

**Brunt of COVID-19 Pandemic on Medics' Children****Nidhi Shukla<sup>1</sup>, Pankaj Tyagi<sup>2</sup>, Jayendra Nath Shukla<sup>3</sup>, Swati Agarwal<sup>4</sup>, Suman Bhartiya<sup>5</sup>, Prachi Shukla<sup>6\*</sup>**<sup>1</sup>*Department of Biotechnology and Bioinformatics, Birla Institute of Scientific Research, Jaipur, Rajasthan, India*<sup>2</sup>*Ex Assistant professor, Pathology Department, MSY Medical College, Nalpur, Uttar Pradesh, India*<sup>3</sup>*Department of Biotechnology, Central University of Rajasthan, Rajasthan, India*<sup>4</sup>*Assistant Professor, Ophthalmology Department, Muzaffarnagar Medical College, Beghrajpur, Uttar Pradesh, India*<sup>5</sup>*Professor and Head, Ophthalmology Department, Muzaffarnagar Medical College, Beghrajpur, Uttar Pradesh, India*<sup>6</sup>*Associate Professor, Ophthalmology Department, Muzaffarnagar Medical College, Beghrajpur, Uttar Pradesh, India***Received: 24-08-2020 / Revised: 17-10-2020 / Accepted: 02-11-2020****Abstract**

COVID-19 has created many changes in the social norms; children being an obvious part of society are also not exempted from this. Not only their studies have been affected, but also their behaviour has been found to be altered. They are facing many different types of attitudes from their own parents, classmates, friends and society during this COVID scenario. This study was conducted to assess the behavioural changes in the children of medical professionals due to the apprehension caused by the corona infection and stress generated by the same.

**Key Words:** Corona, brunt, behavioural changes, apprehension, medics' children

This is an Open Access article that uses a fund-ing model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided the original work is properly credited.

**Introduction**

On 11<sup>th</sup> March 2020 this disease was declared as global pandemic by WHO after being spread in many countries. Being the second most populated country, how was it possible that India remained untouched, so the first case was detected on 30<sup>th</sup> January in Kerala. Analyzing the gravity of the situation, our respected Prime Minister urged Indians to remain indoors as a voluntary 'Janata curfew' for 14 hours on 22<sup>nd</sup> March from 7 am to 9 pm [1-3].

He did invocation for lock down in the whole country from 24<sup>th</sup> March for 21 days limiting the mobility of entire 1.3 million populations, as a preventive measure [4]. This first phase of lock down was strictly followed in every nook and corner of the country, people were locked indoor

except the medical professionals, police personnels, municipal corporation workers, bankers and media persons [5]. People in these professions had to come forward and work continuously despite fear and stress created by this unknown disease. Phase 1 lockdown was further extended for three more phases of lockdown till 31<sup>st</sup> May [6,7]. Then phases of unlock were applied, considering the difficulties in combating the fiscal deficits and problems in daily needs mainly faced by lower socioeconomic strata. Doctors, nurses, medical staff had to directly deal with the COVID patients, compromising their personal and family lives. Worst hit were the children of these parents, as they had to live in fear for their parents getting infected, also they had to face the discrimination and avoidance from their friends, even after unlock. We conducted this survey to assess the brunt of this COVID situation and lockdown on the children of medical personnels. This survey was conducted in the unlock phase 3.

\*Correspondence

**Dr. Prachi Shukla**

Associate Professor, Ophthalmology Department, Muzaffarnagar Medical College, Bahadarpur, Uttar Pradesh, India

E-mail: [prachipankajtyagi@gmail.com](mailto:prachipankajtyagi@gmail.com)

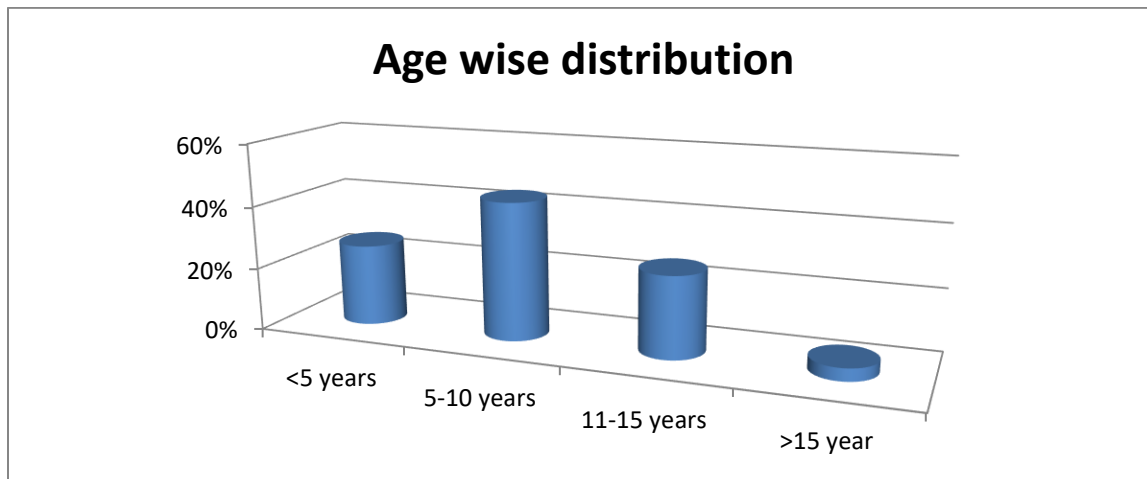
## Materials and Methods

This was a questionnaire based cross sectional study carried out by few health care professionals and researchers from different cities. An online survey questionnaire was created by Google forms having 20 questions. The link of this questionnaire was sent via WhatsApp and other social media platforms to the people associated with the health care profession. On accessing the link they were directed to the questions sequentially arranged, and the medical professionals having child/children had to answer. Out of 20 questions, 19 were multiple choice questions and one

was a one liner question. The information collected was automatically processed to the spreadsheet and the responses were evaluated via auto generated excel sheet.

## Result

A total of 352 medical professionals were interviewed via a questionnaire and all of them were included in the study. Roughly half of the children were in the range of 5-10 years of age group (fig-1), with the mean age of 7.8 years.



**Fig 1:Age wise distribution**

Nuclear and joint families were 57.8% and 42.2% respectively. Children were taken care by either the other family members or by the domestic help in routine, in the absence of parents. Total 80.4% of medical professionals had been in touch with COVID patients in their clinics or hospitals where they could easily get exposed to coronavirus infection. Strict sanitisation protocol was practised by 87.2% of participants for themselves and for their belongings,

after returning from their workplace, which consumed around half to one hour per day. This routine was followed throughout the COVID period by 57.8% participants. About 28.3 % medical professionals had undergone isolation after getting Corona positive, either at hospital or their homes.

In figure 2 the time spent by medico parents along with their children prior to COVID situation is depicted.

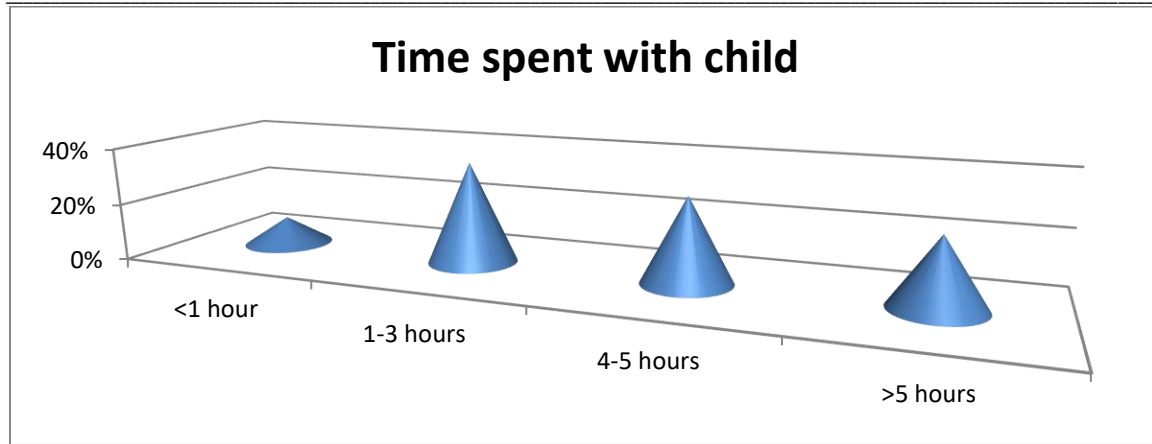


Fig 2:Time spent with child

About two third (62.7%) participants accepted that there were behavioural changes present as shown in the figure-3. The types of negative changes, percentage wise on the basis of the questionnaire are depicted in figure-4.

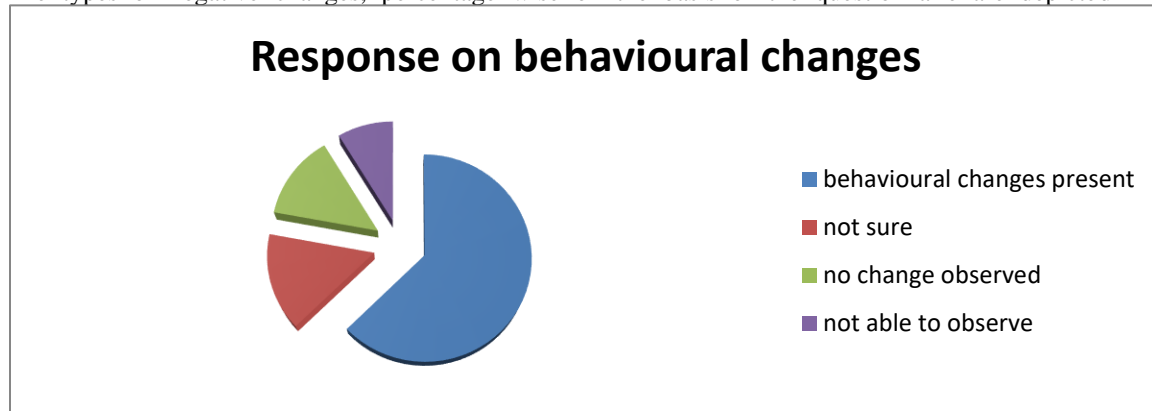


Fig 3:Response on behavioural changes

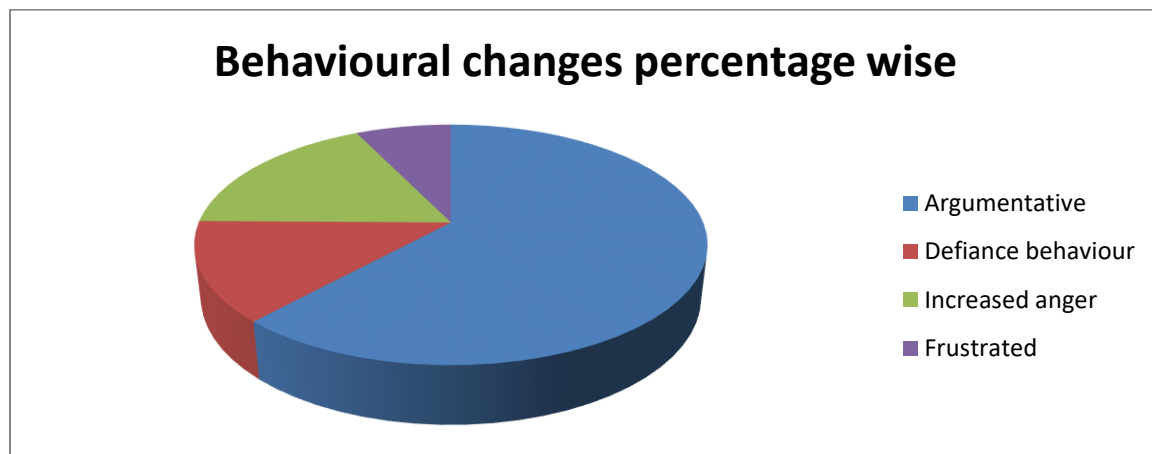


Fig 4:Behavioural changes percentage wise

As per questionnaire 42.6% parents accepted that they usually got easily annoyed during this tough time with their child. According to 83.7% parents, their child became more dependent on electronic devices and due to that, less interactive with family members because of over indulgence into the pseudo world. About 61.2% of the total participants accepted that due to this questionnaire, they got help in introspecting the relationship with their wards, which will definitely help them to rear their younger ones in a better way in future.

### Discussion

In our survey, we found that a positive correlation exists between the behavioural changes in the children of healthcare professionals towards negative direction and the physical and mental stress caused by the COVID pandemic. As soon as this SARS-COVID-19 appeared on our national radar, the position of health care professionals was not very comfortable. A steep learning curve is always seen in response to public health emergencies, particularly when it involves a new disease. Seeing the transmissibility pattern of this disease, precautions for personal protection and community transfer was also to be taken at war footage level. Social distancing became a mandate. Working in direct contact with patients, the medical personnel had to scrub, wear PPE, mask, gloves, face shield, sanitising and what not[8,9]. After getting back from the workplace they had to bathe, scrub, clean, wear a new set of clothes and then hurry home to their children. All the doctors used to follow laborious and detailed sanitising routines, regardless of the stress at the work place, to protect themselves and their families. This practice definitely shortened their time for children and home that they used to provide them in routine. Kids who greet their parents effusively at getting back to home after work, had to wait until after sanitisation, shower, soaking clothes in warm water and detergent etc. Being frontline Corona warrior since March and fighting the battle of this enigma microorganism didn't provide doctors any applause; instead they had to bear the distress seeing their confused and bawling wards. Anguished due to the stigma they faced and discrimination they perceived for their children by their peers as a repercussion of being medics' offspring was also not rare. During the lockdown, because of the COVID duties and isolation protocol of the parent on getting infected, medics' children had to bear more solitude. If schools had been open, this would not have weighed down on them so much. Another mental brunt was the online classes,

which a child being small enough to understand the technicalities of gadgets in the initial phase, had to bear it by force. Though with time they grew up becoming more tech savvy getting introduced to online games and developed their field of interest in the absence of parental guidance. Restriction of outdoor activities led to physical and mental sluggishness in them [10]. They became less interactive with their parents as there were very little things to share being restricted inside the house, with no school or outing. Consequence was, decreased productivity, increased food avoidance, obesity, sluggish interaction, frustration and increased anger [11]. Roughly two-third of the medico parents have accepted that their child has developed an argumentative attitude in this COVID time. Lack of recreation and extracurricular activities has also been a reason of the detrimental effect on the children's tender mindset.

### Conclusion

Outbreaks use to bring long lasting consequences on the physical health of the community, but psychological health is also not an exception for this COVID outbreak. This study concludes that children of health care professionals had a negative impact on their mental health in this COVID pandemic. Medical fraternity being among the front liners in this corona war, are mired by protocols, couldn't contribute enough time to their wards, resulting in behavioural changes and subtle shifts in the demeanour in them. A corroborative, motivational approach to a child's well being is best. Communication, care and commitment is needed towards them and their fears should be acknowledged and taken care of and with time as this pandemic settles down, we can hope that these changes will revert back to normalcy.

### Reference

1. COVID-19: Lockdown across India, in line with WHO guidance. UN News. 24 March 2020.
2. Helen Regan; Esha Mitra; Swati Gupta. India places millions under lockdown to fight coronavirus. CNN.
3. UP Officials Seen With Crowd Amid 'Janata Curfew'. Then, A Clarification. NDTV.com.
4. Gettleman, Jeffrey; Schultz, Kai (24 March 2020). Modi Orders 3-Week Total Lockdown for All 1.3 Billion Indians. The New York Times. ISSN 0362-4331
5. Guidelines.pdf (PDF). Ministry of Home Affairs.

- 
6. 2 More Weeks Of Lockdown Starting May 4. NDTV.com. Retrieved 1 May 2020.
  7. Centre extends nationwide lockdown till May 31, new guidelines issued. Tribune india News Service. 17 May 2020. Retrieved 17 May 2020.
  8. Liu M, Cheng S-Z, Xu K-W, et al. Use of personal protective equipment against coronavirus disease 2019 by healthcare professionals in Wuhan, China: cross sectional study. *BMJ*. 2020;369:m2195.
  9. Rimmer A. Covid-19: Doctors launch judicial review over PPE failures. *BMJ* 2020;369:m2301.
  10. Rundle AG, Park Y, Herbstman JB, Kinsey EW, Wang YC. COVID-19 related school closings and risk of weight gain among children. *Obesity (Silver Spring)* 2020; 28: 1008- 1009.
  11. Von Hippel PT, Workman J. From kindergarten through second grade, U.S. children's obesity prevalence grows only during summer vacations. *Obesity (Silver Spring)* 2016; 24: 2296- 2300.

**Conflict of Interest: Nil**

**Source of support: Nil**