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Letter to the Editor

Safety of face-to-face 2021 annual congress of the Italian Resuscitation Council during the fourth COVID-19 wave in Italy



To the Editor:

The 2021 annual congress of the Italian Resuscitation Council (IRC) took place in person in Rimini, Northern Italy, between December 16th and 18th. Rigorous measures were adopted to grant the safety of participants, including a mandatory EU Digital COVID Certificate, wearing surgical or FFP2 masks, temperature measurement, hand cleaning and social distancing. However, the attendance of asymptomatics who may transmit the virus and trigger outbreaks was pos-

sible despite preventive measures. Therefore, to assess the safety of organising face-to-face congresses during the COVID-19 pandemic, we conducted an online survey among participants registered to the congress.

After the congress, 686 registered people received an email on December 23rd to fill out the first survey exploring social behaviours and perceived safety related to the congress. On December 30rd, a second survey was sent to assess the infective status (symptoms

Table 1 – Distribution of responses to the survey.

Perceived congress safety survey (n = 414)		Post congress COVID-19 status survey (n = 653)	
Transports to the congress, n (%)		Vaccinated for COVID-19 at the time of congress, n (%)	
Car	266 (64.3%)	No	3 (0.5%)
Shared car	88 (21.3%)	Yes – 1 dose	5 (0.9%)
Train	64 (15.5%)	Yes – 2 doses	50 (7.7%)
Plane	12 (2.9%)	Yes – 3 doses	595 (90.9%)
Other	13 (3.1%)		
Role – n (%)		Symptoms suggestive for COVID-19 within 3 weeks, n (%)	
Exhibitor	5 (1.2%)	Tested for COVID-19 within 3 weeks, n (%)	
Participant	353 (85.3%)	No	280 (42.9%)
Volunteer	19 (4.6%)	Yes – antigenic	173 (26.5%)
Faculty	26 (6.3%)	Yes – Molecular	200 (30.6%)
Staff	11 (2.7%)	COVID-19 testing results (n = 373), n (%)	
Occupation, n (%)		Positive	5 (1.3%)
Physician	81 (20%)	Low positive	1 (0.3%)
Nurse	221 (53%)	Negative	367 (98.4%)
Rescuer	68 (16%)		
Other	44 (11%)		
Participation to social events during the congress, n (%)			
Yes	191 (50.4%)		
No – concerns related to COVID-19	42 (10.1%)		
No – other motivations	164 (39.6%)		
Perceived safety – median (IQR)			
Scientific sessions	8 (8–10)		
Expo area	8 (7–9)		
Coffee Break	6 (5–8)		
Launch area	6 (4–8)		
Travels towards and from the Congress	10 (8–10)		
Global satisfaction for safety measures	9 (8–10)		
Would have preferred a virtual congress, n (%)	16 (3.9%)		

compatible with COVID-19 or COVID-19 test results, if performed, during the three weeks following the congress).

We received 414 (60%) responses to the first survey and 653 (95%) to the second one. Most of the respondents (64%) reached the congress venue by car or car-sharing (21.3%). Half of the respondents (50%) declared to have participated in the social events of the congress (lunch, expo area and dinners with other attendees). Of those who did not participate in social events, only a quarter motivated their behaviour with concerns about COVID-19 exposure. Finally, when the participants were asked to score on a 10 points Likert scale their perceived safety of various congress-related contexts, scientific sessions and travels were considered the safest while the lunch and coffee break areas were perceived as the less safe. Concerning the infective status survey, 99.5% of participants declared to be vaccinated with at least one dose at the beginning of the congress. Within three weeks from the congress, 11 participants (1.7%) had symptoms compatible with COVID-19 and 373 (57.1%) tested for COVID-19 of which six (1.6%) were reported positive. Only 16 respondents (3.9%) declared they would have preferred a virtual congress (Table 1).

We found that SARS-CoV-2 transmission was extremely low during a face-to-face medical congress with almost all participants vaccinated and high standards of safety measures. A rate of positive tests of 1.6% is largely acceptable when compared to that of the general Italian population for that period, ranging from 3.6% to 16%,¹ and we cannot exclude that the 6 positive attendees got infected independently from the congress. Our findings are in line with a recent report from the French Intensive Care Society annual congress where no positive cases were documented.² Differently from the French study, we reported data under a period of high COVID-19 incidence and according to the seasonality of COVID-19³ will be preferable to organise congresses in late spring or summer. Despite the limitations of web-based surveys, our data suggest that it is safe, even in winter during high COVID-19 incidence, to organise face-to-face medical congresses if there is a very high vaccination rate among participants and safety measures are employed.

Acknowledgements

None.

Authors' contributions

All the authors have made substantial contributions to conception and design and have been involved in drafting the manuscript and revising it critically.

Conflict of interests

TS is the Social Media Editor of Resuscitation and Resuscitation Plus and member of the ERC BLS Science and Education Committee. FS is the Chair-Elect of the European Resuscitation Council, ILCOR Chair of Social Media Working Group and ILCOR BLS Task Force member. All other authors declare that they have no competing interests.

REFERENCES

1. COVID-19: COVID-19 Italia – Monitoraggio situazione 2021. <https://github.com/pcm-dpc/COVID-19> (last accessed on February 17, 2022)..
2. SRLF Trial Group. Sanitary safety of the 2021 French Intensive Care Society medical conference: a case/control study. *Ann Intensive Care* 2022;12:11. <https://doi.org/10.1186/s13613-022-00986-x>. PMID: 35147794; PMCID: PMC8831193.
3. D'Amico F, Marmiere M, Righetti B, Scquizzato T, Zangrillo A, Puglisi R, Landoni G. COVID-19 seasonality in temperate countries. *Environ Res* 2022;206:112614. <https://doi.org/10.1016/j.envres.2021.112614>. Epub 2021 Dec 22.

Lorenzo Gamberini

Department of Anesthesia, Intensive Care and Prehospital Emergency, Maggiore Hospital Carlo Alberto Pizzardi, Bologna, Italy
Italian Resuscitation Council Scientific Committee, Bologna, Italy

Tommaso Scquizzato

Italian Resuscitation Council Scientific Committee, Bologna, Italy
Department of Anesthesia and Intensive Care, IRCCS San Raffaele Scientific Institute, Milan, Italy

Federico Semeraro

Department of Anesthesia, Intensive Care and Prehospital Emergency, Maggiore Hospital Carlo Alberto Pizzardi, Bologna, Italy

Andrea Scapigliati

Institute of Anaesthesia and Intensive Care, Catholic University of the Sacred Heart, Fondazione Policlinico Universitario A. Gemelli, IRCCS, Rome, Italy

Giuseppe Ristagno

Department of Pathophysiology and Transplantation, University of Milan, Milan, Italy

Alberto Cucino*

Italian Resuscitation Council Scientific Committee, Bologna, Italy
Department of Anaesthesia and Intensive Care Medicine, Azienda Provinciale per i Servizi Sanitari, Provincia Autonoma di Trento, Italy

* Corresponding author at: Department of Anaesthesia and Intensive Care Medicine, Azienda Provinciale per i Servizi Sanitari, Provincia Autonoma di Trento, Largo Medaglie d'Oro 9, 38122 Trento, Italy.
E-mail address: alberto.cucino@apss.tn.it

Italian Resuscitation Council Scientific Committee¹

Received 24 February 2022

Accepted 26 February 2022

<https://doi.org/10.1016/j.resuscitation.2022.02.027>

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¹ Italian Resuscitation Council Scientific Committee (group authorship): Giovanni Babini, Sonia D'Arrigo, Francesca Fumagalli, Alessandro Galazzi, Guglielmo Imbriaco.