

HEALTH OF POLICE PERSONNEL IN COVID TIMES CHALLENGES & SOLUTIONS

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Introduction

Corona virus pandemic has rapidly become a world problem specially for those who are handling the situation like doctors, policemen and municipal administration rightly called as Corona warriors. Police is not different from the public that it handles. Due to increased contact with public, that includes infected person, there are higher chances of contraction of disease by the police personnel themselves.

This article is an attempt to understand the profile of affected personnel's, the measures to be taken for better health and learning points for good and bad experience faced by Mumbai Police while handling the situation day in day out among all 5 lockdowns starting from 21 March. Although, the detailed analysis of data for Mumbai Police has already started but this report is based on preliminary results and experiences on field.

Problem Statement

Globally, total cases of Covid are approximately 6,203,385 of which mortality is 3,72,657 deaths with 6.01 percent and recovery of 2660284.

India has a total covid 19 positive cases at tune of around 1,90,500 (as on 1 june 2020) and in that the mortality is around 5400 which is 2.83 percent and total recovered patients are 91800.

Out of this the comparative chart for comparison of Mumbai Police is as follows

	India	Maharashtra	Mumbai City	Mumbai Police
Total cases	1,18,447	47,190	28817	898
Deaths	3,583	1,577	949	9
Mortality Rate	3.02%	3.34%	3.29%	1%

Age Group (years)	Serious	Medical History of Serious Cases	Deceased
21-30	01	None	00
31-40	01	None	01
41-50	02	HighBP(1)	01
Above 50	07	Diabetes(06) HighBP(04)	07

(official data as on 22 May 2020)

This chart clearly indicates following salient points:

1. Majority of cases in India is mostly from Maharashtra and that too from Mumbai.
2. The infection of Mumbai police ,as per available data ,is not as much as the general population in Mumbai City.
3. The mortality also was less than the general population.
4. The daily data when studied ;showed spike in last two weeks ie with time the cases are increasing exponentially as per the general trend.
5. The serious cases and the mortality is highest for” Above 50 years age group” (64% and 78% respectively)
6. Of all the reported cases ,95% were stable cases.
7. Of all the reported cases ,84% din’t have any medical condition and among those who had, diabetes and high BP were most common.

8. Most of the cases got infection from the other police colleagues or from being on duty.

Major Challenges

1. Preventing the infection
2. Treatment and preventing mortalities
3. Rehabilitation of affected individuals
4. Mental health of working personnel and allaying their fears and boosting their moral
5. Maintaining Positive Health and Immunity of Police Personnel and their family

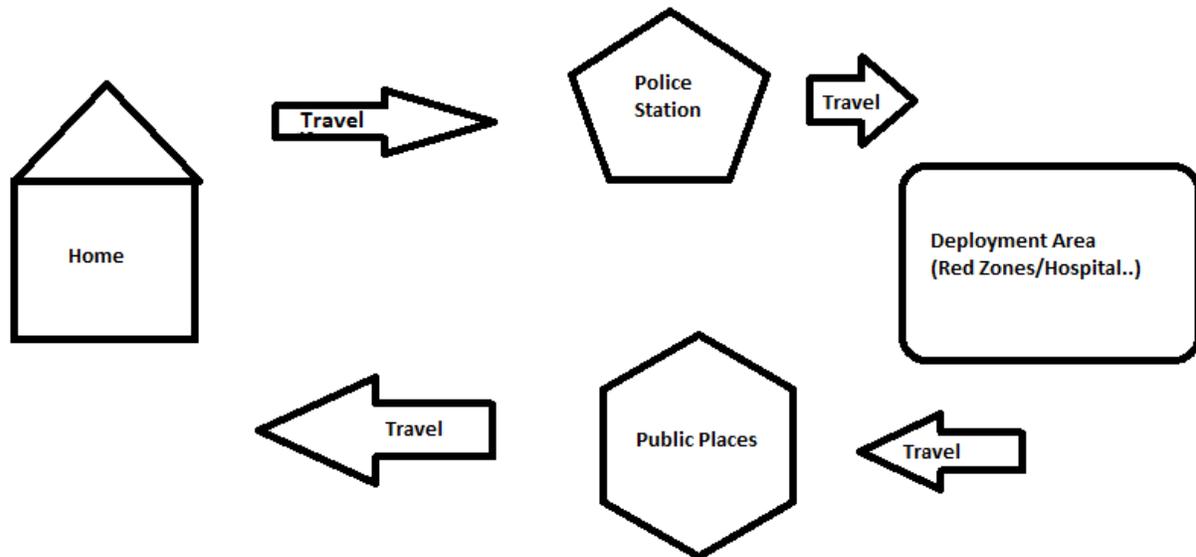
STEPS TAKEN TO MITIGATE THE CHALLENGES

A) Prevention of COVID 19(Primary Prevention)

Understanding Contamination Process in Police Personnels

The major places from where the police personnel can contract the disease are the places they frequently visit. Home is important as disease can be contracted from neighbours and household contacts. Also it's a major concern for the personnel as the infection from him can be spread to his family. The next is the way they travel from their home to place of work or to public places for daily needs. Use of Public transport without social distancing carries high risk. Similarly the police station is high risk place where they come in contact with other police personnels and general public. The most important factor here is social distancing and maintaining hygiene which can help in protection at Police Station level. Casual behavior in social distancing and use of protection equipments with colleagues and public is highly risky and carries high chances of infection. The place of deployment again is a place with similar risk as its not within immediate supervision of seniors and neglected. The incharge of deployment should be extra cautious in following the social distancing norms and hygiene. Public places where

they visit for daily activities like market places also expose them to risk and here prevention of exposure and basic protection is key to protect them.



Places of Contracting COVID-19 by Police Personnel

Basic Measures for prevention are as follows:

1. Information Communication & Education Activities(ICE): Information on Covid and its preventive measures are very essential and updated material in print and as booklets are very useful if provided to police personnel.
2. Counselling sessions by experienced health professionals at level of police station can be arranged in person or by teleconferencing.
3. Use of social media like WhatsApp in spread of current and correct information regarding COVID prevention and countering false information and rumors.
4. Continued Medical Education Programs by teleconferencing and workshops of police doctors by expert panel on COVID will update their response and better medical support to policemen.

5. Social Distancing at Work Place:

It's the most efficient and most cost effective method. It has proven to be very successful worldwide in combination with use of masks. Distance of 2 yards or 6 feet is minimum to keep. Various changes need to be done in Police setup for long term as well like:

- a. Visitors at police station: Open area with distance of 6 feet amidst chairs and benches. The interacting police personnel must be in mask, face shield and with sanitizer. Its better to have separation of both sides by glass or polycarbon sheet.



Visitor at Police Station



Station House in a Police Station

- b. Meetings: Thrust should be on use of Video conferencing for general meetings. In urgent situations, maintaining social distancing in meeting rooms with protective gears is imperative. Calling ill policemen should be deferred and numbers to be kept at minimum possible.
- c. Visitors at senior offices: Use of video calls and conferencing on mobile phones may be tried which will reduce personal visits to offices and police stations.
- d. Rearrangement of office apparatus: Computers, benches, tables should be rearranged and police stations should be decongested to provide sufficient space and hygiene to avoid close contact and mingling of police men.
- e. Bulk Deployments: Many places like red zones or at places likely for law and order situation, require bulk deployment. Extra caution is to be taken for social distancing in section or platoon deployment. The vehicle carrying them should carry half of the full capacity and after deployment the men should not be put very close to each other. It should be seen that they maintain safe distance from each other and also against public.

6. Use of Protective Equipments:

- a. Use of Sanitizers, Papers soaps: They should be at all offices and also in pockets of each personnel. It should be mandatory to frequently wash hand or use sanitizers. Any strength less than 60% alcohol is not recommended.

- b. Use of Masks/Face Shields/Goggles/PPE(Personal Protective Equipment):

Masks are also the most promising measure like social distancing. Use of N95 and above masks are preferred and recommended although any 3 layer mask including the washable ones can be used. Important thing is to discard the single use masks after single use and wash and properly dry the washable and reusable masks. If not followed this itself possess risk of infection. It's also important to apply the mask properly which is not done and should cover nose cheeks and mouth properly all times. Masks should not be used only when not in public. Remember that mask not only protects the individuals who use it but also stop spread to others from person using it. Filter masks offer no extra advantage.

Face shields are good but uncomfortable to wear and uses are confined generally to nakabandi points and visitor rooms and in deployment where it should be combined with face mask and not used alone.

Goggles protect infection through eyes and should be of single use and wide enough covering both eyes. They are generally used with PPE kit.

PPE kits are actually only full body protective gear unlike the medical PPE kits which are worn in 2 to 3 layers and in a particular fashion. So using them should not create a false sense of security and other precautions should be religiously followed. These full body gear should be used for arrests, forceful quarantines and visits to high infected areas like Hospitals and red zones. They are uncomfortable to wear and for long durations specially in hot terrain.



A Squad in PPE and Protective Gear at Police Station Level



A Nakabandi Point in Mumbai City using Protective Gears and Social Distancing

7. Use of Prophylactic Drugs:

Hydroxychloroquine Sulphate (HCQS) is generally recommended for prophylaxis as per Indian Council of Medical Research. A loading dose of 400 mg twice daily after food on first day and 400mg subsequent weekly dose after food, only on medical prescription and contraindicated in persons like minors, having heart ailments etc. A doctor may be called and this prescription may be facilitated at police station level. HCQS is difficult to get in market so bulk supplies can be ensured by headquarters. Chloroquine can also be used instead but in different doses as compared to HCQS.

Similarly use of Antioxidants, Vitamins like B-Complex, Vitamin C tablets, Vitamin D sachets, Zinc & Protein Supplements are also used and supplied to constabulary to maintain good health and immunity.

8. Contact Tracing and Treatment:

Vehement contact tracing, their isolation and proper treatment is key to prevent spread of disease. With each positive case the contact tracing specially high risk cases should be searched, isolated and put for quarantine. They should be properly observed for seriousness of symptoms and followed up accordingly to save their lives and prevent further spread. Police lines stand most vulnerable ,specially in the cities. Proper contact tracing has positive effect on moral of police force too. Home quarantine has to be strictly followed and some senior officer shall be deployed at police lines or building as violations of quarantine are quiet frequent. Common Toilets in Police lines are also important factor for spread and shall be properly fumigated and sanitized ,combined with proper handwashing after use.

9. Care while deployment:

As stated earlier ,deployment of staff should be done wisely so as to avoid exposure of majority of force. Where deployment in bulk is necessary or risky, young men of age less than 40 years without predisposing condition shall be deployed. Social distancing shall be monitored and they should be equipped with protective gears and sanitizers.

As done in Mumbai city ,it's better to compulsorily send staff above 55 years or above 50 years in age with some predisposing conditions, off duty as they are the most vulnerable section and with high mortality. The loss can be compensated with reserve police force, from other side branches or home guards. Similarly, pregnant lady staff shall be left off for their protection.

10. Changes in interacting with Public/Public Services:

Use of online permissions, issue of character certificates, NCs shall be preferred. Less interaction with public directly means less chances of COVID spread.

11. Increased use of Online Crime Reporting and Investigation with digital evidence mapping should be done. Use of office related softwares for handling correspondence and complaint management has helped in reducing police personnel movement across offices and shall be promoted.

12. Apprehension of Criminals, Lockups and Jails:

Lot of police personnel are afraid of this or become too enthusiastic in apprehension of accused neglecting precautions. As far as possible, physical apprehension should be deferred but if situation so arises a special team with PPE kit may do the actual apprehension of person. Exposure to accused should be kept to minimum. Again, young policemen without predisposed factors are best suited for job. After apprehension the accused shall be presumed corona positive until proved otherwise and sanitation protocol for vehicles and men should be followed religiously .

Lockups should be decongested and proper distancing shall be maintained within cell. Regular checkup of inmates and guards is necessary. The Guard handling prisoners shall be using protective kits while handling them and virtual supervision like cctvs are best to avoid frequent visits to cells.

13. Use of Pulse Oximeter & Laser Temperature Guns:

Laser Temperature guns are to monitor fever and increased body temperature from safe distance but they are not very reliable due to high false negative results and high frequency of asymptomatic patients of COVID in India.

Battery operated pocket pulse oximeter is a good device to monitor SpO₂ or Blood Oxygen. Any SpO₂ below 95 is alarming and should refer to doctor for proper examination. A situation called Happy Hypoxemia may be diagnosed also where patient is asymptomatic but with low blood oxygen due to COVID infection. The machine shall be properly fitted on finger ,usually on index finger and properly sanitized after each use. It's useful to keep this at each police station level.

14. Precautions for Dead Body Disposal:

Government of Maharashtra and Municipal Corporation of Greater Mumbai has issued proper guidelines for disposing of dead bodies due to COVID in detail. Until reason is clear, all dead bodies dying of respiratory disease or found unclaimed; shall be treated as COVID suspect bodies and same protocol shall be followed. Insistence should be for corpse bags and to avoid coming in contact with body as far as possible. Help of trained paramedical staff in disposing such bodies shall be taken.

20. Precautions at deployment at Quarantine Centers and Hospital:

Hospital and Quarantine centers for COVID patients have high chances of exposure and carry high risk for infection. Care shall be taken to deploy only optimal numbers and physically fit men specially those at gates and ward duties is to be avoided. They should have protective gears and full body PPE for use when duty is inside premises or where there is interaction with patients or their caretakers. Social distancing among deployed personnel has to be strictly followed and they should be periodically checked for symptoms of COVID disease.

21. Fever Clinics:

They should be organized with help of local doctors and government clinics where staff can be examined and screened for COVID PCR test. This helps in isolating COVID suspect personnel's and gives mental assurance to other policemen.

22. Separate Hostels /Residence for field staff:

A residential facility by acquisition of hotels ,lodges or other places with basic amenities like healthy food, water and sanitation shall be made for staff of field duty, if they don't want to get back to their homes. This gives force the mental assurance that their family will be safe even if they catch infection on line of duty.It also keeps the force handy for use. Special incentives like leaves after continuous work of few days, may be provided. It's necessary to note that no more than 2 people be kept in a room and keep safe distancing and sanitation at such facilities.Lest it may become a separate source of mass infection itself.

23. Fumigation, disinfection and cleanliness of surroundings:

Regular fumigation of offices, police stations, police lines and police vehicles are very important for disinfection. Sodium Hypochlorite or any other free chlorine inducing agent may be used. However, use on body may lead to skin allergies and irritation in eyes, so physical contact shall be avoided. Similarly, cleanliness of premises is paramount in maintaining hygiene and protection. Spitting of Gutkha, pan etc shall be prohibited.

24. Taking Care of Police Line:

If possible, the grocery, vegetable and milk facility shall be provided within police lines by vendors who are asymptomatic and disease free while keeping social distancing and protective equipments. This avoids exposing them to markets and other vulnerable places. In similar fashion plumbers, electrician and other helps may be arranged for police line with known credentials to avoid exposure.

B) Treatment of Cases and Preventing mortality

(Secondary Prevention)

1. Early Tracing and Medical Care:

It's most important that disease shall be identified at the earliest for proper isolation and treatment. Fever, symptoms of cold, sore throat, absence of smelling power and difficulty in breathing and coming in close contact with a positive case are alarms for a person to get himself tested and going to isolation till result is awaited. The guidelines for home quarantine, institutional or Hospital treatment shall be as per local health authorities and shall be followed strictly. The concern incharge shall start monitoring the case closely on daily basis once result is positive.

Mumbai city Police has kept dedicated ambulances to ferry police patients in each zone as generally it takes a lot of time in such situations to get ambulances. Proper contact tracing after diagnosis is must.

2. Dedicated Covid Care Centre for Police

Positive patients will require a Covid Care Centre if they aren't home quarantine. It's better to have a dedicated Police CCC with help of local administration as it enhances moral of working force and puts positive personnel at common place for their proper monitoring and health care. As almost 80 % cases are usually asymptomatic or mildly symptomatic, so CCC suffices the need of medical treatment in majority. Hygiene, regular visit of doctors, availability of medicines and nutritious food , social distancing norms and protective equipment are important aspects to be monitored at such centres.

3. Dedicated Hospitals for Police personnel with Oxygen & ICU facility

Despite all efforts, a minor section of police patients will deteriorate in symptoms. The most marked and often neglected symptom is progressive difficulty in breathing and marked drop in blood oxygen. Here the need of hospital care is required with proper specialist treatment and Oxygen Therapy for majority of cases. Many are managed with the above, but a few will deteriorate further and then may require Ventilators and other reserved drugs for treatment. This can be managed only in a Tertiary Care Centre or a Multispecialty Hospital. As during these times, it becomes difficult to get a hospital bed ,its always better to speak to local administration and get a dedicated Hospital or tie-up with such specialist hospitals in order to avoid bad experience of mortality due to lack of treatment.

Category 2 and 3 patients need to be personally followed at senior levels and provided timely assistance to prevent mortalities.

4. Supply of Drugs & Plasma Therapy in Treatment by Police Headquarter

For most of the constabulary, getting even simple treatment of COVID is pretty expensive. Thus timely availability of hospital care and few drugs used in serious

patients like Low Molecular Weight Heparin (Enoxaparin-an anticoagulant), Remdesivir (antiviral) or Tocilizumab (An anti IL6) or Plasma Therapy tried in serious cases may be either unavailable or unaffordable. Efforts at level of headquarters shall be made for easy availability and affordability of such drugs.

5. COVID Helpline and daily monitoring for tracing serious cases

A dedicated COVID helpline number and dedicated staff shall be kept to monitor situation of COVID positive patients and those in quarantine, to collect data, provide assistance and counseling for police personnel's. This shall be monitored by senior levels to understand the situation, to get feedback and mitigate it. Mumbai City police has such a robust Covid helpline in place and it has proven useful for many affected policemen. This helpline and its staff daily monitors the cases and takes feedback from them. The same is also done at police station and zonal level.

6. Treating Mental problems & Counseling

Many police personnel suffer from anxiety and depression because of the fear and stigma of being a Covid patient. Proper counseling by health care staff, colleagues and senior officials help them allay their fears and overcome such negative thoughts.

C) Recovery & Rehabilitation of Infected Police Personnel

(Tertiary Prevention)

1. Counselling and problem assessment

After recovery of a police patient, a proper counseling by health staff should be done. Senior officers should also speak to them regarding problems the patients might be facing like discrimination from neighbors and staff, loss of a dear one or monetary issues. This will help them settle smoothly in life again.

2. Motivational videos & Positive News

Stories of corona warriors returning back successfully from hospitals and the respect they get has got motivational aspects. Other positive news of greater recovery rate and lesser mortality and success stories are morale boosters.

3. Rewards & Medals

No doubt the fight against COVID is a tough one and to boost the moral rewards to exceptional work or infected individual makes them feel their worth and recognition of risk they took. On similar lines Mumbai City Police has declared a reward of Rs 10,000 for all covid affected policemen who get infected while on duty and also a medal for exceptional work by Maharashtra Police is proposed and in pipeline. The deaths while on duty can also be treated on similar lines as for Martyrs in terms of compensation and job to their wards on compassionate ground. These all, improve sense of security and mental health of police personnel.

4. Monitoring medical expenses and payments

As already discussed, health expenses fall very heavy on police personnel. So immediate clearance of their medical bills as well as timely salaries and arrears will help them to stay strong ,post COVID infection.

D) Maintaining Positive Health & Immunity

The following measures are useful for maintaining good health and strong immunity in normal police personnel's:

1. Yoga daily for some time.

2. Exercise at least for 30 minutes daily.

3. Weight Reduction is very helpful in overcoming other ailments like Diabetes etc.

4. Smoking and Alcohol Intake is known to have higher incidence of contracting COVID infection and hence should be curbed.

5. Nutrition of proper balanced diet with adequate proteins and vitamins is essential. Outside food shall be avoided at best.

6. Vitamins & Supplements like Vitamin B Complex, C, D, Zinc and protein adds to immunity.

7. Taking Care of Mental Health is very important to avoid negative thoughts and have positive approach to overcome this tough time. A healthy body lives in healthy mind.

Hence it is evident that though COVID 19 has proved to be a problem for police personnel and their health still taking few precautions and with institutional support many of these can be handled well.