



NOVEL CORONAVIRUS DISEASE 2019 (COVID-19): STRATEGIES AND STATISTICS OF SIKKIM STATE-INDIA UP TO 1/04/2020

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ABSTRACT:

Objective: The objective of this present short communication work was to critically analysis and systematically collection of the data during this pandemic situation, Government strategies and their implementation for fighting against the Pandemic viruses-Novel COVID-19 within the Sikkim state and its border areas. **Method:** The State Health Department has taken crucial steps to maintain the safety of the public heath throughout the state. Frontline healthcare workers such as doctors, nurses, paramedical (pharmacists), police forces, health official, GMC, NGO, urban and rural local bodies, etc are working 24/7 without thinking about their health. Sikkim has four major districts- East (Gangtok), West (Geyzing), North (Mangan) and South (Namchi). There are three main check posts-Rangpo, Melli and Rammam and international pass (Nathula pass to China) and Chiwabhanjang to Nepal. Data collected by the various agencies such as Government and the independent media houses were highlighted. Here we have highlighted the data based on three districts of Sikkim with quarantine history considering the rural and urban category wise with the factors such as home and self quarantine; facilitated, completed, etc of the public within the state. **Result & Conclusion:** Government as well as independent media houses has collected great amount of data and estimated about 5,98,751 persons were screened as on 28/03/2020 with infrared thermometer in all the above check posts and the passes including International and Inter-state borders and still counting is going on. These statistics are first of its kind for the communication and to keep the scientific evidence for future knowledge.

KEY WORDS: COVID-19; Coronaviruses; Government of Sikkim; Quarantine; Rural and Urban Areas; Health Department.

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INTRODUCTION:

COVID-19 was first identified in Wuhan, Hubei Province, China in December 2019, due to infections with the 2019 novel coronavirus (SARS-CoV-2). It has already been spread to more than 55 countries by 2 March 2020, infected more than 85000 people and caused approximately 3000 deaths ^[1]. This has become a global problem because of the vigorous outbreak of COVID-19. Further management and control of this global threat inevitably depends on the preparedness and precise future risk evaluation, particularly in countries where new cases have been identified ^[2]. Till now dated: 29 March 2020, Sikkim

being a 22nd State of India (Fig:1) has not recorded any new cases either in government as well as in private hospitals and clinics. With the total area of 7096 sq. km, population: 6.1 lakhs (Census: 2011) and shared the border with China in the North (Nathula Pass), Sikkim is geographically vulnerable to the present situation. As per the Government official notification dated:23/03/2020 Order No. 1780/DC that from 25th March 2020, all the sikkimense people are doing home quarantine and movement of the public on the street has significantly reduced already. Further noticed No. 1783/DC (E) 2020 prohibitory order extended up to 15 April 2020.



Fig1: Sikkim map in India, bordered by China in North, Source; <http://aldertoursntravels.com/>



Fig2: Health officials Screening for COVID-19 at major check post of Sikkim-Rangpo Check post; Source: sikkimexpress.com

MATERIAL AND METHOD:

The government of Sikkim is doing their best to fight against Pandemic COVID-19 by providing the top most precautionary facilities to its public. During the crises hours, Health department official has addressing the general public regarding the precaution and prevention measures tips and the global cases data of COVID-19^[3]. Implementing the strict rules for the immigrant from other countries and the states at three state's check posts (fig: 2) such as Rangpo, Melli and Rammam including the International pass like Nathula Pass and points-Utteray and Reshi. There are four major districts of Sikkim; they are East-Gangtok (Capital), West District (Geyzing) and South District (Namchi) and North District (Mangan) with the population density, 2.84 lakhs, 1.36 lakhs, 1.47 lakhs and 43,709 (data given as per the 2011 census). The quarantine data notified by Addl. DC/East for East dated: 1/04/2020, data notified by SDM, (HQ) West Sikkim for West, dated: 31/03/2020 and data notified by Government of Sikkim (official facebook page) for South Sikkim, dated: 26/03/2020.

The Sikkim government under the guidance of Hon'ble chief Minister-Shri P.S Golay has done the tremendous work from their side by distributing free essential commodities, groceries and monetary incentives (Rs-3000, Rs-2000 & ex-gratia of Rs-1000 in two instalments to the poor(BPL)/labours-including Pharma & Temi Tea Garden, BOC workers & state's widow , Rs-12 in additional wages to MGNREGA workers, Rs-1500 in three instalments to Self Help Group (from 1st April 2020) and Rs-5000 for the students those are stranded outside the state),

orphanages and old homes, doing Hospital and clinical activities, providing LPG in a easy way, emergencies services, surgical masks, hand sanitizer, creating awareness among the public regarding health issues, implementing the IPC144 and provided the contact nos. of the concerned high level officers, drivers details for groceries supply to the public and the police personnel for 24/7 to maintain the safety among the public. The Hon'ble Governor of the state: Shri Ganga Prasad Chaurasia and The Hon'ble Chief Minister: Shri P.S Tamang (Goley) pleased with the public to be alert and advice to take preventive measures for the COVID-19 and supported the Hon'ble P.M's statement for 21 days lockdown^[4]. The Hon'ble Health Minister: Dr. M.K Sharma has monitored the situation personally by visiting the Govt. Hospital and private clinics and taking the inquiry about the essential health commodities to struggle against COVID-19. The Chief Secretary, Government of Sikkim: Shri S.C Gupta and The Director General-cum-Secretary, Health Department: Dr. Pempa T. Bhutia regular visits at the Rangpo check post which is a major check post of the state and briefing about Novel COVID-19 related issues and provided the emergency helpline number (104) on the government website that operates 24/7^[5-6]. During this Pandemic crisis, under the supervision and direction of Hon'ble CM has developed the online portal for donation into the Chief Minister Disaster Relief Fund (CMDRF) account on 27/03/2020^[7] where including State Governor, State only MP, Govt. Officers, private owners, local contractors and public have contributed generously.

The results: Collected data are summarized in the table No: 1, 2, 3, 4 and 5.

Table1: Quarantine data for East Sikkim (Rural and Urban areas) as on 1/042020: With four quarantine facilities.

| Sl. No. | Category | No. of Record | | |
|--------------|---------------------------|--|-------|-------------|
| | | Rural | Urban | Total |
| A | Self Quarantine | 1176 | 1062 | 2238 |
| B | Home Quarantine | 88 | 362 | 450 |
| C | Facilities Quarantine | 10(at Rangpo Facilities +55 (at SICUN) | Nil | 65 |
| D | Triage Facilities | 04 | 02 | 06 |
| E | Home Quarantine Completed | 04 | 06 | 10 |
| F | Isolation | Nil | Nil | Nil |
| Total | | | | 2769 |

Table2: Quarantine data for West Sikkim (Rural Area) as on 30/03/2020: With four quarantine facilities.

| Sl. No. | Place/locality(Rural Area) | No. of Home Quarantine |
|---------|----------------------------|------------------------|
| 1. | District Hospital Geyzing | 188 |
| 2. | Yaksam,PHC | 45 |
| 3. | Rinchenpong,PHC | 102 |
| 4. | Sombaria,PHC | 158 |
| 5. | Dentam,PHC | 206 |
| 6. | Mangalbaria,PHC | 72 |
| 7. | Tashiding, PHC | 56 |
| 8. | Nayabazar,PHC | 22 |
| 9. | Soreng, PHC | 167 |
| | Total | 1016 |

Table3: Quarantine data for the South Sikkim (Rural Area) as on 31/03/2020:

| Sl. No. | Category(Rural Area) | No. of Record |
|---------|--|---------------|
| 1. | No. of persons on self Quarantine | 767 |
| 2. | No. of Persons on Home based Quarantine | 14 |
| 3. | No. of Persons Completed 14 Days Home based Quarantine | 41 |
| 4. | No. of Persons at facility Quarantine | 22 |
| 5. | SIRD Quarantine | 07 |
| 6. | Isolation | Nil |
| | Total | 851 |

Table4: Logistic supplies as on 28/03/2020: Source: CMS

| Sl.No. | PPE | N95 Masks | Triple Layer Masks | VTM kit | Hand Sanitizer | Dettol Sanitizers | Gloves |
|--------|------|-----------|--------------------|---------|---|-------------------|--------|
| 1. | 1380 | 2873 | 96100 | 400 | 3000(500ml) 2000(100ml) 3500(300ml) | 2000 | 5000 |

Table5: Isolation and quarantine facilities within the state as on 1/04/2020.

| Place/Isolation | No. of Bedded | No. of Patient Admitted | No. of Patient Discharged |
|-----------------------------------|---------------|-------------------------|---------------------------|
| STNM, Gangtok | 166 | Nil | Nil |
| CRH, Tadong | 20 | Nil | Nil |
| Ayus Hospital, Geyzing | 20 | 05 | Nil |
| Army Hospital, Libing | 41 | Nil | Nil |
| Place/Quarantine | | | |
| SIRD, Karfetar | 20 | 07 | Nil |
| Mining Mine & Geology, Rangpo | 25 | 10 | Nil |
| Power Guest House, Nayabazar | 02 | Nil | Nil |
| New Tourist Quest House, Rangpo | 16 | 06 | 1 |
| Tashiding, Yatri Niwas | 10 | Nil | Nil |
| Dentam Forest Guest House | 05 | Nil | Nil |
| Aden Forest Guest House, Sombaria | 11 | Nil | Nil |
| Kyongsa Girls House, Gaeyzing | 05 | Nil | Nil |
| SICUN, Assam Linzey | 48 | 58 | Nil |
| ICU, STNM hospital | 08 | Nil | Nil |

Table6: Suspicion Samples consign to various Testing Labs (NBMCH, WB & Guwahati, Assam) till 1/04/2020.

| Sl.No. | Total No. of Sample Consign | Tested Negative | Tested Positive |
|--------|-----------------------------|-----------------|-----------------|
| 1. | 26 | 26 | Nil |

CONCLUSION:

The data that are mentioned above will definitely increase if we will not follow strict preventative measures recommended by the World Health Organization (WHO) from our side and here all the public are well cooperative towards the Government's decision. With a courageous step of the state Government towards the mandatory quarantine of the people for 21 days lockdown within the state. Sikkim records zero COVID-19 positive cases. These statistics are first of its kind for the communication and to keep the scientific evidence for future knowledge.

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ABBREVIATION:

1. COVID-19: Novel Coronaviruses
2. GMC: Gangtok Municipal cooperation
3. NGO: Non-Government Organization
4. SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus-2
5. DC: District Collector
6. ISDP: Investigation Supervisors Development Program
7. IPC: Indian Panel Code

8. SICUN: Sikkim Cooperative Union
9. CMS: Chief Minister of Sikkim
10. VTM: Viral-Transport Medium
11. SIRD: State Institute of Rural Development
12. PPE: Personal Protective Equipment
13. BOC: Building and other Construction Workers Welfare Board
14. NBMCH: North Bengal Medical College and Hospital

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