

# RESTRUCTURING THE WORK IN THE OPERATING ROOM WITH THE COVID-19 PANDEMIC

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The coronavirus (Covid-19) pandemic was declared by the World Health Organization (WHO<sup>1</sup>), and the government established measures of prevention and control of the disease, recommending the temporary cancellation of elective surgeries. Except for emergency and urgent surgeries, whose indications remained the same, a large number of surgeries was postponed all over the country.

The health systems (HS) around the world are being as challenged as they possibly can be. After the first wave of this pandemic, the volume of patients who require surgical treatment is critical, and hospitals and health professionals must be prepared to meet this demand<sup>2</sup>. Again, there will be a risk of collapse in the HS due the convergence of postponed treatments and new patients affected by Covid-19.

In global terms, the strict adherence to government health care protocols aims at promoting the return of surgical activities with a certain level of normality, especially aiming at reducing socioeconomic costs. The application and use of this set of actions should be adapted according to the determinations of the government, local resources and locoregional epidemiological data regarding the disease load and presence<sup>3</sup>.

The revenues of private hospitals presented significant reduction in 2020, according to data from the National Association of Private Hospitals, which indicate that the reduction in the first four months of 2020, in comparison to the same period in 2019, was of 26%, related to the variable expenses and the maintenance of fixed expenses<sup>4</sup>.

Due to the postponement of surgeries, the number of complications increased<sup>5,6</sup>. In April and May, 2020, some orientations were published for the gradual return of elective surgical procedures, based on safety protocols and exclusive and segregated flows in the health unit, named Covid Free flow.

The challenge was to guarantee that the patient would leave the isolation, come to the hospital for the surgery and return safely, without being contaminated. Some measures were taken, such as: exclusive and isolated beds for hospitalization and intensive care, exclusive elevators, reinforced hygiene in the rooms, testing of the patient using the nasal swab method (PCR

SARS-CoV2) 48 to 72 hours before the procedure, application of a specific consent term, direct hospitalization (without passing by the reception), temperature check and questionnaire about symptoms in the last 24 hours for all collaborators, physicians and third parties that have access to the hospital; no visitors, use of a disposable surgical mask by the patient, use of a N95 mask by the staff involved in the surgery, use of filter in videolaparoscopic surgeries due to risk of dispersion of carbon dioxide from aerosols used in the pneumoperitoneum<sup>7,8</sup>.

Other challenges came up, such as the high demand of laboratories to perform the PCR, causing delay in the results and postponement of procedures, increased absence of collaborators due to external contamination, regression in a phase of the State plan, with new restrictions and isolation measures, causing fear and insecurity in patients about going to the hospital.

The vaccine arrived and gave hope and expectations of returning to the normal activities.

Vaccines for the immunization against SARS-CoV-2 play an essential role towards a new moment, one of more security and progression of activities for the economic scenario. But despite this perspective, elective surgeries may gradually return to the normal numbers of the pre-pandemic reality.

Besides the predefined flows in the preoperative evaluation phase, such as RT-PCR tests, when the vaccination calendar began in the country, the evaluation about possible side effects after the application of the immunization should also be contemplated.

Considering the vaccines, it is essential to systematize the preoperative flows to verify the administration of doses corresponding to each vaccine, which is the period when it is possible to identify adverse effects, as well as the time of immunization after the administration of complementary doses.

Each individual presents specificities regarding reactions to the vaccine, depending on factors such as age and immune status. Generally, after the administration of the second dose, immunization begins in 14 days, since this is the time period our system requires to create neutralizing antibodies, which block the entrance of the virus in the cells<sup>9</sup>.

The indicator of absenteeism in the nursing staff is a highly relevant data for any health organization, both for the analyses of causes and effects that impact health care. A study from 2019 showed that the average absence in Brazilian companies ranges from 3 to 4%, and these rates are acceptable in a work place.

In the country, considering the Covid-19 pandemic, the number of nursing professionals who are absent from work is still not possible to measure. Health services are challenged to work with shifts in order to meet the patients' needs, even with the increasing absence rates. Besides the contamination with Sars-CoV-2, there is also the impact from the burnout syndrome, the stress caused by governmental and institutional policies, as well as the conducts of society concerning preventive measures against the virus, the ethical dilemma to execute procedures, anxiety and depression disorders, increased self-medication, tiredness, insecurity and fear of contaminating relatives<sup>10</sup>.

Finally, it is a major challenge for the organizations to be sustainable, to maintain their perpetuity, so that costs can be

covered by the revenues, and still maintain a competitive model with qualified care and safety for patients and collaborators.

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