

Teachings after COVID-19 outbreak from a survey on Family Practitioners

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Abstract

Background: since December 2019, the dramatic escalation in Corona virus (COVID-19) cases worldwide has had a significant impact upon healthcare systems. Family practitioners (FPs) played a critical role in the coordination of healthcare between patients and hospitals or new COVID-19 units.

Materials and methods: we performed an online prospective survey to assess the impact of the pandemic on FPs practice. It was supported and delivered by the *Local Association of Physicians of Forli-Cesena and Rimini, Emilia Romagna, Italy* from the 16th-30th of April 2020.

Results: A total of 300 FPs were included, mean age was 53.6±13.5 years. 60.2% reported >75/week outpatient visits before the pandemic which reduced down to an average of <20/week for 79.8% of FPs. 24.2% of FPs discontinued home visits, whilst for 94.7% of FPs there was a >50% increase in the number of telephone consultations. Concern related to the risk of contagion was elevated ($\geq 3/5$ in 74.6%) and even higher to the risk of infecting relatives and patients ($\geq 3/5$ in 93.3%). The majority of FPs (87%) supported the role of telemedicine in the near future. The satisfaction regarding the network with hospitals/COVID-19 dedicated wards received a score $\leq 2/5$ in 46.9% of the cases.

Conclusions: A collaboration is needed with well-established networks between FPs and referral centers. The COVID-19 pandemic has had a significant impact on the working practices of FPs. This necessity for change provided new insights and opportunities to inform future working practices.

Dear Editor,

The Coronavirus disease (COVID-19) pandemic has significantly impacted healthcare systems.^{1,2} Family Practitioners (FPs) faced significant challenges and demands to meet the clinical and logistic needs of the population³, as well as to coordinate healthcare between patients and hospitals/new COVID-19 units. The impact upon family practitioners and their working practices has been poorly investigated⁴.

We performed an online prospective survey to assess the impact of the pandemic on FPs. It was delivered by the *Local Associations of Physicians of Forli-Cesena and Rimini, Emilia Romagna, Italy* from 16th-30th April 2020 to all FPs of these districts; Forli-Cesena and Rimini districts belong to Emilia-Romagna region, which is one of the three Northern Italy regions mostly affected by the COVID-19 pandemic. Italian FPs are part of the territorial primary care system and take care to up to 1500 patients for health issues not requiring a specialist consultation, with outpatients and home visits. The questionnaire consisted of 29 multiple-choice questions (Table 1). A scale from 0 (not satisfied at all) to 5 (extremely satisfied) was used. A total of 300 FPs were included (response rate 56%). All the participants expressed their consent for publication.

Demographics and professional information. The mean age was 53.6±13.5 years and 55.9% were males. The majority of FPs worked as solo practitioners (47.7%), followed by those working as group practitioners with other physicians (42%) and in multi-specialty groups (6.5%). Only 27.8% of FPs were tested for COVID-19, 6.5% of them were positive.

Perceived personal safety. 67.3% of FPs felt they did not receive adequate information regarding the use of personal protective equipment (PPE). It is noteworthy that only 29.7% of participants were provided with official protocols and only 18.7% felt satisfied (score ≥3) with the information they received. The perception of safety was extremely low with a reported score of 0 or 1 in 40.7%.

Activities, concerns and perspectives for the next six months. The number of visits before the pandemic was >75/week in 60.2% cases, but 79.8% of the FPs reported a subsequent average of <20 patients/week. 24.2% of FPs discontinued the usual home visits for the evaluation of older/fragile patients, whilst in 94.7% of cases there was a >50% increase in the number of telephone consultations.

FPs' satisfaction regarding the network with hospitals/COVID-19 dedicated wards received a score ≥ 3 (satisfied) in 53.1% of the cases. Resource distribution was considered unequal by the vast majority of the participants. 86.3% were not or a little satisfied (score ≤ 2), of whom 41.4% of the participants were completely unsatisfied. Concern related to risk of contagious was elevated (≥ 3 in 74.6%) and concerns about infecting relatives and patients were even higher (score ≥ 3 , high concern in 93.3%). Eighty-seven percent of the participants favored the use of telemedicine in the near future, including electronic/online prescriptions to avoid overcrowding.

This survey highlights some of the challenges that FPs have had to face during the pandemic. Clinical activity underwent a deep reorganization in order to balance the healthcare to patients with the lack of PPE and necessary information. Indeed, the decrease in the number of outpatient and home visits was mirrored by an increase in telephone consultations. Telemedicine has been the main modality to provide care assistance and will have a greater role in the future⁵. Finally, this survey highlighted the lack of specific training on the infective risk of COVID-19 and on the use of PPE, especially as FPs were faced with new unfamiliar tasks such as quarantine regulation and psychological support.

The limitations of this study are the small sample size and the data collection from only two Emilia-Romagna areas. However, this region was significantly affected by the pandemic and our data confirms prior findings from another Italian report.⁴

Health systems are going to experience further changes: FPs will represent the first line of fight the pandemic, being required to detect, isolate and treat new cases. Improvements in the collaboration between FPs and hospitals/COVID-19 dedicated wards is needed. These institutions

have the duty to provide physical/psychological protection to FPs who represent the outpost of the citizens' health.

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Table 1. Data summarizing main data of the survey

Family Practitioners' demographics and professional information	Participants n. 300 n. (%)
Gender - male	167 (55.9)
Age – years±SD	53.6±13.5
Working setting	
Solo practitioners	143 (47.7)
Group practitioners	126 (42)
Multi-specialty group	19 (6.3)
Other	12 (4)
Number of COVID-19 positive patients managed	
<10	211 (70.3)
10-30	75 (25)
30-50	9 (3)
>50	5 (1.6)
Having at least one colleague (FP) diagnosed with COVID-19	253 (85.2)
Personally tested for COVID-19	83 (27.8)
Personally COVID-19 positive	9 (6.5)
Family Practitioners' perceived personal safety	
Received appropriate information about PPE	
No	202 (67.3)
Yes, with local meetings	1 (0.3)
Yes, with courses	8 (2.7)
Yes, with protocols	89 (29.7)
Family practitioners satisfied or very satisfied about the PPE information received	58 (18.7)
Family practitioners feeling safe in the workplace during COVID-19 emergency	106 (35.3)
Availability of	
Surgical masks	239 (79.7)
N95 masks	234 (78)

Disposable gowns	104 (34.7)
Goggles or screens	177 (59)
Gloves	262 (87.3)
Family Practitioners' activities, concerns and perspectives for the next 6 months	
Number of weekly outpatient visits before the COVID-19 outbreak	
<50	58 (19.4)
50-75	61 (20.4)
75-100	92 (30.8)
>100	88 (29.4)
Number of weekly outpatient visits during the COVID-19 outbreak	
<20	238 (79.8)
20-50	58 (19.5)
>50	2 (0.7)
Number of weekly in-house visits before the COVID-19 outbreak	
<5	63 (21.1)
5-10	138 (46.5)
10-15	62 (20.9)
>15	34 (11.5)
Number of weekly in-house visits during the COVID-19 outbreak	
None	72 (24.2)
<5	184 (61.7)
5-10	36 (12.1)
10-15	0
>15	2 (2)
>50% increasing of phone calls (telemedicine)	287 (94.7)
Family practitioners satisfied or very satisfied about the network created by local health authority	159 (53.1)
Family practitioners not satisfied or a little satisfied about the distribution of the resources between hospitals and FPs during the COVID-19 emergency	259 (86.3)
Family practitioners with a high or very high fear of getting infected	224 (74.6)
Family practitioners with a high or very high fear of infecting relatives and patients	280 (93.3)
Family practitioners who believe that telemedicine should be used more in future	260 (87)

SD: standard deviation
PPE: personal protective equipment
FP: family practitioner