WHITEPAPER CORONA FUTURE MANAGEMENT

New Corporate Health Management und Employee Health Protection im Kontext von COVID-19

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😡 Medizinisch Wissenschaftliche Verlagsgesellschaft

English Translation from the Original German Publication

Introduction

The coronavirus pandemic resulted in an unprecedented global lockdown. For companies, a global pandemic is a highly unlikely event, a so-called "Black Swan". A life-threatening shock that has changed the workplace and will have a lasting effect. The risk of a next pandemic is a new reality that affects all areas of life and work. The negative consequences of the worldwide lockdown exceed all economic crises of the last decades. There will be several worlds of crises in the future, which will also affect the workplace. In addition to a next epidemic or pandemic, economic and environmental crises are further risks with extreme effects for both employers and employees.

There is a time before Corona and a "New" time with Corona. Here we speak of a "New Normal" and virologists speak of a "Permanent Wave", which is not a hairstyle, but recurring epidemics that will also have a lasting effect on our workplace. Working in the "New Normal" means entrance control by means of fever measurement with thermal imaging cameras, office work with compulsory masks, separating desks, hygiene, team work with social distancing (at least 1.5-2.0 m distance), personal meetings and business travels only when absolutely necessary. Many employees work mainly in the home office (even in rather conservative companies). Those who come to the office must register in advance, show a reason or belong to the emergency staff.

Health is the highest good - this mindset has had an impact on all areas of our lives by now at the latest. The lived maxim is indisputably correct, everything else is subordinated to health. This leads to the fact that every voice from the economy, no matter whether it is from a large corporation, a medium-sized company or a start-up, is not heard. And thus also every proposed solution that demands a future compromise solution between the containment of new cases and a simultaneous revival of parts of the economy. Medicine first - Economy second. All areas of life and work must be subordinated to the so-called "healthism" - for an indefinite period of time. And maybe even forever, because a new vaccine only affects the specific virus COVID-19 and not future new viruses or virus mutations.

So far, little attention has been paid to the psychological effects on employees and their families. The high level of uncertainty means that from the family's point of view, being present in the office increases the risk of infection, especially among risk groups. From the employer's point of view, family celebrations and holiday trips are a potential risk if employees subsequently infect their colleagues in the office and the company may then have to close down temporarily. For employers, it is essential to avoid the horror scenario of a second lockdown at all costs and to strengthen the employees' trust in the employees and their families is the basis of working in the New Normal.

Will shaking hands become a relic of the old days even after COVID-19 for hygienic reasons as a germ hub? Larger events such as the Oktoberfest (which even without the current virus was known as the "Wiesn flu") critically reconsidered because it is too dangerous? Will companies from the nonmedical sector such as Bosch, Daimler and Co. all diversify into healthcare providers in the long term, since they will then be working in the most important sector? Will companies want to send their employees on health-endangering business trips to other countries less frequently, now that over a hundred thousand Germans have still been stuck abroad for two weeks? Will there still be cruises when tourists have to fear at any time that a virus could break out on their ship? And will companies give the subject of health and safety at work a completely new and strategically important role as part of Corporate Health Management?

Working in the New-Normal

The protection of employees against coronavirus infection is at the heart of everyday work in the "New Normal". The central questions are: How must the work be organized to meet the requirements? Which working conditions can be created to increase the office presence of the employees again? Which employees have recovered or are immune and can work again? Which employees have so far been spared from infection or which employees are still at risk of infection? How can risk groups be protected?

Working in the "New Normal" requires a COVID-19 Master Plan (Pandemic Plan), which forms the basis of the operational measures. It consists of the following three elements, according to the so-called PDCA (Plan-Do-Check-Act) cycle:

- Inventory and risk assessment: Locations and number of employees (risk groups), meetings and work schedules structure, spatial conditions in the office, necessary travel activities, contact with external staff (customers and suppliers) and current risk assessment
- **Definition of measures**: Prevention (work behavior, spatial arrangement, office vs. home, workplace safety), detection (risk potentials, early detection, test concept) and management (instructions, responsibilities, budget)
- **Implementation and control**: Procurement of the necessary aids such as tests, masks, hygiene etc., training of the employees and regular communication, management reporting on the use of the measures and evaluation based on key figures, involvement of medical specialists

Corona-Tests are the New kid on the block in Corporate Health Management

Up to now, a medical PCR laboratory test has only been carried out in cases of justified suspicion or symptoms of acute infections. In the case of positive test results, chains of infection are tracked and interrupted by the Federal Government's Corona-App to prevent them from spreading the virus. The problem is that the pathogen is difficult to detect in the early phase of infection (1-2 weeks after infection). Most nCoV-2 infections show mild or asymptomatic symptoms similar to influenza or colds and therefore often remain undetected (the number of undetected cases is probably several times higher than the number of confirmed infections). A prevention strategy must take into account both potential acute and mild cases.

In the course of a SARS-CoV-2 infection, specific IgM/IgG antibodies are formed as an immune reaction, which also act as a temporary protection against a new infection. It is very likely that temporary immunity exists after an infection has been passed through. COVID-19 immunity is detected by IgG antibody tests. Preventive antibody tests are the key to everyday work in the "New Normal". A distinction is made between three stages of progressive immunity.



Fig. 1 Preventive Antibody Tests are the key to everyday work in the "New Normal" (© DNA4GOOD Scientific Wellness GmbH)

Lockdown is primarily about distancing and hygiene with a restricted productivity in the home office. **New Normal** is about preventive virus and antibody testing to partially return to everyday office life. And **Post-Corona** is about vaccination and working without restrictions or with recurring new challenges.

In this context, regular virus and antibody tests enable a differentiated procedure for each group of employees. Three groups can be distinguished:

- **Immunized employees** are IgG-positive and have already undergone an infection. They are most likely to be temporarily immune and able to work without restrictions.
- **Healthy employees** who have not yet had contact with the corona virus are tested negative and may work with restrictions, people in the risk groups remain in the home office.
- Infected employees without symptoms who test IgM positive and infected employees with acute Symptoms contact their doctor immediately.

At present, work is underway to development Antigen-Tests which, as immediate or rapid tests, enable the immediate detection of the virus without the need to involve a laboratory. Today, various SARS-CoV-2/COVID-19 antibody detections (in vitro diagnostics) with different performance quality are available. According to the manufacturers, a rough differentiation can be made with some study results: on the one hand a COVID-19 immediate test as a so-called membrane-based immunoassay with blood from the finger berry and an IgG accuracy (immunizing antibody) of 98.5-99.0%. An IgG specificity of 98-99% indicates the probability that an immunity is correctly indicated. The quality of the result can be increased to up to 99.99% by a further antibody test, reducing the risk of false positive IgG results from 1:100 to up to 1:10,000. A rapid test is a reliable, simple, quick and cost efficient procedure for the - preventive - detection of antibodies.

On the other hand, there is a COVID-19 laboratory test with the method Enzyme-Linked Immunosorbent Assay (ELISA), in which blood from the vein is used and evaluated in the laboratory with an accuracy of 98.5-99.8%. According to the KBV, the ELISA- antibody test should only be carried out on the doctor's orders.

Currently, politicians and scientists are discussing the introduction of preventive corona tests. Bavaria has already pushed ahead and offers corona tests for everyone. Comprehensive and regular corona tests are an elementary component of preventive risk prevention and strengthens the confidence of employees to return to a safe workplace. For example, employees should be offered corona tests after the holiday period to enable comprehensive screening. In contrast to laboratory tests, rapid tests provide an immediate result (within 10 minutes) and can be implemented on site without great effort.

Critical discussion and Appreciation

Just a short time ago, we were critical of the economization of medicine. The economy of a society refers to the totality of all facilities and activities that serve to meet human needs. According to the prevailing opinion, economization means an expansion of economic thinking into areas of life such as medicine and health, in which economic considerations used to play a subordinate role. In this context, economic sociology also speaks of the economization of society. The corona virus has turned the discussion 180 degrees. Today we can talk about the medicalization of the economy, or in this case the workplace. At present, it is not the economy that sets the pace in medicine, but the medicine is dictating the economy and brings it partially to a standstill. A sword of Damocles of constant falling back into shutdown is omnipresent. The term "medicalization" has been used by some social scientists and philosophers like Michel Foucault since the 1970s and means that medicine is spreading to all areas. Some pointed tongues even claim that virologists in particular dominate the country, because their recommendations have a decisive influence on political or board decisions and thus increasingly intervene in the economic context of the workplace.

The economy is not a contradiction of medicine. It is not primarily a matter of saving costs, but of using resources rationally for their intended purpose. Because the business economist knows that if I spend one Euro wrongly in the health care system, I cannot use it anywhere else where it might be of greater benefit to the insured, patients or employees. And so, it is not necessary to conjure up the medicalization of society and economy, but to deliberately provocatively stimulate the discussion critically at this point. Because medicine, society and economy are strongly interwoven. If the economy falls ill and thus becomes a patient, then the health care industry will also fall ill, and this in turn will affect the micro level of every hospital, which in turn will affect the health care of every individual. In addition, problems in the economy with effects such as unemployment have consequences on the mental health of employees and their families and so on. Today, all economic concerns seem to be on hold for the time being. But it is also legitim to ask: How much medicalization can society and the working world tolerate?

At this point, one can critically question whether an increasing number of tests and measures will also lead to a new insecurity in the company and the workforce, which in turn will have a negative effect on a corporate culture of constant fear of the test results. Another aspect is the timing of the testing, which has an effect on the meaningfulness of the results. Further aspects are the handling of possible false-positive results and the refinancing of the costs for the new employee health protection program. All these aspects must also be taken into account from an ethical point of view.

The psychological effects on employees in different branches/occupational groups should not be underestimated. Industry-specific solutions are needed which effectively take into account the special circumstances. The negative events in the meat-processing industry clearly show that all employers are responsible, regardless of the sector. Anyone who fails to meet this responsibility loses the confidence of employees and society. The health protection of employees is the top priority and is elementary for a positive employer branding in the New Normal.

Summary and Outlook

The development of a COVID-19 Master Plan leads to increased safety in the "new" everyday working environment. In this context, it is necessary to determine the status quo on site, document a pandemic plan in writing, prepare documents and work instructions, and prepare training materials. The training of employees and the accompanying consultation of the management and workforce representatives are further elements.

The implementation of a COVID-19 Master Plan is unavoidable against the background of a lockdown scenario. Companies are faced with challenges of selecting and supplying high-quality COVID-19 virus and antibody rapid tests, checking the quality of documents, studies and certificates (external experts), developing workplace procedures for employees, defining the timing of testing intervals, involving medical professionals (e.g. company doctor) and screening the COVID-19 immunity status of employees to implement effective procedures for working in New Normal with regular rapid tests and tracking of the immunity status of employees over time.

Implementation requires additional expenditures and resources for Corporate Health Management. A cost-benefit analysis of Employees Health Protection must be evaluated against the background of the existential threat of a potential lockdown. Rather, the aim is to refinance the costs, for example by saving on office rents and travel expenses. Working in the New Normal changes cost structures in the long term.

Today's Employee Health Protection is not about incapacity to work and return on investment (ROI), but rather about a strategic existential question of the so-called business continuity management. Thus, New Corporate Health Management exceeds previous efforts, e.g. through tax incentives (e.g. tax allowances) or through the support of health insurance companies in the course of the Prevention Act, and is accompanied by a high willingness-to-pay of the companies themselves.

Literature

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Patrick E. Hofmann is the founder of DNA4GOOD Scientific Wellness GmbH in Hamburg. Since the beginning of the Coronavirus Pandemic, DNA4GOOD offers COVID-19 Employee Health Protection solutions to companies. In cooperation with physicians, Pandemic Plans are developed and rapid antibody tests are used to protect the health of employees. Corporate customers and employees benefit from the medical expertise and industry-specific solutions for a safer workplace in the New Normal.

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David Matusiewicz is Professor of Medical Management at FOM University - the largest private university in Germany. Since 2015, he has been Dean of the University's Health & Social Affairs Department and Director of the Research Institute for Health & Social Affairs (ifgs). In addition, he is a founding partner of the Essen Research Institute for Medical Management (EsFoMed GmbH) and supports technology-driven start-ups in the healthcare sector as a founder or business angel. He is also founder of the Digital Health Academy and the media format Digi Health Talk.