Original Resea	Volume - 11   Issue - 04   April - 2021   PRINT ISSN No. 2249 - 555X   DOI : 10.36106/ijar Community Medicine "COMMUNITY PROSPECTIVE EXPERIENCE DURING COVID-19 PANDEMIC"
Sunkad.M.A*	Assistant Professor, Department of Community Medicine, Universiti Sains Malaysia- Karnataka Lingayat Education Society- International Medical Program,(USM-KLE- IMP) Nehru Nagar, Belgaum, Karnataka, India, 590010. *Corresponding Author
	Associate Professor, HOD, Department of Statistics, PC Jabin Science College

# C.M.Math

Department of Statistics, P.C. Jabin Science Hubli,Karnataka, India-580010.

ABSTRACT Background: The Covid -19 disease is very much present in our locality of 4,105 households and 25,545 people. We intend to describe most of the events related to Covid 19 disease like, occurrence of a case, new cases, progress of events, case management, recovery and perceptions of the community. Ours is an open community consisting of 4,105 houses.

Methods: This is a prospective observation study of "Covid 19 disease phenomenon" in our community. The observations are about frequency, trends, progress and behavior. We planned to go round the community for 2 hours a day, to observe and record all that happens concerning Covid 19 disease, and also talk to those affected and record their perceptions in a validated questionnaire consisting of 20 close ended questions with answers graded on Leikert scale. The facts are put in "Observation sentence" and joined to make "Observation paragraphs".

Results: There were 167 Covid cases, 32 cases suffered severely, 91 cases mild form, 44 Covid positive only with no symptoms at all, and 20 cases died. There was fear of the disease to begin with, community learnt the disease, understood how to treat, and later normal life settled.

Conclusion: The Covid 19 disease struck the community suddenly, there were new cases, severe form, mild form, asymptomatic and some died. These events confirm to situation happening at other places.

# Summary of the article:

This article is the description of facts that occurred in an urban community concerning Covid 19 disease. There are 4.105 families in this community. Our leader announced the nationwide "Stay indoors" order to contain the spread of Covid 19 disease in the middle of March, 2021. Our community knew very little of this disease till then. There are ordinary daily wage earners, semiskilled persons, skilled persons, office goers and retired individuals besides women and children in this locality. Those individuals doing essential services like banking, healthcare, and grocery moved out for their work. These were the first persons to get Covid disease in the month of June. Following this incident, their family members tested positive and many people were confirmed of the disease. The government took the responsibility of treatment, tracing, and testing. Also there were elaborate guidelines how people should behave during this period.

The people in the community are also endowed with senses, they observed life as it went by , adhered to the guidelines announced, made adequate changes in their behaviour, pooled their resources, shared the resources, distanced the diseased and lived the life. In the time frame of one year did all the individuals get the Covid disease? How many contacted the disease? How many recovered from the disease? How many died due to the disease, is the main topic of this article.

KEYWORDS : Community, Covid-19 disease, Panic, Pathology

## I. INTRODUCTION

A novel peculiar disease-causing cough, cold spreading fast from person to person, has been a cause of concern, worry, hardship, frustration, loss, and uncertainty among the population (1-4). It was thought of a severe catastrophe hence the order "stay indoors". Then certain measures like wearing Mask, Social distance, Frequent Hand wash, and Sanitize hands, became strict norms. The compulsory detection, testing, tracking, isolation/quarantine, treatment followed. In the first few months there was strict stratification like "Red zone" meaning infective patient, "Yellow zone" test positive but no symptoms and "Green zone" no patient/ covid test positive. As time passes by there are so many changes in the guidelines, several new cases, an increase in the number of testing, expansion of isolation facility, intensive care with Oxygen supply, stretched health care facilities, over work and mechanized mass burials of those dead. The media like Television, Radio, and News Papers give full of first-hand stories concerning this disease. Again by the month of November, December, and January, detection, testing continue, cases are far less, test positivity less, more of home treatment, home isolation, closure of quarantine centres, Covid care centres less occupied and no admission for ICU, healthcare personnel have time to spare (5). The entire task is herculean, how, what a community did on itself is the descriptive account of this paper.

## **METHODS:**

Daily make one round in the community, for 2 hours in an area of 25 sq Kilometers, 4,105 houses, 25,545 population, 4,105 families to observe all that happens during Covid 19 detection, testing, tracing, treatment and make note of health status.( Description). We record Covid disease related facts in "Obervation sentence" and join these sentences to prepare "Observation paragraphs". We use a validated questionnaire to gather Covid 19 disease related information from the infected persons. We have obtained approval from Institutional Research Board (Ref 37/2020/24.8.2020) and written consent from participants.

There are two teams comprising trained Public Health Nurses, Community Health Volunteers to observe the events and gather information in prescribed format. The supervisory team comprising Public Health Specialist and Social workers, to supervise the work, cover the gaps in the information and complete the assigned task.

Outcome: How many get COVID 19 diseases among this community?

How many asymptomatic cases

How many mild form patients

How many severe form persons

How many recovered people, How many died

How the community behaved, and find out community supports if any.

## Study area:

This is an urban community, housing colony developed by the government accommodating all the income groups, and all religious faiths. There are 4,105 households, 8918 children, 2,551 aged, 8,883 adults to support and 5193 youths with a mix of poor, middle class, upper class back ground families. This is an open community means no compound wall, no entry/exit guarded gates. There are areas identified for shopping complex, religious places like temple/Mosque/Church, parks and recreational areas. Besides the essential items like grocery, milk, vegetables there are schools, doctor clinics, health centres, specialist doctor clinics, and nursing homes in this locality. The study area is well connected with road, railway and airline facilities. There is constant mobility of people to cosmopolitan cities like Mumbai, Pune, Kolhapur, Hyderabad and overseas for work, trade and business But a good number of daily wage earners, and some well-placed comfortable job of work from home.

## The description:

The Covid 19 phenomenon as it unfolds: The Covid 19 disease is a novel phenomenon. The months of January and February went by with just light information covered in the daily News Papers and Television

31

channels. The scenario changed in the middle of March when extensive news of Covid 19 disease, transport of patients, treatment in crowded hospitals, mass burials of those dead and the grieving relatives are beamed on Television screen.

The life and daily activities went on as usual. In the third week of March, there was nationwide television address by our Prime Minister, cautioning of the serious disease and executive order of total "lock down, stay indoors" (6, 7). On day one there was total silence in the community with extreme fear of the disease striking them. The time between dawn and dusk was spent with whatever was available in the house. The people spent indoors, peeping through the windows or watching from their balconies, events happening around them. By evening few people walked into the street to buy essentials like milk and vegetables. The commodities were available in limited amount and slightly higher priced. The people were glued to their television sets to know what all is happening in their city. The First day, first week, first month went by no one got the disease. They just heard that someone returned from visit to Australia, tested positive, and taken to government hospital for isolation. Then the household contacts of such persons were traced, put in quarantine and tested (8). There were some people who participated in huge religious congregation, some of them tested positive and similarly household contact tracing done. So during this month the focus was on travel, especially foreign trip, attending mass congregation, showing symptoms like cold, cough, sore throat, escorting such persons to government health centres, isolation and care (9). The government took the responsibility of providing all the care, private doctor clinics, hospitals remained closed. During this period no one in the community developed Covid 19 disease, however those who had mild cough cold treated themselves with homemade remedies.

The situation changed in the month of June, few persons attended a meeting. Among them one person had cough, when tested, showed positive, so all the contacts were quarantined and tested and that is how began the occurrence of Covid 19 disease in the study area To begin with there were few cases, few contacts, their houses were marked, street closed, red zone announced. The community members experienced huge hardships, cannot move, cannot buy essential items. In a day or two life in general streamlined, authorized mobile grocery/ vegetable/ Fruits vendors eased the situation. The escorting of the person with Covid disease in the ambulance was a painful episode, and the entire family was quarantined. In all such instances, Covid Care Centres took care of cases and contacts with medicines and food. The findings are summarized in Table1 to 4.

## Table 1: Showing Covid 19 disease management guidelines between April.2020 to January 2021

		June-July-Aug-	Nov-Dec-Jan
	June	Sep-Oct	
Strict isolation	$\checkmark$		
Strict quarantine		$\checkmark$	
Strict admission			
ICU admission	$\checkmark$		
Home isolation			
Home quarantine		V	V
Home treatment			$\checkmark$

## Table 2 : Showing Community behavior towards Covid 19 patients during April, 2020 to January 2021

	April-May-	June-July-Aug-	Nov-Dec-
	June	Sep-Oct	Jan
Family isolated			
Intra-family isolation	$\checkmark$		
Family members			
distanced			
Patients distanced			
Treatment distanced	$\checkmark$		
Mobile enquiry			
Homely			
Help needy patient			
Talk to patient			

#### Table 3 : Showing the Facilities where Covid 19 patients were treated during April to January 2021

		June-July- Aug-Sep-Oct	
Government facility isol	ation √		
Government facility qua	rantine √		
32 INDIAN J	<b>DURNAL OF AP</b>	PLIED RESE	ARCH

Government facility treatment	$\checkmark$	
Private facility treatment		 
Home treatment		 
Home follow up Government		 
mobile team		

#### Table 4 : Showing Covid disease related behavior during April2020, to January 2021.

	April-May-	June-July-	Nov-Dec-
	June	Aug-Sep-Oct	Jan
Queue up for grocery			
Limited items			
Social distancing	$\checkmark$		
Sanitizing items	$\checkmark$		
Authorized travel			
Mobile grocery			
Mobile Vegetables/Fruits			
Full range of grocery			V
More shops, more options			

#### We describe one such incident in greater detail:

In this community there is a family. We pass by their house daily at the same time twice. The family is full 15 members, aged, elders, teens, young children, always joyous and playful. One day we see some festive mood in them, may be some event . The next day, the house is closed, no one seen, no activity, no play, may be they are on holiday. One day, two day, three days...days go by. We hear a gossip in our neighbourhood, "Mr Savanoor died of Covid, all family tested positive, and admitted to Covid care". We tried phone call, no one answered. Then day twenty five, a call came from elder lady, narrating entire episode:

"June 28, eldest man coughed, mild fever in the night, next morning breathing difficult, shifted to teaching hospital, tested positive, and died by 7.00pm. All family members tested positive but no symptoms, admitted, treated and freed only today. No mobile phone cannot call or receive call. Saw your missed call hence telling you all that happened " This is an account of one family among 4,105 families in our community. There are 42 such families where in Covid 19 visited.

While the government clamped "Stay indoors", essential services continued, bank employees, security, police, community health workers, primary care persons and hospital staff, attended their work. When anyone in the community showed up cough/cold, were tested for Covid, if positive, isolated, contacts traced and quarantined.

That is how Covid testing facilities increased, case load mounted, hospital services exhausted and restlessness began. There was delay in testing/ treating, persons were kept in waiting, some worsened during waiting period, and few even died while waiting for treatment. The common man understood these events the other way and in some places, protests, confusion, chaos violence broke out and government changed the guidelines. Then onwards, private doctor clinic, hospital, home quarantine, and home treatment for mild cases started. In view of the strict protocol, there was very little for the government health care system to think of the alternatives to handle the surging number of Covid cases. On the other hand the community, local doctors, private hospitals learnt every minute, every day, every week to come up with new way of getting well and the burden on public hospitals lessened, the Covid care improved, recovery rate increased, deaths decreased to ease the crisis. There was ray of hope, some philanthropic individuals pooled their school building to set up Corona Care Centre, private Doctors volunteered to treat mild cases, Mobile testing and treatment centre cut down the waiting period, and such community efforts hastened to handle the Covid care effectively. The Covid "Scare" was slowly gone, people become bolder, they were able to trust the air around them, water they drink, fruits/ vegetables they buy, move about to buy grocery, queue up to buy essential items, visit to bank, visit to doctor and speaking to others from a distance. The community gained confidence more by their day to day learning than the government guidelines or television/ News channels. A majority of people practiced hand hygiene, wore mask, and improved their level of cleanliness. Such community perceptions improved to dispel the myths surrounding the Covid, comply with the Covid related behaviour of avoiding the crowd, seek early treatment, help needy family and maintain amity in the community.

Today there is increase in the number of testing, access to treatment

facilities, less government intervention, minimal quarantine, few new cases, rapid recovery and no death due to Covid.

#### One tragic incidence :

There is one single parent mother Ms. Gawaz. She works in the nursing home to make her living. She has two female kids aged four years and two years. There was a patient with cold, cough, who attended the nursing home, later turned Covid positive and the entire nursing home staff were to be put in isolation/quarantine. In this scenario, just imagine the fate of Ms. Gawaz and her two young daughters. The questions like ' Who would care for them? and where will they care", so touchy/ complex situation to handle. The community health volunteers agreed to help the family and managed the issue amicably.

## One tragic death:

There is one middle aged patient Ms. Nagaratna aged 33 years, faculty in a teaching institution. She had cold, cough and fever for few days, tested Covid positive, treated in Covid Care Centre, recovering very well, spoke to all her friends and relatives in the evening. She was to be discharged next morning. But suddenly in the night, developed difficulty in breathing, extreme weakness, collapsed and died. That is how the "Enigma" uncertainty of this illness "Covid 19".

## The guidelines from "Top Down":

The study area has a dedicated comprehensive government "Urban Primary Health Care Centre". It is run on the Public Private Partnership basis with a teaching medical college in the lead. There are two doctors, four nurses, six axillary personnel and twenty community health volunteers. This health care team is supported by multidisciplinary specialist team of doctors from the medical college. The team being trained, when pressed into "Pandemic control" work, readily responded, worked enthusiastically, braved the tough task of tracing the Covid patients, their contacts, helped in their follow up and gave moral support. In view of the huge surge of patients at one point, there was tough time in controlling the emotional overtones of the patients. Besides the guidelines used to come from the top officers, at times changing, confusing and create hurdles in doing routine work. The guidelines and protocols from above were aggressive, strict isolation in the government hospital, strict quarantine of contacts, marking the families and containment in the entire street with police supervision. The local health care system has just to follow the instructions from their boss and in no way alter them, or listen to the community leaders.

## Perceptions from "Bottom Up":

The study area has inhabitants from all walks of life. They are energetic and enthusiastic too. They have been watching the Covid scenario from Day one. They strictly took care of those travelling by selfisolation or self-quarantine (10). They tried by trial and error doing simple tasks like, buying essential items like milk, dairy products, grocery and selling these items, no one got sick. Some persons used their vehicles to run mobile catering services. These ideas were from daily wage earners who had lost their livelihood. Slowly by the month of June, July, August it became clear that Covid disease is manageable, people do recover and treatment expenses are bearable. They also learnt by their experience the different picture of Covid disease presented in media like Newspaper/ Television/ Magazines.Some members provided cooked food for families struck with Covid illness. Some members provided their accommodation for Covid care when in need. The community measures such as these promoted people to seek early treatment (11). There are some doctor practitioners, Specialist practitioners, who came forward to provide medical care to Covid patients and provided moral support to patients to ease the pressure of government hospital.

#### **RESULTS:**

There are 4,105 houses in the study area. Among these 42 houses alone showed Covid cases. There were 39 houses that showed multiple cases. There were 167 cases beginning June, 2020 to February, 2021. There were 20 deaths and 147 recovered fully. The common manifestations in them are Cold, Cough, Fever and Difficulty in breathing. There were 44 Covid positive cases, symptomless. The summary statistics are shown in Table 5, Figure 12, and 3.

Table 5: Demogra	phic profile of COVID-	19 patients

Demographic profile	No of COVID-19	% of COVID-19
	patients	patients
Age groups		

<=14yrs	10	5.99
15-20yrs	7	4.19
21-30yrs	18	10.78
31-40yrs	40	23.95
41-50yrs	28	16.77
51-60yrs	29	17.37
>=61yrs	35	20.96
Mean age	44.30	
SD age	17.78	
Gender		
Male	83	49.70
Female	84	50.30
Educations		
Illiterates	30	17.96
Upto Primary	34	20.36
Upto graduate	40	23.95
PG	63	37.72
Health Status		
Alive	147	88.02
Dead	20	11.98
Total	167	100.00

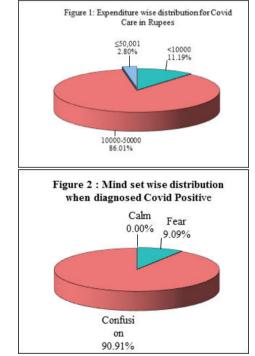
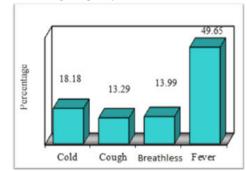


Figure 3: Showing Frequency of Covid disease manifestations



#### **DISCUSSION:**

This is an open community means there is no compound wall with entry exit guarded by security. The families live happily. In the period from Jan 2020 to February, only a few people knew about COVID 19 disease and its symptoms. By March the second week, another 20% of people came to know about this disease. In the first half of March, many people 40% came to know about COVID. The month of March, April, May went by amidst fear. However first week of June, heralded reporting of a COVID case in a school teacher house number 132, four

INDIAN JOURNAL OF APPLIED RESEARCH

33

members of her family tested positive. Subsequently, house number 211,523, and 987 reported three, two, and two cases. The month of July saw cases in house number 101, two, house number 325 three, house number 1021 three cases. Then in August, house number 294 reported five cases, 564 four cases, 631 ten cases, 821 three cases 834 one case, 835 one case, 841 two cases. Amongst this lot, there were two deaths house number 294, and 631 and one admission to ICU. That is how Covid disease marched in the community showing 167 cases in different 42 families. At the time of reporting most of them are recovering (Table I). Besides, there were 136 persons, with Cold, Cough, Fever, and Body ache, treated by local doctors, but not tested for Covid-19. There were few families who experienced common cold disease more often.

We interviewed all the 38 families, while the four families, were busy/ exhausted of the Covid related, visits and enquiry. In our interview we found all the 147 persons recovered fully, able to eat well, lead normal daily activities, able to do their job, mix well with others, got able/ effective services from health care personnel. However respondents emphatically mentioned how their neighbors distanced them in the beginning. There are few (33%) persons who have weakness is present in them. Among the listed persons 51% took treatment in their own houses, 29% in the government hospital and 20% took treatment in private hospital. The treatment expenditure varied from less than Rs 10,000/- 11%, more than Rs 50,000/- 3%, 86% less than Rs 50,000/-. The government took the responsibility of full Covid care but only 60% were happy and remaining 40% experienced difficulties like delay, inadequate and insensitivity. The mindset of these persons, when diagnosed Covid positive, was full of confusion in 90% and fear in 9% and very few maintained calmness. The findings are summarized in Table 5, Fig 1,2, and 3.

The Covid disease manifested in the form of Cold, Cough, Fever and Difficulty in breathing, and extreme weakness. There were 44 Covid positive cases, but symptomless (12). The Covid disease has affected the community, very peculiar, resembling the common cold in many respects but one special feature being "marked weakness" in some individuals.

The month of March, there was national broadcast imposing movement control / stay indoors order. The entire countrymen were alerted about the COVID. Our community stayed indoors, wore a mask, practiced hand wash, and hygienic etiquette. The month of March, April, May went by amidst fear. There is one Urban Primary Health Centre, There are five doctor clinics, One physician clinic, one 250 bedded hospitals, one 500 bedded teaching hospital, accessible to the community.

The COVID -19 Experience: The people have experienced the Covid 19 disease, consequent total lockdown, social distancing, no work, no wages, no school, no college, no play, no social events, and controlled examinations for college students. The daily wage earners suffered badly. But the question is how long savings will last, how long employers patronage, how to spend free time wallowing, and when normal life returns?

The Pathophysiology of Covid 19, is a disease caused a virus, mainly affecting the nose, throat, respiratory tract and lungs (13). The common manifestation are cold, sore throat, fever, difficulty in breathing and severe weakness. In some persons may involve multiple organs resulting in shock and failure. There are also good number of persons who do not experience any symptoms at all (Subclinical infection). While over 80% of persons suffer mildly, recover fast but about 15% need extra special care in Intensive Care Unit. There are two to five percent of person who may die to this disease. The one another character of this disease is it spreads fast from person to person in close contact and crowded places (14-19). So far having seen some cases in the community, seen most of them getting well, the community is stronger, sober able to take rational decisions. True there were twenty deaths but they occurred in most tragic circumstances, the affected were pious, well behaved, aged >60 years (20).

#### Limitation.

Our scope of study is limited to evolution and distribution of cases. There are gaps in our knowledge, how virus selectively affects some, some mildly, some severely? Is it Body immunity? Is it Hypersensitivity?? Is it Immunological dichotomy?

Strength. The responsible citizens, adherence to cleanliness,

INDIAN JOURNAL OF APPLIED RESEARCH 34

supported by cough sneeze etiquettes, and neighborhood moral help.

Weakness. The Pan Demic Media Scare, Movement control, Panic created by media.

CONCLUSION: The Covid disease pandemic struck our urban community selectively some families, showed patients, majority recovered fully and few patients died. The community learnt hard lessons, and behaved amiably.

## **REFERENCES:**

- Koh EBY, Pang NTP, Shoesmith WD, James S, Nor Hadi NM, Loo JL. The behavior 1. changes in response to the COVID-19 pandemic within Malaysia. Malays J Med Sci. Adultah JM, Wan Ismail WFN, Mohamad I, Ab Razak A, Harun A, Musa KI, Lee YY. A
- critical appraisal of COVID-19 in Malaysia and beyond. Malays J Med Sci. 2020;27(2):1-9. https://doi.org/10.21315/mjms2020.27.2.1
- Hamner L, Dubbel P, Capron I, et al. High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice Skagit County, Washington, March 2020. MMWR Morb Mortal Wkly Rep 2020;69:606-610. DOI: http:// dx.doi.org/ 10.15585/ mmwr. mm 6919e6
- David J Cennimo, Coronavirus Disease 2019 (COVID-19) Clinical Presentation,
- Medscape, Jun 08, 2020, https://emedicine.medscape.com/article/2500114-overview Worldometer. Covid-19 Coronavirus Pandemic. Available from: https:// www. world 5.
- ometers.info/coronavirus/ Chinazzi M, Davis JT, Ajelli M, Gioannini C, Litvinova M, Merler S, Piontti APY, Mu K, Rossi L, Sun K, et al: The effect of travel restrictions on the spread of the 2019 novel 6.
- coronavirus (COVID-19) outbreak. Science. 368:395-400. 2020. Zhang C, Chen C, Shen W, Tang F, Lei H, Xie Y, Cao Z, Tang K, Bai J, Xiao L, et al: Impact of population movement on the spread of 2019-nCoV in China. Emerg Microbes Infect. 9:988–990. 2020.
- World Health Organization: Q&A on coronaviruses (COVID-19): How long is the incubation period for COVID-19? [Internet]. [cited 2020 Feb 26]. Available from: https://www.who.int/news-room/q-a-detail/q-a-coronaviruses, 2020.
- Young BE, Ong SWX, Kalimuddin S, Low JG, Tan SY, Loh J, Ng OT, Marimuthu K, Ang LW, Mak TM, et al: Epidemiologic features and clinical course of patients infected with SARS-CoV-2 in Singapore. JAMA. 323:1488–1494. 2020. Khongsai, L., Anal, T.S.S.C., A.S., R. et al. Combating the Spread of COVID-19 Theorem 4. Comparison of the second 0
- 10. Through Community Participation. Glob Soc Welf (2020). https://doi.org/10. 1007/s 40609-020-00174-
- Yamani, L.N., & Yamani, L.N. (2020). Public health perspective of the COVID-19 pandemic: Host characteristics and prevention of COVID-19 in the community (Review). World Academy of Sciences Journal, 2, 21. https://doi.org/10.3892/ wasj. 2020.62
- Zhang, W., Wu, X., Zhou, H., & Xu, F. (2021). Clinical characteristics and infectivity of 12. Emily, W., W. A., Elou, H. (1992). Contrast ended intervention and intervention asymptomatic carriers of SARS-Cov-2 (Review). Experimental and Therapeutic Medicine, 21, 115. https://doi.org/10.3892/etm.2020.9547 Parvez, M.K., Jagirdar, R.M., Purty, R.S., Venkata, S.K., Agrawal, V., Kumar, J., &
- Tiwari, N. (2020). COVID-19 pandemic: Understanding the emergence, pathogenesis and containment (Review). World Academy of Sciences Journal, 2, 18. https://doi.org/ 10.3892/wasj.2020.59
- Scientific Brief. WHO.Transmission of SARS-CoV-2: implications for infection ...9th 14. July, 2020. https://www.who.int/news-room/commentaries/detail/transmission-of-
- July, 2020. https://www.wino.inviews-tooln/commenters/sectan/ausmission of sars-cov-2-implications-for-infection-prevention-precations Ch'ng ES, Tang TH. Anti-inflammatory properties of stingless bee honey may reduce the severity of pulmonary manifestations in COVID-19 infections? Malays J Med Sci. 2020;27(3):150–152. https://doi.org/10.21315/mjms2020.27.3.16 Catanzaro, M., Fagiani, F., Racchi, M. et al. Immune response in COVID-19: addressing a pharmacological challenge by targeting pathways triggered by SARS-CoV-2. Sig Theoretical Theoret Theoret 84(2020).
- 16 Transduct Target Ther 5, 84 (2020). https://doi.org/10.1038/s41392-020-0191-1
- 17.
- Fong IW: Emerging animal coronaviruses: First SARS and now MERS. Emerging Zoonoses: Feb 8, 2017 (Epub ahead of print). doi: 10.1007/978-3-319-50890-0\_4. Hui DS, Azhar EI, Madani TA, Ntoumi F, Kock R, Dar O, Ippolito G, Mchugh TD, Memish ZA, Drosten C, et al: The continuing 2019-nCoV epidemic threat of novel 18 coronaviruses to global health-the latest 2019 novel coronavirus outbreak in Wuhan, China. Int J Infect Dis. 91:264-266. 2020.
- 19.
- Liu Y, Gayle AA, Wilder-Smith A and Rocklöv J: The reproductive number of COVID-19 is higher compared to SARS coronavirus. J Travel Med. 27(taaa021)2020. Sana Parveen, Shraddha Jain. Pathophysiologic Enigma of COVID-19 Pandemic with Clinical Correlates. Int J Cur Res Rev | Vol 12 Issue 13 July 2020 DOI: http://dx. doi.org/10.31782/IJCRR.2020.12136