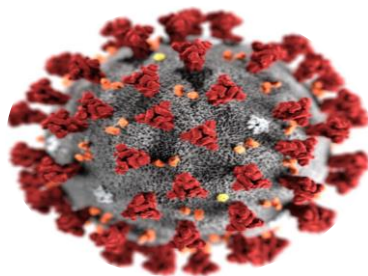


PERCEPTION AND KNOWLEDGE SURVEY REPORT ON DOCTORS DURING COVID-19



To assist the Ministry of Health and Family Welfare, Government of India

An online survey commissioned by the World Health Organization



Content

S. No	Topic	Page Numbers
1	Executive Summary	3
2	Introduction	6
3	Methodology	6
4	Survey Analysis and Findings	10
5	Key Recommendations	49

Executive Summary

It is becoming apparent that Doctors have been directly affected by the COVID-19 pandemic in more than many ways from being the most vulnerable to catch the infection, to being stigmatised by the community to ultimately losing lives by performing their duties. The social order relies on reciprocity therefore we need to realize that “Doctors and nurses and other HCW may be heroes in this pandemic, but will not be martyrs.” It is important for the public, health care administrator and politicians to realize that the HCW are the ones holding the line against COVID-19 and they need to be fully supported in this time of crisis.

In line with this thought process and to support the Ministry of Health and Family Welfare (MOHFW) the World Health Organization (WHO) had commissioned this survey with the sole purpose of understanding the challenges and issues faced by the “Doctors” while responding to COVID-19. The survey is still ongoing but a draft report is being submitted covering a period of October 13 – November 14, 2021. The survey till date has received responses from 25 states and has touched 800 responses from young, urban, MBBS/ MD doctors with equal participation from male and females. The survey conducted in Hindi and English through an online chatbot mechanism called “Sarvekshan”. The critical findings of the survey have been provided below:-



Testing and Treatment of COVID 19

- 61%** of the respondents have been responding to COVID19 since the beginning.
- 67%** had been tested for the disease.
- 40%** of the respondents had been diagnosed with disease.
- 34%** of the respondents had symptoms but were not tested “Positive”
- 58%** were in an anxious state of mind.
- 88%** of the respondents were able to cope with the eventuality of having the disease.
- 77%** of the doctors were able to get themselves treated at home.
- 49%** of the respondents needed support for arranging logistics for treatment and testing.
- 13%** of the doctors said they faced long symptoms of the disease.



Supportive environment provided to Doctors

- 82%** of the respondents felt that they were at the risk of infecting their family.
- 66%** of the respondents had to spend money out of pocket to procure PPE.
- 73%** doctors had problem wearing N95 masks.
- 78%** of the doctors received support from their friends and relatives.
- 49%** of the respondents experienced stigma at home or workplace.





50% of the respondent got periods of leave.
85% got adequate training.
51% claim that they received adequate rest hours.
49% of the respondents received support from their workplaces on mental health.
37% of the doctors received recreational support at their workplaces.
74% of the doctors agree that they received adequate PPE.
58% of the respondent received adequate accommodation at workplace.
68% of the respondents say that PPE received was of good quality.
67% of the respondents agree that they received adequate quantity of N95 masks
71% agree that N95 masks provided were of good quality.
84% of the respondents had access to adequate hand washing facility.
84% agree to receive good quality disinfectants.



Self-Care
50% of the respondents did encounter physical or verbal assault while discharging duties.
85% did wash hands frequently.
77% avoided touching nose, mouth and eyes.
81% used disinfectant to clean hands when soap and water was not around.
71% avoided going to the social event.
95% of the doctors wore a mask in public.
83% adhered to physical distancing.
68% of the respondents disinfected their surfaces.
41% of the doctors indicated that due to surge of patients they had to face long duty hours.



Health and well-being Index
42% of the respondents thought they were cheerful all the time.
38% of the respondents thought that they were calm and relaxed all the time.
45% of the respondents felt active and vigorous all the time.
35% of the respondents wake up feeling fresh and rested.
36% of the doctors feel that their life is filled with things that interest them.



Knowledge Questions
53% of respondents have given the right answer to the “treatment protocol” question.
55% of the respondents have given the right answer in terms of “admission” to hospital while dealing with SPO2 issues.



Sources of information
Television – only **12%** use it as a medium of information
Newspapers – only **19%** use it as a medium of information



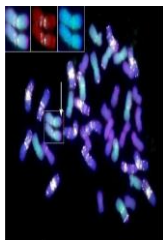
Colleagues – 23% of them regularly use this medium of information.
Social media – 28% of them regularly use this medium of information.
Ministry of Health and Family Welfare – 42% of the doctors use this medium for regular information.
World Health Organisation website – 42% of the doctors use this source for information.
Professional bodies – 38% of the respondents look up to this information sources for regular updates.



Vaccine Hesitancy
 90% of the doctors have taken both the doses of vaccination.
 34% of the total respondents who are not vaccinated have sighted the reason that they already had COVID 19, hence did not take the vaccination.



Confidence level on emerging disease
 45% of the physicians are only confident in treating COVID 19 disease.
 73% of the respondents provided tele-consultation during the ongoing pandemic.
 55% of the respondents felt that providing consultation over phone or online mechanism was safe and smooth.



Future planning for emerging diseases
 53% a major exercise should be initiated to identify the gaps in present healthcare system.
 50% introducing specially designed programmes.
 44% hiring more permanent and qualified staff.
 43% addressing lack of hospital preparedness.



Capacity building of doctors
 38% on government run programmes in India.
 29% relied on workplaces/hospitals for training and capacity building.
 19% relied on the World Health Organization
 14% relied on Professional bodies.



Testing Scenario and treatment for patients
 59% of the respondents found it at an acceptable level the availability of drugs and other resources at their hospitals while managing COVID patients.



Hospital Management during COVID 19
 78% - Overcrowding.
 66% - Physical distancing was practiced by them at workplace.
 73% - Had fully equipped triage facility at their workplace.
 86% - Felt confident because of regular biomedical waste management.
 71% – They had adequate ventilation system.
 84% - Received adequate guidance from their hospital on IPC.

Introduction

The Healthcare workers primary aim is to save lives, but they are also bound to keep themselves safe, hence they are put in the category of frontline healthcare workers, but this recent pandemic has changed that and they have been upgraded to “warrior” community as they are still providing treatment but at the risk of being infected themselves. This fear is quite intense as you are also part of the Society and you also have your own families thus the risk of infecting your near dear ones puts you in an anxious state of mind, regardless of this the healthcare fraternity have showcased exemplary courage and earned the title of a warrior.

We know that health care workers (HCW) have been at the forefront of the battle of COVID-19 pandemic, they have been and are still facing several challenges in delivering their duties. The plight of HCW in India (and perhaps across the world) can be described in a bunch of issues first one being **shortages of personal protective equipment, long working hours, violence against health care community, increased risk of infection, social and family impacts.**

Though these concerns have been voiced enough in different forums nationally and internationally, still this ongoing Pandemic is being handled by our healthcare community and we need to not only discuss these issues but also find solutions for the same. In continuation with this admiration and forthcoming support to be provided to this very important “**warrior**” community the World Health Organisation (WHO) has commissioned this online survey for doctors.

The survey talks about various interesting issues that have been a highlight of this

digital evidence collection mechanism which include **testing and treatment of COVID 19, supportive environment provided to doctors, self-care, health and well-being index, current knowledge base of doctors, confidence level on emerging diseases, views of medical professional for future planning for emerging diseases, capacity building initiatives, testing scenarios and treatment of patients on COVID 19 and hospital management during COVID 19.**

Methodology

The survey carried out will have far reaching implications as it would lead to better understanding about the effects of COVID-19 on medical professionals.

Objectives: The objectives of this survey are:-

1. To understand the perceptions and overall impact on the health and well-being of the medical doctors during COVID-19 response.
2. To understand the supportive environment made available to doctors during COVID-19 response.
3. To understand acceptance/hesitancy issues for COVID-19 vaccination among medical doctors.
4. To understand the risk of technical concerns of the treating physicians.
5. To understand the training needs and future health system strengthening perspectives of the physicians.

Survey methods:

Digital Survey: A quantitative perception survey will be carried at a Pan-India level through mobile phones/ tablets/ laptops using CHATBOT on WhatsApp with support from independent **platforms catering to this professional community Federation of Resident Doctors Association (FORDA), Docuplexus and IDEA network of doctors.** These individuals and organizations have supported us in implementing this Survey. FORDA has shown keen interest in such future activities as well they would be interested in organising focused online group discussions among their members or any other consultations.

The questionnaire was rolled out on a Pan-India basis through an online mechanism. The doctor community was targeted regardless of working in private or public hospitals, rural and urban scenario both resident and consultant doctors in any of the speciality stream.

Profile of Respondents: Doctors/ male and female. The ongoing survey is estimated to reach out to at least 1500 doctor i.e. through FORDA and Docuplexus, from across the country by reaching all the six zones of the country. The survey is also been pitched through District Health Societies in the state of Assam and Bihar.

The survey has reached a confidence level of 95% which means, that targeted population size of 1500 doctors was set, with a confidence interval of 5, we have achieved more than 306 respondents to reach the survey size of 95% Confidence Level, which has been attained.

(We have been focused to seek a Pan-India presence for this survey is attained)

Geographic Locations: Pan-India North Zone, South Zone, East Zone, West Zone, Central Zone and North East Zone.

Roll-out approach:

To ensure that the all identified categories of thematic areas, the survey was drafted as a questionnaire and subsequently oriented to the implementation partners.

Data Management and Analysis Plan:

The data collected under this knowledge attitude and perception survey is analysed at various levels and this multivariate analysis will yield objective based findings, the data collected is in the most agile form to perform various need-based permutation and combinations and deliver the maximum findings which can be derived from this data set.

Transparency of data:

The data capturing mechanism through an integrated chat-bot methodology makes sure that the data collection process is transparent and not influenced by external factors. The back-end data storage and extraction system is also digitally unmodified and transparency and security is maintained throughout the process.

Ethical considerations:

The organizations involved (Indian Medical Association, FORDA & Docuplexus) will be first addressing the consent issue through their internal communication and then going ahead with the dissemination of the survey. Also the questionnaire also requests your consent for filling the survey.

Dissemination Strategy

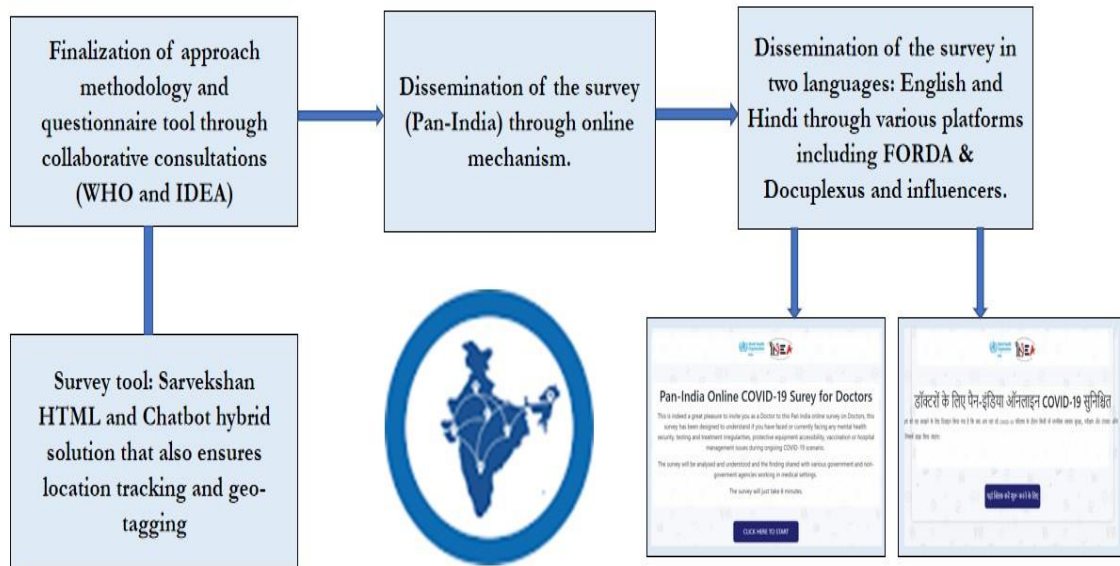
The dissemination strategy will include bringing on board three national

organizations working with the doctor's community as indicated above, they have

METHODOLOGY

Survey Time period: 13th October, 2021 to 12th November, 2021

Total Landing Counts: 800



Implementing Partners Logo

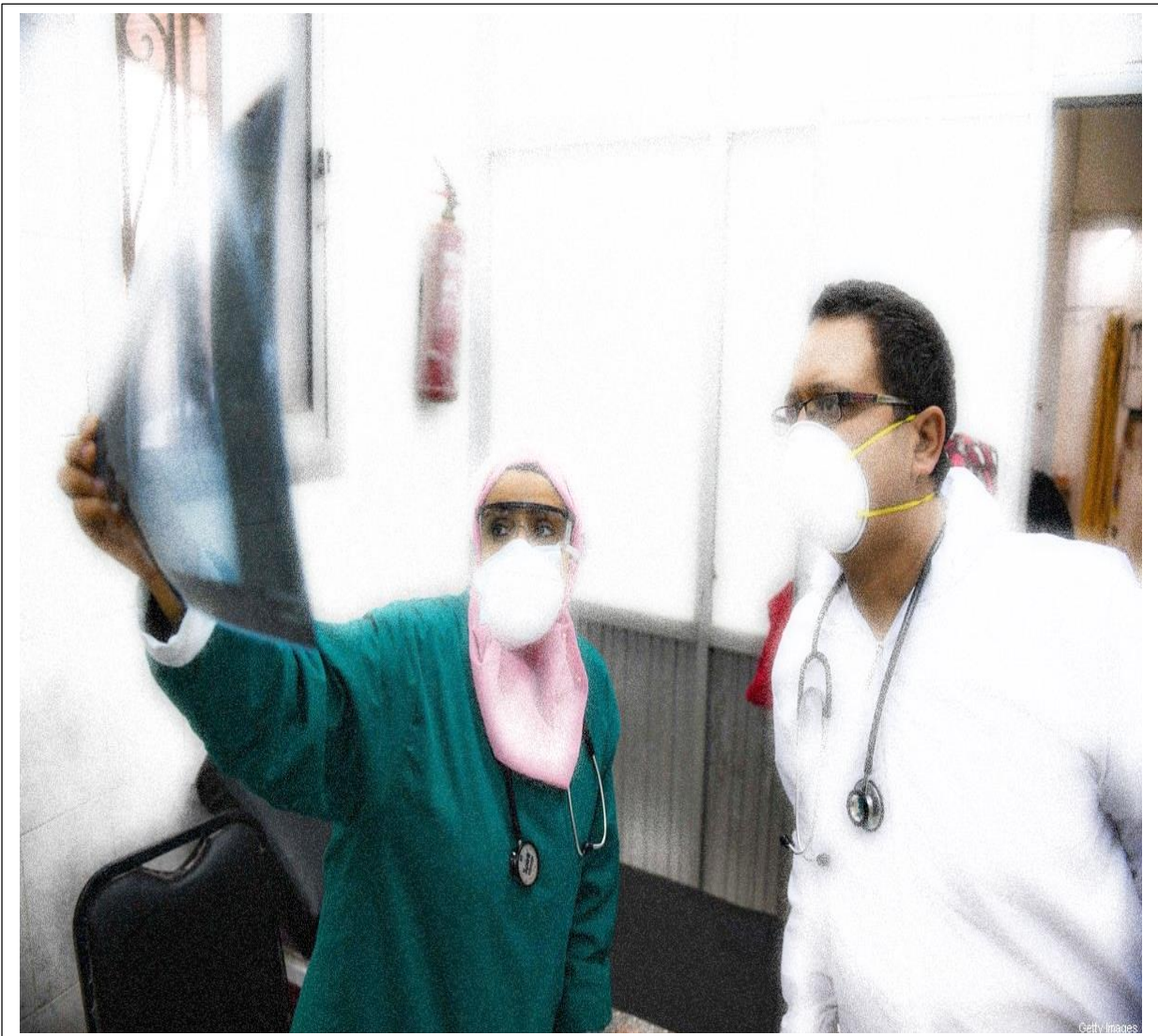




members all over the country covering rural and urban parts of the country and also serving the resident doctors as well as consultants.

The coverage of the survey is Pan-India except barring a few states in the North-East and Ladakh. Though the coverage achieved is primarily from urban India, but efforts are on to run this through the District Health Societies to cover the rural India.

ANALYSIS & FINDINGS



Analysis & Findings

Although the Health Care Workers (HCW) are at the forefront in the battle of COVID-19 pandemic, they are facing several challenges in delivering their duties. The plights of HCW in India (and perhaps across the world) is facing significant challenges at the professional and personal front in spite of such challenging circumstances this community has not stepped back.

We in India as well as globally salute the spirit of service showcased by this community.

Reflection of this spirit can also be reflected in this survey commissioned by the World Health Organisation (WHO), which has primarily outlined its objectives under the methodology section, primarily to understand the challenges and issues that Doctors are facing and to highlight it among the authorities and professional bodies so that they can receive adequate support and understanding in order to perform their task more efficiently and effectively.

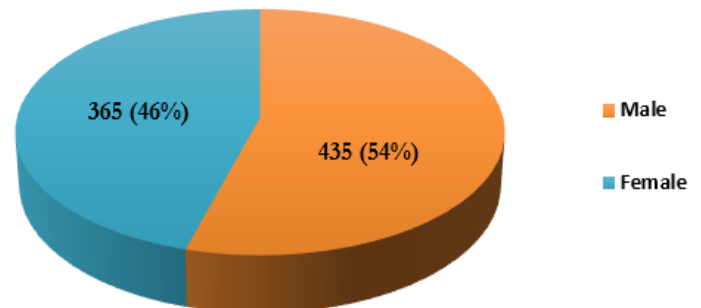
The total data collated is within the timeframe of 13 October 2021 to 12 November 2021, the responses received within this time frame are 800.

GENDER

The gender ratio of the survey is very good with **46% female and 54% male**, therefore no gender bias has been witnessed in this analysis.

Younger group of doctors, mid and elderly aged medical professionals are not inclined towards IT interventions

Gender (N= 800)



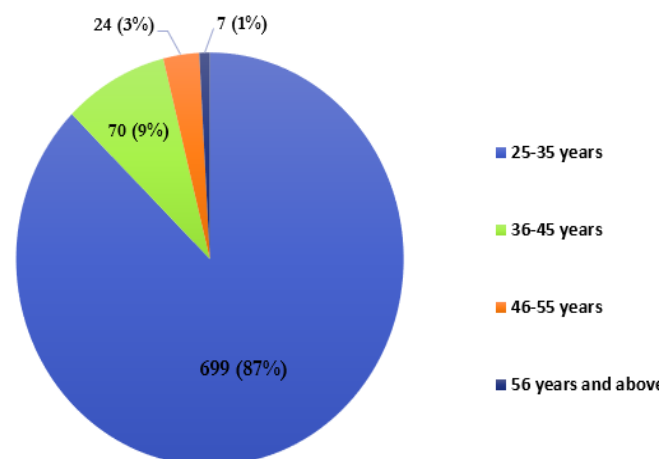
Equal participation from both genders in the survey

AGE GROUP

The age group of the respondents are as follows **87% of the respondents are from the age group of 25 – 35 years, secondly by 9% from 36 – 45 years and finally 3% by 46 – 55 years and 1% of above 55 years.**

This evidence reflects that the young doctors have primarily reflected their opinions and experiences and therefore when we analyse and take recommendations this fact should be observed.

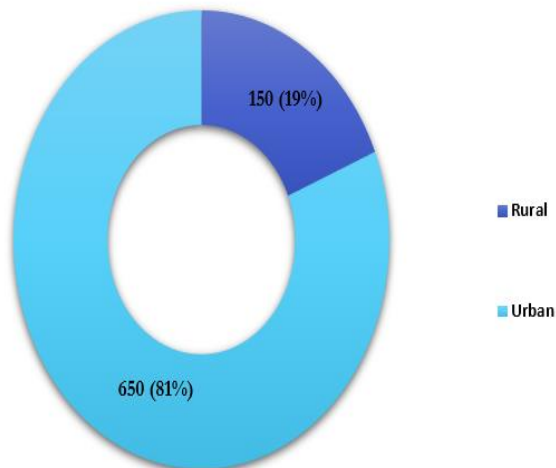
Age-Group (N= 800)



Profile

Primarily the respondents are from **urban settings (81%) and only 19% are from rural settings**. Therefore, we would like to request to the WHO if the survey could be floated through DGHS, in the rural settings (public health system- PHC, CHC and District and Civil hospitals) as we would have a good evidence collection and analysis will be stronger on pan-India level. Although we have received responses from **more than 28 states** but primarily in urban settings, therefore technically rural facet has gone unanswered.

Location of the Respondents (N= 800)



Which is a reflective indicator of major healthcare human resource are located mainly in cities or urban scenario

Location (Highlighted are gainers)

No	State
1	National Capital Region
2	Andhra Pradesh
3	Maharashtra
4	West Bengal
5	Bihar
6	Haryana
7	Madhya Pradesh
8	Uttar Pradesh

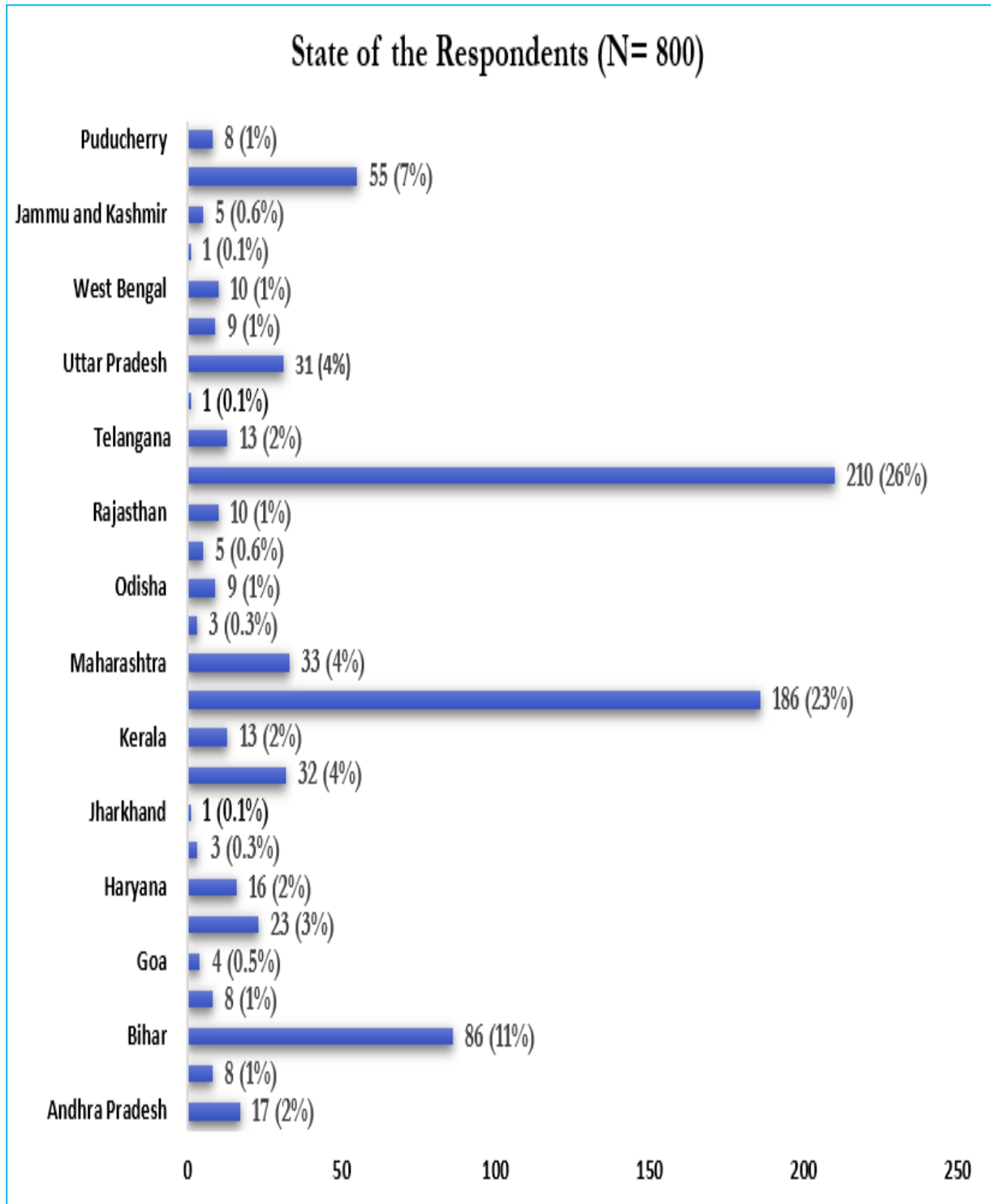
9	Gujarat
10	Chhattisgarh
11	Assam
12	Karnataka
13	Rajasthan
14	Punjab
15	Manipur
16	Uttarakhand
17	Tamil Nadu
18	Odisha
19	Telangana
20	Kerala
21	Odisha
22	Kerala
23	Puducherry
24	Goa
25	Jammu and Kashmir
26	Jharkhand

The states in blue row have responded well in the survey. Hence the analysis will reflect their participation.



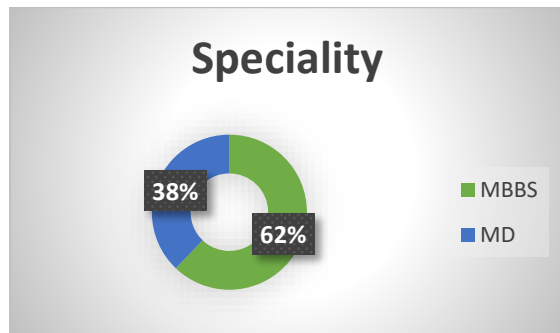
"When I returned home after months of hectic COVID duties, people in the neighbourhood were not comfortable with me being in my home. This was very obvious during my first visit to home after the beginning of the pandemic. "

Dr. Venkatesh Karthikeyan,
 Department of Community and Family
 Medicine,
 AIIMS Patna.



Education

The profile of the respondents can be mapped as follows around **62% of the respondents are MBBS and 38% are MD doctors**. Therefore the response can be gauged accordingly to understand the views and main take away of the finding category wise.



Type of hospital

The respondents primarily belong to the **private tertiary hospital 22%, private primary hospital 14%, and state hospital 13%, national hospital 11%, and primary health centre 7% and private secondary hospital 6%**. This shows an interesting mix of responses from different levels hence it is not a synopsis of any one level of service providers in fact is healthily representing public and private responses.

Good representative across all sectors of hospitals, for COVID 19 all kinds of hospitals have been used at an optimum level

How long have you been responding in COVID 19

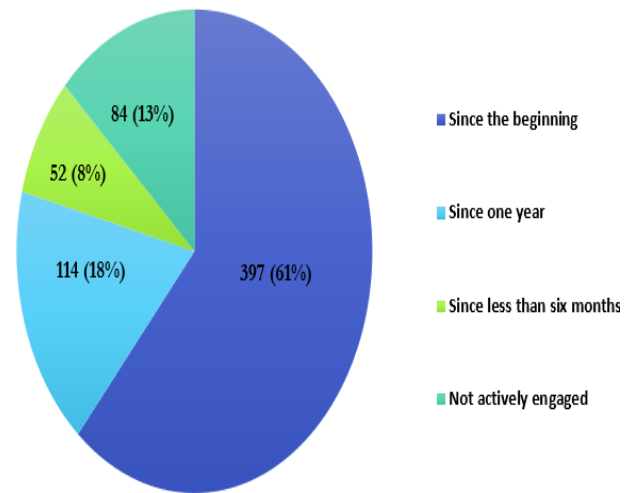
The respondents have been responding to COVID 19 since the beginning (61%) and 18% since the beginning of the year and 13% since less than six months and finally 8% of the respondents have not been actively engaged in COVID 19 treatment and testing.

Therefore as we can analyse that majority of respondents have been responding to COVID

19 since the beginning of the pandemic and thus their experiences and opinions will reflect the right situations.

Majority of the respondents had been involved in COVID since the beginning of the response

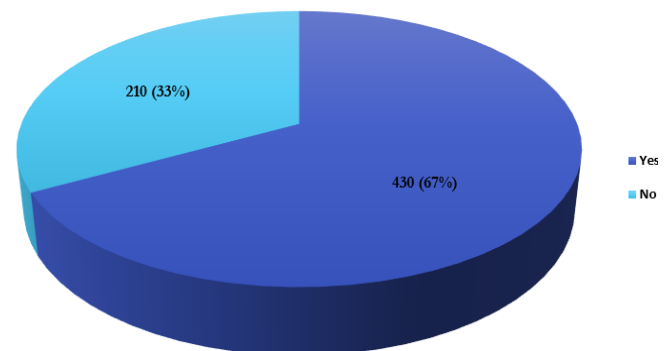
How long have you been responding for COVID-19? (N= 647)



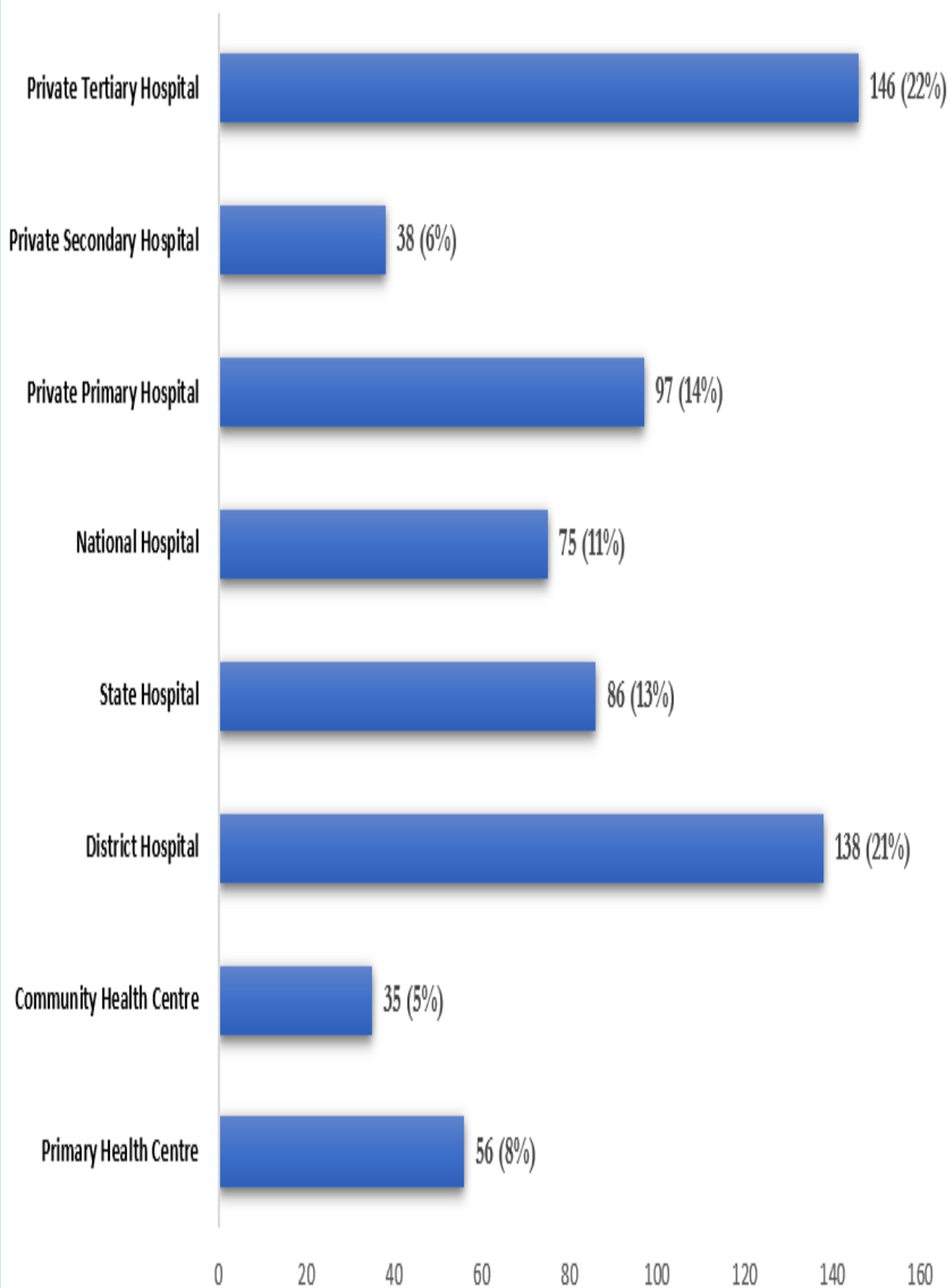
Have you ever been tested for COVID 19

Around 67% of the respondents have been tested for COVID 19 although 33% still haven't been tested for COVID 19.

Were you ever tested for COVID-19 Symptoms? (N= 640)



Type of Hospital (N= 671)

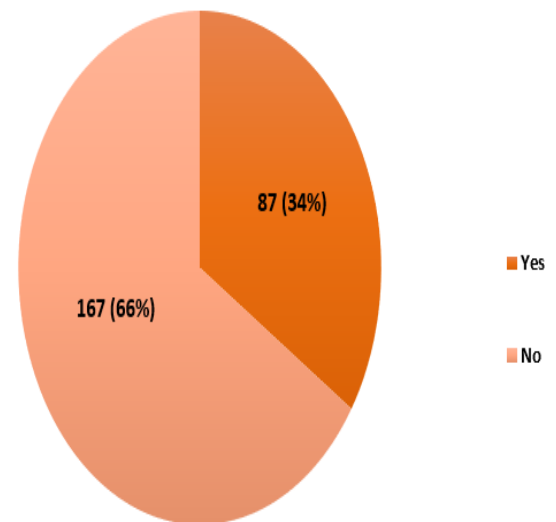


Healthcare workers with symptoms and exposure were adequately tested however even in future scenarios the healthcare workers with similar or emerging symptoms needs to be tested since they are at the highest level of risk of contracting the disease and are valuable frontline assets of the nation. Majority of the countries have taken a proactive measure in safeguarding their healthcare workers.

Did you have symptoms but did not test positive

Almost **34% of the respondents had symptoms but did not test positive is a huge number for dilemma**, though 66% were safe in terms of decision making as either they have symptoms and had COVID 19, either they did not have symptoms but if they did have then they had COVID 19. Therefore they were out of the dilemma.

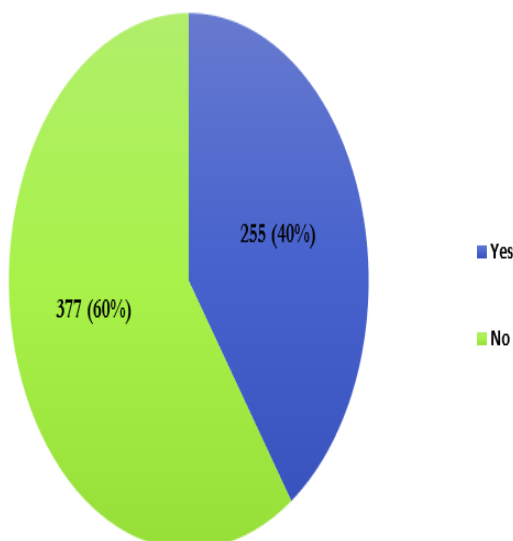
Did you have symptoms but did not test positive for COVID-19?
 (N= 254)



Have you ever been diagnosed with COVID 19

Almost **40% of the respondents have been diagnosed with COVID 19, while the 60% is still safer lot**. This further showcases that in spite of being in the COVID 19 duty they have been practicing COVID Appropriate Behaviour (CAB) and thus been able to save themselves.

Were you ever diagnosed with COVID-19? (N= 632)



The risk perception among the health care practitioners (HCP) despite being educated lot is still low many of the HCW also tend to avoid recurrent testing despite of symptoms.

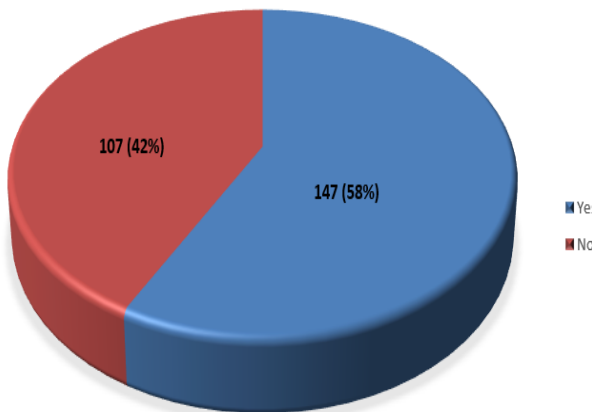
Was it weighing on your mind and making your anxious

The respondents were experiencing COVID 19 symptoms and were not detected with the disease yet, it sure was making them anxious while performing their duties, and almost **58% of the respondents were experiencing**

anxious behaviour, while 38% were able to balance it.

During such crucial junctures the organization and the authorities should pay heed to such behaviour and provide some soothing in-house measures.

Was it weighing on your mind and making you anxious? (N= 254)

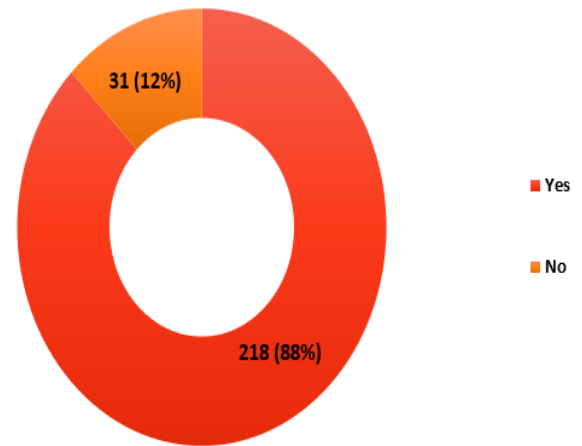


Uncertain and evolving symptomatology of COVID 19 made it a typical disease even the changing course of disease and changes in symptomatology of patients during the first and second wave, created doubts among the medical fraternity with regards to symptom identification testing dilemma varied patient outcome and uncertainty regarding the treatment protocols.

Were you able to cope with the eventuality


When the doctors were faced with this eventuality, almost **88% of the doctors were able to handle their anxiousness but also perform their duties, leaving behind only 12% of the respondents** who had not yet defined their coping mechanism and so might have hampered their duties.

Were you able to cope with the eventuality? (N= 249)



What was the severity level of your COVID 19 infection

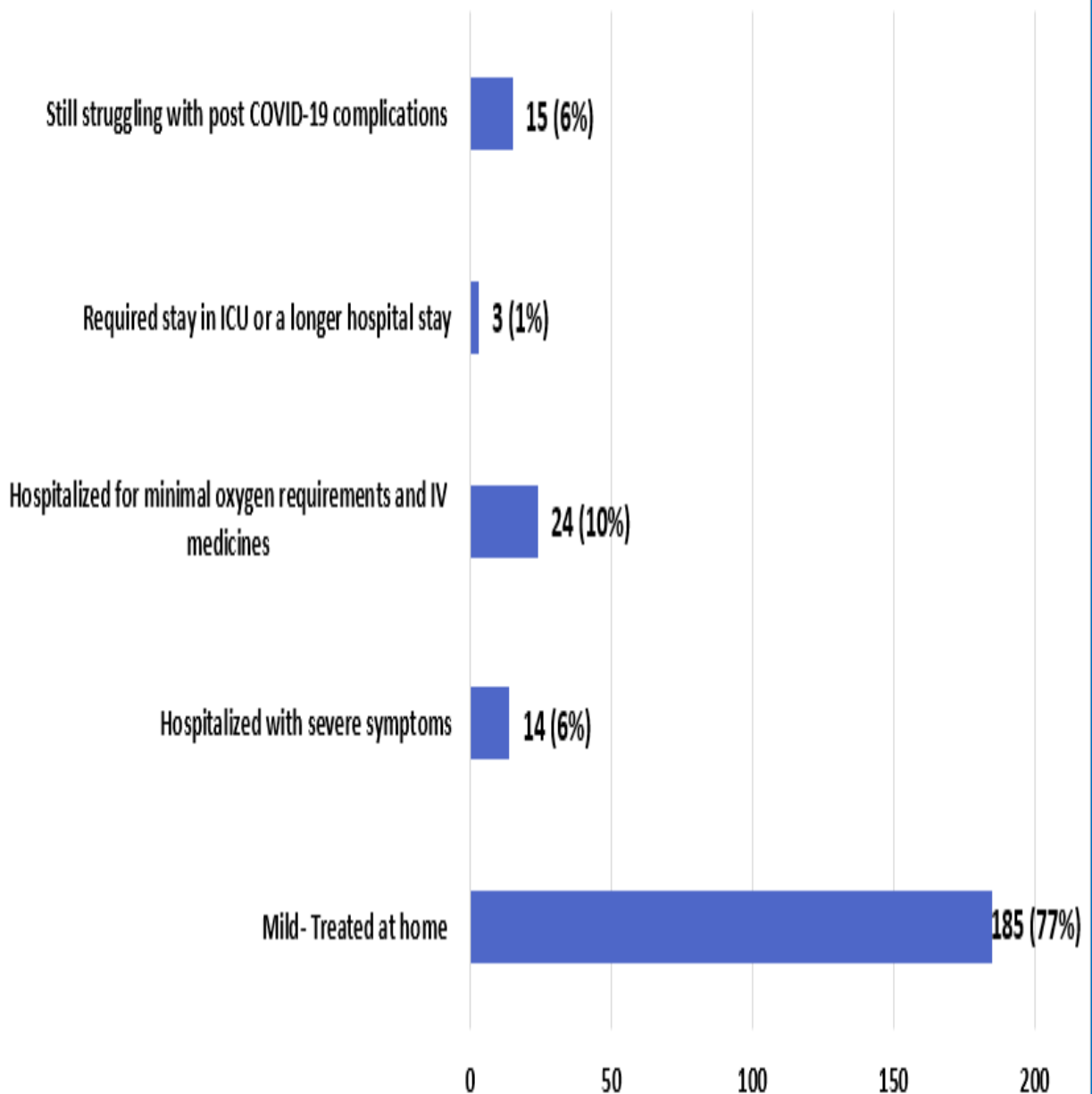
It is confident to acknowledge that **77% of the doctors were able to get themselves treated at home and the next 10% were hospitalized with oxygen requirements and IV fluids, whilst 6% are still struggling with post COVID 19 complications or severe disease symptoms and 1% of the respondents only required ICU or hospital stay.**



Dr. Karan Juneja
IMA JDN NATIONAL SECRETARY

I did not face episodes of stigma as COVID WARRIOR but lot of friends and family questioned me when my father got effected that did he get infection from me. I was also able to manage the resources with help of very cooperating colleagues and friends.

What was the severity level of your COVID-19 infection? (N= 241)



Most of the physicians got milder form of infection and were able to recover at home with minimal medical care though required advance medical care in hospitals set ups and few of them also encountered advance phase of disease and required intensive care support and ventilator care and support. IMA source 1,492 doctors lost their lives.

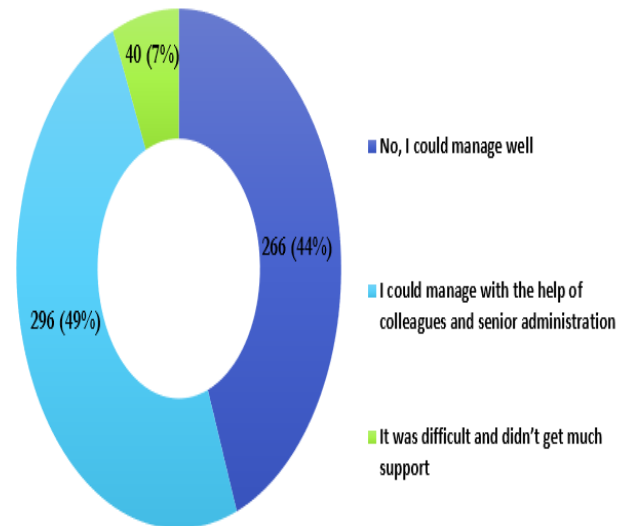
Did you find any difficulty in arranging from your logistics for treatment and testing?

Around **44% of the respondents could manage on their own, whilst 49% of the respondents had to take support from the colleagues and the senior administration, and the rest 7% found it difficult to arrange the logistics for testing and treatment.**

We need to understand that being doctors if they had found it difficult in arranging testing and treatment for themselves or their family then of course general population also would have faced the ire.



Did you find any difficulty in arranging resources or logistics for your testing and treatment of COVID-19? (N= 602)



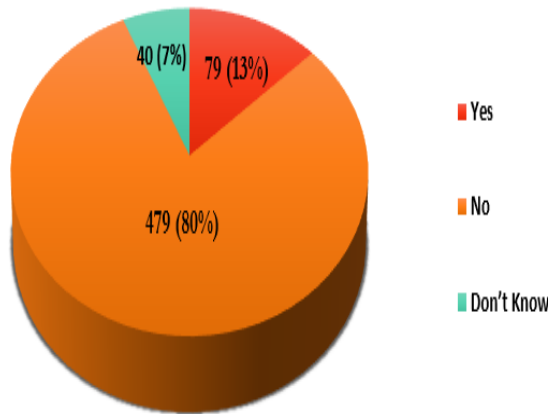
Vast majority of healthcare physicians because of their proximity towards healthcare services enjoyed better access to healthcare and testing however at times and places due to overburdening and excessive patient load there were instances where even healthcare professionals found it difficult to get themselves or family members tested and the treatment was also delayed.

Did you have COVID 19 symptoms for long

Majority of the **respondents 80% said that no they did not experience COVID 19 symptoms for long. 13% though said that yes they experienced the symptoms for long whilst 7% did not experience it at all.**

This analysis further shows that in between the testing and treatment which was their job, almost 13% doctors were themselves also experiencing the disease symptoms.

Do you have long COVID-19 Symptoms? (N= 598)



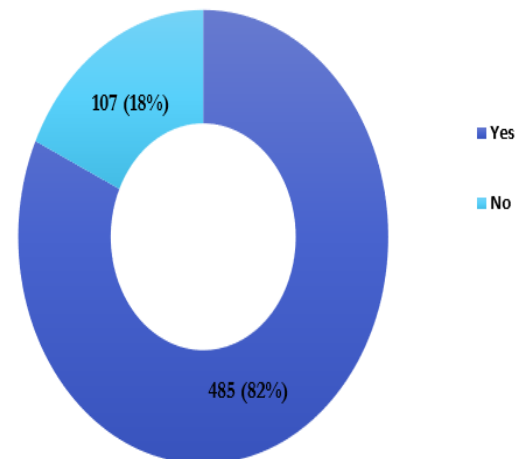
Being placed at a better position in terms of seeking healthcare support and medical care most medical professionals in seeking healthcare support and thus were confident in seeking healthcare challenges brought by the pandemic. However going thru excessive work pressure, massive stress on healthcare facilities. Poor patient outcomes, huge surge in number of deaths, eventualities and causalities within the family the psyche and the mental well-being of the health care professional was also effective.

60% inferences – tested – adequate testing/ compared to the general population Medical at higher risk of turning COVID 19 positive due to exposure to the patient with the disease

Being a healthcare worker did at any time you felt the fear of infecting your family

It is alarming to note that **82% of the respondents were living under the fear of infecting their families, but yet performing their duties. Only 18% were not or less fearsome of the cause and believed that if they follow the CAB then they will not bring the infection home.**

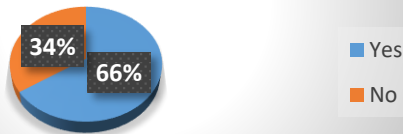
Being a healthcare provider, did you at any time consider yourself at high risk of infecting your family members/ contacts during the response to COVID-19? (N= 592)



Did you have to spend out of pocket in order to procure PPE

More than half of the respondents (**66%**) had to spend out of pocket expenses for procuring PPE and only 34% had not done so, therefore the responsibility of keeping themselves safe and following the COVID appropriate behaviour (CAB) was on the doctors and they had taken it seriously.

Did you have to spend OOP for PPE/masks...

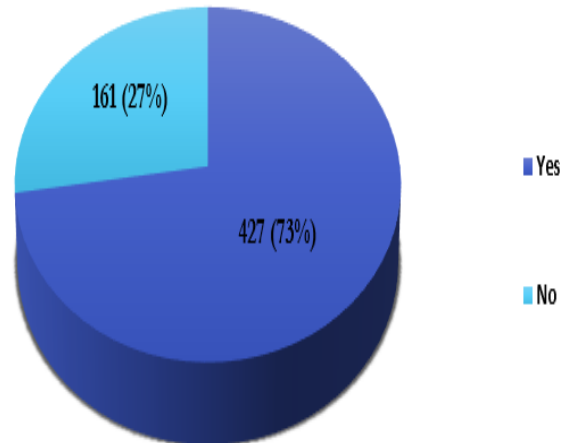


In the first wave whether in public or private health settings they had limited access to PPE, many had to buy also. While in second wave the situation was phased out with good supplies.

Did you have any problem in wearing N95 masks for long duty hours?

Yes, almost **73% of the respondents had problem in wearing N95 masks for long hours whilst 27% of the respondents felt that they were comfortable** in wearing the masks as earlier also they were used to wearing surgical masks.

Did you face any problem in wearing N-95 Masks continuously during working hours? (N= 588)



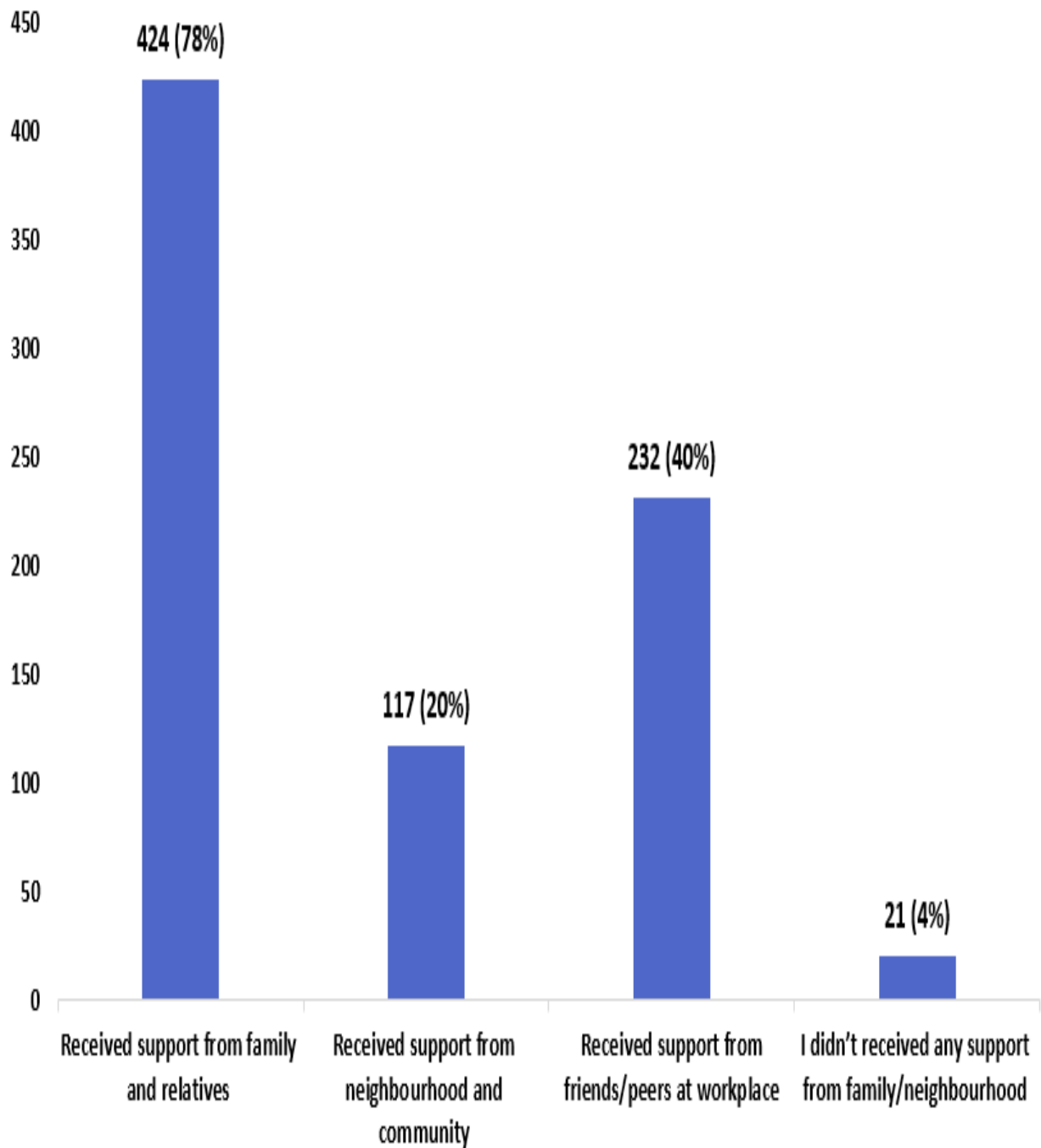
Excessive perspiration, humid weather conditions limited availability of masks and long duty hours made N95 masks an uncomfortable experience



Did you receive conducive or supportive environment within the family/ or neighbourhood/ or within the community setting

As the pandemic was widespread and communication regarding doctors hard work was being disseminated by the MOHFW and by the leadership of the nation hence the **HCW (78%) received support from the family and relatives, 40% received support from friends and peers at workplace, 20% received support from neighbourhood and the community and finally 4% of the doctors still did not receive any support from the neighbourhood or community.**

Did you receive conducive or supportive environment within the family/ or neighbourhood/ or within the community setting? (Multi-select) (N= 573)

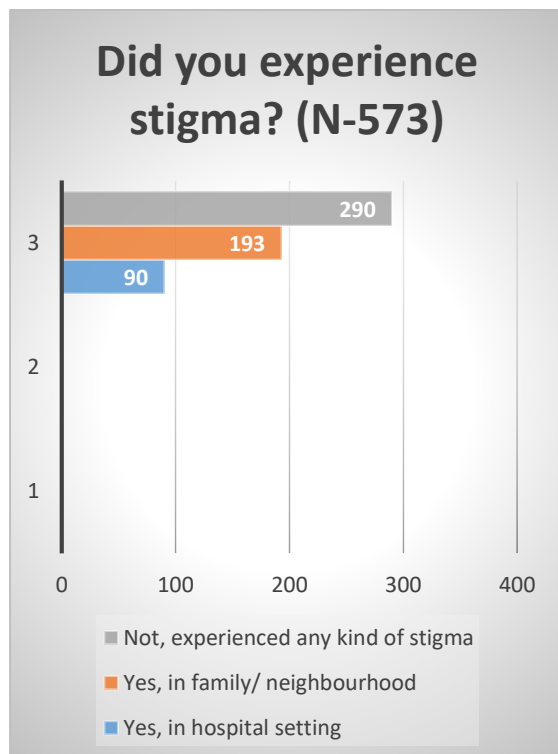


Did you experience any kind of stigma as a COVID 19 warrior

Yes, **15% experienced stigma in the hospital settings, while 34% faced stigma in family and neighbourhood settings**, but the best finding was that more than half (**51%**) of the respondents did not face any time of stigma, which is an indication of community acceptance and understanding.

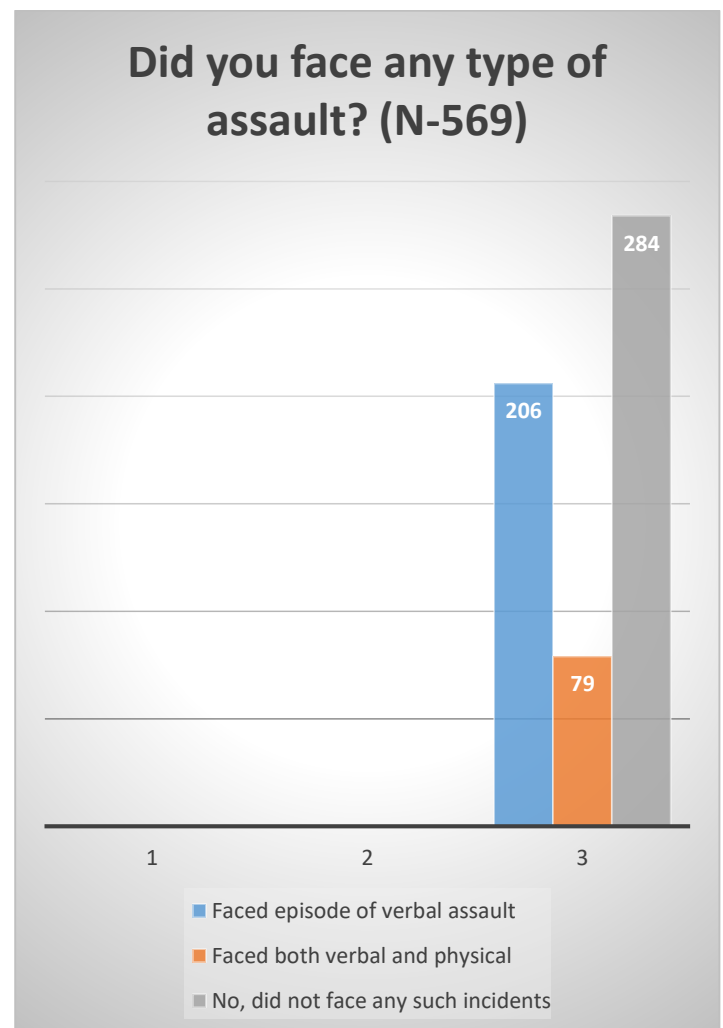
This also has to be taken in the context that primarily it is an urban survey and cannot be generalised in the rural context and further has been limited to younger age group of 25 – 35 years, hence we need to bear this is in mind.

May be in older age groups and rural context this may not be the case, hence our humble plea would be run this same survey in the rural settings also so that we could study their experiences and opinions.



Did you or any of your colleague face an incident any episode of violence & assault during the ongoing pandemic

This is astonishing that **36% of the respondents had faced an episode of verbal assault in the hospital and 14% faced verbal and physical assault in the hospital**. But, the rest **50% did not experience stigma** and talks volumes of our urban community, but again we cannot generalise this for rural context, we need to delve deeper.



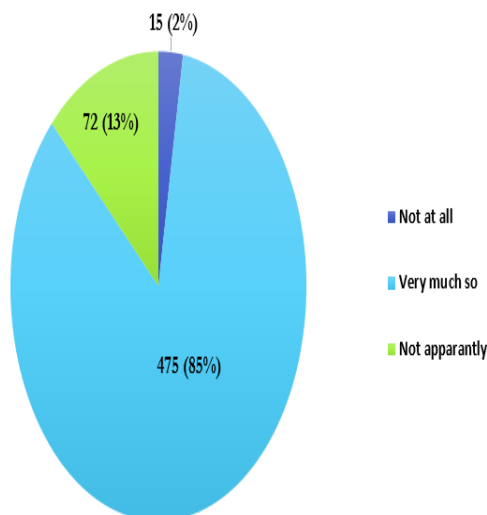
Due to poor outcomes of patient, due to highly infectious nature of the disease, Violence on doctors has been a prominent issue within the country and global and was no different during COVID 19 pandemic in the midcourse of pandemic the government took corrective action 1897 Epidemic Act to safe guard healthcare professionals against violence the number of incidences after that significantly reduced

During last 7 days which prevention measures have you taken

Frequently washed hands

85% respondents did frequently wash hands, but still 13% apparently not and only 2% were under most preferred very much so.

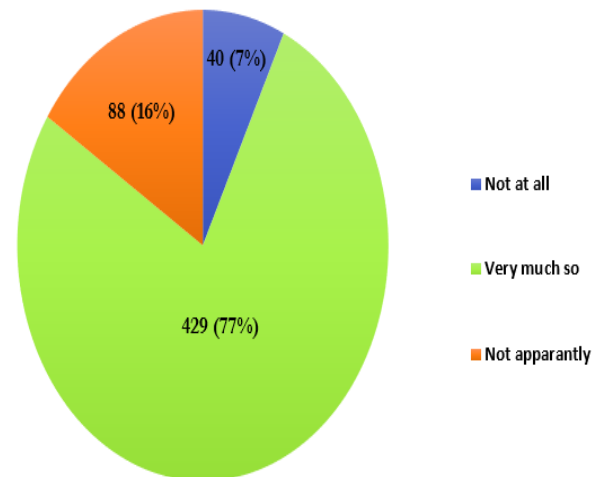
(A) Frequently washed hands with soap and water for 20 seconds at least. (N= 562)



Avoid touching eyes, nose and mouth

77% were under most preferred category very much so, 16% not apparently and 7% not at all.

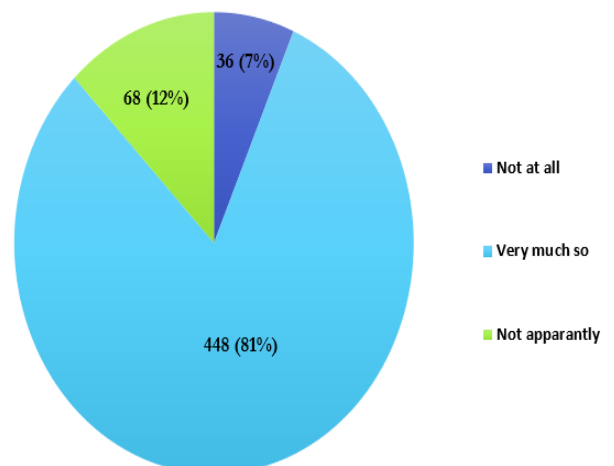
(B) Avoided touching eyes, nose and mouth with unwashed hands. (N= 557)



Used disinfectant to clean hands when soap and water was not around

81% very much so the most preferred category, 12% not apparently and 7% under not at all, therefore disinfectants were considered to be an easy and effective way to clean hands.

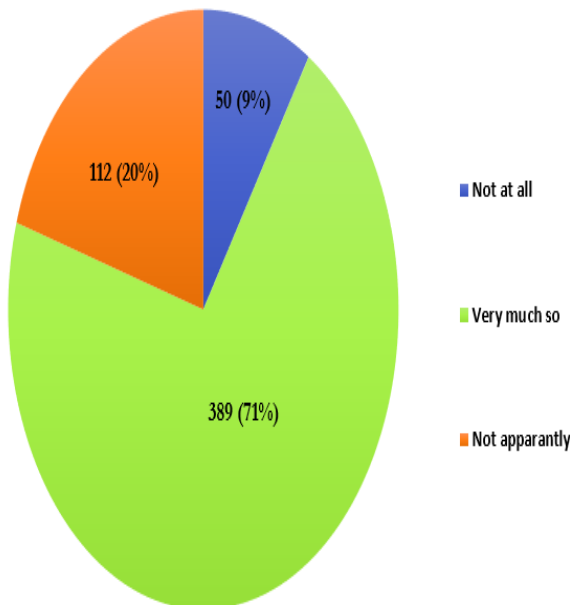
(C) Used disinfectant to clean hands when soap and water was not available. (N= 552)



Avoided social event I wanted to attend

71% voted for the most preferred category, 20% voted for not apparently and 9% of the doctors still attended the events, therefore we need to pay attention to risk communication for HCW in urban as well as rural settings.

(D) Avoided social event I wanted to attend. (N= 551)



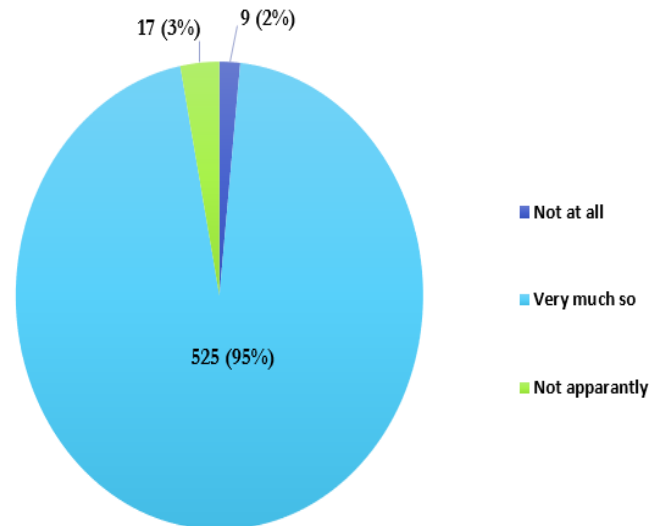
Being highly knowledgeable group of the community and practiced ideal behavioural practices

Wore a mask in public

95% of the doctors adhered to this norm of CAB, whilst 3% not apparently and 2% of the respondents did not. Therefore in the urban context there are 2% doctors not wearing masks we need to pay heed to rural settings as well and to older age groups as the response for this survey is from younger age groups.



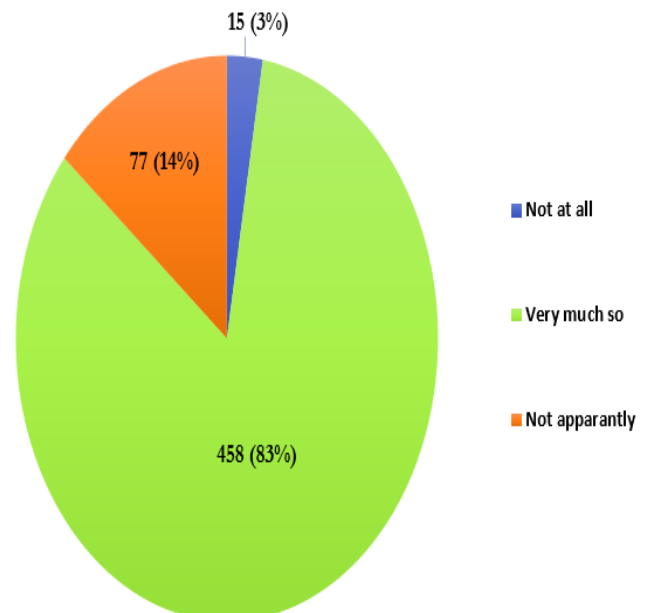
(E) Wore a mask in public (N= 551)



Ensured physical distancing in public

83% of the respondents have adhered to this and around 14% not apparently and 3% not at all.

(F) Ensured physical distancing in Public. (N= 550)

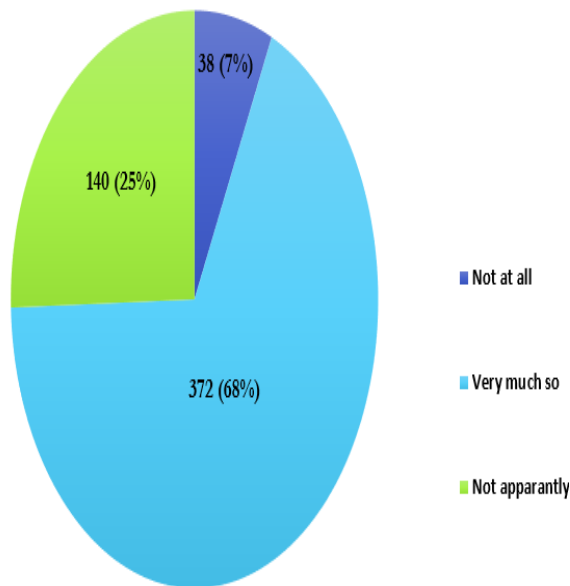


Disinfected surfaces

68% of the respondents were favourable of this CAB trend, but around 25% not

apparently 7% not at all. Therefore in urban context a considerable doctors were not very critical if this trait though it would be interesting to know in rural areas, what was their priority.

(G) Disinfected surfaces (N= 550)



What were the main causes of long duty hours

41% of the respondents favoured that due to unprecedented surge of patients they were facing long duty hours, whilst 27% voted that lot of staff got infected therefore they were experiencing long duty hours. Also 23% of the respondents thought that there was already shortage of staff therefore they were facing this and 9% thought due to lack of rotational policy they were facing it.

But we have to understand that it was a cumulative effect depending on each of the health care facility whether private or public. All the four factors must have contributed to it, based on the individual health care facility, therefore risk communication measures need to be taken on all the four factors.

“COVID-19 battlefield was really something which will all of us remember down the lane, rather than being overwhelmed by the task I was excited about it that how I could save patients. The level of empathy, curiosity and compassion to how save a life and see that smile on the face of a family make me still remember my days of residency. It's been 21 months since we have been wearing masks. There have been many nameless protagonists fighting the COVID war behind those snugly fit N95 masks. There were always these low times when I felt helpless to help the needy ones. The second wave was always like successfully pulled an all-nighter without a death and without the oxygen shortage. There were in fact even lows where I felt what the use of my education is when I am seeing people dropping down as a deck of cards and I have no idea how to stop it. But I always believed keep doing well. It will always have an unexpected way of coming back.”

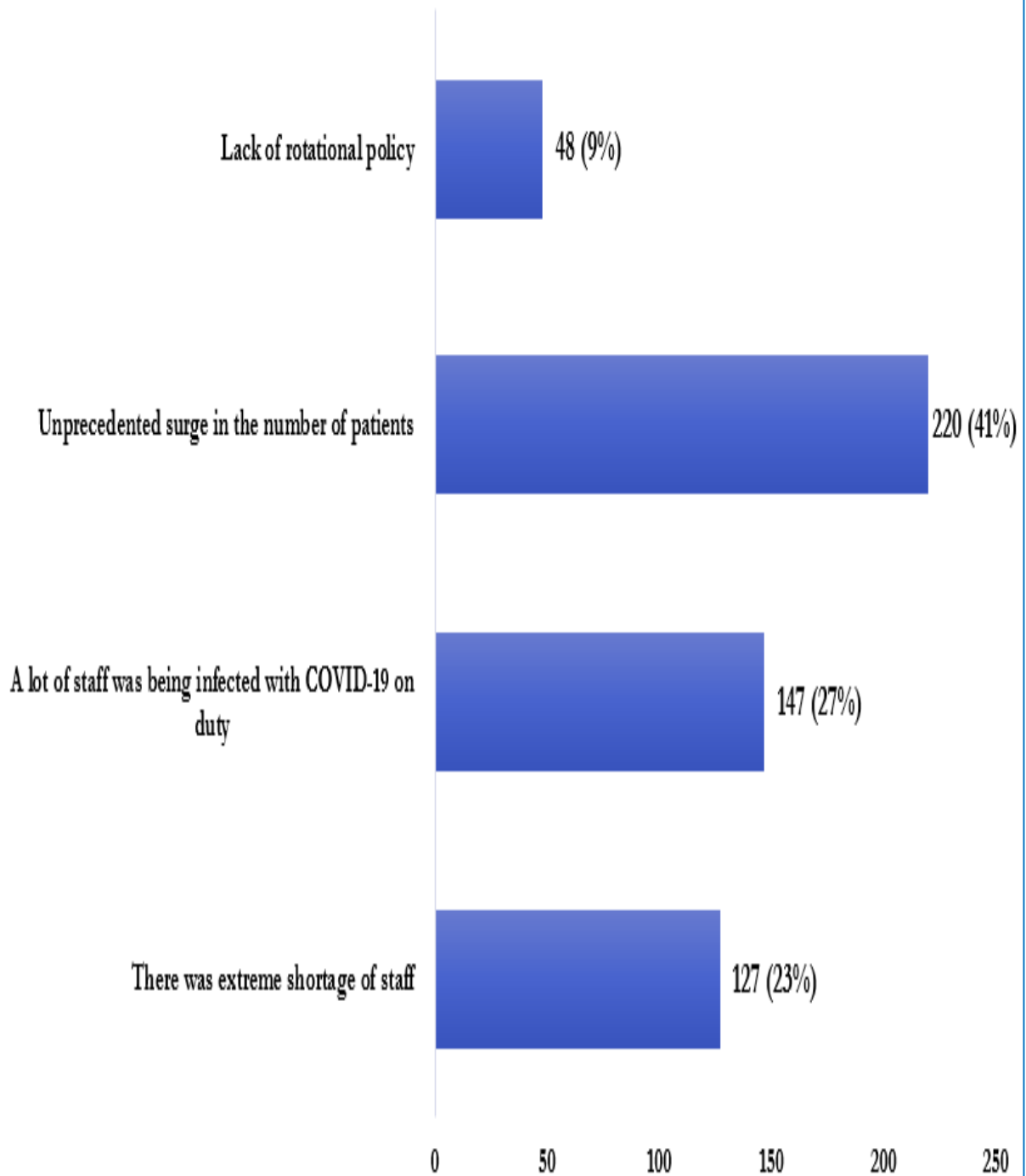
Dr. Aravind Swamy,

Junior Doctor, Madurai, Tamil Nadu



ARAVIND.A

What were the main causes of long duty hours? (N= 542)



What has been the impact of the COVID 19 response on your health and wellbeing?

We need to study further that **31% of the doctors felt that it had a bearing in terms of physical ailment which had affected their mental health and well-being. Also, 6% thought they were highly impacted so much so that they had to undergo counselling sessions or treatment.**

43% of the respondents had been somewhat impacted, which is again a huge number whilst only 20% of the respondents thought that they had not much impacted.

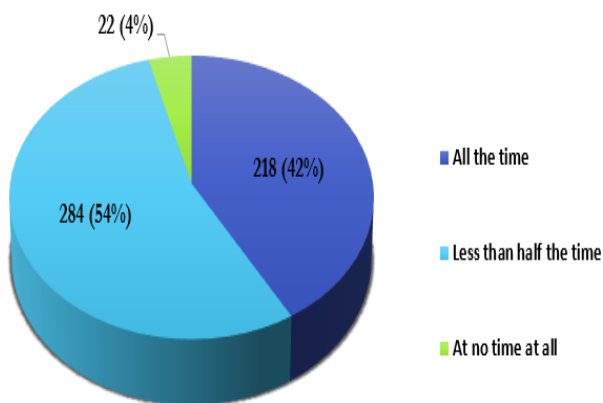
Health and well-being index

This index has exhibited an array of traits of mindfulness among doctors

I feel cheerful and in good spirits

54% said only half the time otherwise their spirits are down while **42% though that they were cheerful all the time** also 4% also thought that they were never cheerful.

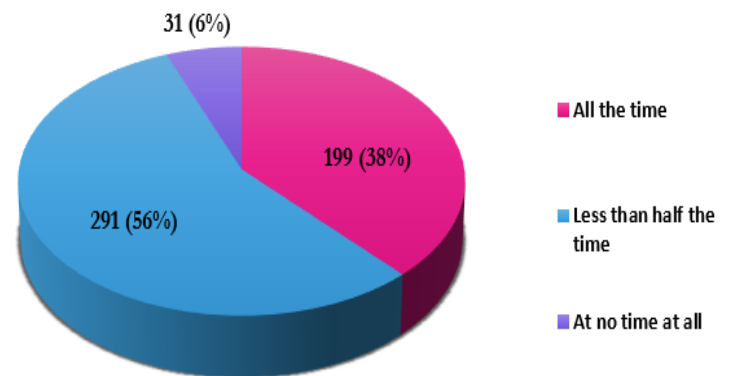
(A) I feel cheerful and in good spirits (N= 524)



I feel calm and relaxed

56% only felt less than half the time otherwise they were stressed, while **38% were all the time calm and relaxed** and 6% no time at all they felt calm and relaxed. This is alarming because if the caregivers are so stressed then in long run it will affect their professional decisions as well.

(B) I feel calm and relaxed (N= 521)



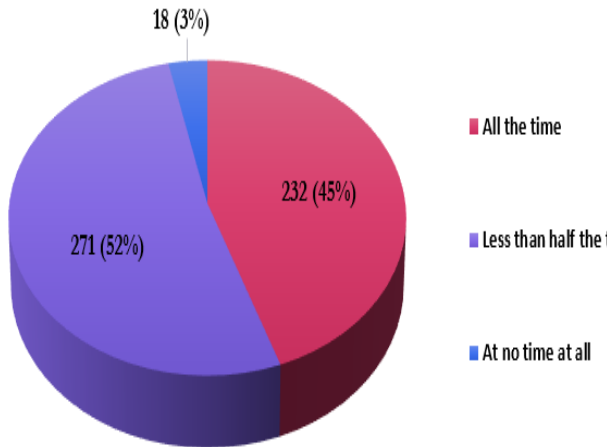
I feel active and vigorous

More than half of the respondents (**52%**) felt that they were not active and vigorous half of the time. While **45% of them felt active all the time and 3% never felt so**, therefore we need to cater to this 55% of the HCW community that needs our attention.

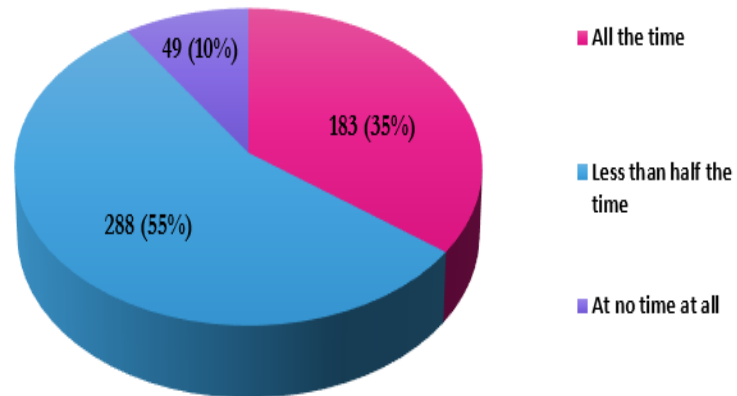


(C) I feel active and vigorous (N= 521)

time and the in fact 10% of the doctors feel that they are never rested and fresh.



(D) I wake up feeling fresh and rested (N= 520)



I wake up feeling fresh and rested

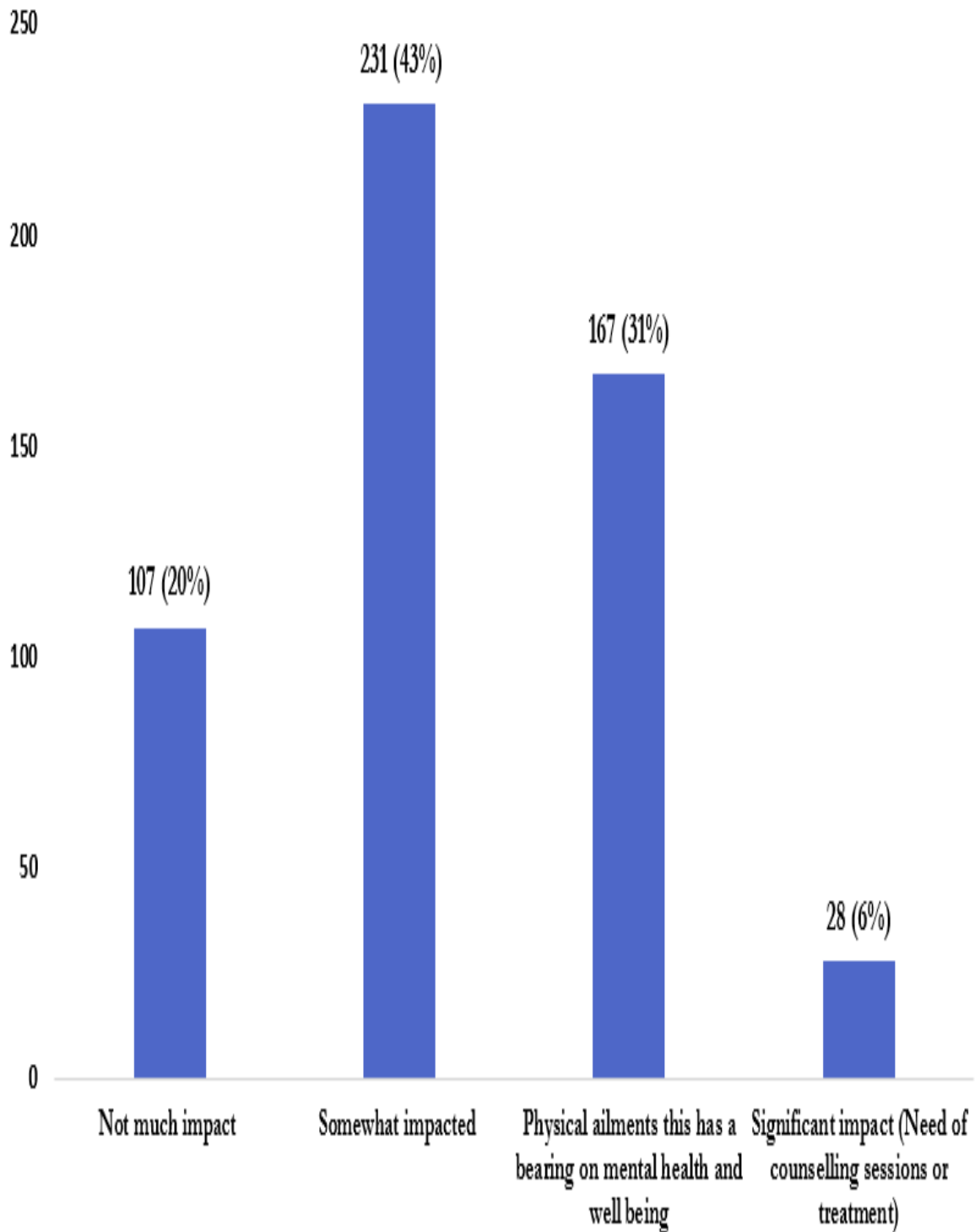
Only **35% of the respondents feel fresh and rested**, the rest 55% of the doctors feel that they wake up fresh and rested only half of the



"The COVID-19 pandemic was a very stressful phase both in terms of personal and professional life. So many family and friends were getting effected, even few got very sick. And loosing so many patients is always a stress to a clinician. No, I personally didn't encounter any kind of stigma being a covid warrior but it was very sad to know about such stories from some acquaintances. My takeaway from the COVID-19 situation is that It's the pandemic that has given us a lesson that health system needs more and more betterment and better infrastructure, also much more share of GDP as in our country".

Dr. Kulsaurabh Kaushik, Intensivist at Fortis Escorts, Delhi

What has been the impact of the COVID-19 response on your health and well-being? (N= 533)

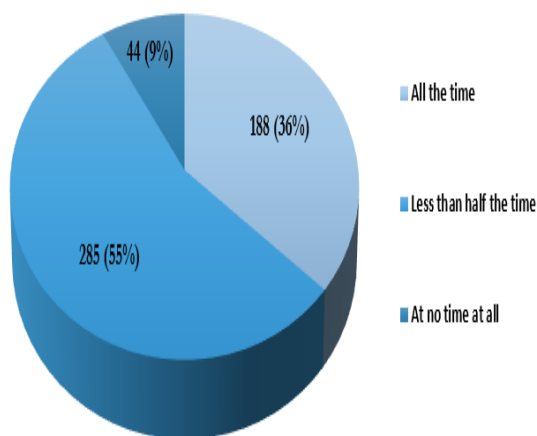


My daily life is filled with things that interest me

55% of the doctors feel that only half the time they could feel this interest the rest of the time it is mundane. Whilst **36% thought all the time they were having a good time with activities that interest them.** **9% at no time at all they had any such realisation** that they had interesting stuff in life, therefore there should be recreation corners in healthcare facilities.



(E) My daily life is filled with things that interest me (N= 517)

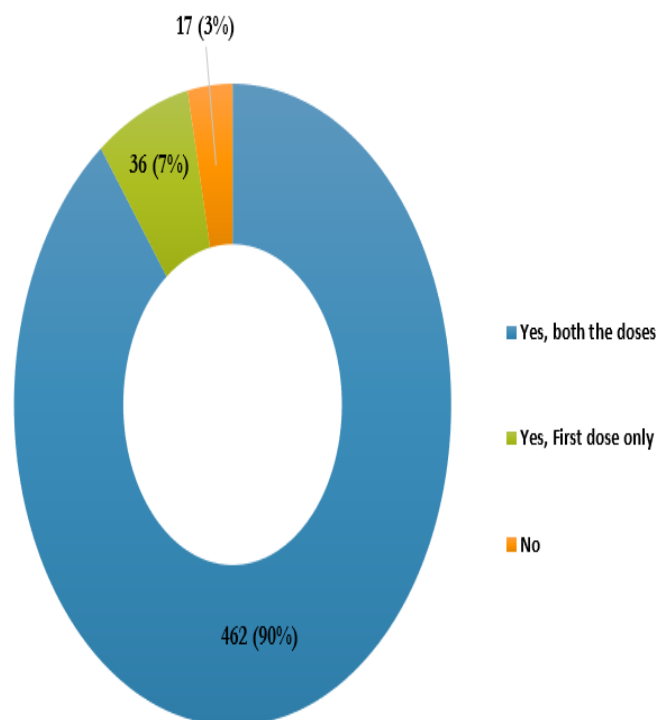


Not just physical impact but also mental impact, however government supportive programmes and welfare schemes and also supportive steps taken by the private players and local government acknowledging their service also boosted the morale of the healthcare professionals

Have you taken full doses of vaccination

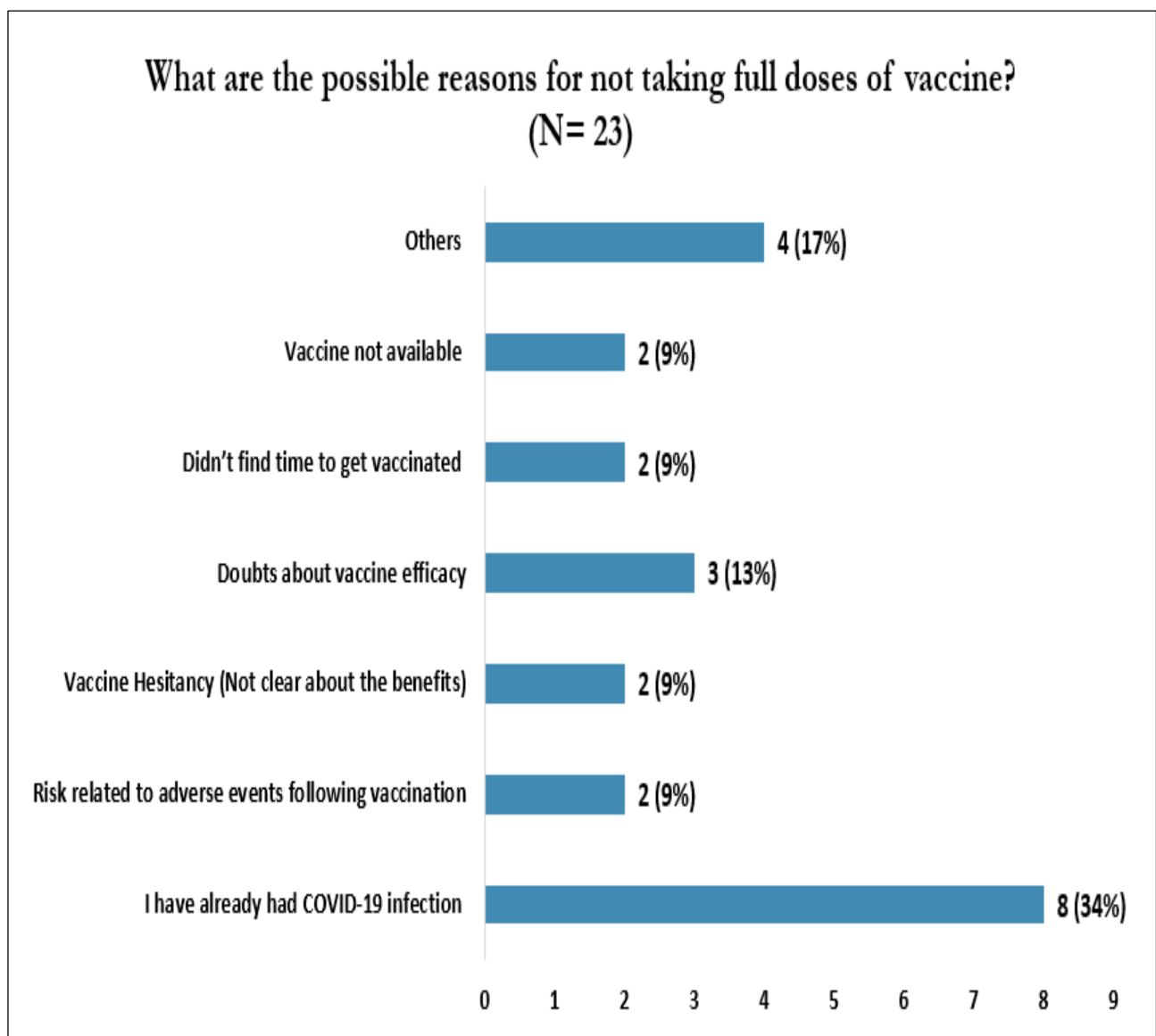
It is quite impressive that **90% of the doctors have taken full doses of vaccination, only 7% had taken first dose only.** It is alarming to notice that **still 3% of the doctors have not taken the vaccination.** RCCE measures should be taken to get these doctors vaccinated.

Have you taken full doses of COVID-19 Vaccination? (N= 515)



What were the possible reasons for not taking full doses of vaccination

34% of the doctors stated that since they already had the disease hence they omitted vaccination. 17% said due to pregnancy or presently they were on antiplatelets. 13% had doubt on the efficacy of the vaccine. Rest 9% each either did not find time, availability of vaccine, not clear about benefits or its risks.



Knowledge based questions

We had also tried to assess treatment based knowledge questions for the doctors and we are amazed to analyse that even 24 months after the pandemic we are yet to get 100% correct results, which has been widely publicised by the MOHFW in their treatment guidelines.

If the respiratory rate of the COVID 19 patient is more than 26 but less than 30 for past 2 hours, what level of severity would you classify for the patient?

53% of the respondents have given the right answer, whilst 47% have given incorrect answers, these responses showcases that still the doctors are not fully compliant in treating this disease.

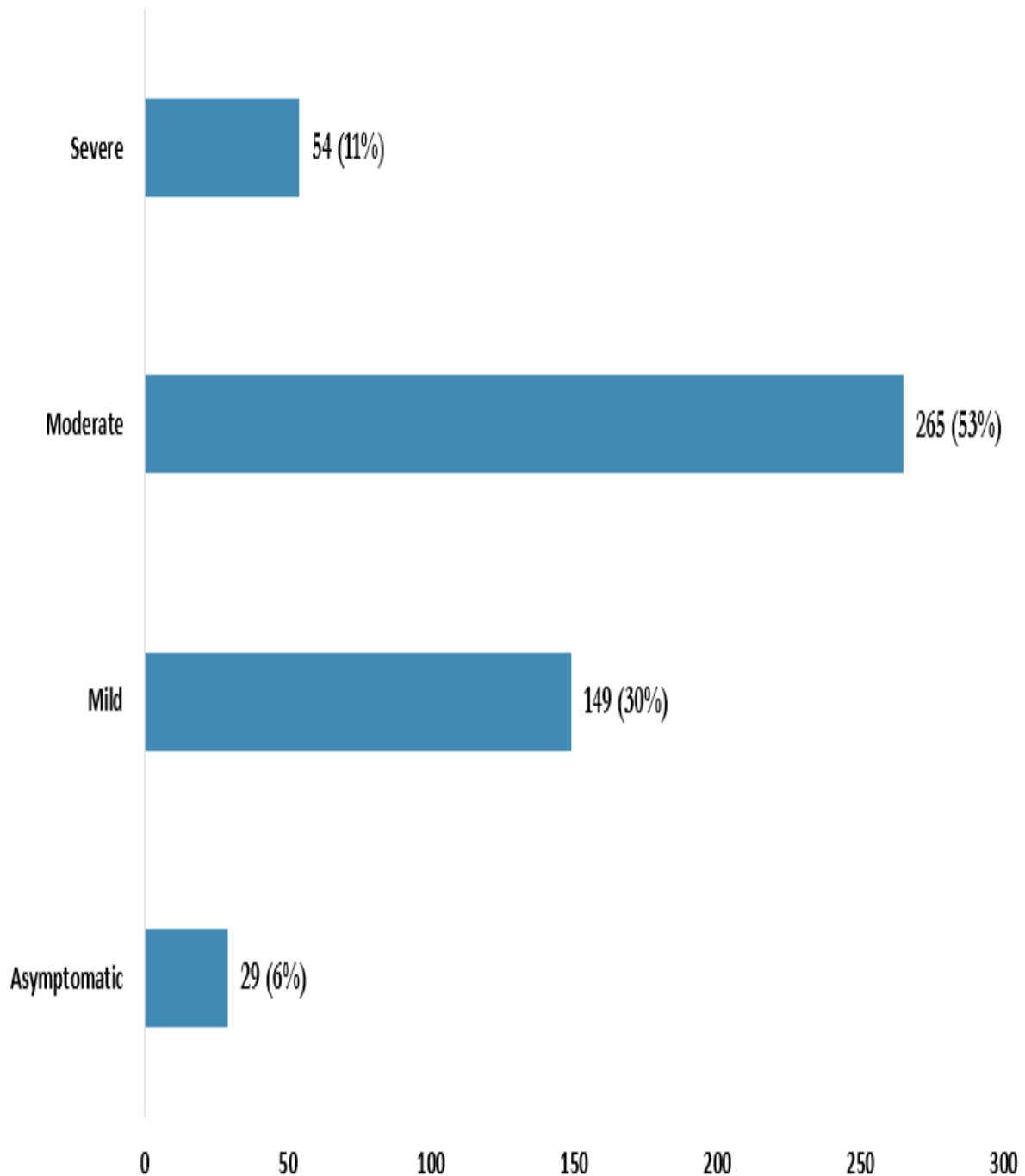


“My family was isolated during the first wave of COVID-19 by the neighbours following rumours that I was tested positive for COVID-19.

Dr Rastogi, AIIMS Jodhpur



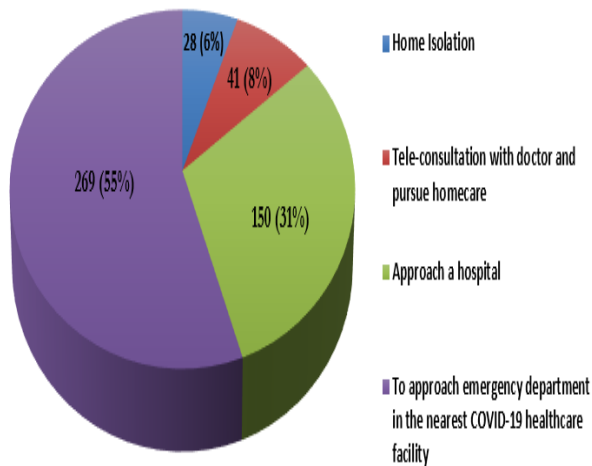
If the respiratory rate of a COVID-19 patient is more than 26 but less than 30 for past 24 hours, what level of severity would you classify for the patient?
(N= 497)



If a patient is suffering from SPO2 less than 90% on room air except in COPD patients, what type of care would you suggest to the patients?

55% of the respondents have given the right answer but 45% of the patients have given incorrect answers, therefore we need to roll down intensive training and repeated clinical information from the MOHFW among the care giving community as they will advise the right measure and thus the lives will be saved and health systems will be able to respond better, especially during critical care.

If the COVID-19 patient is suffering from SPO2 less than 90% on room air except in COPD patients, what type of care would you suggest to the patient? (N= 488)

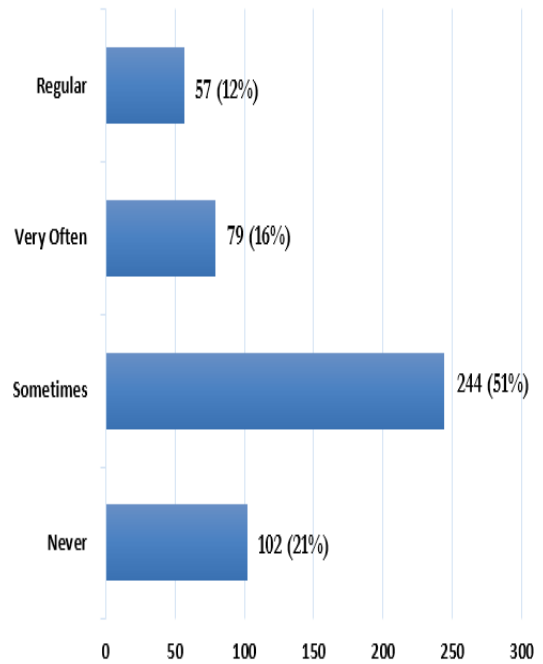


How do you update your knowledge about COVID-19 and available national and global guidelines?

Television

Only 12% of the respondents have indicated that they use TV as a medium to solicit knowledge on national and global guidelines on COVID 19.

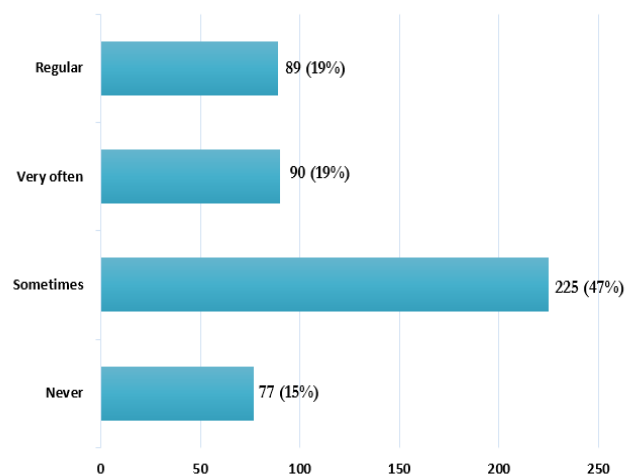
(A) Television (N= 482)



Newspapers

About 19% of the respondents use newspaper as a regular medium to update their knowledge on national and global guidelines.

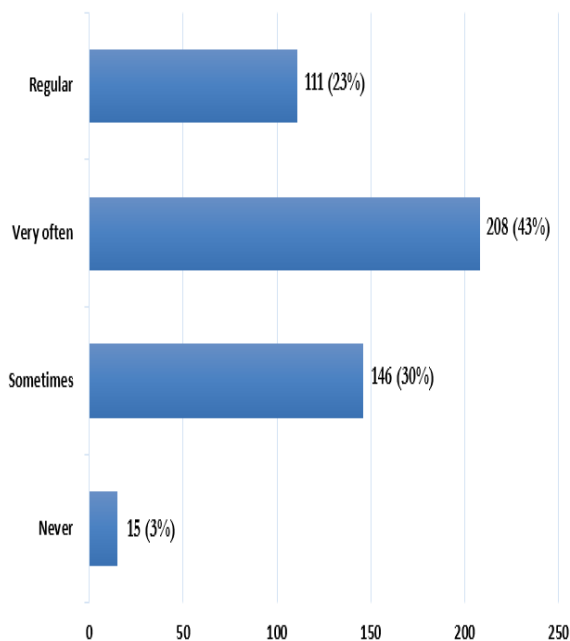
(B) Newspaper (N= 481)



Colleagues

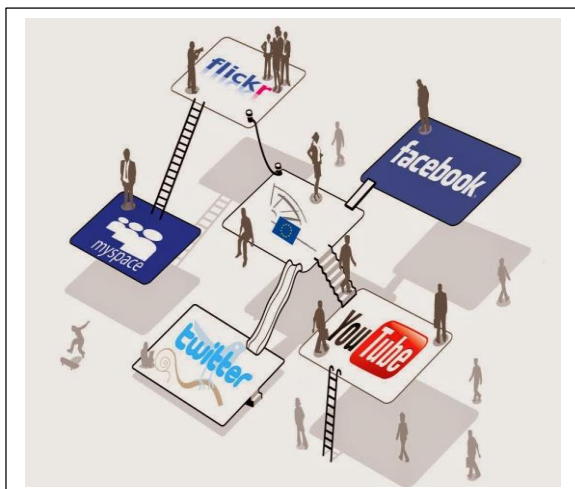
23% of the respondents gather knowledge and information on national and global guidelines related to COVID 19 from colleagues.

(C) Colleagues (N= 480)

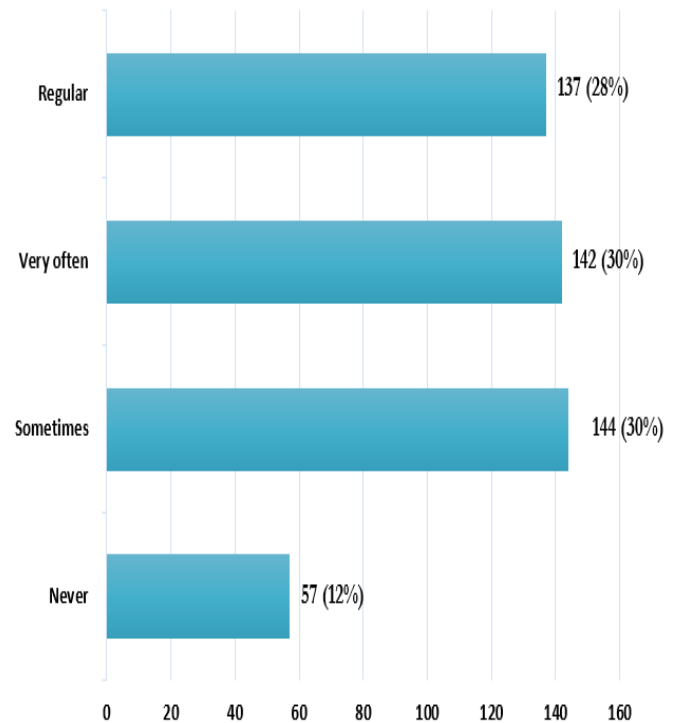


Social media

It is relatable to see that **28% of the respondents look up to social media** for knowledge and guidelines of national and global level.



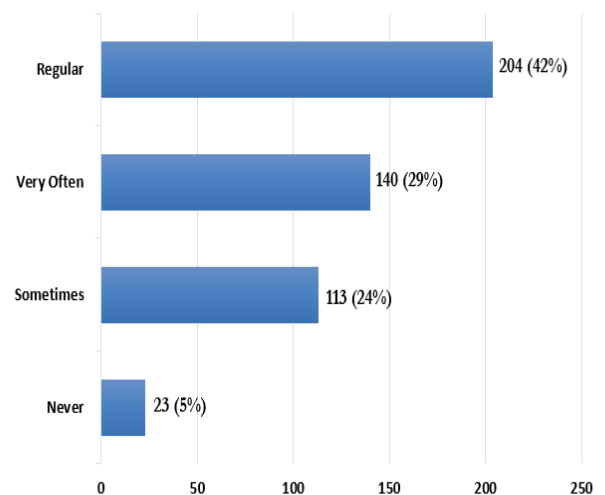
(D) Social Media (N=480)



Ministry of Health and Family Welfare website

42% of the doctors check on the ministry website directly for knowledge and guidelines on national and global level.

(E) Ministry of Health and other government websites (N= 480)

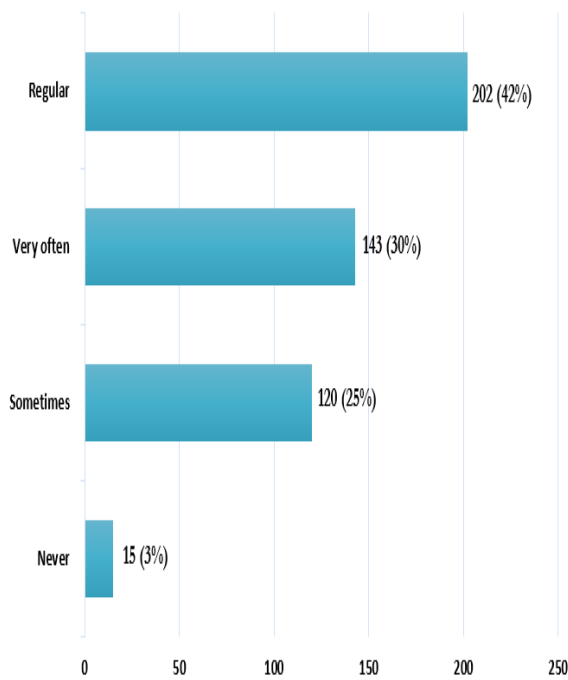


World Health Organization (WHO) website

Same as above **42% of the respondents rely for knowledge** and guidelines of national and global scale on the WHO website.

Therefore we should work on disseminating these knowledge products and guidelines in local languages as well so that it can be well disseminated and more doctors could benefit from it.

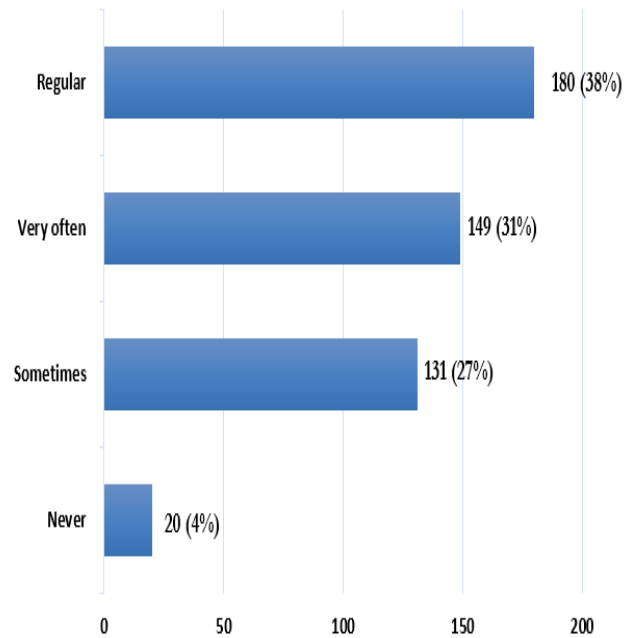
(F) World Health Organization (N= 480)



Professional Bodies

38% of the respondents look up to the websites and other communication channels related to professional bodies for knowledge products and guidelines disseminated at national and global level.

(G) COVID-19 Professional Bodies (N= 480)

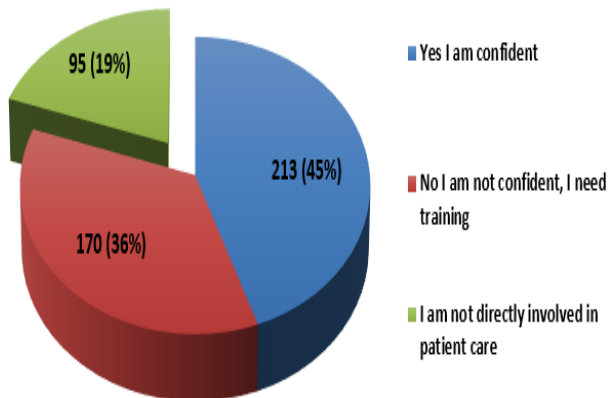


Physicians tend to choose more than one source of information gathering and have a tendency to verify the information

Since this is a new disease how confident are you about the treatment methodology

Still 24 months down the line of the emergence of the disease still only **45% of them are confident in treating the disease. Almost 36% of the doctors declared they were unsure of the treatment.** This is alarming and should be taken in the light that quick and effective capacity building of the doctors is necessary.

Since this was a new disease, how confident are you now about the treatment methodology? (N= 478)



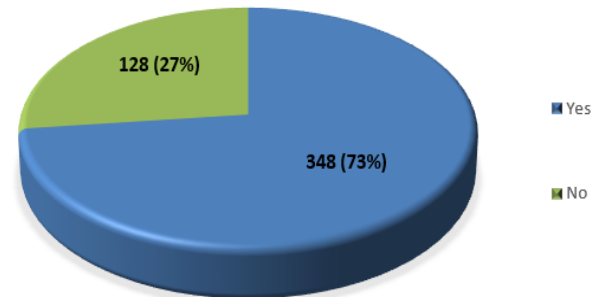
A lot of treatment methodologies like ivermectin, hydroxychloroquine, plasma therapy, several inhalation therapies were initially regarded as main stand recommend were later on retracted from the clinical protocols.

Did you provide tele-consultation/ over the phone consultation to the patients

A majority of **73% of the respondents had provided tele-consultation** and over the phone consultation to the patients.

It was one of the convenient method to provide treatment from a distance, looking at the IPC dynamics and transmissibility of the virus.

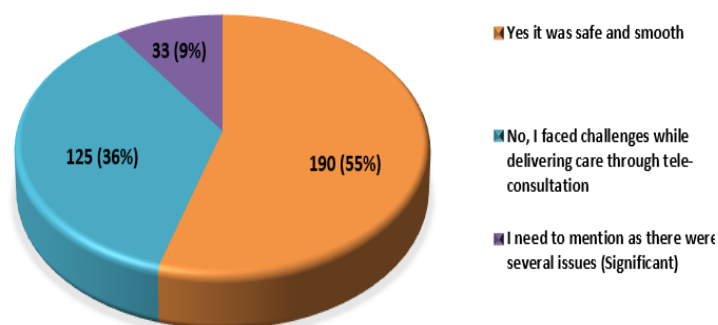
Did you provide tele-consultation/over the phone consultation to the patients? (N= 476)



How was the experience in providing tele-consultation or over the phone consultation

55% of the respondents felt that it was safe and smooth, the rest 45% had difficulties and issues. Therefore, we need to refine the delivery of over the phone consultation and prescribed formats can be devised by concerned authorities to do so then ad hoc mechanisms.

(A) How was your experience in delivering tele-consultation? (N= 348)



Hence given the mutation of virus and ever emerging newer lines of treatment methodologies, physicians find it difficult to cope.

To be better prepared for COVID 19 like events, what areas do you think need more attention and resources

53% of the respondents agreed that a major exercise should be initiated to identify gaps in the delivery mechanism of the existing health care systems.

50% of the respondents agreed that specially designed programmes or the better readiness of the health care system should be introduced within the country.

44% of the respondents thought that more quality oriented and permanent staff should be hired.

36% of the respondents thought that focused skill development is necessary.

32% thought that the surge capacity issue should be addressed in a more planned manner.

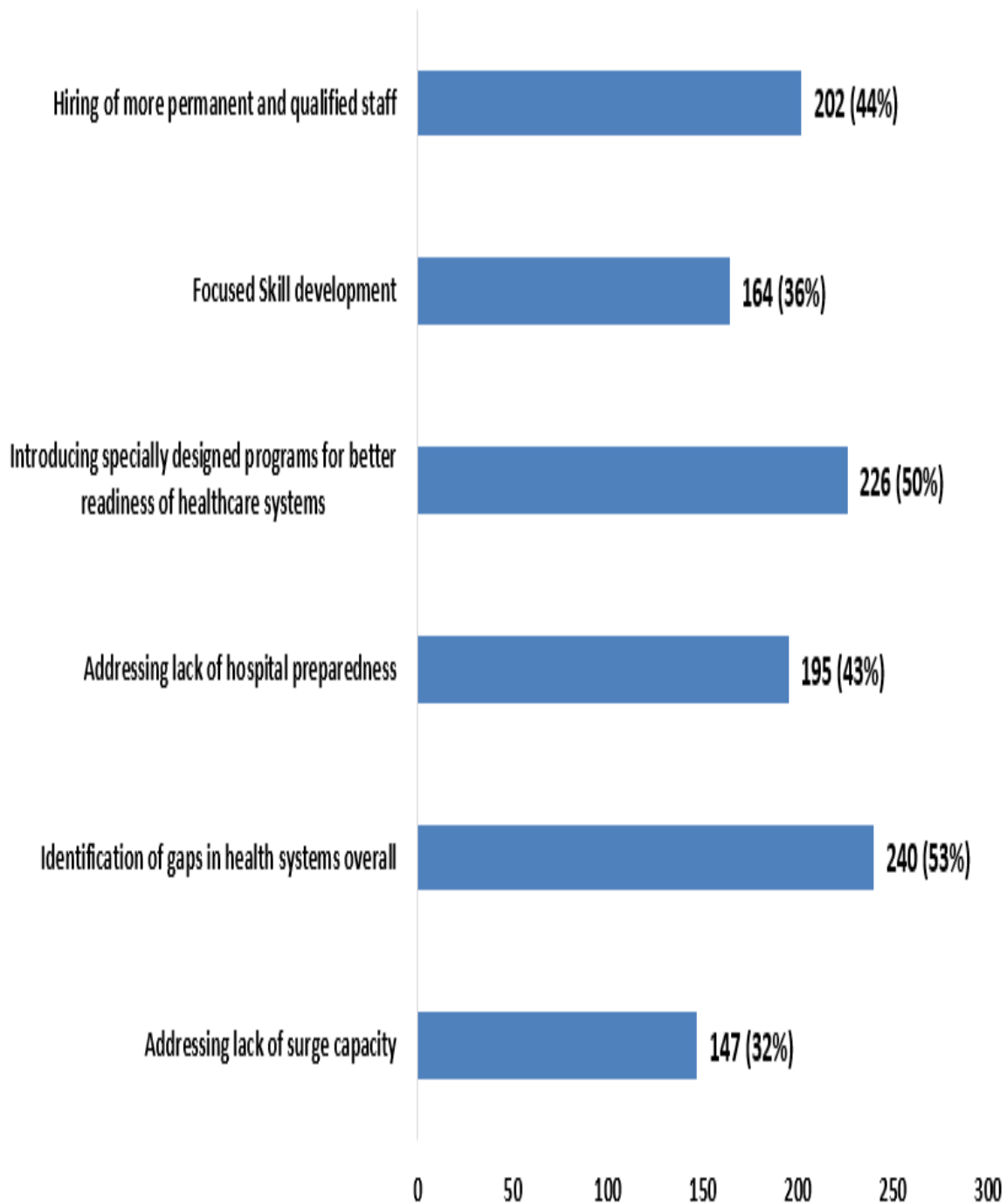


Emergency preparedness among health professionals as well as proper health education and mental preparedness for public through integrated approach

Informed public health cadre with facilities for forecasting and tracking of occurrence of novel infections, trained health care and para-clinical staff with meticulous field surveillance workers and preparedness ready health system resources right from the primary health care

There should be increment in dental surgeons in all levels of health care sectors as it is now confirmed that so many diseases can be prevented and cured with a proper oral hygiene and care

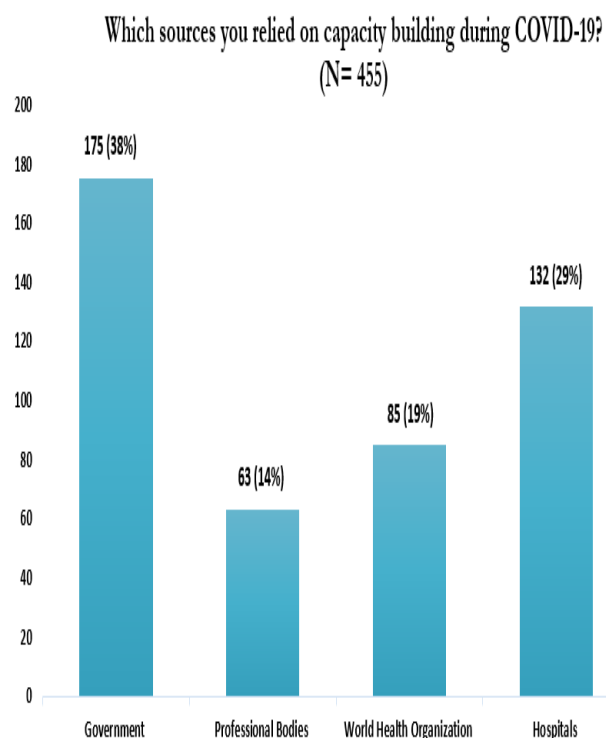
To be better prepared for COVID-19 like events, what areas do you think need more attention and resources? (Multi-select) (N= 455)



Which sources you relied on capacity building during COVID 19

A good **29%** said that they relied on hospitals for capacity building further **38%** relied on government run programmes and initiatives, **14%** on professional bodies and the rest **19%** on the World Health Organization.

Therefore efforts from government to ramp up capacity building efforts among the doctors should be high on the agenda and the hospitals should be part of such campaigns so that the same initiatives could be rolled out through them. Further, the professional bodies and the WHO should extend value addition measures to the capacity building efforts rolled out by the government and the hospitals.



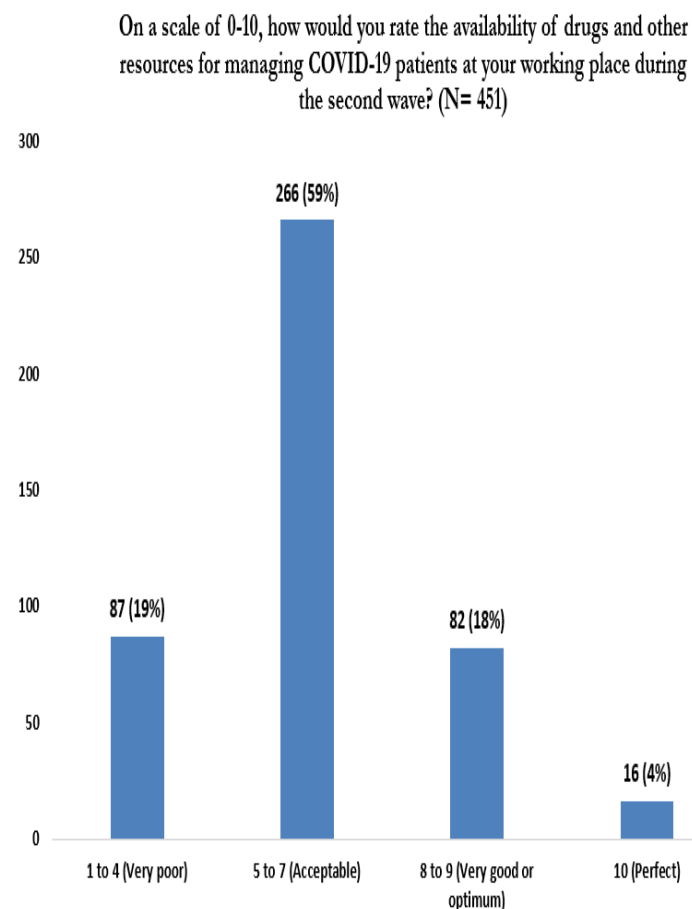
IGOT platform adopted by MOHFW and other e-learning platforms from trusted sources i.e. state and central govt. were the major sources of capacity building.

On a scale of 0 – 10, how would you rate the availability of drugs and other resources for managing COVID 19 patients at your working place during the second wave

59% of the respondents have claimed that they had experienced acceptable levels of availability of drug and resources to deal with the second wave surge. Though, only **4%** have said perfect level and **9%** said a good level, we also need to pay attention that **19%** have also indicated poor availability.

Looking at the respondent profile of urban and young we are of the opinion that responses might change when probed in to rural settings.

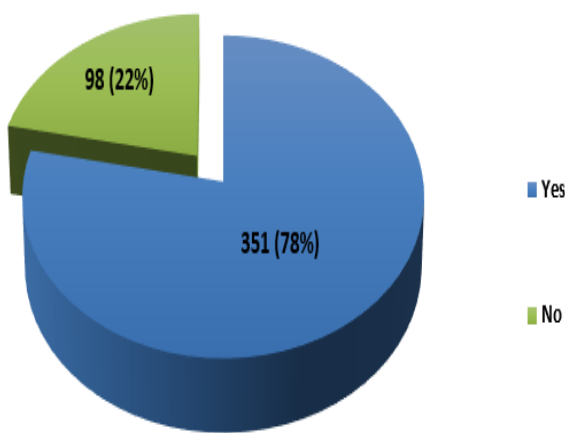
Though age and education profile might not have a bearing on this question.



Did you face any problem any problem of over-crowding in your hospital/ workplace

78% of the respondents did face problem of over-crowding in their hospital and workplace.

Did you face any problem of over-crowding in your hospital/workplace? (N= 449)

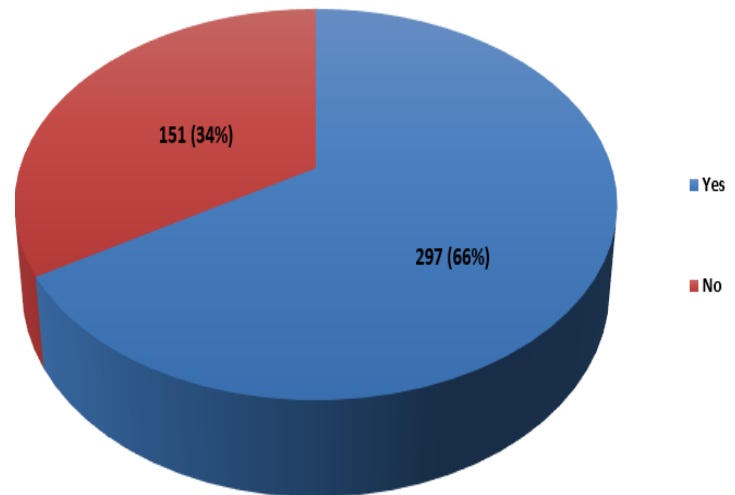


Were you able to ensure physical distancing of patients in your clinic or hospital

Only **66% of the respondents were able to maintain physical distancing among their patients** within their clinic and hospital settings.

So a large section in urban settings were not able to maintain physical distancing, therefore if we again probe in to rural settings we will be able to know the exact percentage of hospitals/ health care centres not able to follow physical distancing.

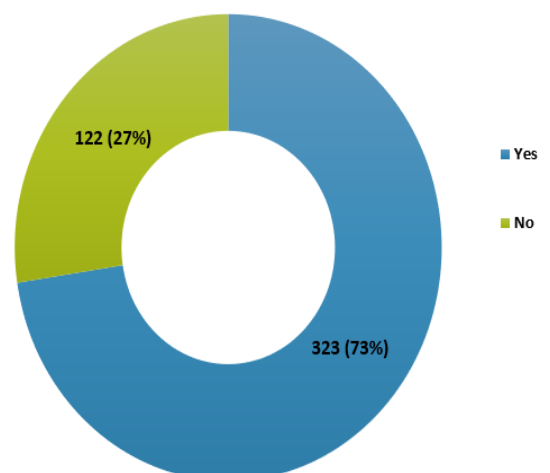
Were you able to ensure physical distancing of patients in your clinic? (N= 448)



Did you have adequately equipped triage facility in your healthcare centre

73% of the population agreed to have adequate facilities whilst 27% voiced out that they could not do triage, but probing in rural settings might change the responses.

Did you have adequately equipped triage facility in your healthcare facility? (N= 445)

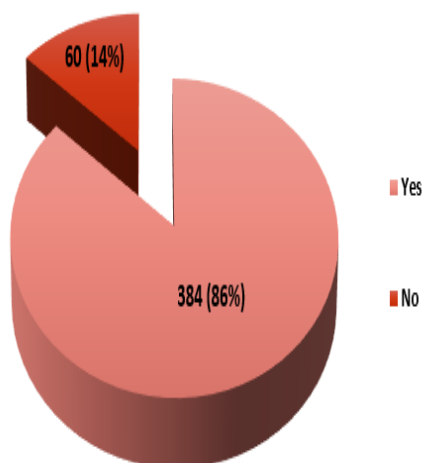


Did environmental cleaning/ disinfection and biomedical waste management in your hospital/ healthcare facility instill confidence for COVID 19 prevention and protection

86% of the respondents have agreed that they were feeling more confident due to carrying out of environmental cleaning/ disinfection and biomedical waste management in their workplaces/ hospitals.

Around **14% were still not confident and if we investigate** in the rural settings then such cleaning and bio-waste medical norms may/ or may not have been carried out.

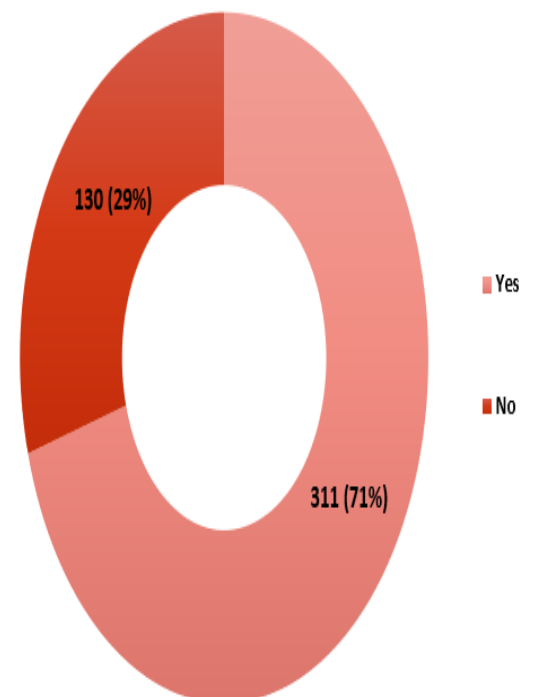
Did environmental cleaning/ disinfection and biomedical waste management in your hospital/ healthcare facility instill confidence for COVID-19 prevention/ protection? (N= 444)



Did your hospital/ healthcare facilities ventilation system provided adequate number of air changes per hour to prevent transmission of COVID 19

71% of the responses were in favour of the adequate air ventilation within the hospital. While 29% said that they did not receive this service so still in spite of repeated guidelines still infrastructure was not able to cope with the norms.

Did your hospital/healthcare facilities ventilation system provide adequate number of air changes per hour to prevent transmission of COVID-19? (N= 441)

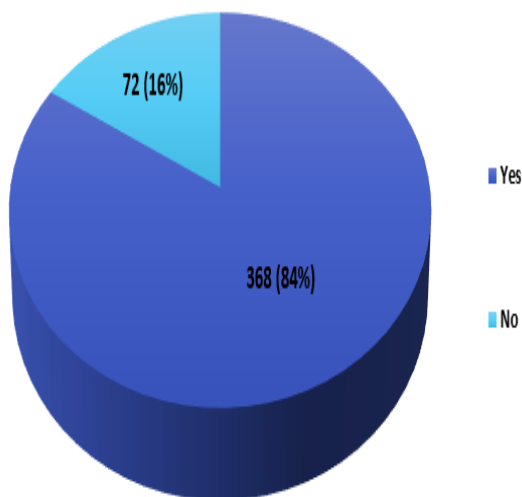


Did your hospital's infection control programme provide adequate guidance and support for preventing COVID 19 in healthcare workers and patients

Around **84% of the respondents said yes their hospital** did provide adequate guidance and support for preventing COVID 19 in HCW and patients.

While **16% dismiss the fact and therefore RCCE intervention** is necessary, so that every healthcare institution practices these norms and thus safeguard the patients and HCW.

Did your hospital's infection control programme provide adequate guidance and support for preventing COVID-19 in HCW and patients? (N= 440)

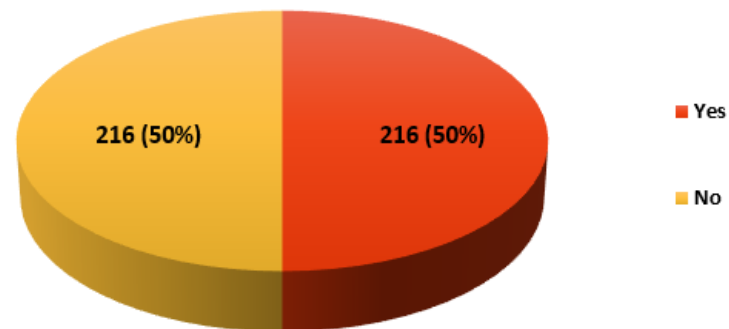


Did you receive conducive and supportive environment in the healthcare/ hospital settings where you were working

Periods of leave

50% of the respondents received and the rest half did not receive this support.

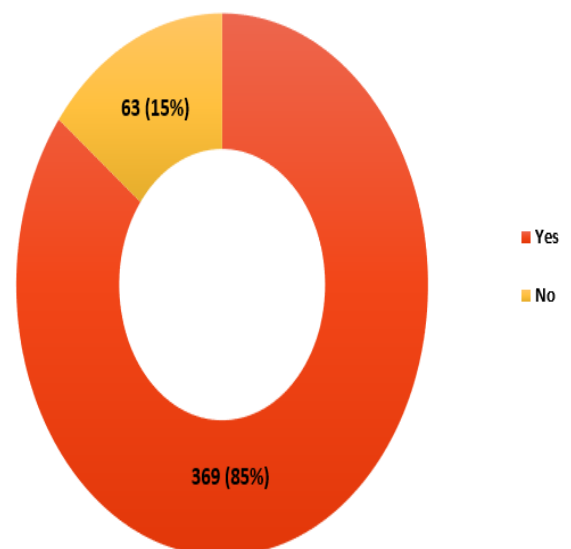
(A) Periods of leave (N= 432)



Training on infection prevention and control

85% of the respondents had received adequate training on IPC from their hospital.

(B) Training on PPE/Infection prevention control (N= 432)



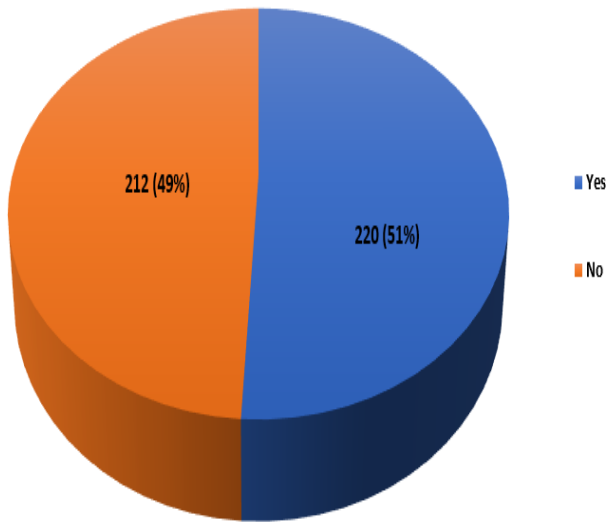
Enough rest hours

51% claim that they received adequate rest hours whilst the rest half claim they

did

not.

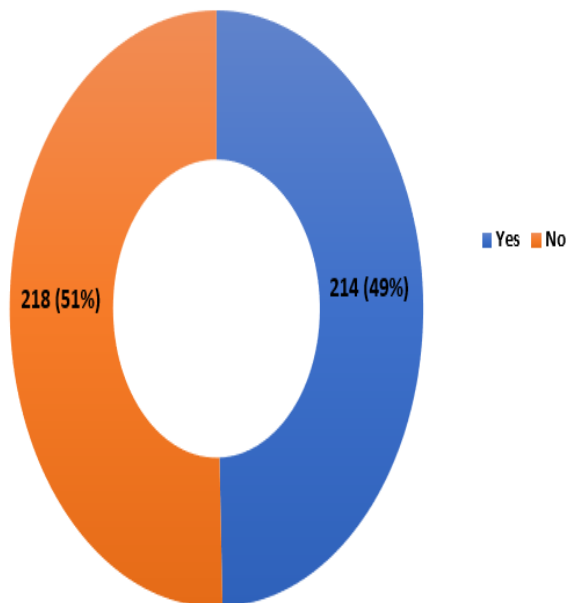
(C) Enough rest hours (N= 432)



Support for mental health

51% of the doctors claim that did not receive any support from their workplace/ hospital on mental health.

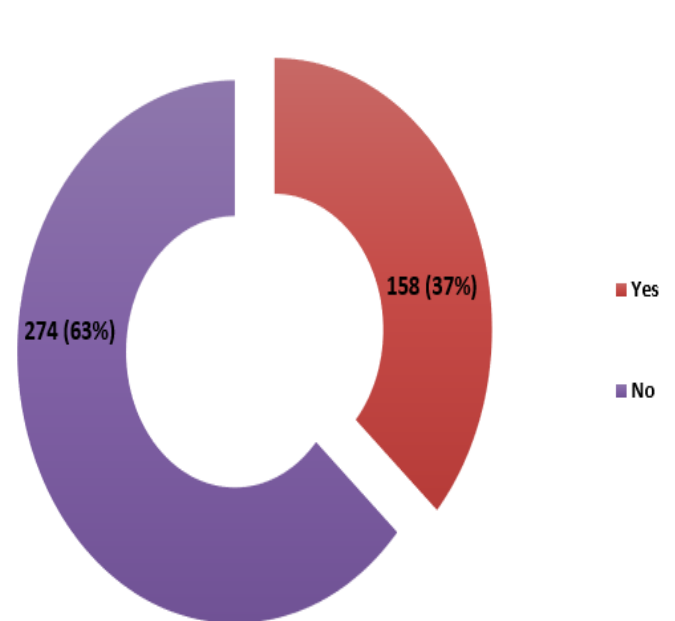
(D) Support for Mental Health (N= 432)



Any recreational/ motivation activities at workplace/ healthcare facility

Only 37% claim to have received this support the rest 63% did not receive any such support and again we are talking primarily based on urban and young profile respondents.

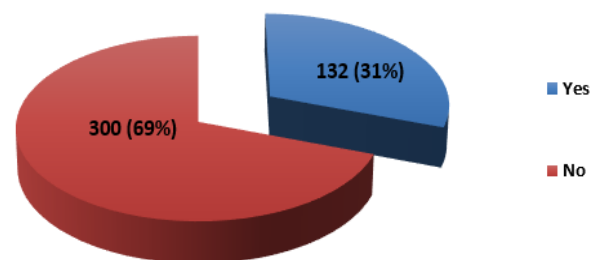
(E) Any recreational/ motivational activities at workplace/healthcare facility (N= 432)



Any added incentive

31% of the respondents claim that they did receive added incentive and the rest 69% did not receive any such incentive.

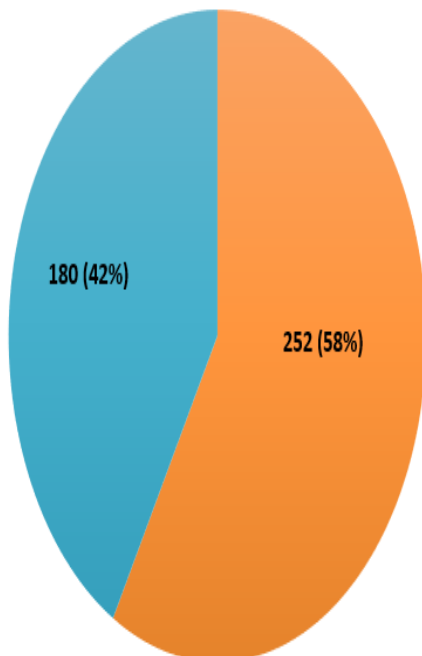
(F) Any added incentive (N= 432)



Adequate accommodation in healthcare facility/ hospital

58% of the respondents did receive adequate accommodation in healthcare facility/hospital. While 42% did not receive so, hence had to face problems regarding boarding and lodging and even carrying infection home or having adequate rest during duty hours etc.

(G) Adequate accommodation in the healthcare facility/hospital (N= 432)

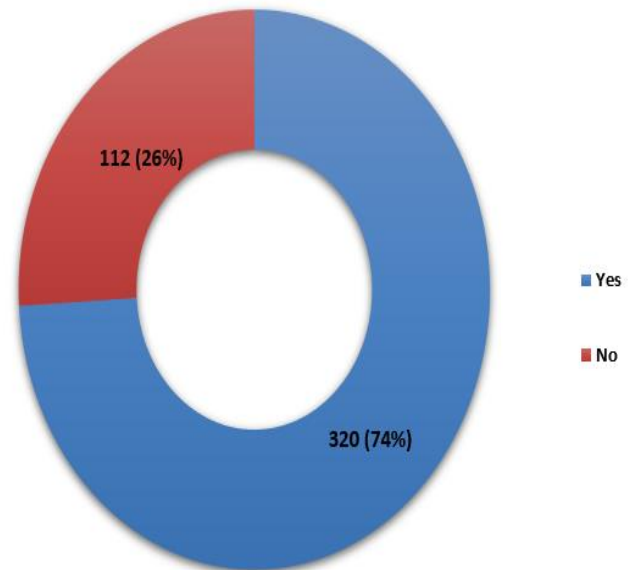


Access to adequate number of PPE coveralls

74% of the staff has said that they did receive adequate PPE coveralls while 26% were denied the adequate support of PPE in urban context.



(H) Access to adequate numbers of PPE coveralls (N= 432)

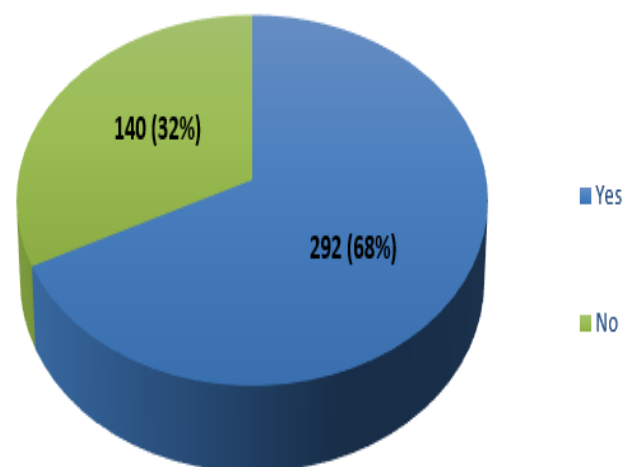


Were PPE coveralls provided of good quality

- Yes
- No

68% of the respondents said yes they did receive good quality coveralls, the rest 32% were not satisfied with the quality, this again primarily in urban context.

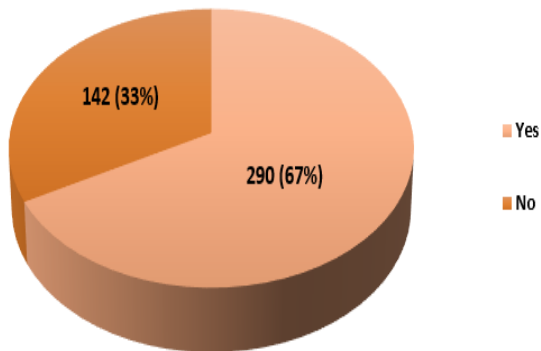
(I) Were PPE coveralls provided of good quality? (N= 432)



Provided with enough N95 masks

Yes **67%** agreed to being provided with **adequate** number of N95 masks. The rest of the 23% did not get it in adequate quantity.

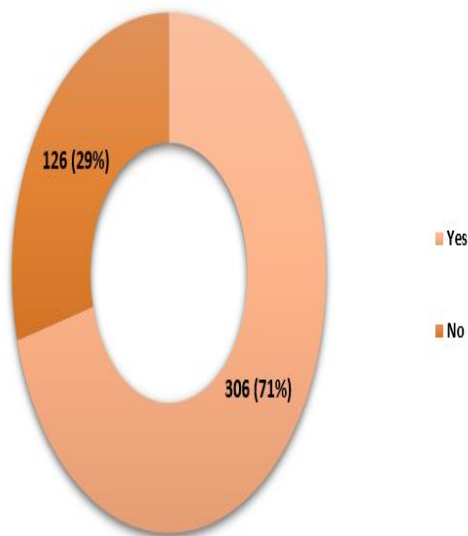
(J) Provided with enough N-95 masks (N= 432)



Were N95 masks provided of good quality

Yes, **71%** agree that the **N95 masks provided were** of good quality, while 29% agree that they weren't of good quality.

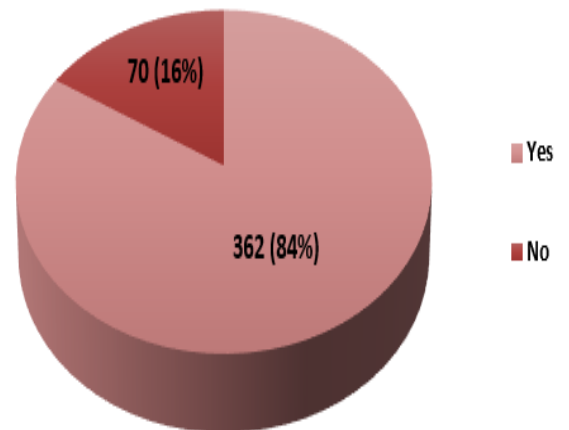
(K) Were the N-95 masks provided of good quality? (N= 432)



Access to adequate hand washing facilities

84% have said yes they had access to **adequate hand** washing facilities the rest 16% were facing challenges.

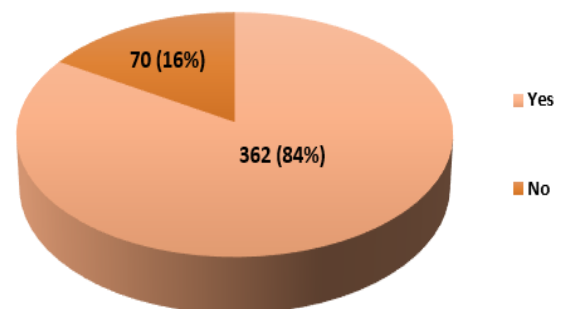
(L) Access to adequate hand washing facilities (N= 432)



Adequate quality hand disinfectants

84% of the respondents have agreed to receiving good quality disinfectants and the rest 16% did not receive good quality stuff.

(M) Adequate/Quality hand disinfectants (N= 432)



There were better clinical outcomes and minimal post COVID sequel because of quality of care health care professionals received, timeliness and quality of care. Many of them also received proper post COVID rehabilitation which are relatable to better outcomes the step taken by the government for ensuring the health care and safety of the healthcare professionals also benefitted the physicians.



(Annexure-II) Question-29: To be better prepared for COVID-19 like events, what areas do you think need more attention and resources?

1	Emergency preparedness among health professionals as well as proper health education and mental preparedness for public through integrated approach
2	Infrastructure support including civil work and hygiene in public hospitals
3	Informed public health cadre with facilities for forecasting and tracking of occurrence of novel infections, trained health care and para-clinical staff with meticulous field surveillance workers and preparedness ready health system resources right from the primary health care
4	Training of Medical Officer like an intensive training program for the skill acquirement and to face this crisis
5	Building Research capacities for early treatment
6	Intense health information and education to general public
7	More network of primary health centres
8	More resources should be devoted to behaviour change communication
9	Training about resuscitation and care in ICU
10	Quarantine management at airport should be given utmost importance to prevent spread
11	More healthcare policies and programmes
12	Measures to prevent violence in hospitals
13	Better surveillance on health-related programmes and Policies
14	There should be increment in dental surgeons in all levels of health care sectors as it is now confirmed that so many diseases can be prevented and cured with a proper oral hygiene and care

Question-23 (A): Other reasons for not taking the vaccine

1	Pregnancy
2	Presently on antiplatelets

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For Further details

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S.No	Topic	Recommendation
1	Profile of our respondent Gender Age group Location Speciality Type of hospital	<p>The respondent of this profile is unisex but young within the age group of 25 – 35 and representing urban settings. Primarily from private tertiary and public health district hospital representing Pan-India.</p> <p>Equal participation of both the genders Most younger group of doctors, mid and elderly aged medical professionals are not inclined towards IT interventions Which is a reflective indicator of major healthcare human resource are located mainly in cities scenario MBBS / MD Good representative across all sectors of hospitals, for COVID all kinds of hospitals have been used at an optimum level</p>
2	Diagnosed with COVID-19 disease	<p>Healthcare workers with symptoms and exposure were adequately tested however even in future scenarios the healthcare workers with similar or emerging symptoms needs to be tested since they are at the highest level of risk of contracting the disease and are also valuable frontline assets of any nation. Majority of the countries have taken a proactive measure in safeguarding their healthcare workers.</p>
3	Level of COVID-19 infection acquired by the doctors while responding to it	<p>Most of the physicians got milder form of infection and were able to recover at home with minimal medical care though required advance medical care in hospitals set ups and few of them also encountered advance phase of disease and required intensive care support and ventilator care and support.</p> <p>As per IMA (Indian Medical Association) 1452 doctors lost their lives I COVID 19.</p>
4	Fear of carrying infection to family and friends	<p>Being the highly transmissible disease given the disease dynamics and the proximity of healthcare professionals within the high viral load setups such as hospitals, OPDs and ICUs. The likeliness of getting affected by COVID 19 was always on a higher side, however due to adequate capacity building risk communication focused training, knowledge sharing practice, IEC campaigns the HCW were made aware about the risk of transmission.</p>

		Better IPC practices, promoted use of PPE, and strong community embedded behavioural practices threw it as an initial line of defence in safeguarding the health of medical professionals.
5	Personal Protective Equipment usage and accessibility	<p>First phase did pose a shortage for personal protective equipment</p> <p>Second phase the supply cycle was recovered and PPE was available</p> <p>But still many doctors had to pay for PPE, probably in rural areas</p> <p>We need to now keep this habit of donning and doffing of PPE forever as this will help us be resilient in these changing situations.</p>
6	Conducive and supportive environment Family/ friends Community/ neighbourhood Workplace/ hospitals	<p>Though most of the doctors favorably received conducive environment from family/ friends/ community neighbourhood or in hospitals, but still cases have been reported of stigma and isolation, therefore we need to work towards proper laws and awareness generation to overcome fear of the community.</p> <p>In metro cities the government also made special arrangements for boarding and lodging of doctors.</p> <p>Also some hospitals also had made the arrangement for their staff.</p>
7	Faced violence and assault during ongoing pandemic	<p>Due to poor outcomes of patient, due to highly infectious nature of the disease, Violence on doctors has been a prominent issue within the country and global and was no different during COVID 19 pandemic in the mid course of pandemic the government took corrective action by revising the 1897 Epidemic Act to safe guard healthcare professionals against violence, therefore number of incidences after revision of the act has significantly reduced.</p> <p>Efforts should be made to implement the Act in an effective manner.</p>
8	Stigma	RCCE campaigns need to be run by the government and professional bodies from time to time, so that the caregivers receive adequate respect and honour for performing their duty in such challenging circumstances rather than be stigmatized.

9	Long duty hours	Better human resource management / surge planning for emergencies is a key lesson from pandemic
10	Impact of COVID-19 on health and well being	<p>Not just physical impact but also mental impact, however government supportive programmes and welfare schemes and also supportive steps taken by the private players and local government acknowledging their service also boosted the morale of the healthcare professionals</p> <p>Long term mental impact – better programme need to be envisaged, programmes designed for long term physician well-being should be targeted programmatic way.</p>
11	Vaccination status	<p>Better risk communication and community engagement (RCCE) action is needed to curb vaccine hesitancy among HCWs.</p> <p>Like timely updates on the process being followed and regular dissemination on the issue will help them to build confidence and thus would not only themselves be vaccinated but also promote among the community.</p>
12	Knowledge	<p>A lot of treatment methodologies like Ivermectin, Hydroxychloroquine + Azithromycin, plasma therapy, several inhalation therapies were initially regarded as main stand recommend were later on retracted from the clinical protocols.</p> <p>Hence given the mutation of virus and ever emerging newer lines of treatment methodologies, physicians find it difficult to cope.</p> <p>Therefore regular participatory research based discussions and formal platforms need to be organized where Doctors could share and learn from each others experiences. Especially by the government, professional bodies and the WHO.</p>
13	Tele-consultation	<p>Tele-medicine – adequate capacity building and training needs to be imparted.</p> <p>Challenge to reach far off locations and remote areas gives rise to such practices but end user orientation and unavailability of proper regulatory mechanism makes it a difficult practice</p>

14	Preparedness measures	<p>The second wave definitely had put stress on isolated areas within the country like the National Capital Region, Maharashtra, Kerala especially managing the disease by demarcating COVID and Non-COVID cases within the health facility.</p> <p>Recommendations received from respondents</p> <ul style="list-style-type: none"> - Emergency preparedness among health professionals as well as proper health education and mental preparedness for public through integrated approach - Informed public health cadre with facilities for forecasting and tracking of occurrence of novel infections, trained health care and para-clinical staff with meticulous field surveillance workers and preparedness ready health system resources right from the primary health care - Training of Medical Officer like an intensive training program for the skill acquirement and to face this crisis - Intense health information and education to general public - More resources should be devoted to behaviour change communication - Quarantine management at airport should be given utmost importance to prevent spread
15	Capacity building	<p>Better capacity building for rural and private healthcare set ups Government platforms like IGOT need to be promoted Global and national level online and offline mechanisms for building capacity in vernacular languages will be a welcome step</p>
16	Availability of drugs in your workplace for patients during second wave Overcrowding/ Triage area/ Physical distancing/ Biomedical waste management/ Airway management	<p>During first wave the lives were lost due to non-availability of services to combat the surge in patients.</p> <p>During the second wave systems were strengthened and our healthcare system was able to provide support to the affected, but lives</p>

		were lost due to severity of infection especially with patients having co-morbidity issues.