# Assessment of stress perceived pending of results after the test for covid-19 among Comorbid and non-Cormobid employees of a company in the Gabonese oil sector

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ABSTRACT: This study focuses on perceived stress and the COVID-19 pandemic among employees of a company in the Gabonese oil sector. It assesses the relationships between the sub-modalities of the covid-19 pandemic (knowledge of the pandemic, compliance with barrier measures and the effect of the pandemic) on perceived stress, on the one hand, and on the other hand the degree of stress perceived among employees diagnosed as co-morbid and not co morbid. The data from a questionnaire submitted to 54 men and women employees made it possible to establish an inter-correlation matrix, linear regressions on the pandemic, perceived stress and the type of employees who participated in this research. At the end of all these analyzes, we record strong and significant links; 1) between the quality of work, professional relationships and perceived stress; 2) between compliance with barrier measures, knowledge of the pandemic, the effect of the pandemic and the perception of COVID-19. To a lesser extent; 3) no difference recorded in the level of perceived stress between co-morbid and non-co-morbid employees while waiting for their results after the screening session.

**KEYWORDS:** Covid-19 pandemic, petroleum sector, Co morbid, non-Co morbid.

# 1 INTRODUCTION

The year 2020 will have marked the minds of everyone living in the world, regardless of the continent. The arrival of this pandemic upset the established order, leading to a change in attitudes and behavior in professional and non-professional settings. Authors such as [1] conducted a study on the psychopathological consequences of confinement. Based on the synthesis of the literature on the different pandemics and their consequences, they demonstrated that the psychological effects of isolation have already been described in the literature, however, the scale of the containment implemented during the COVID-19 pandemic by the authors remains unprecedented. According to their recommendations, it is not only necessary to reread the published studies, but also to anticipate the psychological problems that could arise during or after confinement. The authors chose to go beyond the COVID-19 literature to examine the implications of the known consequences of confinement: boredom, social isolation, stress, lack of sleep.

Faced with the panel of consequences of this pandemic, the organizational environment is also part of this phase of upheavals and other major changes in terms of work organization, working hours, quality of work, professional relations, reorganization of workstations, etc. This current pandemic context which has not only prompted the implementation of security measures by the government (respect for barrier measures, social distancing, wearing of individual and collective protection, etc.), but also and above all the applicability and scrupulous respect of said measures within all private and public

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organizational structures in Gabon. On a reduced scale, the work environment is the place where exchanges between employees take place every day, as well as with staff outside the structure and therefore, it becomes a medium for the spread of the virus. This is why the employer must do everything possible to guarantee the safety and health of employees. Our objective in this study will be to simultaneously study the relationship between the covid-19 pandemic and the stress perceived among the employees of a company in the Gabonese oil sector and assess the degree of perceived stress based on the profile (co-morbidity or not) of employees while waiting for their results. In order to secure the working environment for employees, the managers of this company in the petroleum sector carried out a screening of all employees in order to curb the disastrous consequences within the structure, but also in their families.

## 2 THEORETICAL ASPECTS

## 2.1 THE COVID-19 PANDEMIC AND THE GABONESE STATE'S RESPONSE

Regarding the global spread of the virus, WHO Director Dr Tedros Adhanom Ghebreyesus recalls that it has saturated health systems and caused widespread social and economic disruption. In this vein, some governments have found a way to reduce the ability of the virus to spread more quickly inside and outside certain cities through so-called "barrier" measures which have been characterized by the border closure, the confinement of populations, the compulsory wearing of masks, massive screening, etc. These defensive measures helped limit the short-term impacts of the virus, which is how WHO launched the first preparedness and response plan to deal with this pandemic. This update of the strategy adopted by each state, builds on the evidence the world has accumulated in recent months on how the new coronavirus is spreading, the severity of the disease it causes, how to treat it and end this pandemic [2].

The Gabonese government, realizing that this pandemic is much more than a health crisis, has set up the Steering Committee (Copil) to fight against the Covid-19 pandemic. One of the main lessons the authorities have learned from this situation is that the sooner cases are identified, tested and isolated, the harder it is for this virus to spread. But between theory and reality on the ground, sometimes the gap is observed and currently Gabon has over 24,107 confirmed cases, including 20,916 cures (Wikkipedia), and yet this principle aims to save lives and mitigate the economic impact of the pandemic. This reality teaches us that each individual at their level must show the same determination and the same sacrifice as health workers in order to put in place the measures that will make it possible to stop this pandemic. Remember, the daily life and behavior of individuals have been profoundly changed and other areas; social, economic, public health, etc., which many people rely on in times of difficulty, have been put to the test. In line with this approach, several sub-dimensions have been evaluated with a view to operationalizing the "pandemic" variable, of these sub-dimensions, there is knowledge of the pandemic (modes of contamination for example), the behavior adopted in the face of this pandemic (compliance with barrier measures), professional relations, the quality of work (modification of workstations), etc.

The authorities keep recalling that the countries in which local transmission has led to epidemic outbreaks with almost exponential growth, physical distancing measures and generalized movement restriction at the population level, have been introduced, to slow the spread, and other control measures have been put in place. However, these measures have had a profound negative impact on individuals and Gabonese society as a whole, bringing social and economic life to a virtual standstill. These measures have disproportionately affected disadvantaged groups, especially those in precarious situations; thus accentuating the degree of poverty. For others who depend on their jobs to support themselves, technical unemployment has shattered their dreams. It is in this vein that the Gabonese authorities felt that it was urgent to plan a gradual transition towards the abandonment of these restrictions so as to obtain a sustainably low level of transmission while allowing the recovery of certain sectors of economic and social life, while ensuring a careful balance between socio-economic benefits and epidemiological risk.

## 2.2 THE TRANSACTIONAL CONCEPT OF STRESS AND THE REASSESSMENT OF THE PANDEMIC SITUATION

Transactional models see stress as an interaction between the person and their environment. They explain that stress does not reside in the situation or in the person, but in the transaction between the environment and the person. R. Lazarus is the main representative of this cognitive approach. Work by [3] and [4] emerges a concept linking the individual and his environment [5]. Faced with an obstacle, the subject evaluates the threat or the challenge in relation to his own possibilities of response. It is the adequacy or not between the perceived external demand and the resources also perceived or self-assessed by the subject that will determine the occurrence or not of stress. In the current situation that interests us, the employees and management staff of this structure are facing a completely unknown pandemic, by carrying out mass screening, leaders seek to isolate employees with covid-19. This isolation leads to a wave of consequences ranging from quarantine (with a ban on setting foot in the company) to the amputation of 10, 15 or even 30% of the salary. As part of the eventuality of a

positive diagnosis, the employee here assesses the present situation and the consequences that this entails, we are talking about the adequacy or not between the perceived external demand characterized by this pandemic situation and the resources perceived by the subject. Faced with negative connotations, waiting for the test results when it is long, increases the degree of stress in the employee.

It is up to R. Lazarus and S. Folkman to have spoken for the first time of the transactional model [6]. It is first and foremost a model that sees the person and the environment in a dynamic, mutually reciprocal and two-way relationship. Separate characteristics of the subject and the environment converge to give new meanings through the process of situational assessment. Then, this model recognizes a process involving changes over time, differentiating the immediate consequences from the long-term consequences of stress on adaptation (temporal aspect). In addition, stress is conceived as a process which is constantly reiterated in the course of confrontational situations encountered in everyday life. Currently the situation that the employees of this company in the oil sector are facing is the occurrence of the covid-19 pandemic, for some it is the ignorance of the pandemic through the lack of control of the modes of contamination, the control of the symptoms, the ignorance of the profiles prone to the contamination of the pandemic, etc., which put some employees in a situation of extreme anxiety thus triggering the onset of stress. A situation that may or may not be repeated depending on the employee's degree of knowledge of the pandemic or depending on new elements specific to the pandemic situation.

Finally, R. Lazarus and S. Folkman insisted a lot on the three levels of stress included in a transactional perspective: the social, psychological and physiological level [6]. In the same vein, [7] conceive of stress not as a fixed component of the environment or of the individual but as a process evolving over time. In this state of affairs, the covid-19 pandemic, when it first appeared in its infancy, left an indelible anchor with the populations and the employees who participated in this study were not spared. For some of them who have seen relatives die, be unemployed or interned in certain university hospitals, observe and observe these variations. It is in a way a cybernetic model where, in addition to the components themselves, the relationships between them and their evolution over time as a function of certain factors, influence the onset of stress [6]. In fact, the concept of stress is at the crossroads of the individual and the environment in which they live. Stress management in the strict sense limits interventions to individuals.

Clearly, therefore, stimulus design does not open the door to stress management programs and that of response limits them to relaxation techniques or drug treatments. On the other hand, the notion of transaction assumes that each person has their own way of experiencing and managing this transaction. Stress management programs can then enable them to optimize this subject-environment transaction with their own resources. It is then a question of improving one's coping modes (action to deal with the problem of stress by individual cognitive-behavioral methods or in a work group). We will also see that just acting on the individual is not enough. Action on the environment is just as essential. The transactional approach emphasizes the idea of the individual's assessment of the situation. According to [6], before responding with a feeling of helplessness, the person subjected to the demands of his work environment first proceeds to an assessment of the situation, of his cognitive, emotional and behavioral resources. Depending on the results of this assessment, the individual will adopt one or the other coping strategy. These coping strategies go through awareness and information campaigns, regarding the respect of barrier measures and the application of the prevention system specific to each organizational structure.

# 2.3 PROBLEM

In view of the above, according to the transactional model of [8], stress depends on an individual's assessment of the stressful situation, but also of the individual's assessment of his ability to adjust to the demands of the situation. Thus, after assessing the situation, the individual can then engage in a series of adjustments that allow him to deal with the aggression arising from the situation. The assessment of the situation would therefore depend on the judgments of the individual who assesses the meaning of the transactions between him and the environment in which he operates [8]. Based on this state of affairs, we are in the process of emphasizing that, the current situation to which the employees who participated in this study are exposed, pushes each of them to take their responsibilities not only for their own safety, but also and above all for that of others, by evaluating the degree of risk involved. The pandemic is present, the consequences external to the company are known to all through the regular information spots broadcast in the public and private media, those specific to the company are also used, they are reminded every day during information or awareness points (quarantine in the event of a positive test for covid-19, reduction of the pay according to the organization of his working time, etc.) in the company. Measures to prevent the transmission of COVID-19 applicable in all workplaces and to all the people there are the following: frequent hand washing or frequent disinfection of the hands with a hydro-alcoholic solution, compliance with respiratory hygiene rules (for example, covering your mouth when coughing), physical distancing of at least 1 meter, according to national recommendations, wearing a mask when distancing is not possible, regular cleaning and disinfection of the environment and restriction of movement [9].

Enforcing clear policies, delivering unambiguous messages, and training staff and managers is essential to raise awareness of Covid-19. Care for people with covid-19 or their contacts is also essential [10]. For example, workers who are ill or showing symptoms should be required to stay at home, isolate themselves and contact a doctor, or call the Copil information number 1410 for advice on testing and treatment to behave. All of this information is considered standard, because no information on co-morbidity is given to employees or pathological profiles prone to contamination or at risk. These are the measures applicable and applied within this company in the Gabonese oil sector, but which leave some limits to be noted, limits which continue to cause concern for each employee, while awaiting the results of the covid test -19. An always long wait that allows employees to conduct a transactional assessment of the situation that will determine their fate to remain in the company or leave in the event of a positive diagnosis.

In short, two major questions constitute the framework of our problematic; is the covid-19 pandemic a predictor of perceived stress among employees of this company? Is there a significant difference between the profile (co-morbid and non-co-morbid) of employees and their degree of perceived stress? On the basis of the questionnaire developed and selected for this study, the data resulting from it will allow us to answer several questions; how do the employees of this company perceive the COVID-19 pandemic? What do they know about this pandemic? Do they master the measures decreed by the government in terms of prevention? Etc. So many questions that allow us to present in the following sub-section the different variables under study, before clearly explaining the research hypotheses dedicated to this study.

#### 2.4 THE HYPOTHESES

## THE GENERAL HYPOTHESIS (HG)

The stress perceived by the employees of this company in the Gabonese oil sector depends not only on their perception of the covid19 pandemic, but also and above all on the length of time to wait for results after the screening phase.

#### **OPERATIONAL ASSUMPTIONS**

H1: There is a significant link between the perception that employees have of the pandemic and perceived stress at work. The more employees have in-depth knowledge (knowledge of modes of transmission, type of virus, symptoms, etc.) of the pandemic, the better it reduces their degree of stress at work.

H2: There is a significant and positive link between the profile of the employees (co-morbid and not co-morbid) working in this company and the perceived stress. Employees with a co-morbidity profile present a much higher degree of stress than their non-co-morbid colleagues, because the co-morbidity profiles are prone to easier contamination of covid-19 than non-co morbid ones.

# 3 METHODOLOGICAL CONSIDERATIONS

## 3.1 THE SCOPE OF THE STUDY

Our study was conducted among the employees of an organizational structure in the Gabonese oil sector. This structure acts as an intermediary between the oil companies and the market. According to [11], this structure's mission is to strengthen the role of the State in the strategic field of hydrocarbons. It had initially focused on upstream oil, even daring to launch into the exploitation of the Remboué and Mboumba fields. This structure has agreed to open its doors to us in order to assess the perception of the pandemic among its employees and verify its effect on perceived stress.

# 3.2 THE STUDY POPULATION

The choice of this study was motivated by the fact that the covid-19 pandemic being a new and global phenomenon, it was necessary to study it in order to actively participate not only in a current event, but also and above all to shed light on the realities of this phenomenon in the Gabonese environment. Especially when the number of research publications continues to fuel the scientific literature. Our research was carried out with the staff of this structure and the only criterion for participation in it was the availability of agents at their workplace, in particular those who agreed to participate. This is a random sample consisting only of managerial and non-managerial employees of this company. By this principle, we have succeeded in having a participation of 54 employees, including 26 women and 28 men. The breakdown of our sample is shown below.

Table 1. The study sample

	Hommes	Femmes	Totaux	
Cadres	14	3	17	
Non cadres	14	23	37	
Co-morbidity status	28 (10/18)	26 (5/21)	54 (15/39)	

Source: Author's table, July 2020

After observing the table above, out of a sample of 54 employees, we count 14 male and 3 female managers. While among non-executives, we have 14 men against 23 women. Regarding the comorbidity characteristic, in men there are 18 employees with a negative status against 10 positive employees (therefore co-morbid). Among women, there are 5 co-morbid employees against 21 negative women, or 15 co-morbid male and female employees combined against 39 non-co-morbid employees.

#### 3.3 THE DATA COLLECTION TOOL

As part of this exploratory study, we opted to collect quantitative data exclusively instead of qualitative data, given our time in this organizational structure. For the collection of our data, we opted for the use of the questionnaire, so the tool chosen for our study was subdivided into two main parts assessing the perception of the pandemic and the perceived stress. Regarding the pandemic, we used the questionnaire model (ERPC-19), developed by [12] composed of 73 items corresponding to the living conditions of households and the activities Gabonese entrepreneurs. These items were created and adapted to generically measure the perception of the response to the COVID-19 pandemic with 6 sub-dimensions (knowledge of the disease, behavior adopted in the face of the disease, impact on the employment of household members, loss of income, the future of SMEs and the debt ratio).

For the purposes of our research, we have retained only three sub-dimensions: knowledge of the disease (eg: Coronaviruses are a family of viruses. The disease caused by this coronavirus has been named COVID-19 by the World Health Organization - WHO, Since March 11, 2020, the WHO qualifies the global situation of COVID-19 as a pandemic, because the epidemic is now global. etc.), the effects of the pandemic (eg: Since the turnover mechanism, I notice that my state of health has (greatly) deteriorated since they changed our schedules. Since the turnover device, I manifest health problems, such as migraine) and compliance with barrier measures in the face of the pandemic (I remain confined to my home if I do not live with a person suffering from COVID-19, I respect the distancing measures, I respect simple actions to protect myself and my neighbor, I only go out to go to work or to shop for groceries). Regarding perceived stress, we adapted the scale of [13], example: While waiting for my results, in my work, I perform repetitive tasks, While waiting for my results, my work requires a high level of competence, While waiting for my results, in my work, I have varied activities, While waiting for my results, in my work, I have to learn new things.

# 4 RESULTS

Table 2. Presentation of the inter-correlation matrix

	1	2	3	4	5	6	7
Quality of work	1 (.89)						
Professional relationships	,430**	1 (.850)					
Knowledge of the pandemic	,032	,040	1 (.854)				
Compliance with barrier measures	,268*	,361**	,596 <sup>**</sup>	1 (.812)			
Effects of the pandemic	,072	-,288 <sup>*</sup>	,276*	,097	1 (.884)		
Perception of COVID-19	,165	,061	,855 <sup>**</sup>	,754 <sup>**</sup>	,602**	1 (.901)	
Perceived stress	,949**	,692**	,039	,341*	-,043	,153	1 (.894)

Source: Author's table, July 2020

According to the literature, any study conducted in psychology, the inter-correlation matrix always appears in the form of a diagonal, this diagonal is only the presentation of the results of the crossing of the variables under study between themselves. Authors are free to add mean scores and standard deviations to their table, this is not the case here. Table 2 presents the

Pearson correlations and the cronbach alpha indices, evaluating the reliability of our variables according to the indices in parentheses present in the table. Regarding the work quality sub-dimension composed of 18 items, this variable records a reliability index of ( $\alpha$ = 0.89). For the second sub-dimension, related to the type of professional relations, a value of ( $\alpha$ = 0.84) is recorded for 8 items. Overall, these two sub-dimensions operationalize the perceived stress variable which in turn records an index of ( $\alpha$ = 0.89) with a total of 26 items. Regarding the sub-dimensions of the COVID-19 pandemic variable, knowledge of the pandemic totals an index of ( $\alpha$ = 0.77) with 13 items which assesses it. The barrier measures sub-dimension records an index of ( $\alpha$ = 0.76) with 9 items. The last sub-dimension is related to the effects of the pandemic on employees, it totals an alpha of ( $\alpha$ = 0.88) with 5 items. We will retain here that the global cronbach alpha of the COVID-19 pandemic scale is ( $\alpha$ = 0.86) with a total of 27 items, an acceptable reliability overall, which shows that the questions put to the employees who took part in the study were understood and well understood by them.

Regarding the rest of our analyzes, compliance with barrier measures has a significant and positive link with the perception of the COVID 19 pandemic (r = 0.75; p = 0.00), ditto with perceived stress (r = 0.34; p = 0.01), this result has a double objective; not only does it indicate that the employees of this company respect and apply the preventive measures decreed by the Gabonese government and applied within their company, but also recalls that the implementation of these measures acts directly on the degree of perceived stress of employees. Information and awareness campaigns are organized not only within their organizational structure, but also through the media. This partially validates our hypothesis (H1) which states that "There is a significant link between the perception that employees have of the pandemic and the stress perceived at work".

Conversely, there is no significant link between the perception of the COVID-19 pandemic and the quality of work (r = 0.16; p = 0.23), the finding is identical between compliance with barrier measures and the effect of the pandemic (r = 0.09; p = 0.49), between knowledge of the pandemic and perceived stress (r = 0.039; p = 0.728), between the effects of the pandemic and perceived stress (r = 0.04; p = 0.76). Finally, the relationship between the perception of COVID-19 does not show any significant link with perceived stress (r = 0.15; p = 0.27). This partially invalidates our hypothesis (H1), because only one sub-dimension out of three records a link with perceived stress. Faced with the limits of this correlational analysis, we are going to perform regression analyzes that can give us information on the significant differences between perceived stress and the profile of employees on the one hand, and on the other hand between the perception of the pandemic and the perceived stress.

**MANOVA** Somme des carrés ddl Carré moyen F Sig. Quality of life at work 2,751 1 2,751 4,009 ,050 Professional relationships ,617 1 ,617 ,784 ,380 Perceived stress 1,942 1 1,942 3,631 ,062 ,024 1 Knowledge of the pandemic ,024 ,110 ,741 Knowledge of the pandemic 1 ,906 3,490 ,906 ,067 Effects of the pandemic 4,495 1 4,495 4,157 ,047 1 Perception of COVID-19 ,612 ,612 3,322 ,074

Table 3. Regression analysis

Source: Author's table, July 2020

After the 3x1 type regression analysis (effect of the pandemic, barrier measures, knowledge of perceived stress) with employees, the conclusions record a significant result F = 3.04; p = 0.03, this presence of a relationship between two variables is explained to more than 15% of the total variance ( $R^2 = 0.157$ ). We can retain here that the perception of the pandemic constitutes a predictor variable of the stress perceived by these employees when the barrier measures are not respected, that the employees are not aware of this pandemic and that its effects are also little known. We can conclude that the hypothesis (H1) "There is a significant link between the perception that employees have of the pandemic and the perceived stress at work. The more employees have in-depth knowledge (knowledge of modes of transmission, type of virus, symptoms, etc.) of the pandemic, the better it reduces their degree of stress at work" our study has been validated. The continuation of the regression analyzes underlines that the results obtained show an absence of significant link between knowledge of the pandemic and perceived stress ( $\beta = 0.23$ ; p <0.171), this lack of link is explained by more than 39% of the total variance ( $R^2 = .397$ ; p <.037), same observation with the effects of the pandemic ( $\beta = -0.23$ ; p = 0.857). In the same frame, a non-significant relationship is observed between the profile of employees; co-morbid (avg= 13, 26; t= 0.32, p <0.698) against non-co-morbid employees (avg= 14.02; t= 0.28, p<0.741) and perceived stress ( $\beta = 0.48$ ; p = 0.985).

At the end of such a result, we are able to indicate that there is no perceptible difference in the level of the degree of stress perceived among co-morbid and non-co-morbid employees as our hypothesis stipulated (H2) "There is a significant and positive link between the profile of the employees (co-morbid and non-co-morbid) working in this company and the perceived stress. Employees with a co-morbidity profile present a much higher degree of stress than their non-co-morbid colleagues, because co-morbidity profiles are prone to easier covid-19 contamination than non-co-morbid ones"; which invalidates this research hypothesis. It should be noted that the medical term "comorbidity" is regularly pronounced with the Covid-19 epidemic. For good reason, the presence of comorbidity is one of the two most important risk factors for serious forms, after age. It designates the presence of illnesses and / or various acute or chronic disorders in addition to the initial illness (for example: having diabetes and hypertension, having diabetes and being infected with Covid-19). As an indication, let us add that these "secondary" diseases can be directly due to the first or not have any apparent links with it or be the consequence of it. To give an example, diabetes is a disease presenting a strong comorbidity: it is frequent that other diseases are associated with it. According to the WHO "the prevalence of diabetes in schizophrenics is about 15%, against 2% to 3% in the general population". The result obtained may or may not raise questions, questions because we expected the validation of this hypothesis, which completely defeats reality, on the other hand no questions because we tell ourselves that given the low rate of employees with a comorbid profile (27.77%), we should not expect a significant difference.

## 5 DISCUSSION

The results obtained at the end of the analyzes carried out tend to partially validate our initial hypotheses. We expected that there would be a significant link between employees. Employees who have in-depth knowledge (knowledge of modes of transmission, type of virus, symptoms, etc.) of the pandemic would experience a lower degree of stress at work (H1). Our regression analysis on the perception of the COVID-19 pandemic and the perceived stress confirms this hypothesis. On the other hand, the regression on the profile of employees and perceived stress does not validate the direct relationship between the two variables. The conclusions of our first hypothesis clearly show the predictor of the perception of the COVID-19 pandemic on perceived stress, that is to say that knowledge of the pandemic as a whole significantly reduces the degree of perceived stress among employees. When line managers insist that their employees avoid confined spaces, high-traffic areas, where they would be in close contact with other people, regardless of the environment or when they indicate that the risks of contracting COVID-19 are higher in high-traffic areas and insufficiently ventilated where infected people spend long periods together in close proximity, this can be accepted. These employees are aware that it is in these environments that the virus seems to spread most effectively by respiratory droplets, hence the importance of taking all precautions. They are very well informed and the statistical results show us that they are aware of the threat. In this diagram, the overall control of the pandemic is important because it makes it possible to reduce the degree of stress as demonstrated by the transactional approach of [11], [13], according to them stress does not reside in the environment or in the individual but in the transaction between the individual and the environment. Faced with this threat, employees implement coping mechanisms characterized by the meaning they give to this threat after assessing the situation. This is not surprising since stress levels vary for the same person depending on the circumstances. Likewise, some employees will be better equipped than others to deal with stress and the techniques (or means) of defense are more effective depending on the individual.

We assumed that, employees diagnosed with co-morbid present a relatively different degree of perceived stress than their non-co-morbid colleagues. One has to wonder why this lack of difference, especially when we stick to the writings of the high authority in health [2] which indicates that all the comorbidities do not have the same weight and people deemed particularly vulnerable and with rare and serious pre-existing conditions are at increased risk of dying from SARS-CoV-2 infection. Faced with such results, the managers of this company must continue their determination as to strict compliance with all the measures enacted, isolate the employees most at risk of developing a serious form of COVID-19 in the event of positive results, for example, because age remains the second factor. Although we have not presented the crossing of the age variable in this study, We can underline that the results obtained go completely against the results obtained by two large-scale French studies: the Epi-Phare study conducted by the Health Insurance and the National Agency for the Safety of Medicines and Health Products (ANSM), and the study of the Medical Information Systems Program (PMSI) carried out by the Bordeaux medical information department. These studies confirm that age is the predominant factor in the occurrence of severe forms and death linked to Covid-19.

# 6 CONCLUSION, SUGGESTIONS AND OUTLOOK

At the end of this study, remember that the objectives which formed the backbone of this study consisted here of evaluating the link or causal relationship between the perception of the Covid-19 pandemic characterized by knowledge of it, its effects

and compliance with barrier measures and perceived stress among employees of a company in the Gabonese oil sector. Then cross the profile of employees (co-morbid and not co-morbid) with the perceived stress, in order to identify any differences in the degree of stress between co-morbid and non-co-morbid employees awaiting the results of the test after screening. The main results revealed that these employees, committed and very involved in the achievement of the objectives assigned by the hierarchy, show moderate anxious manifestations, with a concern centered on their situation in the event of positive results to COVID-19. They also express the fear of contamination of relatives with immediate consequences of job loss or layoff. This type of study is unprecedented in the Gabonese oil sector, even if the results obtained agree with the conclusions of the work of [11], [13], faced with a stressful situation caused by the COVID-19 pandemic, the employees assessed the stakes of this situation (perceived stress). They then estimated the resources available to each of them to act, respond and possibly intervene on the problematic solution. It is this personal appreciation of the issue and the resources, which allowed each employee to orient their responses through adaptation strategies called coping. These objectives were partially achieved on the one hand because the perception of the pandemic predicts perceived stress, and on the other hand, there is no difference between comorbid and non-co-morbid employees in terms of their degree of perceived stress.

Concretely, this company would benefit from reducing the rate of pressure inflicted on its employees, who are always put to the test, faced with the individual risk of contamination of their relatives and / or colleagues. This pressure involves a series of questions relating, on the one hand, to their experience of the epidemic (fear for oneself / for those close to them, isolation, feeling of injustice / helplessness...), their family behavior (widening or narrowing of the circle of relatives), their professional situation (working conditions, concerns), and their social activities, etc., for example or on the systematic search for symptoms suggestive of an infection. We cannot end without enumerating the few limits which marked out this research work. First, the data collected could suffer from the common variance bias, due to the fact that employees were questioned on all the variables studied in a single collection. Then, local companies constitute a unique field of research that does not allow us to generalize our observations, because each structure has its own realities and finally, the sample, the number of which does not even reflect half of the workforce of the overall population of this company, is predominantly made up of men. However, gender can be an explanatory factor for the results obtained.

As recommendations, we suggest that social contacts are important between the employees of this company. If their movements are restricted, they keep in regular contact with colleagues by phone or online. They must also increase the amount of traditional therapeutic potions consumed (steam bath, infusion recipes from grandmother or abstain altogether for some (in case of allergy). That they do not start consuming alcohol, if they have never used it before. That they avoid being in a situation of denial, as a way to deal with fear, anxiety, boredom or social isolation. There is no evidence that alcohol consumption has a protective effect against viral infections or other types of infections. In reality, we rather observe the reverse phenomenon, because the harmful use of alcohol is associated with an increased risk of infections and worse treatment outcomes. Discrimination at work should be avoided as much as possible, fear is a normal reaction in situations of uncertainty. But sometimes the fear is expressed in a form that can hurt other people (refusal for any hug).

## **AUTHOR'S CONTRIBUTION**

All authors contributed equally to the manuscript.

# **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

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# **INFORMED CONSENT**

Written & Oral informed consent was obtained from all individual participants included in the study. Additional informed consent was obtained from all individual participants for whom identifying information is included in this manuscript.

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