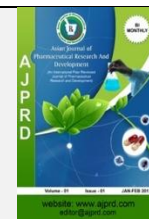


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Short Communication

Critical Analysis of Covid-19 in Sikkim as On 19 April 2020

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ABSTRACT

Objective: The goal of this current short communication research was to critically analysis and systematically collect data during this pandemic situation, government strategies and their implementation to counter the pandemic virus-Novel COVID-19 within the Sikkim state and its border areas.

Methods: It highlighted data obtained by the different agencies provided by government and independent media houses. Here we highlighted data focused on factors such Home quarantin, Facility Quarantine, Triage facility, details of patients admitted, Logistic supplies and details of test for COVID-19.

Result: Total cumulatative number of passengers screened were 6,03,370 at the major entrance(Rangpo check post), persons in home quarantine, Triage facility, total number of sample sent for examination and total number of sample found positive and found negative were 2954, 2, 59, 0 and 59 respectively till dated:11/04.2020.

Conclusion: With the State Government's bold move towards mandatory quarantine of the population inside the state for total 40 days lockdown (including both 1st phase and 2nd phase). Sikkim reports zero COVID-19 positive cases as on 19/04/2020. These statistics are first of its kind for the communication and to keep the scientific evidence for future knowledge.

Key words: Government of Sikkim, Quarantine facility, SARS-CoV-2, COVID-19, Government initiatives.

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INTRODUCTION:

COVID-19 (Coronavirus Disease-2019) is an international public health emergency. Patients that develop the extreme form of the disease make up about 15 percent of the cases. As of this time, no clear, reliable, validated, pharmacological treatment is available^[1]. Invitro studies have indicated that chloroquine, an immunomodulant drug commonly used to treat malaria, is successful in minimizing viral replication in other infections, including coronavirus (CoV) and MERS-CoV associated with SARS^[2]. According to WHO, As of April 18, 2020, the outbreak of the coronavirus disease (COVID-19) had spread to six continents, and approximately 154,388 people had died after contracting the respiratory virus^[3]. Till now

dated: 19th April 2020, Sikkim being a 22nd State of India (Fig:1) has not recorded any new cases within the entire state. 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, noticed No. 1783/DC (E) 2020 prohibitory order extended up to 15 April 2020 and further second official notification no: 296/DM(W) dated 17/04/2020 extended the lockdown upto 3 May 2020, all the sikkimense people are doing home quarantine and movement of the public either on rural and urban areas has significantly decreased to minimum.

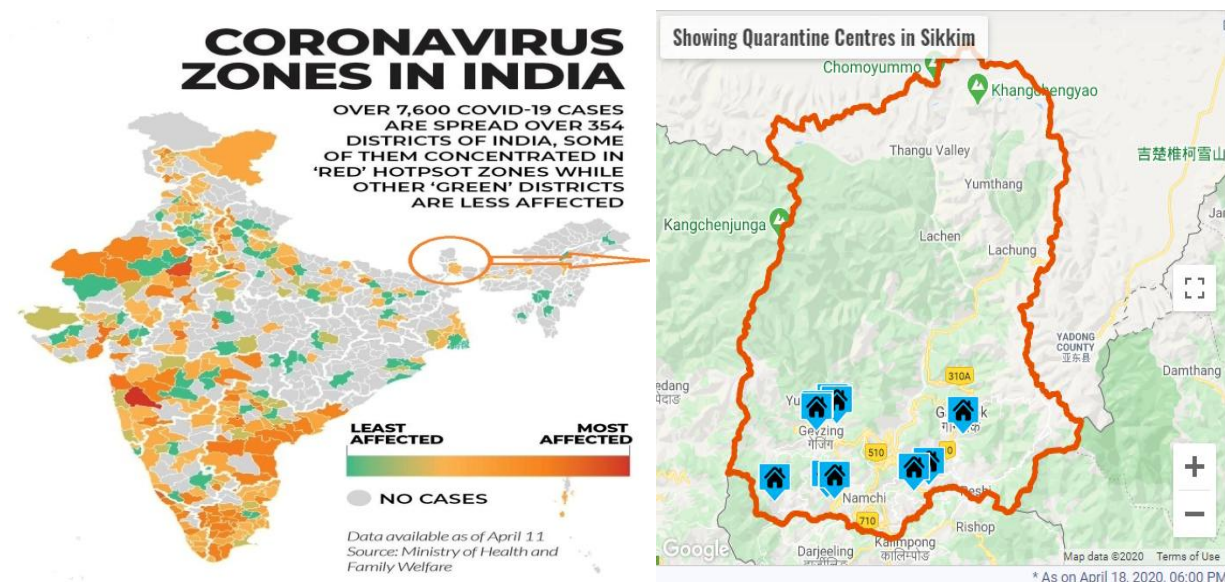


Figure 1: Map of India with zones of affected areas as on 11/04/2020 and Sikkim with Quarantine Centres as on 18/04/2020, Sources: Indiatoday.in-MoHFW, GoI, <https://www.covid19sikkim.org/home>



Figure 2: COVID-19 Screened by frontline Health officials at Rangpo Check post, Sikkim; Source: <https://science.thewire.in>, <https://www.covid19sikkim.org/home>

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 such as Rangpo, Melli and Rammam including the International pass like Nathula Pass and points-Utteray and Reshi. The highlighted information's were collected from various media houses including governmental websites as well as NGOs, independent media, official face book or twitter pages of CM, etc.

SIKKIM GOVERNMENT'S INITIVATES:

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 to the public that few are summarised on the following points below:

1. Government has started the screening of each individual at the major Checkposts since first week of February 2020.

2. Banned on entry of International tourist from 5th March 2020 and domestic tourist from 17th March 2020.
3. Government has requested the GoI for the COVID-19 testing Laboratory within the state; recently GoI has approved NBMCH, West Bengal for testing facility.
4. Government has started the construction of fully equipped testing laboratory in the New STNM hospital-construction is under progress.
5. Free groceries to the entire rational holder based on number of family member summarised in table6.
6. Rs-30000 for each Sikkimense patients undergoing treatment outside the state.
7. Rs-3000 each to frontline workers. and Rs-5000 to all ASHA workers and to students stranded outside the state.
8. Rs-3000, Rs-2000 & ex-gratia of Rs-1000 in two instalments to the poor public(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 workers (from 1st April 2020).
9. Providing Medicines servie, 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 medical emergency and groceries supply to

the public and the police personnel for 24/7 to maintain the safety among the public.

10. 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 (1st phase) and 19 days (2nd phase) day's lockdown^[4-5].
11. 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.
12. 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^[6].

13. 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.
14. All the district administration heads plays crucial role for providing the important updates on Dos and Don'ts to maintain the safety of the public.
15. Government has instructed the strict surveillance in its border areas with police personnel's.

RESULTS: Collected Information's are summarized in the table No: 1, 2, 3, 4, 5 and 6.

Table1: COVID-19 report of India and Sikkim as on 19/04/2020.

Sl. No.	Region	Active Cases	Death	Recovered
1.	India	13295	519	2301
2.	Sikkim	Nil	Nil	Nil

Sources: MoHFW, Govt. of India.

Table2: Passengers screened at state borders for COVID-19 as on 10/04/2020.

Date	Number of vehicle	Cumulative number of vehicle(till date)	Number of passengers screened	Cumulative number of passengers screened (till date)
10/04/2020	349	106576	417	603370

Table3: 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

Source: Govt. of Sikkim(GoS).

Table4: Suspicion Samples examine to various Testing Labs (NBMCH, WB & Guwahati, Assam) till 19/04/2020.

Sl.No.	Total No. of Sample Consign	Tested Negative	Tested Positive
1.	57	57	Nil

Table5: Logistic details as on 11/04/2020.

Sl.No.	Qty	PPE	N95 MASKS	VTM	Triple layered masks	Hand Sanitizer	Dettol Sanitizers	Gloves
1.	Received	6463	13053	3300	470100	36451	2042	127050
2.	Issued	3178	10782	2550	260850	24071	1526	99450
3.	Stocks in CMS	3285	2271	750	209250	12800	516	27600

Table6: Free groceries to all the rational holder public based number of family members:

Sl.No	Item	Families with 3 or more members	Families with 2 or less members
1.	Rice	20kgs	10kg
2.	Dal	5kgs	2kg
3.	Cooking oil	5litres	2litres
4.	Potatoes	7kgs	5kgs
5.	Onions	2kg	1kg

Source: Notification no:19/Home/2020, GoS.

RESULTS:

Total cumulative number of passengers screened as on 11/04/2020 were 6,03,370 at the major entrance(Rangpo check post), persons in home quarantine, Triage facility, total number of sample sent for examination and total number of sample found positive and negative were 2954, 2, 59, 0 and 59 respectively.

CONCLUSION:

With the State Government's bold move and scientific strategies towards mandatory quarantine of the population inside the state for 40 days lockdown (including both 1st phase and 2nd phase). Sikkim reports zero COVID-19 positive cases as of 19th/April/2020. These statistics are first of its kind for the communication and to keep the scientific evidence for future knowledge.

CONFLICT OF INTEREST STATEMENT

The authors declared there is no conflict of interest to disclosed.

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Authors' contributions

B.B.K, responsible for selection and guidance. S. B planned, drew up the paper and was responsible for reviewing data and communicating it to the reputed scientific journal.

Abbreviation:

COVID-19: Novel Coronaviruses
 GMC: Gangtok Municipal cooperation
 NGO: Non-Government Organization
 SARS-CoV-2: Severe Acute Respiratory Syndrome Coronavirus-2
 DC: District Collector
 ISDP: Investigation Supervisors Development Program
 IPC: Indian Panel Code
 SICUN: Sikkim Cooperative Union
 CMS: Chief Minister of Sikkim
 VTM: Viral-Transport Medium
 SIRD: State Institute of Rural Development
 PPE: Personal Protective Equipment
 BOC: Building and other Construction Workers Welfare Board
 NBMCH: North Bengal Medical College and Hospital

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