

International Journal of Recent Advances in Multidisciplinary Research Vol. 08, Issue 03, pp. 6687-6693, March, 2021

RESEARCH ARTICLE

COVID-19 SAFETY MEASURES IN COMPANIES FOR EMPLOYEES WELL-BEING AND BUSINESS SUSTAINABILITY

Maamri, N. *, Chaib, R and Benidir, M.

Laboratory of Transport Engineering and Environment, University of Brothers Mentouri, Constantine 1, Algeria

ARTICLE INFO

Article History:

Received 20th December, 2020 Received in revised form 30th January, 2021 Accepted 14th February, 2021 Published online 30th March, 2021

Keywords:

Covid-19, BCP, Safety measures, Crisis management, Well-being.

ABSTRACT

The purpose of this paper is to investigate the readiness of Algerian companies to face COVID-19 outbreak and suggest appropriate control measures in order to avoid business disruption by providing safe work environment. A survey was conducted to investigate the preparedness of Algerian companies in the midst of COVID-19-outbreaks. The survey consists of 24 items. Questions had been clear and direct to know about preparedness and actions taken by companies to face COVID-19 risk. To spotlight on actual situation that Algerian' companies are living, in the midst of virus spread. Also, a model has been proposed to preserve safe work continuity. That is based on the changes imposed by the COVID-19 pandemic. This technique allows us to manage well the quarantine period, ensure the functioning of companies within a minimum of employees, showing how to assess risk level, and take appropriate control measures. Results has been indicating that Algerian companies are not enough prepared to continue work in the midst of COVID-19 and a business continuity plan is needed plus appropriate control measures to provide safety and avoid business disruption.

INTRODUCTION

Human society is exposed to many risks, which could be ambiguous, the result of "complex interactions between society and environment" (Aouati, 2017) (Ferreira, Lima, Crema, & Verbano, 2019). The occurrence of various disasters clearly highlights the complexity of these interactions and the magnitude of the consequences that may result from (KHARZI CHAIB, Ion VERZEA,2020). Hence, organization should Occupational health and safety. manufacturers are paying more attention to identify all situations that may jeopardize their business (Chaib, Salim, & Verzea, 2015). Some risks are likely to have serious socioeconomic effects. Today, coronavirus (COVID-19) risk has several impacts that may extend to economic crisis. What makes it a very special concern that requires control measures. Virus effects relate not only to the system concerned but also to its environment. This infectious disease is constantly changing, developing and spreading quickly all over the world .It puts business in an unexpected crisis, even jeopardizing its existence. In order to ensure business continuity, national and international regulations pay particular attention to the business continuity plan (BCP). The latter has its origins in the management of information security and more particularly in the (ISO 17799) standard relating to the security of information systems. It is especially a document of common sense that requires a collective and concerted effort of business leaders with their employees. Also, International Standard for implementing and maintaining effective business continuity plans (ISO 22301), has been taken into account business continuity plans in cases of emergencies, supply chain disruption and any other critical risk that can affect business continuity, which could be integrated into the entire

management system of an organization ("ISO 22301 Business continuity," n.d.). BCP is an essential element of an organization's crisis management system (Myers, n.d.). It is a set of measures, tools and means which enables an organization to provide or maintain in essential condition, under various crisis scenarios, its essential services. Also, defined as preparing procedures to ensure the survival of the organization in times of business disruption (Andrew Hiles, 2007). Hence occupational Security and safety management is therefore essential. What makes organizations owing to national and international regulations gives special attention to the management of safety and security that should be aligned to its strategic objectives in aim to reach sustainability by improving decision making and efficiency at a time. Employees are the core of an organization regardless of its size and field of production that's why employee's safety and well being have an impinge on its short and long term goals. Nowadays, Sustainability becomes a major concern for firms; hence that companies should manage uncertainties and risks to survive and stay competitive and so forth to be efficient and durable (Schulte, 2018). Therefore, working conditions must be controlled by the employer in order to offer employees a quality working environment and manage to increase the socalled safe positive atmosphere conducive to the productivity and competitiveness of the company (KHARZI, CHAIB, VERZEA, 2020). As a result, businesses must manage the uncertainties and risks involved to survive and remain competitive and ultimately to be efficient and sustainable. Subsequently, the management of risks becomes an inevitable responsibility for regulatory, economic, environmental and ethical reasons (Li, 2018) (Jilcha & Kitaw, 2017). According to what has been previously mentioned, it becomes crucial to implement a business continuity plan which meets the

industrial requirements imposed by the economic situation in the midst of this deadly risk and provide a safe working environment for the proper management and businesses sustainability. Thus, this study focused to investigate the readiness of Algerian companies facing covid-19 outbreak also a model has been proposed to preserve safe work continuity.

Business concern: Today, the major concern for companies is how to prevent from coronavirus (covid-19) and to provide a safe workplace by safeguarding its workforce. This infectious deadly disease that spreads fear not only in workplaces but in worldwide. It's possible that COVID- 19 will sicken some employees and force others into quarantine. That pushes firms to plan and act to be enough prepared to face the virus outbreak and to preserve business continuity. By preserving the health and safety of its workforce and improving working conditions, the company has to meet the rights of its employees, and more generally of society as a whole (Ouffroukh, Rachid, Verzea, & Lakhdar, 2018). In addition, acting for the well-being of its employees enhances its value, which in part determines its short and long term success. So that contributes to the sustainable development of society (Schulte & Hallstedt, 2017). Thus, in order to prevent supply chain disruption, with consequences leading to chaos, companies should continue their activities in the midst of covid-19 pandemic. While facing this new challenge, Occupational practitioners, healthcare advisers and safety professionals should be involved in making adequate control measures. As a result, effective workplace health and safety programs can help saving lives by reducing risks and their consequences. They can also have positive effects on workers' morale and productivity and can save employers considerable costs by being reactive through a business continuity plan.

MATERIALS AND METHODS

The selected study area of this present study is Algerian companies; a survey was conducted to investigate the preparedness of Algerian companies in the midst of covid-19-outbreaks, and its impact on employees' productivity. The survey consists of 24 items. Questions had been clear and direct to know about preparedness and actions taken by companies to face covid-19 risk. To spotlight on actual situation that Algerian' companies are living in the midst of virus spread. Also a model has been proposed to preserve safe work continuity. That is based on the changes imposed by the COVID-19 pandemic. This technique allows us to manage well the quarantine period, ensure the functioning of companies within a minimum of employees, showing how to assess risk level and take appropriate control measures.

RESULTS AND DISCUSSION

309 answers were received from employees from several work sectors within 72 hours.,Hydrocarbon (29,8%), Food (15,9 %), Construction (20,1%), Electricity (10,7%), Telecommunication (9%), Other(14,6%). From all three Big , medium and small sized companies.

- The most of Algerian companies don't have a business continuity plan while the most positive answers 50,5% were related to several sectors, 58,9% of participants has been declared that coordination with local authorities is poor

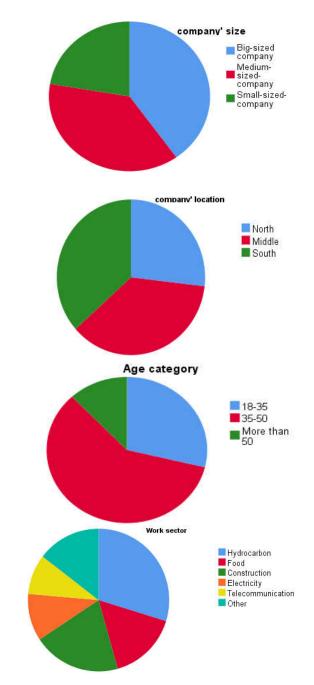


Fig. 1. Studied category

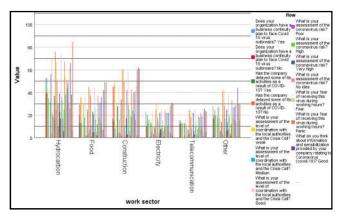


Fig. 2. Summary results of Algerian companies readiness to face covid-19 risk

- 53 % of workers declared that their companies has been delayed some of their activities as a result of covid-19, the perception of risk were very high for the majority (50,2%).

- The most of Algerian employees (71,8%) are afraid of being infected while performing their work which affect their productivity while 28% are in a state of panic .Also the most staff(88%) said that there is no collaboration to deal with their stress and pressure that resulted from this crisis: Hydrocarbon (76%), Food (45%), Construction (60%), Electricity (25%), Telecommunication (25%), Other sector (41%).
- Information and sensibilization provided by companies relating to Corona virus (covid-19) were rated between medium (47,6%) and insufficient (41,1%). Besides social distancing is judged less severe in most sectors (47,9%).86,1 % of employees confirmed that Remote working does not exist as the first option, while the most companies are changing their work schedule besides reducing numbers of employees.
- The most of responses from several sectors declared that safety measures at transportation are poor Hydrocarbon (76%),Food (45%),Construction (60%), Electricity (25%), Telecommunication (25%).
- Only (37,5%) of employees are getting training about new preventive measures in line with the outbreak of infectious disease.86 % of employees declared that there is no Medical screening and 72,2 % says that appropriate PPE are not provided.
- Due to observed data companies are not enough prepared, as making a business continuity plan helps companies and their main core to know what should be done in the short and medium-term while facing the crisis. Enough information and basic knowledge are crucial to act. And taking into account the long term impact, given that the vaccine does not exist yet. Companies have to make a collaborative business continuity plan with its employees, contractors and local health authority to preserve employees' health from covid-19 putting people's health in the first place and maintaining its business continuity .The plan should assess and adopt best practices to slow the disease's spread. Leaders have to choose their work team which has to be effective and capable to work together and give a strategy response. The main suggestions from the right members help getting the right decision making. Companies should have enough tools, procedures, technology and anything else that would be important for saving its safety and durability at a time.
- Companies today are facing a new situation and new crisis, what makes leaders and their work team taking responsibility and must be prepared and be aware to make the workplace ready and safe, firms are exposed to the risk that may lead to supply chain disruption or even to shutdown risk due to the covid-19 outbreak. Since the pandemic covid-19 is classified as an emergent and intolerable risk that companies deal with.
- Managing stress and concerns about covid-19 inside and outside companies are crucial; stress from covid-19 can lead even to suicide. Where the German Prime Minister Volker Bouffier has declared that the German Finance Minister, Thomas Schaefer, committed suicide due to his anxiety about this deadly virus and its impact on the economy. This virus made the most of workers in a state of panic and stress. Employers have to minimize work-related

- stress and anxiety inside company(Chinazzi et al., 2020), virus quick spreading and due to the absence of typical symptoms for some infected individuals, leads to more stress and fear which could affect employees' productivity and provide further risks in the workplace. Employees should be careful of news from unknown sources or websites and depend on the information that relies on recognized official reliable sources. Employers should make staff aware about healthy lifestyle that enhances resilience and encourage them to participate in healthy activities to make a balance between work and home life also to stay positive and that this crisis is a global problem that needs only to be wise and respect safety requirements to curb the virus spread.
- Promote regular teleworking across the organization (Leave, 2020)by providing ICT infrastructure or taking work at home as the best option if it is reasonably practicable to prevent workers from infection and also to assure business continuity. This Control measure facing covid-19 risk may not be reasonably practicable for all firms due to different activity sectors such as drilling rigs and construction's sites which need the presence of employees in worksites. Hence a proposed work rotation is proposed (Figure 4) as a solution for safe business continuity.

Thus, the proposed technique helps in managing the quarantine period, and ensures the continuous operations of business with a minimum number of workers. However, the effectiveness of this tool is conditioned by a deep and comprehensive understanding of the risks that societies are facing. In order to take the appropriate measures for the protection of employees from the pandemic, the risk level should be assessed by the necessary information. The main objective of the work is by making strategic companies work so as not to paralyze the country, such as oil and gas companies (Wolf, 2019), inculcating an adaptation culture to the effects of changes in behavior and attitudes, spreading culture of continuous and sustainable progress within the company and maintaining a good atmosphere in the workplace, to protect and promote the health and safety of workers and at the working environment to promote safe and sustainable development in enterprises. In order to detect the risk factors at the right time, the workplace should continuously be monitored so that the negative effects can be avoided.

Employees proximity have to be minimized according to (WHO) requirements. Any close contact with an infected person, exposed to coughing, sneezing, respiratory droplets or aerosols can spread the virus (Shereen, Khan, Kazmi, Bashir, & Siddique, 2020), hence Social distancing helps in preventing and controlling the covid-19 spread, it is the main control key measure that should be taken inside and outside companies. Meetings should be limited to what is strictly necessary and remotely held by video conference.

Workers who have acute respiratory symptoms should be immediately separated until confirmation of their state of health. Companies must stay in collaboration with public health and health care authorities. Also, save all visitors' information in case of suspicion of COVID-19 case. Since the vaccine does not exist yet and the virus is new for everyone what creates Anxiety and misunderstood especially in the existence of chaos and rumors, misinformation that appears on

social media and poor communications which increase anxiety, confuses workers more and complicates the situation and work climate.

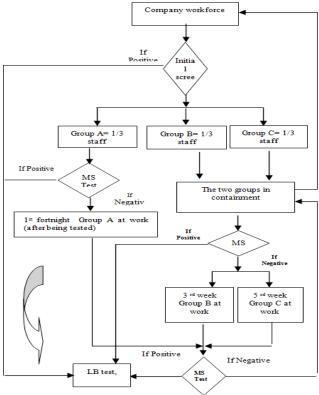


Fig. 3. Proposed approach for safe continuous operation of companies in the midst of n-cov-2019 outbreak

Efficient social dialogue is crucial (Ilo & Covid-, 2020), hence employers have to provide and spread enough, clear and straightforward information to employees through posters, emails and different technologies. This will help them understanding and following the right safety requirements about preventing from covid-19. Taking into consideration their participation to face health and safety risks which is crucial for better management. Evidence based information presentation are crucial, especially when cognitive abilities, literacy or numeracy are lower also when Highly emotional, stress, cognitive load (Fischhoff, Peters, Silver, & Shullman, 2020).

- Mobility boosts the risk rate of infection and spread of the virus. Hence traveling restrictions are crucial to limit covid-19 spread(Chinazzi et al., 2020). Traveling is the most risk factor that enhances employees exposures to risk, companies have to be more careful about their staff and try to investigate if they were visiting high-risk areas or if they were in contact with an infected person outside the workplace and spread information to all staff to keep them safe while traveling from or to work and to be more responsible about their safety plus avoiding any contact with people with suspicious symptoms. Also to avoid crowded places and use social distancing at least 1meter.Employer has to provide clean and sanitized transportation means. All non-essential trips should be canceled or postponed. Written approval from an employer is required while traveling from the workplace.
- Employers are required to provide their employees with the necessary and appropriate personal protective equipment PPE in accordance with OSHA PPE standards

such as gloves, medical masks, gowns, goggles, face shield and respirators (i.e., N95 or FFP2 standard or equivalent (Janssen, Nelson, & Cuta, 2007) to keep them safe from covid-19 while performing their jobs and have to guarantee a disinfected work environment regularly with efficient products (Kampf, 2020), and take all hygienic essential measures, for instance, encouraging regular hand-washing remind. (WHO) has confirmed that cleansing hands with an (ABHR) or with soap and water are both effective to prevent from COVID-19. Hand hygiene in business, or elsewhere, is essential. Whatever the sector of activity, simple actions are essential. Poor hand hygiene can cause major epidemics (COVID-19) and may slow down the company activity or even the whole society. Hand hygiene is the first barrier against the epidemics that cause many sick leaves in companies. It is therefore essential to regularly inform staff about best practices to follow. Hygienic actions and social distancing have been proved as key success measures which prevent from covid-19 spread.

- Medical screening and surveillance are essential steps that should be taken by firms to stay awake about infection cases. Employers should investigate their workers if they were in a high risk area or have been in close contact with someone who is a confirmed case of COVID-19. Thus risk level can be evaluated which helps in taking the appropriate control actions Employers should give special attention to the most vulnerable workers category that have weakened immune system and require enhanced protection against infection (eg; older employees; patients with a cardiovascular history: complicated hypertension, stroke or coronary artery disease, heart surgery; insulindependent diabetics who are unbalanced or who have complications secondary to their pathology; people with a chronic respiratory pathology likely to decompensate during a viral infection; patients with chronic kidney disease on dialysis and patients with cancer on treatment.) Hence death rate is enhanced when the patient has a preexisting health conditions (Isaifan, 2020)(Hcsp & Iii, 2020). After identifying and ranking the risk that the firm is exposed to, the latter must prevent its main source by (employees) taking main control measures (engineering controls, administrative or workplace controls...) (Leave, 2020), changing some strategies and trying to adapt the new situation such as contact and face to face communication which is not allowed. Thus separation as an example by using barriers will prevent workers from hazard exposures, changing work schedules, canceling or using different methods of meetings or brainstorming by using technology and innovation will provide safety.
- Every company whatever its size or sector must be compliant with legal requirements to preserve its sources (workers) as well as its existence. Employees have the right to be protected from any type of risk while performing their activities (Cb, Sj, & Al, n.d.), Also to quit their jobs in case of having suspicious symptoms such as coughing, sneezing or fever. If the employer requests that the employee stays away from work, the employee should be paid in many cases. Quarantined employees (that came from a high-risk area) may be paid for the isolation period from their employers,(eg; like Germany or may not be paid which depends on employers decision like in the UK or may receive governmental allowances, like France for a period of 20 days as maximum)

(Mohamed, Partner, & Of, 2020), it depends on the relevant jurisdiction. In Algeria Executive decree number 20-69 of 26 Rajab 1441 corresponding to March 21, 2020, on measures to prevent and combat the spread of Corona virus (COVID-19) which consists of 11 articles that are intended to fix social distancing measures(art.1), and mentioning the category that has the right on exceptional leave such as pregnant women and women raising children as well as people with chronic illnesses and those with health vulnerabilities(art 8), take any measure encouraging remote working in compliance with the laws and regulations in force (art9). Critical and essential sectors have to continue their work(art.10) such as the medical sector ("journal officiel algerie," 2020)

Conclusion

Since Algerian companies are not enough prepared to continue work in the midst of COVID-19 hence a business continuity plan is needed plus appropriate control measures to provide safety and avoid business disruption. Prevention of biological risks consists in breaking the chain transmission as far as possible by measures of work organization, collective and individual protection, information and training of personnel. In order to avoid supply chain disruption and keep safe work environment in the context of the Coronavirus crisis, companies are asked to make a business continuity plan (BCP). This plan consists of listing all the measures aimed at ensuring, according to various crisis scenarios, including facing the pandemic risks, maintenance of the essential establishment activity while preserving health and safety of employees. Companies are not only an effective element of the economic pillar, but they affect the social and societal pillars, which makes the right strategies in companies in collaboration with local health authorities also up to date with information and recommendations of the WHO; make big difference in facing this serious crisis and vice versa. Thus, the internal and external identification of vital activities and skills will help in anticipating their replacement to keep only vital activities and organize team rotations.

It also allows all the staff working during the scheduled period, reducing contact between the numbers of reduced employees and to know the overall risk rate in the various departments, and entire company agreeing to take the appropriate control measures. This plan consists of listing all the measures aimed at ensuring, according to various crisis scenarios, the maintenance of the essential activity of the establishment while preserving the health and safety of employees. This makes it possible to inculcate a adaptation culture to the effects of changes in behavior and attitudes, to the daily workers behavior. This helps to instill an adaptation culture to the effects of changing behavior and attitudes, to information and training in good personal hygiene practices. In addition, this approach helps spreading the culture of continuous and sustainable progress within the company even in the midst of crisis. It strives to maintain a good atmosphere in the workplace, to protect and promote the health and safety of workers and the working environment. Thus, it manages to promote safe and sustainable development in business during this crisis period. This approach can be generalized to all socio-economic sectors. In all cases, individual hygiene measures remain essential.

REFERENCES

- Andrew Hiles. (2007). The Defi nitive Handbook of Business Continuity Management Second Edition.
- Aouati, M. S. (2017). Map risks in the company: highlight at the top priority risks. https://doi.org/10.1108/WJE-12-2016-0159
- Cb, D., Sj, C., & Al, K. (n.d.). Pre-emptive low cost social distancing and enhanced hygiene implemented before local COVID-19 transmission could decrease the number and severity of cases ., 1–8.
- CDC. (n.d.). CDC. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html
- Chaib, R., Salim, A. M., & Verzea, I. (2015). Retour d'expérience: Discerner les risques qui méritent d'être poursuivis ou renforcés dans l'entreprise, (July).
- Chinazzi, M., Davis, J. T., Ajelli, M., Gioannini, C., Litvinova, M., Merler, S., ... Yu, H. (2020). The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak, *9757*(March), 1–12.
- Ferreira, P., Lima, D. A., Crema, M., & Verbano, C. (2019). Risk management in SMEs: A systematic literature review and future directions. *European Management Journal*, (xxxx). https://doi.org/10.1016/j.emj.2019.06.005
- Fischhoff, B., Peters, E., Silver, R. C., & Shullman, S. L. (2020). Using the Psychological Science of Crisis Leadership and Communications to Navigate the Coronavirus: A Webinar for Public Officials.
- Gilbert, M., Pullano, G., Pinotti, F., Valdano, E., Poletto, C., Boëlle, P. Y., ... Colizza, V. (2020). Preparedness and vulnerability of African countries against importations of COVID-19: a modelling study. *The Lancet*, 395(10227), 871–877. https://doi.org/10.1016/S0140-6736(20)30411-6
- Hcsp, L., & Iii, N. (2020). Avis provisoire Recommandations relatives à la prévention et à la prise en charge du COVID-19 chez les patients à risque de formes sévères, 2–3.
- Ilo, T., & Covid-, S. (2020). COVID-19 and the world of work, 1-3.
- Isaifan, R. J. (2020). The dramatic impact of Coronavirus outbreak on air quality: Has it saved as much as it has killed so far?, 6(3), 275–288. https://doi.org/10.22034/gjesm.2020.03.01
- ISO 22301 Business continuity. (n.d.).
- Janssen, L. L., Nelson, T. J., & Cuta, K. T. (2007). Workplace Protection Factors for an N95 Filtering Facepiece Respirator, (758062630). https://doi.org/10.1080/15459 620701517764
- Jilcha, K., & Kitaw, D. (2017). Industrial occupational safety and health innovation for sustainable development Engineering Science and Technology, an International Journal Industrial occupational safety and health innovation for sustainable development. *Engineering Science and Technology, an International Journal*, 20(1), 372–380. https://doi.org/10.1016/j.jestch.2016.10.011
- journal officiel algerie. (2020). Retrieved from https://www.joradp.dz/FTP/jo-francais/2020/F2020015.pdf
- Kampf, G. (2020). Potential role of inanimate surfaces for the spread of coronaviruses and their inactivation with disinfectant agents. *Infection Prevention in Practice*, 100044. https://doi.org/10.1016/j.infpip.2020.100044
- KHARZI, Rachid CHAIB, Ion VERZEA, A. A. (2020). Safe and sustainable development in a hygiene and healthy company: using the decision matrix risk assessment

- (DMRA) technique "Case study. *Journal of Mining and Environment*, 8. Retrieved from http://jme.shahroodut.ac.ir/article 1714.html
- Leave, M. (2020). Legal Developments Affecting the Workplace U . S . Department of Labor Issues Workplace Guidelines for Coronavirus Outbreak , Including Specific Guidance on FMLA , FLSA and FECA, 1–14.
- Li, L. (2018). A Study on Enterprise Risk Management and Business Performance, 123–138. https://doi.org/10.4236/jfrm.2018.71008
- Mohamed, B., Partner, M., & Of, L. J. (2020). FRANCE: COVID-19 (Coronavirus) Employer FAQs, 19, 1–9.
- Myers, K. N. (n.d.). BUSINESS CONTINUITY STRATEGIES.
- Ouffroukh, L. A., Rachid, C., Verzea, I., & Lakhdar, K. (2018). Analysis of risk and the strengthening of the safety technical barriers: Application of Skikda (Algeria) oil refining complex World Journal of Engineering Article information:, (December). https://doi.org/10.1108/WJE-02-2017-0031
- Schulte, J. (2018). Company Risk Management in Light of the Sustainability Transition. https://doi.org/10.3390/su10114137
- Schulte, J., & Hallstedt, S. (2017). Challenges for Integrating Sustainability in Risk Management Current State of Research, (August).
- Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., & Siddique, R. (2020). COVID-19 infection: origin, transmission, and characteristics of human coronaviruses. *Journal of Advanced Research*. https://doi.org/10.1016/j.jare.2020.03.005
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*, 76(February), 71–76. https://doi.org/10.1016/j.ijsu.2020.02.034
- Wolf, A. (2019). The myth of stability in Algeria. *Journal of North African Studies*, 24(5), 707–712. https://doi.org/10.1080/13629387.2019.1647899
- Andrew Hiles. (2007). The Defi nitive Handbook of Business Continuity Management Second Edition.
- Aouati, M. S. (2017). Map risks in the company: highlight at the top priority risks. https://doi.org/10.1108/WJE-12-2016-0159
- Cb, D., Sj, C., & Al, K. (n.d.). Pre-emptive low cost social distancing and enhanced hygiene implemented before local COVID-19 transmission could decrease the number and severity of cases ., 1–8.
- Chaib, R., Salim, A. M., & Verzea, I. (2015). Retour d'expérience: Discerner les risques qui méritent d'être poursuivis ou renforcés dans l'entreprise, (July).
- Chinazzi, M., Davis, J. T., Ajelli, M., Gioannini, C., Litvinova, M., Merler, S., ... Yu, H. (2020). The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak, *9757*(March), 1–12.
- Ferreira, P., Lima, D. A., Crema, M., & Verbano, C. (2019). Risk management in SMEs: A systematic literature review and future directions. *European Management Journal*, (xxxx). https://doi.org/10.1016/j.emj.2019.06.005
- Fischhoff, B., Peters, E., Silver, R. C., & Shullman, S. L. (2020). Using the Psychological Science of Crisis Leadership and Communications to Navigate the Coronavirus: A Webinar for Public Officials.
- Gilbert, M., Pullano, G., Pinotti, F., Valdano, E., Poletto, C., Boëlle, P. Y., ... Colizza, V. (2020). Preparedness and

- vulnerability of African countries against importations of COVID-19: a modelling study. *The Lancet*, *395*(10227), 871–877. https://doi.org/10.1016/S0140-6736(20)30411-6
- Hcsp, L., & Iii, N. (2020). Avis provisoire Recommandations relatives à la prévention et à la prise en charge du COVID-19 chez les patients à risque de formes sévères, 2–3.
- Ilo, T., & Covid-, S. (2020). COVID-19 and the world of work, 1–3.
- Isaifan, R. J. (2020). The dramatic impact of Coronavirus outbreak on air quality: Has it saved as much as it has killed so far?, *6*(3), 275–288. https://doi.org/10.22034/gjesm.2020.03.01
- ISO 22301 Business continuity. (n.d.).
- Janssen, L. L., Nelson, T. J., & Cuta, K. T. (2007). Workplace Protection Factors for an N95 Filtering Facepiece Respirator, (758062630). https://doi.org/10.1080/1 5459620701517764
- Jilcha, K., & Kitaw, D. (2017). Industrial occupational safety and health innovation for sustainable development Engineering Science and Technology, an International Journal Industrial occupational safety and health innovation for sustainable development. *Engineering Science and Technology, an International Journal*, 20(1), 372–380. https://doi.org/10.1016/j.jestch.2016.10.011
- journal officiel algerie. (2020). Retrieved from https://www.joradp.dz/FTP/jo-francais/2020/F2020015.pdf
- Kampf, G. (2020). Potential role of inanimate surfaces for the spread of coronaviruses and their inactivation with disinfectant agents. *Infection Prevention in Practice*, 100044. https://doi.org/10.1016/j.infpip.2020.100044
- KHARZI, Rachid CHAIB, Ion VERZEA, A. A. (2020). Safe and sustainable development in a hygiene and healthy company: using the decision matrix risk assessment (DMRA) technique "Case study. *Journal of Mining and Environment*, 8. Retrieved from http://jme.shahroodut.ac.ir/article 1714.html
- Leave, M. (2020). Legal Developments Affecting the Workplace U.S. Department of Labor Issues Workplace Guidelines for Coronavirus Outbreak, Including Specific Guidance on FMLA, FLSA and FECA, 1–14.
- Li, L. (2018). A Study on Enterprise Risk Management and Business Performance, 123–138. https://doi.org/10.4236/jfrm.2018.71008
- Mohamed, B., Partner, M., & Of, L. J. (2020). FRANCE: COVID-19 (Coronavirus) Employer FAQs, 19, 1–9.
- Myers, K. N. (n.d.). BUSINESS CONTINUITY STRATEGIES.
- Outfroukh, L. A., Rachid, C., Verzea, I., & Lakhdar, K. (2018). Analysis of risk and the strengthening of the safety technical barriers: Application of Skikda (Algeria) oil refining complex World Journal of Engineering Article information:, (December). https://doi.org/10.1108/WJE-02-2017-0031
- Schulte, J. (2018). Company Risk Management in Light of the Sustainability Transition. https://doi.org/10.3390/su10114137
- Schulte, J., & Hallstedt, S. (2017). Challenges for Integrating Sustainability in Risk Management Current State of Research, (August).
- Shereen, M. A., Khan, S., Kazmi, A., Bashir, N., & Siddique, R. (2020). COVID-19 infection: origin, transmission, and characteristics of human coronaviruses. *Journal of Advanced Research*. https://doi.org/10.1016/ j.jare. 2020.03.005

Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., ... Agha, R. (2020). World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*, 76(February), 71–76. https://doi.org/10.1016/j.ijsu.2020.02.034

Wolf, A. (2019). The myth of stability in Algeria. *Journal of North African Studies*, 24(5), 707–712. https://doi.org/10.1080/13629387.2019.1647899
