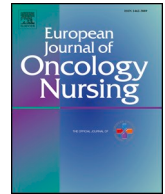




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## Letter to the Editor

## COVID-19 containment measures adopted by Italian Paediatric Oncology and Haematology Association (AIEOP) centres to prevent the virus spread among healthcare providers



Sars-CoV-2 (COVID-19) is a new virus that has spread rapidly worldwide. Italy has been heavily affected by this pandemic (Lambertini et al., 2020). Cancer patients who contract COVID-19 infection seem to be at a major risk to severe illness and poor prognosis (Kotecha, 2020). Although children seem less vulnerable to the disease, they are not immune to it. The paediatric onco-haematology population is more at risk of contracting the virus because of its fragility due to immunosuppression (Hrusak et al., 2020). The Italian Ministry of Health issued recommendations about patients affected by malignancies, both for adults and children (Ministero della Salute, 2020). Furthermore, in order to support the clinicians, the Italian Paediatric Oncology and Haematology Association (AIEOP) issued a document containing national recommendations tailored on paediatric patients with cancer (AIEOP, 2020). The AIEOP network includes 48 Italian

centres sharing standards of treatment, clinical trials protocols and research projects. In order to provide the measures adopted in different haemato-oncology paediatric centres belonging to the AIEOP network, a nurse-led national survey has been conducted. This survey aims to highlight preventive and control measures to manage COVID-19 infection in AIEOP centres. In this short letter we try to exploit the survey results showing what measures are adopted to prevent the spread of the virus among the operators of the AIEOP centres also considering what is reported in the national AIEOP press release (Table 1).

All the implemented measures are consistent with the AIEOP national recommendations. Sixty-six percent of the responding centres reported a shortage of PPE and difficulties in supply: this was reported about masks (FFP3 66.7%; FFP2 55.6%, surgical 47.2%) and alcohol-hand rub (52.8%). Interestingly, the majority (83.3%) felt safe in their

**Table 1**

COVID-19 containment measures adopted by Italian Paediatric Oncology and Haematology Association (AIEOP) centres to prevent the virus spread among healthcare providers (multi-response questions, n = 36).

Implementation Area	Containment measure adopted (healthcare providers)	n <sup>a</sup>	%
Personal protective equipment (PPE) Related Behaviours	Alcohol-based hand rub available in the common areas	23	63.9
	Chlorine-based disinfectants provision to clean surfaces and environments	30	83.3
	Wearing mask as an essential criterion to enter the facilities	22	61.1
	Wearing gloves as an essential criterion to enter the facilities	5	13.9
	Use of thermal scanner for those workers who enter the facilities	1	2.8
	Body temperature measured or self-reported at the beginning of every work shift	20	55.6
Work Organization	Staff meetings suspended	29	80.6
	Events determining gathering in the workplace suspended or reorganized (i.e. nurses' handover, rest breaks at work)	22	61.1
	Hospital cafeteria closed to professionals	15	41.7
	Hospital canteen closed to professional	9	25
	Healthcare holidays or any kind of work permit suspended	12	33.3
	Smart work solutions activated (when possible)	16	44.4
Financial Training	Pediatric onco-haematology staff moved to COVID-19 units	19	52.8
	Salary increase or supplementary payments for the frontline medical staff	0	0
Health Related	E-learning about PPE	12	33.3
	E-learning about the pandemic	13	36.1
Diagnostic	Home isolation period if positive swabs and no symptoms	28	77.8
	No home isolation period and/or no swabs performed to those healthcare providers without symptoms, even in case of previous direct contact with a COVID-19 confirmed case	7	19.4
	Home isolation period and/or swabs performed if no symptoms but direct contact with a COVID-19 confirmed case	11	30.6
	Home isolation period if healthcare providers presented symptoms	16	44.4
	Dedicated phone number to answer COVID-19 related questions from healthcare staff	22	61.1
	Swabs performed to the entire staff	8	22.2
Others (e.g. serological tests)	Swabs performed to those healthcare providers who were in contact with a COVID-19 confirmed case, without wearing PPE	20	55.6
	Swabs performed to those healthcare providers who presented symptoms (fever and respiratory symptoms)	14	38.9
	Others (e.g. serological tests)	4	11.1

<sup>a</sup> Multi-response questions.

own work environment and considered their work conditions good enough. The rest of the responders (16.7%) did not answer the question. Staff absenteeism has been analysed and only 16.6% of the responders registered an increased rate: this was related to providers' illness, the need to care for a relative, fear, or lack of transportation to get the workplace.

Medical staff have been asked to report the clinical management of cancer children found positive to COVID-19. The survey showed that in 36.1% of the centres, paediatric oncologists have visited the positive covid cancer children in the dedicated covid units or at home; in 19.1% of the centres, paediatric oncologists have not visited themselves the positive covid cancer children. Lastly, 13.8% of the medical staff used phone or telemedicine for consulting with patients.

Despite the non-rigid and uniform management in all centres, only 14 positive onco-haematological children were reported and 35 people including doctors, nurses and other staff confirmed that the measures implemented have been satisfactory. Given the limited literature available, this survey represents an excellent vision of how an unexpected emergency situation could be faced and could be a reference in case of similar events in the future.

#### Declaration of competing interest

None declared.

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