

# Effectiveness of Covid-19 management training of Community Health Officers (CHO) in Bulandshahr, UP

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# Introduction

The National Health Mission (NHM), the country's flagship health systems strengthening programme, particularly for primary and secondary health care envisages "attainment of universal access to equitable, affordable and quality health care which is accountable and responsive to the needs of people"

In order to strengthen the Institutional structure and organising primary health services it is imperative to have a set of defined service which should be made available at all the health delivery centre.

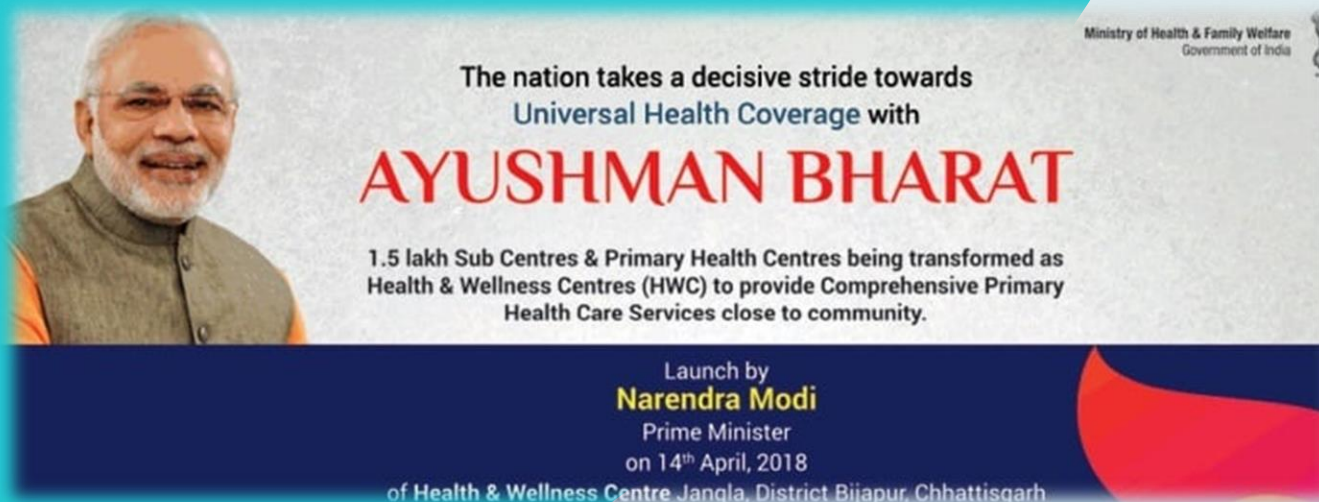
This role of delivering comprehensive health services will be fulfilled by the Health and Wellness Centres(HWCs) which at Sub health centres are lead and managed by Community Health Officer (CHO).



CHOs are nursing background students who undergo 6 months training program called the CCHN, Certificate Program in Community Health

In the block level the community was served by CHOs to tackle the disease in the community, it was important to assess their knowledge on management of the disease in the community based on the training they received.

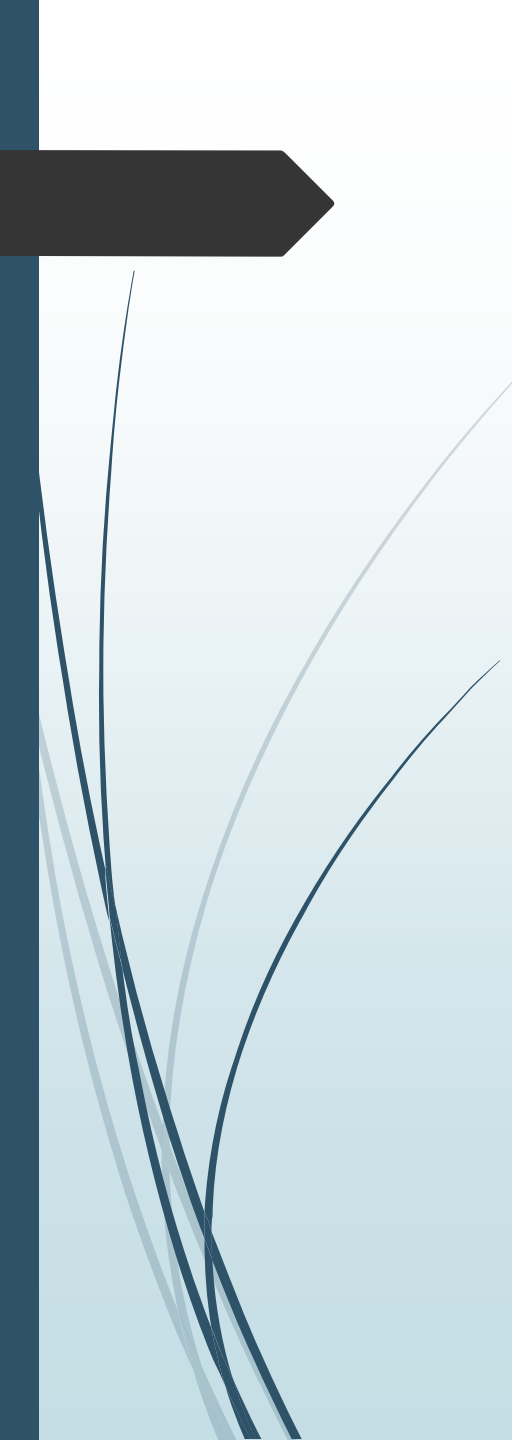
The purpose of this research is to find the effectiveness of the training conducted by Jhpiego and district Medical Officers (MOs) for Covid-19 management during the pandemic which was imparted to the CHOs to increase their knowledge on the subject and successfully implement it on the field without hesitation.





# Research Question

- ▶ How effective was the training on Covid-19 management for the Community Health Officer (CHOs) in the community?
- ▶ How to improve the training module based on the CHOs experience in the field to better prepare them for their work in the community?



# Objective

- To determine the effectiveness of training on Covid-19 management for CHOs of Bulandshahr district, UP.
- To assess the knowledge of CHOs post training on the Covid-19 management and how to improve the training module based on the CHOs experience in the field performing Covid-19 management.

# Literature Review

| S. No. | Title                                                                                             | Author                                                                                                                      | Year | Study location | Results                                                                                                                                                                                                                           |
|--------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | The experiences of health-care providers during the COVID-19 crisis in China: a qualitative study | Qian Liu, Dan Luo, Joan E Haase, Qiaohong Guo, Xiao Qin Wang, Shuo Liu, Lin Xia, Zhongchun Liu, Jiong Yang, Bing Xiang Yang | 2020 | China          | Comprehensive support should be provided to safeguard the wellbeing of health-care providers. Regular and intensive training for all healthcare providers is necessary to promote preparedness and efficacy in crisis management. |

# Literature Review

| S. No. | Title                                                                        | Author                      | Year | Study location | Results                                                                                                                                                                                                                                                                               |
|--------|------------------------------------------------------------------------------|-----------------------------|------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.     | Life in the pandemic: Some reflections on nursing in the context of COVID-19 | Jackson D, Bradbury-Jones C | 2020 | Australia      | Nurses are the backbone of health systems around the world, and this has never been more apparent than now, there can be no doubt that nursing and the provision of health care will come out the other side of this pandemic stronger and better prepared to face future challenges. |

# Literature Review

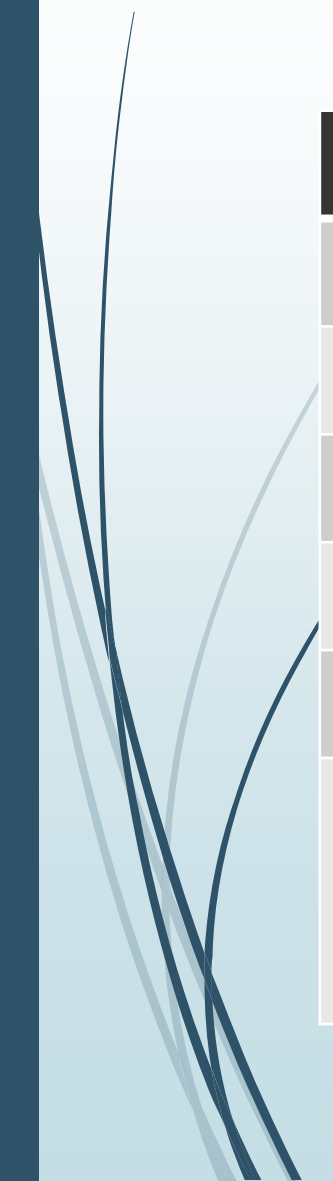
| S. No. | Title                                                                                                                | Author                                                         | Year | Study location | Results                                                                                                                                                                                                                              |
|--------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.     | <b>Impact of pandemic flu training on ability of medical personnel to recognize an index case of avian influenza</b> | Bruria Adini, Avishay Goldberg, Robert Cohen, Yaron Bar-Dayana | 2012 | London         | Training programmes for hospital personnel for pandemic flu have a significant role in improving performance in case of pandemic flu. The key component of the training programme appears to be the implementation of the programme. |

# Literature Review

| S. No. | Title                                                                          | Author                                           | Year | Study location | Results                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|--------------------------------------------------------------------------------|--------------------------------------------------|------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.     | Effectiveness of continuing education programmes in nursing: literature review | PhD,<br>Odette Griscti<br>MHSc RN<br>John Jacono | 2006 | Sydney         | <p>While the philosophy behind continuing education is to encourage nurses to become lifelong learners, the learning method chosen for such programmes is often didactic in nature, as opposed to encouraging nurses to take initiative and direct their own learning.</p> <p>Continuing education is intended to ensure healthcare practitioners' knowledge is current, but it is difficult to determine if those who attend these courses are implementing what they have learnt.</p> |



# Methodology



| <b>Study Design</b>       | <b>Descriptive Cross sectional study</b>                                                      |
|---------------------------|-----------------------------------------------------------------------------------------------|
| <b>Study setting</b>      | <b>Bulandshahr District, Uttar Pradesh</b>                                                    |
| <b>Study Population</b>   | <b>Community Health Officers(CHO)</b>                                                         |
| <b>Duration of study</b>  | <b>3 months</b>                                                                               |
| <b>Study tool</b>         | <b>Structured questionnaire</b>                                                               |
| <b>Data analysis plan</b> | <b>Data was gathered using google forms and analyzed through Google forms and Excel sheet</b> |

# Results

- CHOs posted in the district vs CHOs practicing Covid-19 management in the community

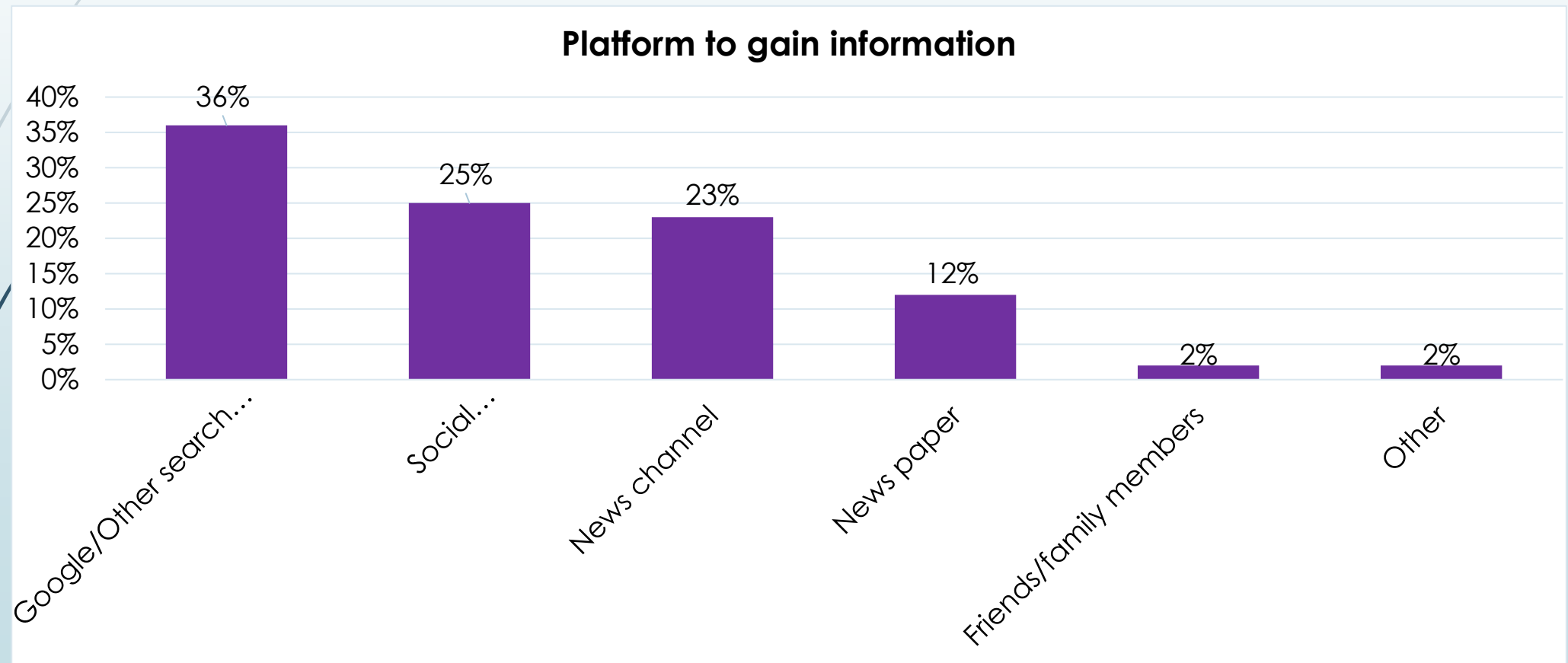
| Total CHO Placed in District | Total CHOs posted in Covid-19 duty |
|------------------------------|------------------------------------|
| 64                           | 55                                 |

- **CHOs knowledge on Covid-19 before training:** CHOs previously attained some form of knowledge on Covid-19 through various means such as social media, new channels, youtube, word or mouth, articles etc. 45% of them said they had sufficient knowledge on the subject prior to the training given to them while 55% of them

| Yes | No | Maybe |
|-----|----|-------|
| 28  | 17 | 19    |

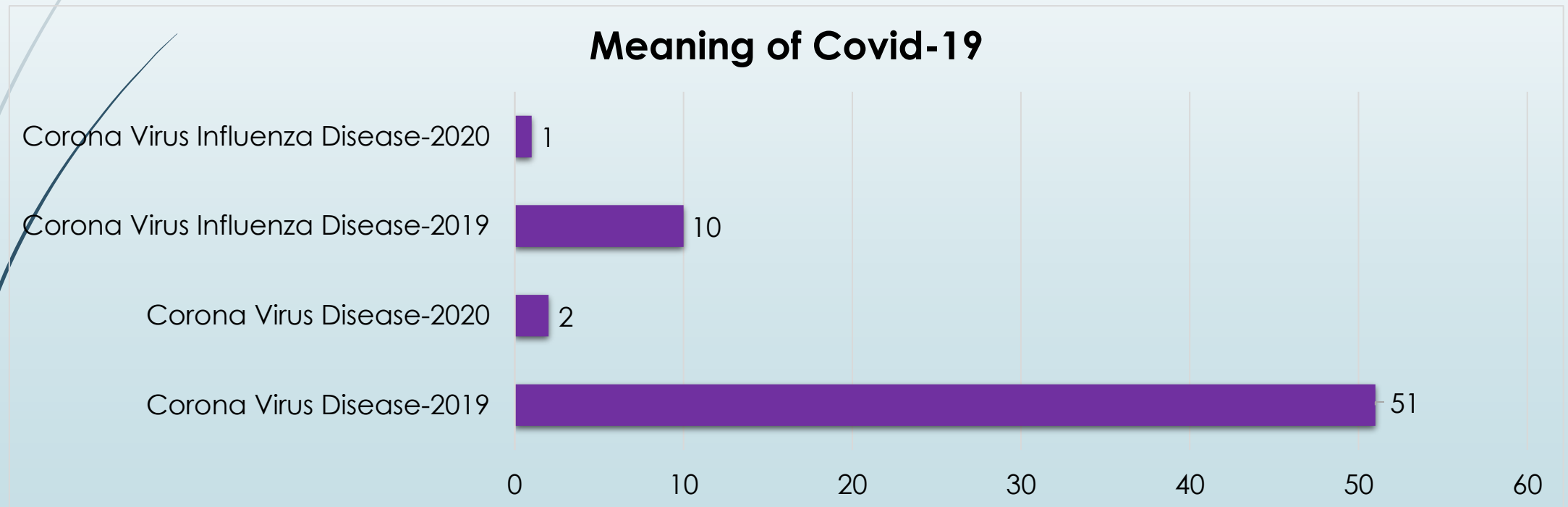
# Results

- **Platforms to gain knowledge on Covid-19:** Before training was imparted the CHOs gained knowledge through various means but out of all search engines and social media ranked highest



# Results

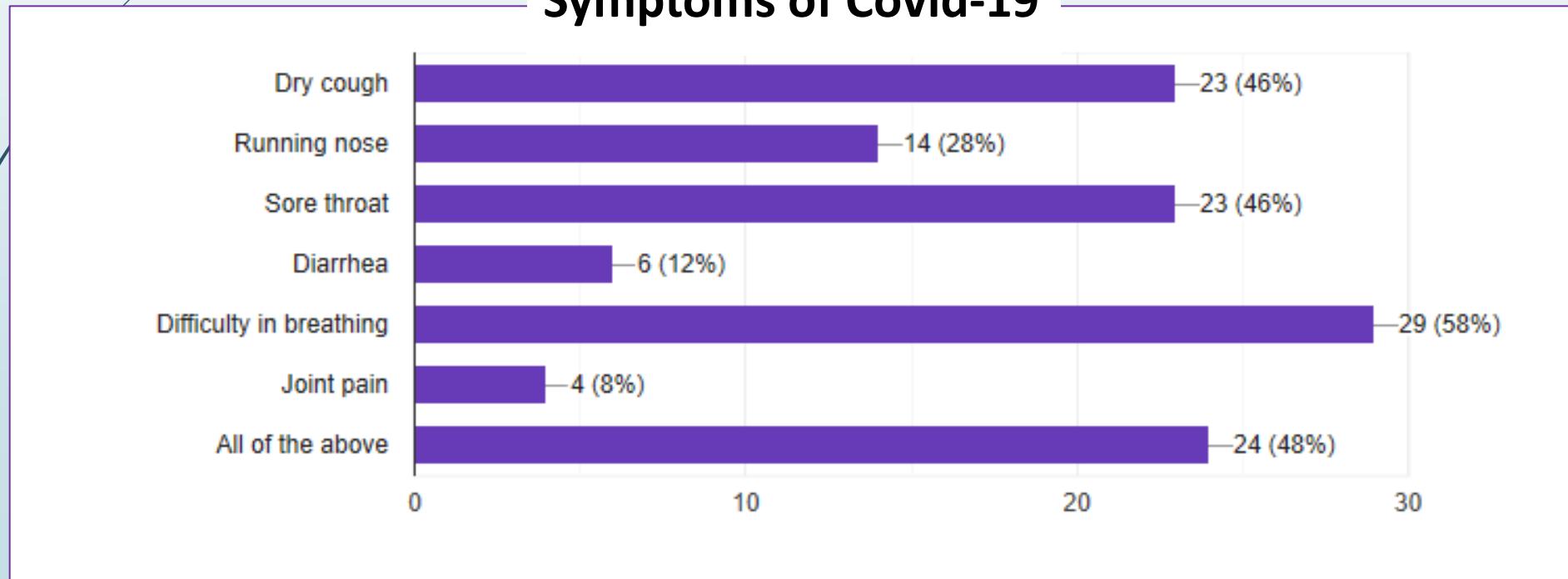
- **Knowledge assessment of CHOs post training:** The data was collected after 3 weeks of training. Their knowledge on Covid-19 management was assessed post training. 79.6% of CHOs knew correctly what Covid-19 stands and 13 of them (20.4 %) even after training did not know what Covid-19 stands for.



# Results

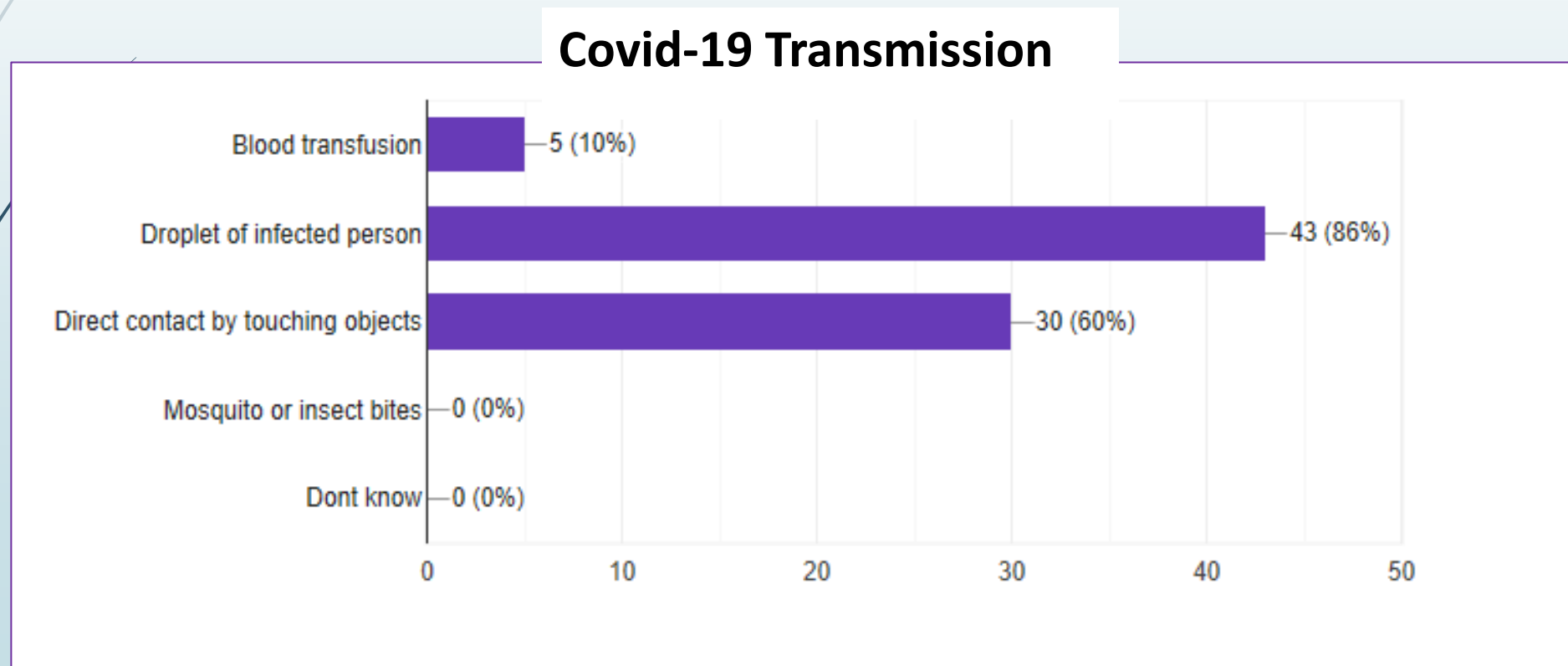
- **Knowledge assessment of CHOs post training:** Common symptoms of Covid-19 are Dry cough, difficulty breathing and sore throat. 58% of CHOs knew difficulty in breathing as one of the most common symptoms of Covid-19 followed by 23 % each of sore throat and dry cough were answered. 24 % was selected by 24 % of CHOs whereas Joint pain is not a symptom of Covid-19 along with diarrhea and running nose.

## Symptoms of Covid-19



# Results

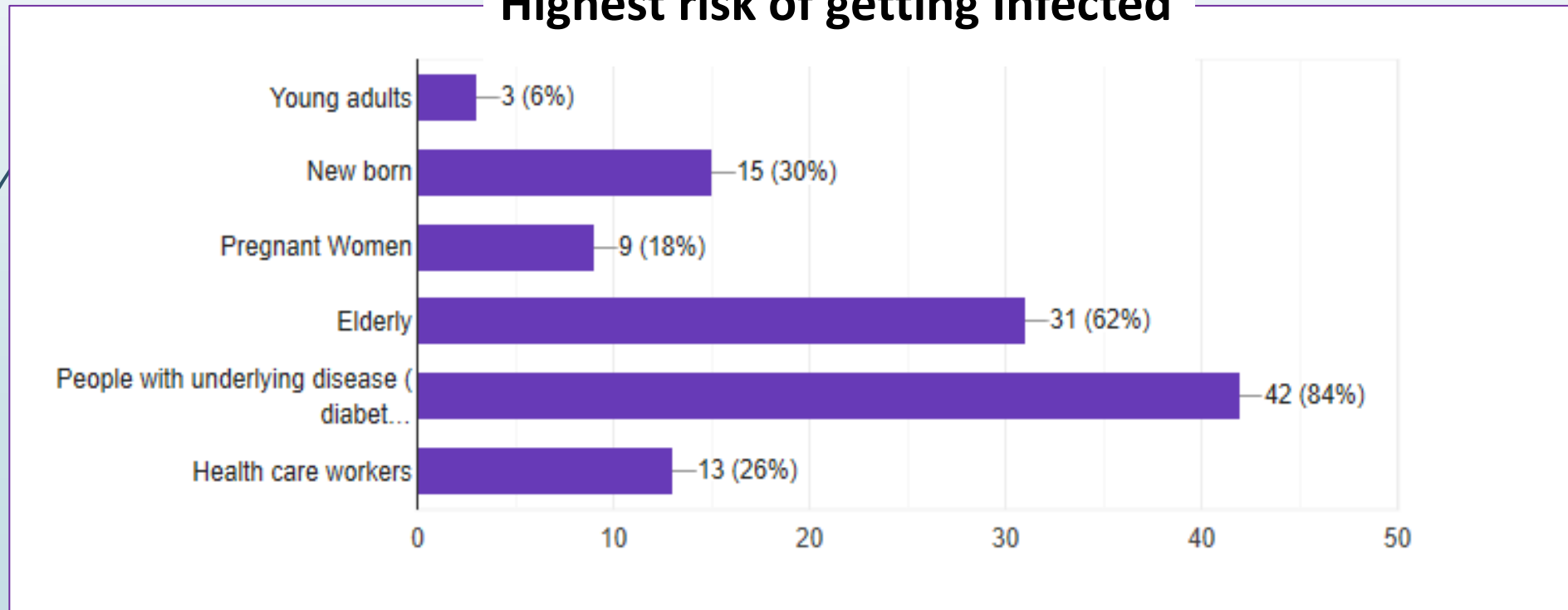
- **Knowledge assessment of CHOs post training:** It is mostly spread via droplet of the infected person which 43% CHOs knew and second most common is via touching contaminated surface which 30% answered. There is no transmission via mosquitoes which positively was not answered by anyone of the participants.



# Results

- **Knowledge assessment of CHOs post training:** Elderly and people with underlying disease such as hypertension, diabetes etc are at the highest risk of getting infected by the disease. 84% participants knew that people with underlying disease are at highest risk followed by elderly (62%) Young adults who are healthy are at least risk of getting infected, 6% marked young adults.

## Highest risk of getting Infected

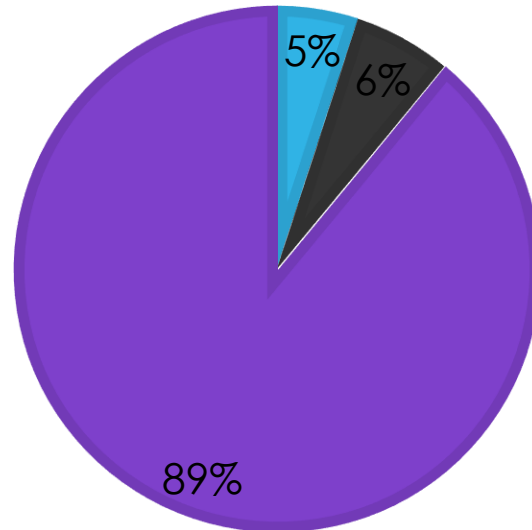


# Results

- **Importance of training of Covid-19 management:** This was completely based on the participants experience after working on the field for 3 weeks. 89% (57 out of 64) participants felt the training was important and relevant to them and 6% (4 out of 64) felt it was somewhat important while remaining 5 % (3 out of 64) did not feel the importance of the training all, they felt it was useless.

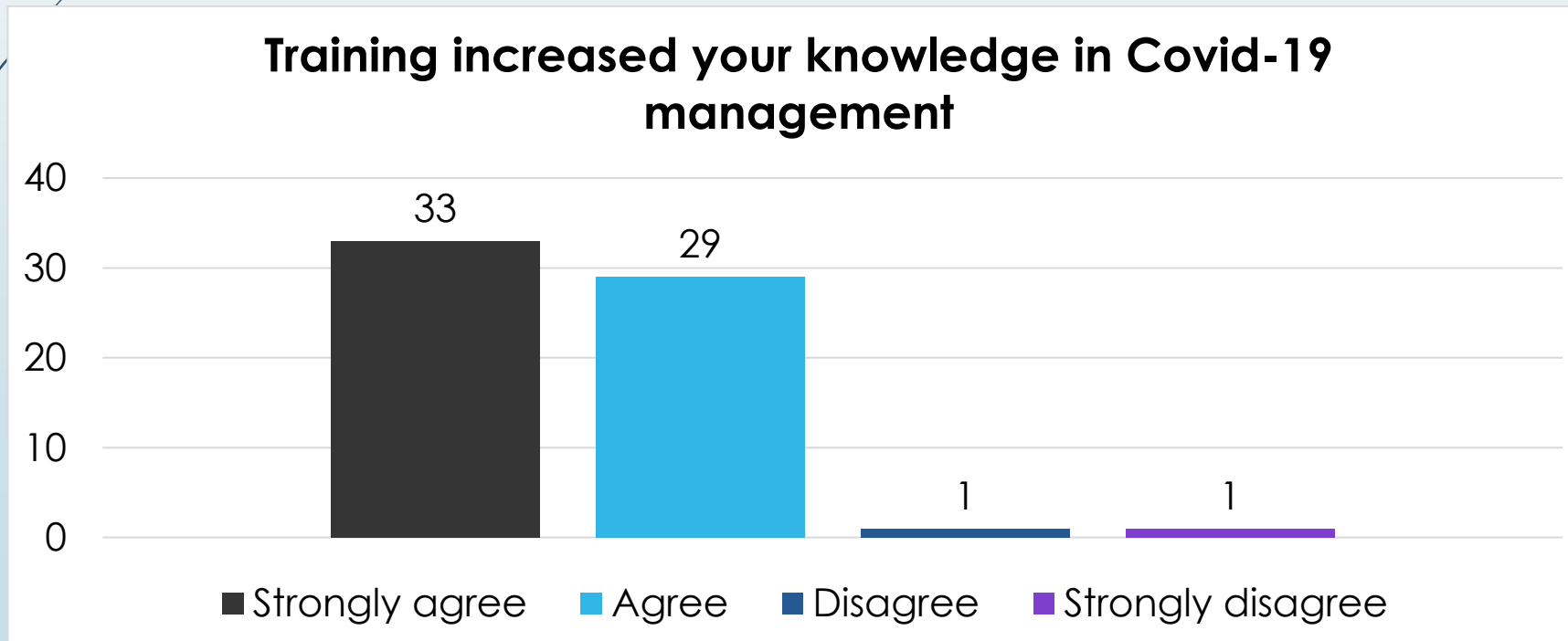
## Importance of training on Covid-19 management

■ Not helpful ■ Less important ■ Somewhat important ■ Very important



# Results

- **Increase in knowledge on Covid-19 after training:** Post training 51% (33 out of 64) of participants strongly agreed that the training increased their overall knowledge on Covid-19 management and 45 % (29 out of 64) agreed the knowledge was increased and 1 CHO completely disagreed that the training increased their knowledge and 1 CHO disagreed on the same. These might be those who did not practice Covid-19 management in the field and were not posted on Covid-19 duty

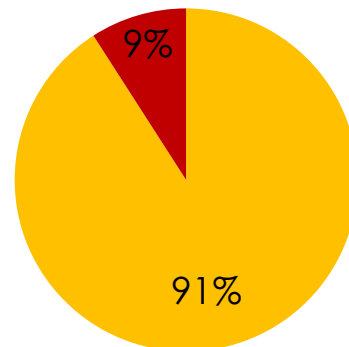


# Results

- **Ability to practice Covid-19 management in the community after receiving training:** Out of 64 CHOs who were trained 55 of them were posted on Covid-19 duty. This was collected only by those who were posted on the field (55 out of 64) 91% which 50 participants were able to practice Covid-19 management successfully based on the training that was provided to them. 9 % (5 out of 55) were somewhat able to practice and faced few challenges which will be discussed further along the study.

## Able to practice Covid -19 management as taught during the training in the community

■ Yes ■ Somewhat ■ No



# Results

- **Need for a refresher training:** 21% of participants did not answer correctly what Covid-19 stood for, 10% participants think that Covid-19 is transmitted via blood transfusion, only 89% and 64% participants knew that the highest risk of infection is among the people who have an underlying disease and elderly respectively and not everyone was clear about the symptoms of Covid-19 management. There are 5%(7 CHOs) participants who felt that the training was less important and 6%(8 CHOs) felt it was somewhat important and 9% of CHOs were not able to practice Covid-19 management in the community based on the training given to them, based on these data it can be concluded why 80% of CHOs felt the need for refresher training with 5 % considering somewhat need the training.

| Yes | No  | Maybe |
|-----|-----|-------|
| 80% | 15% | 5%    |



# Results

## ► **Challenges faced by the participants in the field practicing Covid-19 management post training:**

The challenges faced in community while practicing Covid-19 management there were many responses the most common were:

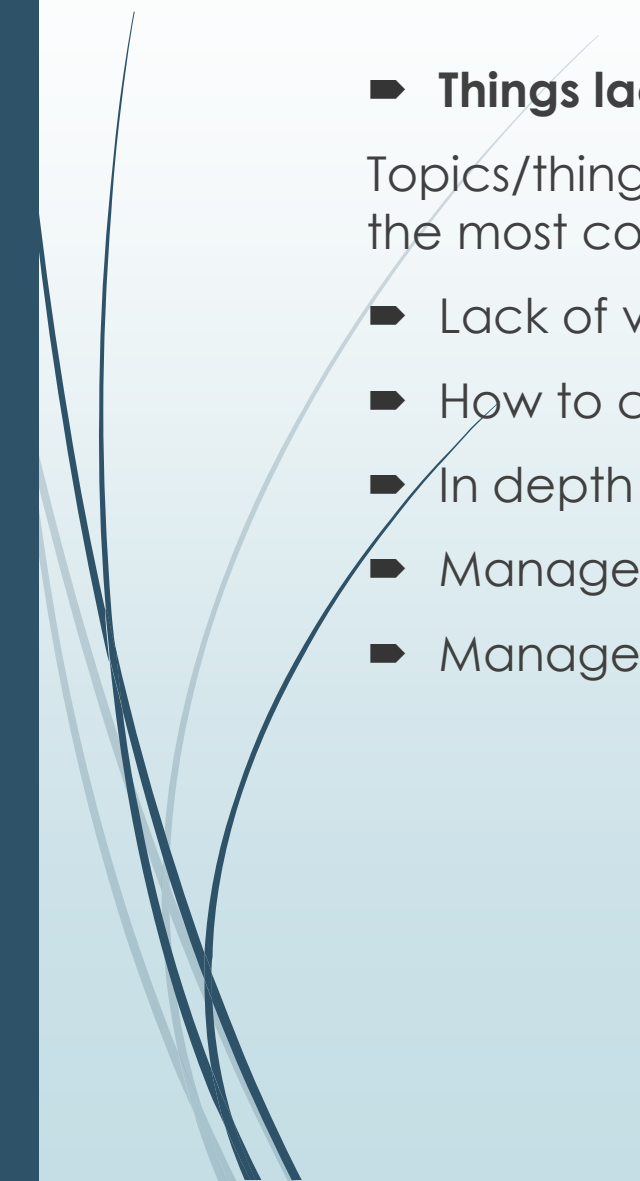
- Identifying Asymptomatic patients
- Community has a phobia about Covid-19 screening
- Management of fear of community people from healthcare workers
- Convincing people to wear mask
- People don't cooperate with screening process specially in muslim community
- People don't give correct information and hide family members within the house
- Unavailability of PPE kits



# Results

## ► **Things lacking in the training module according to the participants:**

Topics/things that were lacking in the training module. When asked this question the most common topics that were answered were:

- Lack of videos for better understanding
  - How to correctly wear/remove PPE kits
  - In depth knowledge about the disease
  - Management of violent people in the community
  - Management of uncooperative people in the community
- 

# Conclusion

- The training conducted in Bulandshahr District, UP to all the CHOs in the district on Covid-19 management has helped the CHOs perform effectively in the field and perform their duties. The CHOs felt the importance of the training and believed that it increased their knowledge on the topic and gave them confidence to step on the field and practice Covid-19 management in the community with minimum hesitation. Their importance on the front line was unchallenged and the training acted as a tool for their defense in the community. There is a need for refresher training with little modification and addition to it which will help the CHOs to refresh the topic and perform better. There were many challenges that the CHOs faced in the field in regards with the community and awareness of the people but every individual handles situation differently. Their work is imperative in fighting this pandemic which has crippled nations and engulfed the whole world. This training has successfully strengthened the Corona warriors of our country. Such capacity building sessions are necessary for continuous education and learning of the skilled manpower.

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# Thank you