Scheda per la rappresentazione dell'esperienza

Level: Hospital

Topics:

- Training, information and management of healthcare workers

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Staff surveillance

Since COVID-19 outbreak, the first priority of the Univerisyt Teaching Hospital Città della Salute e della Scienza of Torino was to protect healthcare workers and keep delivering services to citizens. Several actions were implemented in order to protect health of our staff: distribution of PPE and training on their correct use, a dedicated area for continuous update on the organization's guidance and procedures, pre-triage stations at the entrances, reorganization of the activities and services provided, reorganization of spaces and working hours, free phone counselling and support from the organization's Psychology Service, widespread communication about the benefits provided by Law, etc. while continuing to ensure essential services to users.

Epidemiological surveillance was crucial for the health of our staff. It consisted of timely tracking workers' exposure to people who tested positive, where they workers or patients, and monitoring onset of symptoms among employees.

Occupational health, hospitals' Medical Directorates and Health Professions Directorate set up a working group and defined the actions to be implemented by drafting a protocol integrating



legislation provisions, previous knowledge, guidance from scientific associations and organizational elements regarding feasibility and resources availability.

The surveillance section of the protocol included the following elements:

- 1. Filling in and sending a surveillance sheet
- 2. Assessment of the risk of infection by the Occupational Health and Occupational Risk Units
- 3. Feedback on the assessment results
- 4. Path based on the risk class
- 5. Swab testing
- 6. Results of the swab test
- 7. Definition of suitable isolation measures
- 8. Return to work (for COVID positive or high risk workers)
- 9. Reporting to the National institute for insurance against injuries on the workplace and disease certification

While carrying out this activity, the surveillance sheet was crucial: its filling in and sending to the Occupational health Unit ensured an exchange of information that was essential during the emergency. The surveillance sheet filled out by the employees included, alongside with personal details, information about job position and department, contact details, and clinical information that allowed the Occupational Health Unit the immediate allocation to one of the risk classes (low-medium-high) and tracking of the employee. All these pieces of information were fundamental for the Medical Directorate and the Healthcare Professions Unit in order to define the actions to be undertaken.

Here follow the specific actions to be undertaken per each risk class:

- Low: the employee could keep working with the sole indication to monitor possible onset of symptoms
- **Medium:** the employee could keep working but he/she was required to wear mask while waiting for swab testing within 72 hours from the latest contact
- **High:** if on the workplace, the employee was immediately tested and sent back home; if already home, they could start household isolation.

Collection of reporting sheets was initially made in paper with considerable effort for manual registration; it was subsequently digitalized to reduce workload. A digital database with all the sheets collected was set up. It was updated daily and then shared with Medical Directorates and the Health Professions Departments, which allowed immediate implementation of monitoring actions while guaranteeing data quality and significant improvement of system's efficiency with less use of dedicated staff.

Dedicated teams were set up for analysis of the reporting sheets in the database and implementation of subsequent actions. The multi-professional teams were composed of nurses with specific skills in infection prevention and control, healthcare assistants, nurses with risk management skills, physicians from the Medical Directorate, physicians in training from the School of Hygiene and Preventive Medicine.

The tasks assigned to the team included:

 Checking timeliness of swab testing for the employees classified as highly at risk and collaborating with the Medical Directorate and the Health Professions Department in managing the consequent out-of-work provisions





 Organize swab testing for employees classified as medium risk considering multiple factors: timeliness of testing (swab testing performed at least 72 hours from the contact), subsequent and multiple exposures, impact on the organization in case of clusters requiring simultaneous testing in the same service, employees needs, supporting the staff in the correct implementation of the procedure, study and evaluation (in collaboration with the Occupational health unit) of particular reports.

Algorhytms were created that made it possible to manage large numbers of reports: in particular, the algorhytm a list of names which was assigned a recommended action based on the elements previously described, that helped make reasoned choices about the daily schedule.

The dedicated team proved to be effective to ensure coordinated and safe management of a huge number of reports: 10000 reports were collected in 2 months, about 6800 swab testing were performed and 220 positive employees put on temporary leaving. Integrating several professionals ensured flexibility and facilitated the relations among the diverse functions of the organizations, which was essential in a moment when timeliness and speed of action must be associated with data quality and organization's safety.

In May, the number of reports decreased significantly (200 reports in one entire month): as a results, the teams reduced their activities and the staff assigned went back to their usual activities dedicating only part of their time to the teams'activities.

In conclusion, data analysis and interpretation helped to predict and reduce the development of possible epidemic outbreaks within the organization, promptly taking actions aimed at reducing risk. Collection of these data will be a starting point for future studies on clusters and on the epidemiology of the infection among employees, so as to better understand the epidemic's key factors and be ready in case of new peaks or possible future emergencies.

