EFFECT OF COVID19 ON MIGRANT WORKERS : LEGAL AND CONSTITUTIONAL PERSPECTIVE

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ABSTRACT

*The problems of migrant workers have become very important in many developing countries of the world. That the now the reason behind migration is COVID – 19.That the Government of India Honorable Prime Minister Narendra Modi nationwide declared lockdown . It was the Government's sudden and exclusive order to shut down all economic activity and movement was stop . That the Inter-State Migrant Workmen act 1979was enacted to prevent the exploitation of inter-state migrant workmen by contractors, and to ensure fair and decent conditions of employment. That on 26th may 2020 Apex court takes uamotue cognizance of migrant labour issue . The court ordered the Central government and State government to immediately provide transport , food and shelter free of cost to the migrant workers. Apex court quoted"**Bread, a house, adequate clothing, education and good health and above all right to walk with dignity on the world's boulevards is basic need of every human being."** That on the 18thjune 2020 Central government finance minister Mrs. Nirmala Sitraman announced the special scheme for Migrant worker. That it covers the 116 district .This scheme will help the all migrant worker to secure their livelihood.*

Introduction

'Bread, a house, adequate clothing, education and good health and above all right to walk with dignity on the world boulevards is basic need of every human being.'

- Justice Higgins[1]

The problems of migrant workers have become very important in many developing countries of the world. The process of migration began in the 19th century. It has been discussed by many researchers in many ways, who have emphasized social and cultural, distant, political and economic factors as causes of migration .The motives of migration are classified as push factors which emphasize on the situation at the origin, that is, place from which migration started and pull factors which emphasize on the situation at the destination. Unemployment, flood, earthquake, drought, [i.e., natural calamities] are the push factors. Pull factors that determine migration such as attraction of city - life, for education, health, development of backward community, job opportunities and training facilities. That the now the reason behind migration is COVID – 19 .The India declared COVID-19 as a notified disaster on March 14, 2020.That the Government of India Honorable Prime Minister Narendra Modi nationwide declared lockdown on 24 March 2020.

That our Indian lockdown considered the world's strictest lockdown due to that India's lockdown has been implemented has raised several fundamental constitutional questions. It was the Government's sudden and exclusive action to shut down all economic activity and movement that has resulted in the deprivation of the right to life and livelihood of many persons which enrich in Indian Constitution. That many migrant workers, daily wages worker affected due such closing of economic activity. The Indian migrant workers have faced multiple hardships due to COVID19 and sudden declaration of lockdown. That due to the lockdown many workplace factories, industries are closed , the many migrated labour had not only faced with problem of loss of income, food shortages but also they are not getting assurance of job in future. That due to lockdown many of labors who are working in construction side began walking back home with no means of transport . That the many migrants also died due to the lockdown, with reasons ranging from starvation, suicides, exhaustion, road and

[1]Khan and Khan's, Commentary on Labour & Industrial Law, Asian Law House, Pg. No.278

rail accidents, police brutality and denial of timely medical care .That researcher discuss the problem of migrant worker from the legal point of view.

Constitution of India & Legal enactment in India for Migrant workers

Human conduct in a society is governed by a set of rules and regulations, often referred to as law. In order to protect and realize the rights of the citizens specially the vulnerable and weaker sections of the society the laws become even more important. The Indian Constitution considers social security as an integral part and various chapters of it finds the direct or indirect reference. It requires that the State should work hard to achieve or promote the welfare of the people by securing and protecting, as effectively as it may, a social order in which justice social, economic and political shall inform all the institutions of national life. The Constitution of India requires that the State should within the limits of its economic capacity make effective provision for securing the right to work, to education and to public assistance in case of unemployment, old age, sickness and disablement. It also asks for securing just and humane conditions for work and to provide the labour citizens with the benefits like maternity benefits as well secure the weaker section at the time of disaster or in danger.

That Constitution of India under its Chapter IV embraces principles and policies pertaining to social security measures which are to be followed by the state in future.[2] The Fundamental Rights are enshrined under Part-III of the Constitution of India comprising of Article 12 to Article 35. The Right to Food is also an integral part of the Art. 21 of the Indian Constitution providing for right to life and liberty.[3] The Art. 21 of the Indian constitution is like an umbrella covering within itself a plethora of rights. Right to health also features into it. Article 38, obliges the State to strive to promote the welfare of the people by securing and protecting, as effectively as it may, a social order in which justice, social, economic and political, shall inform all the institutions of the national life In particular, it must direct its policy towards securing to all its citizens, men and women equally, the right to an adequate means of livelihood; right to good health and strength of workers, men and women and to protect the tender age of children from being abused and to ensure an atmosphere where the citizens are not forced by economic necessity, to enter into avocations unsuited to their age and strength; to provide adequate opportunities and facilities to children to develop in a healthy manner. Article 41 of the Constitution requires that the State should within the limits of its economic capacity and development; make effective provision for securing the right to work, to education and to public assistance in case of unemployment, old age, sickness and disablement.[4]

Under Article 41 (2), Job Security forms an ingredient of the 'right to work', read in the light of the philosophy of socio-economic justice.[5]Article 42 requires making provisions for securing just and humane conditions of work and for maternity relief. Maternity Benefits Act, 1961 falls under the provisions of this Article.

Article 43 provides for social security to all the citizens of the nation.

Article 47 requires the state as amongst its primary duties to include raised levels of nutrition and standard of living along with improvement in the conditions of public health. The obligations cast on the State in the above Articles constitute Social Security for all workers, List III in the Seventh Schedule of the Constitution of India includes

- Social Security and insurance, employment and unemployment.[6]
- Welfare of labour including conditions of work.

[2]Jain M. P. *'Indian Constitutional Law'*, Lexsis Nexis(2018) pg 1465

[3]Parmanand Katravs Union of India, AIR 1989 SC 2039

[4]PYLEE M.V., CONSTITUTIONAL AMENDMENTS IN INDIA, 347 (2003)

[5]Daily casual labour employment under P and T department v. Union of India, (1988) 1 SCC

[6] Item no 23 of the list III ,VIITH SCHEDULE OF THE Indian constitution

- Provident funds.
- Employers' liability
- Workmen's compensation, invalidity, old age pension and maternity benefit

The Social security has always been of a primary concern for workers. The labour law statutes such as the Industrial Disputes Act, 1947, Payment of Wages Act, 1936, Contract Labour Act, 1970, the provisions of the Industrial Disputes Act, 1947 and various social security laws which explicitly recognizes the right of an employer to lay off an employee and reduce wages to 50% upto a period of 45 days in certain eventualities including a natural calamity and after 45 days if the layoff continues[7]. That the key piece of legislation governing inter-state migrants in India is the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979. [8]The Act was enacted to prevent the exploitation of inter-state migrant workmen by contractors, and to ensure fair and decent conditions of employment. The law requires all establishments hiring inter-state migrants to be registered, and contractors who recruit such workmen be licensed. Contractors are obligated to provide details of all workmen to the relevant authority. Migrant workmen are entitled to wages similar to other workmen, displacement allowance, journey allowance, and payment of wages during the period of journey. Contractors are also required to ensure regular payment, non-discrimination, provisioning of suitable accommodation, free medical facilities and protective clothing for the workmen

Role of Judiciary securing the rights of Migrant worker

The Supreme Court has emphasized the great value of the Social Security in democratic society. Thus from the start the judiciary has vindicated the stand taken in the Constituent Assembly. The plays vital role in protection and safeguards and security against various risk in workers life as directive principles have been given importance equal to fundamental rights.

In Randhir Singh v. Union of India[9],the Supreme Court has held that although the principle of 'equal pay for equal work' is not expressly declared by our Constitution to be a fundamental right, but it is certainly a constitutional goal under Articles 14, 16 and 39 (c) of the Constitution. In **Francis Coralie v. Union Territory of Delhi**[10] said that the right to live is not restricted to mere animal existence. It means something more than just physical survival. The right to live' is not confined to the protection of an faculty or limb through which life is enjoyed or the soul communicates with the outside world but it also includes "the right to live with human dignity "**In Delhi Development Horticulture Employee's Union Vs. Delhi Administration**[11]**.**the Supreme Court has held that daily wages workmen employed under the Jawahar Rozgar Yojna has no right of automatic regularization even though they have put in work for 240 or more days. The petitioners who were employed on daily wages in the Jawhar Rozgar Yojna filed a petition for their regular absorption as regular employees in the Development Department of the Delhi Administration. They contended that right to life, includes the right to livelihood and therefore, right to work. The Court held that although broadly interpreted and as a necessary logical corollary, the right to life would include the right to livelihood and therefore right to work but this country has so far not found feasible to incorporate the right to livelihood as a fundamental right in the Constitution. **In Chameli Singh v. State of Uttar Pradesh**[12] the Supreme Court emphasized on the importance of the right to shelter as one of the basic human rights designed to ensure all facilities to the workers to develop himself as a member of a civilized society. in **Consumer Education and Research Centre v. Union of India**[13], that the Supreme Court for the first

[7]Section 25C and Section 25M of Industrial dispute act 1947

[8]Meenupaul, Labour and Industrial Law edition 2013 , page nu 11

[9] AIR 1982 SC 879

[10] AIR 1978 SC 597

[11] AIR 1992 sc 789

[12] AIR 1996SC1051

[13] (1995)3SCC42

time explicitly held that 'the right to health is an integral fact of all meaningful right to life. That on 26th may 2020 Apex court takes uamotue cognizance of migrant labour issue. The court ordered the Central government and State government to immediately provide transport, food and shelter free of cost to the migrant workers. That judiciary has taken absolute steps to safeguard the basic rights of migrant workers.

Role of Government for securing the rights of migrant workers

The government declared the lockdown for the worldwide disaster, the central government, several state governments to impose a complete lockdown in their states invoking the legislation Epidemic Diseases Act, 1897. The Central government issued an advisory on 20th March 2020 appealing to all employer's association and various factories not to terminate their employees or cut wages of its workers in view of the lockdown. It also advise to all employers of private and public sector of establishments to extend their cooperation by not terminating their employees, particularly casual or contractual workers or reduce their wages. It further stated that if any place of employment is to be made non-operational due to COVID-19, the employees of such unit will be deemed to be on duty. While the country was coming to terms with the nationwide lockdown a huge exodus of migrant laborers trying to reach their hometowns started taking place. Such a mass efflux of laborers increased the risk of spreading the virus which prompted the central government through the Ministry of Home Affairs to issue an order on 29th March, 2020 in exercise its power and directing the states and union territories to ensure adequate arrangements of temporary shelter and provision of food for migrant workers who had already moved out got stranded in such states and union territories amongst other directions.[14] It also appears that the Ministry of Labour and Employment has consciously chosen to issue an advisory instead of resorting to a formal order mandating payment of wages during lockdown

The Finance Minister Nirmala Sitharaman has come up with a Rupees 1.7 lakh core relief package for the daily wage earners, women workers and migrant workers as the country remains in a 21-day lockdown period due to corona virus outbreak. The Nirmala Sitharaman said that PM Garib Kalyan relief package will be distributed as cash transfers and food security. The government does not want anyone to remain hungry. The government of India have come with a package that will immediately help those affected directly and those migrants workers, urban and rural poor. The Government are looking both at cash transfers as well as food security measures. The Finance Minister announced that an additional 5 kg of rice or wheat will be given for free by the government of India to the poor household in India. The government has also hiked the MNREGA wages from Rs 182 to Rs 202 a day. This is likely to benefit about five crore families. Those workers who fall under the essential service category such as doctors have also been given an insurance cover of Rs 50 lakh. The Government are giving Rs 50 lakh insurance cover per person for the warriors who are exposing themselves to the virus. This includes workers, doctors, nurses etc. That on the 18thjune 2020 Central government finance minister Mrs. Nirmala Sitraman announced the special scheme for Migrant worker who migrated to their native place. The scheme concentrated on Bihar, Madhyapradesh, Uttarpradesh, Rajastan, Zarkhand & Oddisha. That it covers the 116 district of above states. It government helps the migrant worker to get job surety and to secure his fundamental right that is Right to work and right to livlehood. This scheme will launched on 20thjune 2020 which will inaugurated by Prime Minister Narendra Modi, This scheme will help the all migrant worker to secure their livelihood.

Conclusion

The Migrant workers, those workers, who migrate from one area to another area within the state or country in order to get seasonal or

[14]under section 10 (2) (l) of the Disaster Management Act, 2005

temporary or part time work in different sectors. The consequences of the lockdown are already proving to be disastrous for migrant workers. One of the lessons from this episode is to not let aspirational requirements become a hindrance to the effective protection of the every groups these requirements are designed for. This will require a principled distinction between formalization and ostensible social-welfare.

That government of India announced big package for the weaker section. That Package which was announced which help the weaker section to survive. That package was not enforced by the authorities of government therefore weaker section has not get benefit of package to workers at large due to that those migrant workers can't survive in migrant state .That due to the not proper enforcement of various schemes they are deprived their basic right of food shelter and clothing. That during the lockdown no traveling facility are available . Therefore the worker moved to their native by walking. That the apex court of India also sue moto take the initiative for securing the rights of works. Lastly I concluded that Central government has successful to secure the rights of works by offering Rupees 1.7 lakh core relief package for the daily wage earners, women workers and migrant workers that will immediately help those affected directly and those migrants workers, urban and rural poor but government authorities fail to proper implementation of the package which is yet not be benefited to migrant workers. That all state governments fails to manage traveling facility for all migrant from other states.

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2. Industrial Disputes Act, 1947
3. Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979
4. Payment of wages Act 1936
5. Contract Labour Act , 1970,

Website

1. www.manupatra.com
2. https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_740893/lang--en/index.htm

STUDYOF CHANGES IN PHYSICO-CHEMICAL CHARACTERISTICS OF SARANGPURI LAKE, DIST- WARDHA DURING COVID-19 PANDEMIC LOCKDOWN PERIOD

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ABSTRACT

The present study was aimed to estimate the current status of physico-chemical characteristics of Sarangpuri lake in Wardha District, Maharashtra in lockdown period of COVID-19pandemic.Changes in physico-chemical parameters such as water temperature, pH, transparency, total dissolved solids, total hardness, chlorides, phosphates, dissolved oxygen,biological oxygen demand were analysed for three months, March 2020 to May 2020.
The results of the present study indicate that all the physical and chemical properties of Sarangpuri lake water were within desirable limits. Favorable changes were observed in concentration of Total dissolved solids, Total hardness. Chlorides, Nitrates, Phosphates, Dissolved oxygen and BOD indicating tremendous decrease in lake water pollution during lockdown period of COVID-19 as there were no man-made, domestic and agricultural activities during lockdown period of COVID-19 pandemic in Wardha District.

***Keywords**: COVID-19, Lockdown, Sarangpurilake, Physico-chemical, Parameters*

Introduction

Water pollution is extremely essential for survival of all living organisms. Ground water is an important source for drinking, irrigation and industrial purpose in India. But serious problem in India is that almost 70% of its surface water resources and groundwater reserves are contaminated by biological, toxic, organic and inorganic pollutants due to growth of population, agriculture, industries. In India still now several researchers have done study on physico-chemical and biological characteristics of standing and running water resources (Fule, et.al.,2009; Prasanna and Ranjan,2010; Ingale and Ambekar,2013).

People on globe are under tremendous threat due to undesired changes in the physical, chemical and biological characteristics of air, water and soil. Generally human population, industrialization, use of fertilizers and man-made activities, water is highly polluted with different harmful contaminants. But during COVID-19 pandemic in India there was continuous lockdown in different states including Maharashtra and there was a long break in man-made, agricultural and industrial activities. So, present study was carried out to evaluate physico-chemical characteristics of Sarangpuri lake water in the lockdown period of COVID-19 pandemic.

Materials and Methods

Study Area

To study the physico-chemical parameters of water, Saragpuri lake was selected.It is situated in Arvi Tahsil of District- Wardha. Three sites, Site I, Site II and Site III were selected from different locations. Water of lake is used for irrigation, Industrial and drinking purpose.

Physical parameters

For measurement of Temperature, pH of water in Sarangpuri reservoir, a portable digital water analysis kit was used and Transparency of water was measured by Secchi disc.

Chemical parameters

Dissolved oxygen from water samples was determined by Wrinkler's iodide azide method. Total hardness and Chloridesfromwater samples were determined by titrimetric method.Total dissolved solids were estimated by Gravimetric method. Nitrate and Phosphatewere determined by spectrophotometric method.

Results and Discussion

Different physico-chemical parameters studied during present work and their values are shown in Table1.

Water Temperature

Temperature of lake water ranged from 23.2 to 33.7 from March to May 2020. High variations were observed at all three sites. Water temperature was high in the month of May due to low water level, high air temperature and clean atmosphere. Sharma et.al.(2000) also recorded the fluctuations of water temperature between 21^0C to 29^0c during the limnological studies of Udaipur lake.

pH

During present study water pH values were found 7.3 to 8.1.These results indicate the alkalinity of lake water throughout the study period. pH value is very important for plankton growth (Chisty,2002). As per the studies of Umavathi,et.al.(2007), pH is ranged between 5 to 8.5 is best for plankton growth.

Transparency

In the present study water transparency values ranged from 49.2 to 65.7cm. which indicated the productivity of lake water as proposed by Sharma and Durve (1991). Kadam, et.al.(2007) also reported higher transparency occurred during winter and summer due to absence of rain, runoff and gradual settling of suspended particles.

Total Dissolved Solids

Total dissolved solids in the present studies ranged from 456.7 to 678.4 mg/l in three months of study period. Fule, et.al.(2017) reported the TDS values (highest 925.0 mg/l) in the same lake water which were higher than the highest values in the present study (678.4mg/l) and it may be due to decrease in water contamination as human activities such as activities for domestic purposes, spraying in agricultural fields, visits of domestic animals were less due to lockdown period.

Total hardness

In the present study total hardness ranged from 122.4 to 143.7mg/l from March 2020 to May2020. The increase in the hardness can be attributed to the decrease in water volume and increase in the rate of evaporation at high temperature. But total hardness values were found to be less as compared to the findings of Fule, et.al.(2017) in the same lake water as the rate of evaporation was less as temperature was less and so water volume was not decreased more as was in the year 2008-09. Hujare (2008) reported that total hardness was high during summer than rainy season and winter season. Somewhat high values may be due to addition of calcium and magnesium salts.

Chloride

Chloride values were found high during the study and ranged from 24.5 mg/l to 35.3 mg/l from March to May 2020. The chloride concentration serves as an indicator of pollution by sewage. These values were found to be decreased as compared to previous study due to decrease in sewage and ultimately decrease in water pollution. Similar results were reported by Umavathi, et.al.(2007) who showed that high concentration of chloride is associated with increased level of pollution.

Phosphate

The phosphate content in the study area was found in the range of 0.31 mg/l to 0.49 mg/l from March to May2020.It is one of the most important nutrient and limiting factor in the maintenance of lake fertility.

Nitrate

During the study nitrate fluctuated between 0.283 mg/l to 0.512 mg/l. These values are much lower than Chisty (2002), Rani, et.al.(2004) and Dorlikar and Nimgare (2017). High concentration of nitrate in drinking water is toxic (Umavathi, et.al,2007).

Dissolved Oxygen

It is an important aquatic parameter and it plays important role in life processes of animals. In the present study the DO values were found from 8.25 mg/l to 9.70 mg/l.

Biological Oxygen Demand (BOD)

It is an important parameter to the oxygen required for degradation of organic matter. IN present study BOD recorded from 8.78 mg/l to 9.74 mg/l which is within permissible range. Devaraju,et.al. (2005) has made similar observations in Muddur lake. High BOD value is unfavorable for zooplankton.

Table-1: Physico-chemical parameter values of Sarangpuri lake water from March to May 2020.

S.N.	Parameter	March			April			May		
		Site I	Site II	Site III	Site I	Site II	Site III	Site I	Site II	Site III
1	WT	23.6	23.2	20.7	23.3	24.5	24.7	30.3	33.7	31.4
2	pH	7.3	7.4	7.3	7.5	7.4	7.6	7.5	7.9	8.1
3	TR	49.2	49.6	49.8	51.0	51.3	55.5	60.4	65.7	65.0
4	TDS	456.7	468.4	466.4	474.7	484.8	543.6	532.4	632.7	678.4
5	TH	122.4	123.5	124.0	130.5	131.4	132.2	135.4	140.6	143.7
6	Cl	24.5	24.6	26.9	25.6	27.6	28.8	30 .7	35.3	29.8
7	P	0.31	0.32	0.35	0.32	0.35	0.37	0.43	0.45	0.49
8	N	0.283	0.298	0.324	0.378	0.390	0.402	0.478	0.501	0.512
9	DO	8.25	8.25	8.37	8.55	9.19	9.29	9.59	9.54	9.70
10	BOD	8.78	8.90	8.90	8.97	8.97	9.10	9.17	9.45	9.74

WT=Water temperature (0^0c), TR=Transparency(cm), TDS=Total dissolved solids(mg/l), **WT=Water temperature (0^0c), TR=Transparency(cm), TDS=Total dissolved solids(mg/l),** **TH= Total hardness(mg/l), Cl=Chloride(mg/l), P= phosphate(mg/l), N= Nitrate(mg/l), DO=Dissolved oxygen(mg/l), BOD=Biological oxygen demand(mg/l)**.

Conclusion

The results of the present study indicate that all the physical and chemical properties of Ashti lake water were within desirable limits. There was drastic change in concentration of total dissolved solids, total hardness. Chlorides, nitrates, phosphates, dissolved oxygen and BOD indicating tremendous decrease in lake water pollution during lockdown period of COVID-19. Water is safe to use for drinking, irrigation and fish culture.

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IMPACT OF COVID-19 ON EDUCATION SECTOR-A STUDY ON PROBLEMS FACED BY THE COLLEGE STUDENTS FROM ONLINE LEARNING WITH SPECIAL REFERENCE TO DAKSHINA KANNADA DISTRICT OF KARNATALKA

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ABSTRACT

COVID-19 is affecting almost every sector of the economy and the education sector is no exception. Schools, colleges, universities and institutes of all levels have deferred or dropped examinations and the fate of students is hanging in a critical state. According to a report of the Ministry of Human Resource Development, there are 993 universities, 39931 Colleges and 10725 standalone institutions listed on their portal, which contribute to education. These institutions further reflect the student density of India, as the total enrolments in higher education every year are nearly 37.4 million, reflecting the expanding horizons of the education sector. The interference in the education system due to the COVID-19 is a reminder that there is a need for transformation. Now we are observing that in future there will be shift from thinking digital to being digital. Even though the country has been adapting to the new age learning, but there still lies an obstacle in making the endeavors entirely successful. What remains intact is that only 45 crore people of our total population of the country have access to the internet and thus to online learning. The people residing in rural areas are still very much deprived of the latest advancements and therefore hampering the cause of online learning. In this context, the study was undertaken to know the problems faced by the college students from the online learning. A sample size of 120 students studying in Dakshina Kannada District of Karnataka was selected by following convenient sampling method with a hypothesis that there is an association between place of residence and problems faced by the college students from online learning. The study aimed at to bring out some policy measure for problem free online learning

Keywords: *Transformation, Online learning, Coronavirus, Internet*

Introduction

Our health and wealth are highly influenced by various emerging viral diseases. The viral outbreaks like Crimean Congo haemorrhagic fever, Ebola, Lassa fever, Marburg virus, SARS- CoV, MERS-CoV, Nipah, Zika virus, Rift Valley fever virus and COVID-19 are some evidence ofour disaster. Some of these outbreaks are highly influenced global life and WHO declared them as a public health emergency of international concern. Just recently, in December 2019, a novel coronavirus (2019- nCoV), now COVID-19 has emerged in Wuhan, China and spread its wing over the whole globe. A large segment of the world population are affecting by it. Therefore, the WHO declared the COVID-19 as pandemics on 30thJanuary 2020. Adaptations to human infection, easy way of transmission, and absence of immunity make the COVID-19 highly contagious in nature. Modern transport systems converted the world into a global village and made a way for the quick spreading of any contagious agents like COVID-19 viruses. As per the Ministry of Health and Family Welfare's data, released on 14th June 2020, highest single-day spike of 11,929 new COVID-19 cases and 311 deaths has been reported in the 24 hours. The total number of cases in the country now stood at 3,20,922 including 1,49,348 active cases, 1,62,379 cured/discharged/migrated. The death toll has reached 9,195.Maharashtra, Delhi, Tamil Nadu, Gujarat continue to be among the worst hit states. In Maharashtra alone, the total number of cases is now over one lakh. Corona virus has affected almost all the sectors of the economy. While the corona virus has badly affected education sector. It is widely agreed that radical changes in the education sector are needed until the corona virus is eradicated.

Literature Survey

Previous studies made on COVID-19 highlighted below:

Samander Kaushik, Sulochana Kaushik, Yashika Sharma, Ramesh Kumar, Jaya Parkash Yadav(2020)in their article on "The Indian perspective of COVID-19 outbreak" reviewed the general continent, virology, pathogenesis, global epidemiology, clinical presentation, diagnosis, treatment and control of COVID-19 with the reference to India.**Vikram R. Jadhav, Tushar D. Bagul, Sagar R. Aswale(2020)** in their article on " COVID-19 Era: Students' Role to Look at Problems in Education System during Lockdown Issues in Maharashtra, India" highlighted the impact of lockdown on schools and colleges in Maharashtra, students opinion on online education during the lockdown period and its consequences.**Amit Kumar Arora , R. Srinivasan(2020)** in their article on "Impact of Pandemic COVID-19 on the Teaching – Learning Process: A Study of Higher Education Teachers" mentioned changes brought about by COVID-19 on teaching and learning process in higher education sector

Statement of Research Problem

All of us know it very well that COVID-19 has severe impact on education sector all over the world. By throwing light on literature survey, it is clear that no previous study was done on problems faced by the college students from online learning. To fill up this research gap, present study titled **"Impact of COVID-19 on Education Sector-A Study on Problems faced by the College Students from Online Learning with Special Reference to Dakshina Kannada District of Karnatalka"** is undertaken.

Objectives of the Study

The present study was based on the following objectives:

- To know the transformation in education sector due to COVID-19
- To analyze the concept of online learning
- To study the problems faced by the college students from online learning.
- To offer some suggestions to the problems

Research Hypothesis

In the light of above objectives following research hypothesis was developed:

H_0: There is no association between place of residence and problems faced by the college students from online learning

H_1: There is an association between place of residence and problems faced by the college students from online learning

Research Methodology

The present study was based on both primary data and secondary data. The primary data was collected from the sample of 120 college students of Dakshina Kannada District of Karnataka. The sample size was collected by following convenient sampling method. Questionnaire in Google Form was prepared to collect data from the respondents. Likert's five-point scale and percentage analysis were used to analyze the data.Chi square test was applied to test the hypothesis. Secondary data was collected from the reports, journals and websites.

Covid-19-Transformation In Education Sector

Covid-19 has changed the entire scene of education sector all over the world. There is a lot of confusion in the education system of India and students are unable to follow their regular academic routines. Against the backdrop of this emergency and considering the safety of students and their educational issues, most of the institutions have taken initiative to facilitate telecommunication, Skype call, Zoom application and other virtual options to reduce the distance in education. In India, some private colleges could adopt online teaching methods. Low-income private and government colleges may not be able to adopt online teaching methods. As a result, there will be completely shut down due to no access to online learning solutions.Again, Higher education sectors are also disrupted which again pave an impact on the country's economic future. Various students from India took admissions in abroad like US, UK, Australia, China etc. And these countries are badly affected due to COVID-19. Maybe there is a possibility that students will not take

admissions there in future and if the situation persists, in the long run then there will be a decline in the demand for international higher education also. Another major concern is employment. Students those have completed their graduation may have fear in their minds of withdrawal of job offers from the corporate sector due to the current situation. The Centre for Monitoring Indian Economy's estimates unemployment rate from 8.4% in mid-March to 23% in early April and the urban unemployment rate is 30.9%.

Concept of Online Learning

Online teaching or online learning or eLearning or electronic learning is the learning through electronic devices such as computers, tablets and even smart phones that are connected to the internet. It aims at digital transformation in the classroom with help of the internet. It provides an opportunity of distance education to the remote students by means of web-based online learning programs as well as the teachers with innovative teaching tools to teach virtually from anywhere at any time, irrespective of the geographical area. Elliott Maisie coined the term "eLearning" in 1999, marking the first time the phrase was used professionally. In the years since, eLearning's reputation has gone from strength to strength

Advantages of Online Teaching

Online learning provides following benefits:

- Students can learn at their own time and phase
- Encourages long distance learning
- Enhances collaboration and communication
- Real-time teaching and learning
- Effective and efficient time management
- Gives students and teacher a worldwide exposure
- Access to everyone equally from anywhere and at anytime
- Affordable
- Introduces students and educators to education technology
- Encourages digital and smart classrooms
- Improves Visualization

Disadvantages of Online Teaching

Online learning has following limitations:

- No control over the students or classroom
- Virtual Classroom requires computers and internet access, which might not be at hand to everyone
- Enrolling into online live class or courses can be costly
- Students lack real-time teaching experience
- Affects the traditional student-teacher collaboration
- Problem of security of online learning programs.
- Gives a way for health issue

Findings And Discussion

To study the problems faced by the college students from online learning a sample of 120 students residing in Dakshinakannada district were selected**.**Questionnaire in google form was prepared to collect data from the respondents. Data collected from the respondents were analysed as follows..

Table 1 shows educational profile of respondents:

Educational profile of the respondents given in the Table 1 shows that out 120 respondents surveyed 17% were PU students, 33% were Degree students, 25% were Engineering students, 8% were Diploma students and remaining 17% were Post graduates.

Table2 showsgender of respondents

Gender classification of respondents given in the Table 2 shows that 53% of the respondents were male and remaining 47% were female.

Table 3 showsarea of residence of respondents

Area of residence of respondents given in Table 3 shows that 29% of the respondents resided in rural areas, 43% of the respondents resided in semi urban areas and remaining 28% resided in urban areas

Table 4 shows Apps used for online learning

Table 4 gives information about apps used by the respondents for online class. 28% of the respondents were using ZOOM App, 21% were using Moodle, 18% were using Google classroom, 10% were using others including social media particularly WhatsApp, 8% were respectively using Google Meet and AZ Recorder and remaining 7% were using Skype.

Table 5 shows problems faced by the respondents from online learning

12 different types of problems faced by the respondents from online learning were selected and the respondents were asked to rate them on Likert's Five Point scale as 'very high', 'high', 'average', 'low' and 'very low'. The response gathered was analysed and mean scoring was calculated and then ranking was done. It was found that 'Network problem'(4.68) was the major problem followed by **'**No personal touch'(4.61), **'**Health problems like head ache, eye problem, dozing etc'(4.55), 'Lack of concentration'(4.41), 'No effective doubt clarification'(4.28) , 'Power supply problem'(4.03), 'Not having own personal PC, Laptop, Smart phone etc'(3.85), 'Financial problem'(3.84) , 'May lead to addiction to mobile'(3.80), 'Operating problem'(3.22),'Thundering and lightening'(2.95) and 'Lack of family support'(2.46) in the order of importance.

Table 6 shows the result of Chi Square Test

Chi Square Test was used to test the association between place of residence and problems faced by the college students from online learning. It was found that calculated Chi Square value (64.71) was more than the Table value at 5% level of significance (For v=8; Chi Square Table Value at 5% level of significance is =15.507) thus rejecting the null hypothesis and accepting the alternate hypothesis and proving that there is an association between place of residence and problems faced by the college students from online learning

Suggestions

In the light of the problems faced by the college students from online teaching following suggestions are given:

- Government as well as private telecom operators and broad band service providers should move towards high speed data networks and offer facilities to students like additional data, free internet, subsidised package etc.
- Software such as video chat platforms and even VR applications can be used to create personal touch and clarify the doubts. Again small assignments, discussion on course materials, clearing points of confusion may be emphasised.
- To reduce health issues teachers should set class schedule, work with students to set milestones and help them to design a routine to meet those goals. Again, teacher should listen to the students about their obstacles that hinder their ability to study.
- Toenhance concentration,courseshould have coherent structure,well organized materials blended with challenges and adventures, videos, storytelling, gamified solutions and simulators
- Students as well as parents should be given chance to communicate their problems with teachers through e-mail, discussion groups, chat room office hours, cell phones, and even text messaging.
- To avoid the technical issues simple and comprehensive help page can be adopted with due care to sound system and try out on several smart phones, browser and operating systems
- Government or college should provide digital equipment freely to the students who cannot afford it
- Students need to accept the new learning circumstances with positive attitude and open mind and heart to avoid the stress and better prepare themselves for classes
- Students need to set small goals for themselves throughout the day and give themselves rewards for completing certain tasks
- Students should develop strong self-discipline**,** culture of independence,

internal motivation, responsibility, a certain level of maturity and time management skills.

- Students should see that the learning environment is conducive. Lighting in the room should be at least as bright as the computer screen to avoid eyestrain and seating arrangement should be comfortable
- Uninstall any computer games to avoid temptation

Conclusion

Teaching and learning in an online learning environment happens differently than in the traditional classroom and can present new challenges to both teachers and students. If the suggestions given above are taken care of as policy measures and if the students adapt themselves to the online learning environment with positive mind set, then the digital transformation will see successful endeavours in future.

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Appendix

Table 1: Educational profile of respondents

Educational Profile	No. of respondents	Percentage of respondents
PU Students	20	17
Degree Students	40	33
Engineering Students	30	25
Diploma Students	10	8
Post-Graduation Students	20	17
Total	120	100

Source :Survey Data

Table2: Gender of Respondents

Gender	No. of respondents	Percentage of respondents
Male	64	53
Female	56	47
Total	120	100

Source :Survey Data

Table3: Area of residence of Respondents

Area	No.of respondents	Percentage of respondents
Rural	35	29
Semi Urban	52	43
Urban	33	28
Total	120	100

Source :Survey Data

Table 4:Apps used for online class

Apps	No. of respondents	Percentage of respondents
ZOOM	34	28
Google Meet	10	8
Google Classroom	22	18
Moodle	25	21
Skype	8	7
AZ Recorder	9	8
Others including social media	12	10
Total	120	100

Source :Survey Data

Table 5: Problems faced by the respondents from online learning

Sr. No	Problems	Very High	High	Average	Low	Very low	Total	Mean scoring	Rank
1.	Not having own personal PC,Laptop,Smart phone etc	50	20	36	10	4	120	3.85	7
2.	Network problem	90	25	2	2	1	120	4.68	1
3.	Power supply problem	55	23	35	5	2	120	4.03	6
4.	Health problems like head ache, eye problem, dozing etc	85	20	12	2	1	120	4.55	3
5.	No personal touch	87	24	5	3	1	120	4.61	2
6.	No effective doubt clarification	70	30	8	7	5	120	4.28	5
7.	Lack of concentration	75	28	10	5	2	120	4.41	4
8.	Thundering and lightening	35	8	25	20	32	120	2.95	11
9.	Lack of family support	15	10	30	25	40	120	2.46	12
10.	Financial problem	45	30	28	15	2	120	3.84	8
11.	Operating problem	25	23	41	15	16	120	3.22	10
12.	May lead to addiction to mobile	45	32	25	10	8	120	3.8	9

Source :Survey Data

Table 6: Chi Square Test showing association between place of residence and problems faced by the college students from online learning

Area	Problems faced by the college students from online learning						Chi Square Test Value
	Very High	High	Average	Low	Very low	No.of respondents	
Rural	29	6	-	-	-	35	64.71
Semi Urban	6	11	15	20	-	52	
Urban	5	7	15	4	2	33	
Total	40	24	30	24	2	120	

Source :Survey Data

Chi Square Test Value= $\sum\frac{(O-E)^2}{E}$ **= 64.71**

Degree of Freedom v = (r-1)(c-1)

=(3-1)(5-1)

=8

For v=8; Chi Square Table Value at 5% level of significance is =15.507

EFFECTS OF COVID-19 PANDEMIC LOCKDOWN ON AVIFAUNAL DIVERSITY OFSARANGPURI LAKE, ARVI, DISTRICT-WARDHA(M.S) INDIA

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ABSTRACT

Birds serve as one of the best environmental indicators. Their presence anywhere speaks volumes of enviorment as to whether all is well or there is something amiss. The presence of birds also shows the biological importance or going technical, the biodiversity significance of that area. Birds are found throughout the world. At approximately all altitudes and in almost every climate. The birds have great efficiency to fly. Sarangpuri lake inhabits several local and migratory species. Reduction in water retention in this lake in summer has affected Avifauna diversity in the study area. The study was based on visual observation. Present study deals with effects of covid-19 on diversity of avifaunal population in Sarangpuri lake, Arvi, in Wardha District (Maharashtra) India. It is observed that there that there is tremendous increase in bird population and its diversity due to decrease in pollution. It was observed that the, out of 52 species, 15 species were categorized as insectivorous, 14 species carnivorous, 09 species omnivorous, 05 species frugivorous, 04 species piscivorous, 03 species granivorous. 01 species nector feeder and only one species was observed as herbivorous. 36 species were common, while 13 were less common and 04 were recorded as rare in occurrence. Total 52 species of birds are observed in Sarangpuri lake, Arvi, during COVID-19 pandemic. Same number of species were found in previous study but population is found to be increased in the present study.

Keywords- *COVID-19, Effects, Lockdown period, Sarangpuri lake, Avifaunal diversity*

Introduction

The birds are very significant component of biodiversity and are the most important indicators of the balanced living systems. The population of birds in a particular ecosystem is depending on the composition of the ecosystem, environmental condition and seasonal variation. Many species of birds respond to small changes in habitat structure and composition, therefore they serve as good indicators of changes in the environment (Robert et al, 2001). Out of more than 9000 bird species of the world, the Indian subcontinents contains 1300 species or over 13% of the Worlds bird species (Grimmet et al, 2004). Wetlands are one of the most threatened habitats because of their vulnerability and attractiveness for their development (Hollis et al, 1988). India has a diverse has a diverse range of wetland types that harbor not variety of breeding resident species of birds, but also attracts a number of water fowl breeding in Central and North Asia in Winter.

One such important ecosystem in Central India is Wardha district of Maharashtra state. Sarangpuri lake is small having tropical wet and dry climate. Summers are extremely hot lasting from March to June. The maximum temperature occurring in May. Winter lasts from November to January. It receives an annual rainfall of 1,260 mm from monsoon rains during June to September. Sarangpuri lake has biodiversity rich ecosystems and harbors a variety of local as well as migratory birds due to abundant supply of food throughout year in the form of worms, crustaceans, insects, molluscs as well as aquatic weeds. The city harbors different kinds of aquatic as well as terrestrial weeds in its catchment area of Sarangpuri lake which support a large number of fauna on which the bird thrive very well.

The earlier studies on birds were undertaken by investigator like Wadatkar and Kasambe (2002) studied the bird of Pohara- Malkhed forest reserve, Yardi et al, (2004) studied on birds of Salimali lake, Aurangabad, Kulkarni et al, (2005) studied on birds in and around Nanded, Maharashtra. It has been recorded that this region of Vidarbha is lagging behind the bird studies with respect to various reservoirs. The present investigation was carried out 52 species of birds to effect of COVID-19

pandemic on Avifauna diversity of Sarangpuri lake, Arvi, District Wardha (M.S) India.

Study area-Sarangpuri Lake is 3km away from Arvi. Arvi is a city and municipal council in the Wardha district in the state of Maharashtra. India with geographical coordinates of in North and in East. It is positioned at 20.59n and 79.14E. Arvi has an approximate altitude of 828 meters. The town is getting the piped water supply since year 1918 and the source of water supply is a storage tank known as Sarangpuri lake. Total catchment area of lake is 254 acres around three sides of reservoir and the average rainfall 1008 mm .Its Water storing capacity is1.64mm3. Due to abundant food availability throughout the year in this area in the form of fruits, worms, crustaceans and insects etc. The lake always attracts a large number of birds throughout the year.

Material and Methods

Studies were made throughout the year from June 2019 to May 2020 for preparing a check list of birds weekly visits to the sites. The birds are recorded by line transect method (Barnham et al, 1980) as well as by visual observations. Binoculars were used for bird watching. Bird population was observed and documented every week in the early morning hours 7.00am to 10.00am and in the evening time when the birds are most active. Some visits were also made in afternoon to check the activities of avifauna at different times. The birds were identified and classified on the basis of books authored by Salim Ali (2002), Bhat Harish and PramodSubbarao (2006) and Pande et al, (2003). The scientific and local names were ascertained based on the key of Manakadam and Pittie (2001). Status of each species is categorized as Resident, Resident migratory and Migratory. A check-list is prepared as per Abdulali (1981) and Gaikwadetai, (1997).

Result and Discussion

In the present investigation, 52 species of birds were observed in and around the Sarangpuri lake. The birds have been categories in various groups based on their habitat residential, common, winter visitor and Uncommon. Similarly, Thakar et ai., (2010) observed a total 104 species of birds on and around the two reservoir of Kheda. Gorghate et al., (2012) observed 25 species of birds in Siregaonlake.

It was observed that the, out of 52 species, 15 species were categorized as insectivorous, 14 species carnivorous, 09 species omnivorous, 05 species frugivorous, 04 species piscivorous, 03 species granivorous. 01 species nector feeder and only one species was observed as herbivorous. 36 species were common, while 13 were less common and 04 were recorded as rare in occurrence.

Species like Little Grebe, Herron, Egret, Stork, Lapwing, kite shrike and black winged stilt were observed to feed upon aquatic insects, molluscs, crustaceans, frogs, tadpoles and fishes and were categorized as carnivorous. Piscivorous birds observed were kingfisher. Spot bill duck was recorded as herbivorous species feeding on shoots of aquatic weed. Granivorous birds like Munia and Dove were observed to feed upon grass seeds, weed seeds, crop grains etc. Birds like Barbet, Parakeet, and Pigeon were observed to feed upon wild figs, fruits, berries, fruit buds and were categorized as frugivorous birds. Insectivores birds observed were Small green bee eater, Cuckoo, Hoopoe, Woodpecker, Wagtail, Drongo, Paradise flycatcher, Warber and Magpie Robin. Omnivorous birds feeding upon insects, worms molluscs, grains, fruits and shoots of aquatic plants were Indian tree pie, Babbler, Blue Rock Pigeon, Bulbul, Koel, Myna and White breasted waterhen. Two nectar feeder species were Purple sunbird and Purple rumped sunbird feeding upon pollen grains from variety of flowers.

In present investigation, the maximum bird species were recorded during winter seasion and lockdown period, early monsoon while less number of species was observed during late summer. Keeping in view the varied avifauna recorded, steps should take for proper maintenance and beautification of the reservoir, so as to preserve the biodiversity of this reservoir.

The studies of such kind can be utilized for assessing the biological wealth of the specific region. The large no. of species of birds indicates that the reservoir is rich in aquatic insect and other large larvae, tadpoles, worms,

crustaceans, flies midges, beetles, snail, Zooplankton and phytoplankton. The migratory birds like Common teals, Common pochardWegion, Gargeny prefer shoots, Tubers and Seeds of aquatic plants, aquatic weeds indicating their abundance. (Ali, 1996) Sarangpuri lake area was found to be good spot for bird community. As like other lakes Sarangpuri lake is rich in bird diversity and represented in table 1.1

Kulkarni et al., (2005) reported 151 species of birds from Nanded division. Sahu and Dutta (2005) recorded 39 species of birds from Mayurbhanj district, Orissa. Qadri (1989) observed 13 avian species during 1985-87 from Hokersar wetland. Wadalkar and Kasambe (2002) reported 171 species of birds from Pohara-Malkhed reserved forest, Amravati. Kurhade (2010) recorded avian diversity of 208 different species from Jaikwadi Water Reservior, Maharashtra.

In present investigation Carnivorous and Insectivorous birds found most abundant in the lake during lockdown period. Though Sarangpuri lake is rich in Avianfauna diversity and population throughout year but bird population was found to be increased during lockdown period of COVID-19 due to decreased pollution of water because of decreased human activities during this period.

Table 1.1 List of birds observed in Sarangpuri lake during 2019-2020

Sr. no.	Zoological name	Comman name	Species
1	Tachybaptusruficollis	Little Grebe	Carnivorous
2	ArdeaPurpurea	Purple Heron	Carnivorous
3	Ardeolagrayii	Pond Heron	Carnivorous
4	Bubulcus ibis	Cattle Egret	Carnivorous
5	Ardea alba	Large Egret	Carnivorous
6	Egrettagarzetta	Little Egret	Carnivorous
7	Ciconiaepiscopus	Whitenacked stork	carnivorous
8	Ephippiorhyncusasiaticus	Blacknacked stork	Carnivorous
9	Vanellusindicus	Redwattled lapwing	Carnivorous
10	Milvusmigransgovinda	Pariah kite	Carnivorous
11	Accipiter badius	Shikra	Carnivorous
12	Elanuscaeruleus	Black shouldered kite	Carnivorous
13	Himantopushimantopus	Blackwinged Stilt	Carnivorous
14	Laniusschach	Rufosbacked shrike	Carnivorous
15	Cerylerudis	Lesser pied Kingfisher	Piscivorous
16	Alcedoatthis	Small blue Kingfisher	Piscivorous
17	Phalacrocoraxniger	Little Cormorant	Piscivorous
18	Sterna aurentia	Indian River Tern	Piscivorous
19	AnasPoecilorhynca	Spotbill Duck	Herbivorous
20	Streptopeliachinensi	Spotted Dove	Granivorous
21	Lonchurapunctulata	Spotted Munia	Granivorous
22	Streptopeliasenegalensis	Little brown Dove	Granivorous
23	Megalaimahaemacephala	Crimsonbreasted Barber	Frugivorous
24	Treronphoenicoptera	Comman Green Pigeon	Frugivorous
25	Psittacullakrameri	Roseringed Parakeet	Frugivorous
26	Psittaculla eupatrid	Alexandrine Parakeet	Frugivorous
27	Psittaculacyanocephala	Blossomheaded Parakeet	Frugivorous
28	Meropsorientalis	Small Green Bee Eeater	Insectivorous
29	Clamatorjacobinu	Pied Crested Cuckoo	Insectivorous
30	Coraciasbenghaiensis	Indian Roller	Insectivorous
31	Upupaepops	Hoopoe	Insectivorous
32	Hirundosmithii	Wiretailed Swallow	Insectivorous
33	Picoidesmahrattensis	YellowfrontedpiedWoodpecker	Insectivorous
34	Aegithinatiphia	Common Iora	Insectivorous
35	Saxicoloidesfulicata	Indian Robin	Insectivorous
36	Motacillaflava	Yellow Wagtail	Insectivorous
37	Motacilla alba	White Wagtail	Insectivorous
38	Dicrurusadsimilis	Black Drongo	Insectivorous
39	Terpsiphone Paradise	Paradise Flycatcher	Insectivorous

40	Cisticolajuncidis	Streaked Fantail Warbler	Insectivorous
41	PriniaSocialis	Ashy Wren-Warber	Insectivorous
42	Copsychussaularis	Magpie Robin	Insectivorous
43	Dendrocitlavagabunda	Indian Tree Pie	Omnivorous
44	Turdoidesmalcolmi	Large Gray Babler	Omnivorous
45	Sturnuspagodarum	Black Headed Myna	Omnivorous
46	Columba livia	Blue Rock Pigeon	Omnivorous
47	Eremopterixgrisea	Ashycrowned Finch-Lark	Omnivorous
48	Pycnonotuscafer	Redvanted Bulbul	Omnivorous
49	Eudynamysscolopacea	Koel	Omnivorous
50	Acridotherestristis	Common Myna	Omnivorous
51	Amauronisphoenicurus	WhitebreastedWaterhen	Omnivorous
52	Nectariniaasiatica	Purple Sunbird	Nector Feeding

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ANXIETY AND ACHIEVEMENT MOTIVATION: PSYCHOLOGICAL EFFECT DURING COVID-19 ON SPORTS PERSONS

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ABSTRACT

This study review and suggests that the selection trails and participation in sports with respect to anxiety and achievement motivation during this COVID-19 pandemic phase many of the national and international sports event have been postponed. It is important to explore the psychological aspect of sports persons in this situation. In these study 20 male players selected as subject, Data collected through online mode. The survey asks players about experience, feelings and thoughts related with anxieties during participation and selection trails during these study process. The results will be useful to address sports persons and psychological effect during covid-19 with respect to anxiety and achievement motivation.

Keyword: *Covid-19, Sports, Physical Education, Anxiety, Achievement Motivation.*

Introduction

On 11th March 2020, the World Health Organization declared that the COVID-19 novelCoronavirus had become a global pandemic. (Reade & Singleton, 2020)In this pandemic situation no vaccine is available many of the country adopt the lockdown concept in this situation, need to increase the immune system through physical exercises and maintain the physical health. To safeguard the health of athletes and others involved, most major sporting events at international, regional and national levels have been cancelled or postponed. The Olympics and Paralympics, for the first time in the history of the modern games, have been postponed. (Daniela Bas, Melissa Martin, Carol Pollack and Robert Venne, 2020)

During this period many research published, sharing information and exchanges the ideas to recover from this spread of virus. But there is serious issue to maintain and develop physical fitness and wellness. Physical Education has long been the centerpiece of an ideological struggle in education (Sprake, Andrew & Temple, C., 2016) and achievement motivation is the essential part for academic attainment as well as on the playfield. (Oguntayo, Rotimi&Segun-MartinsIO, 2010).Therefore the need to focus on this important area concern for psychologist and efforts are being made for understanding the relationship and psychological effect of anxiety and achievement motivation during COVID-19 pandemic situation on the players willingness to participate in sports and selection trails.

Definition

"The ***achievement motivation*** is conceived as a latent disposition which is manifested in over striving only when the individual perceives performance as instrument to a sense of personal accomplishment."-**Atkinson & Feather**

"***Anxiety*** is the tense, unsetting anticipation of a threatening but vague event;a feeling of uneasy suspense."-**Stanley Rachman**

"***Social anxiety*** involves feelings of apprehension, self-consciousness, and emotional distress in anticipated or actual social situations."- **Harold Leitenberg**

Hypothesis

Sport competitive anxiety and achievement motivation among players will differ significantly on the basis of their level of for participation in sports and for selection trails in sports during COVID-19 pandemic situation and post lockdown period.

Methodology

The following steps were taken into consideration for conduct the present study.

Sample

For the present study, we were faced with the challenge of reaching defined population and on the spot collection of data. Therefore, a web-based data collection method through

emailwas implemented on 20 male inter-collegiate level players of SantGadge Baba Amravati University;Amravatiwas selected as sample through the simple random method.

Tools

For the study present study to assess the anxiety and achievement motivation of the players standardizes, Sport Competitive Anxiety (SCAT) andAchievement Motivation Test (ACMT) inventory were used.

Procedure

For the present study 20 male inter-collegiate level players of SantGadge Baba Amravati University, Amravati was selected as sample through the simple random method. After explaining and obtaining consent from participants through email web-based data collection method used. Sport Competitive Anxiety (SCAT) and Achievement Motivation Test (ACMT) questionnaire was administered to selected subjects as per their connivance and availability. To compare Sport Competitive Anxiety and Achievement Motivation of players the responses were compiled and proceed for further analysis i.e.t-test to determine the significant difference and interpretation. Result depicted in table 1 and 2 respectively.

Analysis of Data

Table-1: Achievement Motivation Test (ACMT)

Condition	Mean	Standard Deviation	Mean Difference	Standard Error of Mean difference	t-ratio
For Participation in Sports	18.95	4.87	1.0	1.5627	0.639[@]
For selection trailsin Sports	17.95	4.097			

[@] **Not Significant at 0.05 level** **tabulated $t_{.05}(19) = 2.093$**

It is evidence from the finding of above table that there is no significant Mean difference in the variable of Achievement Motivation test (ACMT)

For Participation in Sports and For selection trails in Sports, because the calculated t-value of 0.639 is quite less than that of tabulated t-value of 2.093, which is required to be significant at .05 level for the 19 degree of freedom. Though Mean difference is occur 1, but this Mean difference is not statistically significant. The difference between the Means of these two conditions has been shown graphically in figure no.1.

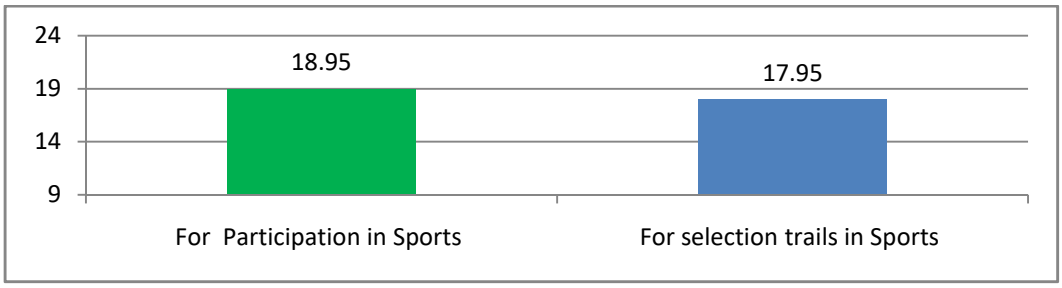

Figure-1: Graphical representation of Achievement Motivation for participation in sports and for selection trails in sports

Table-2: Sports Competitive Anxiety Test (SCAT)

Condition	Mean	Standard Deviation	Mean Difference	Standard Error of Mean difference	t-ratio
For Participation in Sports	18.3	4.35	0.95	1.2611	0.753@
For selection trails in Sports	19.25	2.88			

@ Not Significant at0.05 level **tabulated t .05 (19) =2.093**

It is evidence from the finding of above table that there is no significant Mean difference in the variable of Sports Competitive Anxiety Test (SCAT) For Participation in Sports and during For selection trails in Sports, because the calculated t-value of 0.753 is quite less than that of tabulated t-value of 2.093, which is required to be significant at .05 level for the 19 degree of freedom. Though Mean difference is occur 0.95, but this Mean difference is not statistically significant. The difference between the Means of these two conditions has been shown graphically in figure no.2.

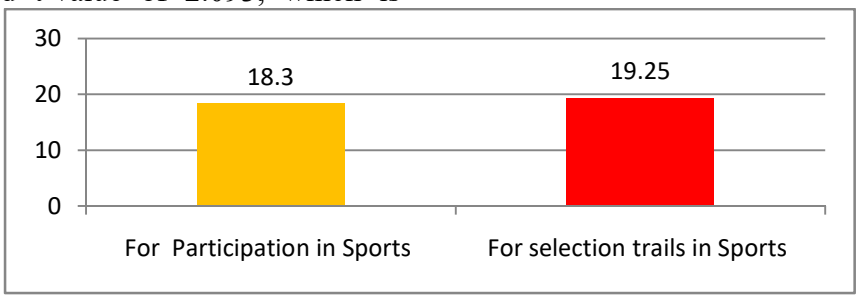

Figure-2: Graphical representation of Sports Competitive Anxiety for participation in sports and for selection trails in sports.

On the basis of analysis of data, following results are obtained:

Result

Anxiety and Achievement Motivation of inter collegiate players was found to be,no significant difference in anxiety level and achievement motivation of players for participation in sports and for selection trails in sports duringthese COIVD-19 pandemic phases it has been seen that anxiety and achievement motivation level during willingness to participate in sports was quite equal to for selection trails in sports.

Discussion

During this covid-19 pandemic situation and various conditions of a players such as mental stress, environmental stress, demanding for good performance, prance of spectators, etc lead to decreases excitement through which neuromuscular co-ordination distorted an players feel uncomfortable, hence, such results has found in the present study. It shows that anxiety level and achievement motivation of players depends on the physical, emotional, social and psychological well-being which is integral part of positive mental health.

Conclusion

On the basis of results, concluded that there was no significant difference between anxiety and achievement motivation with respect to willingness of sports persons for participation in sports and selection trails during this COVID-19 pandemic situation.

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IMPACT OF COVID -19 ON STUDENTS ONLINE EDUCATION WITH SPECIAL REFERENCE TO UG STUDENTS OF MANGALORE UNIVERSITY

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ABSTRACT

The world is battling COVID-19 and economies across the globe have declared a lockdown. Work from home (WFH) has become the norm, especially for service organizations.Also, the research institutions had to be temporarily shut down according to government orders. This paper attempts to analyze the impact of Covid-19 on student's online education. Many countries have decided to close schools, colleges and universities.Many families around the world feel the extreme short-term disruption: home schooling is not only a huge shock to the income of the parents but also to the social life and learning of the children. Teaching is moving online. Student assessments are also moving online, with a lot of trial and error and uncertainty for everyone. Network issues, lack of training, and lack of awareness were stated to be the major challenges faced by the students during online classes. Lack of awareness was stated to be the most important reason by those who did not adopt online classes followed by lack of interest and doubts regarding the usefulness of online class. Less attendance, lack of personal touch, and lack of interaction due to connectivity issues were found to be the significant drawbacks of online classes. The study also suggested the ways to overcome the above challenges faced by the students. The data has been collected through google forms with the help of a well-structured questionnaire. The major factors and interpretations are then discussed, providing a clear picture of the findings, after which the conclusion of study is drawn.

Keywords: *COVID-19, online classes, Impact on online education, students' challenges.*

Introduction

Internet was in development stage in early 1990s compared to now and the conventional wisdom about the online courses was different in 1990s than today. We are in the 21st century where everything is possible and acceptable. For example, students are studying at home/work place utilizing computer which is called online schooling/learning. According to a report of the Ministry of Human Resource Development, Government of India conducted a survey on higher education and observed that there are 993 universities, 39931 Colleges and 10725 Stand Alone Institutions listed on their portal, which contribute to education. The current pandemic is not only seen affecting the health of the citizens in the country but is also seen hindering various industries and shaking them to their roots. The national lockdown and the ascending health crisis were striking the education of the students as well, with their universities being shut and their syllabi stranded, until the industry decided to initiate a revolution instead. Reinventing their radicles and making a conscious choice to grow even in the time of crisis, the universities decided to digitalise the sector. The educational reform in India in the COVID-19 era seems to be a live example of how need truly is the mother of invention or reinvention, in this scenario. Allowing educational institutions to adopt online learning and infuse a virtual study culture, the pandemic is already steering the sector forward with technological innovation and advancements.

Objectives of the Study

1. To study the impact of covid- 19 on students' online education.
2. To analyze the advantages and disadvantages of online education.
3. To examine the challenges faced by the students while attending online classes.

Research Methodology

The present study is based on primary and secondary data. The data has been collected through google forms with the help of a well-structured questionnaire. The study has been conducted among the UG Students of Mangalore University. The secondary data has been collected from the research articles and journals.

Review of literature

According to Amit KumarArora and Srinivasan R (2020) from the study they observed that students while attending the online classes they face the problems like Lack of awareness, lack of interest and doubts regarding the usefulness of online classes. Less attendance, lack of personal touch, and lack of interaction due to connectivity issues were found to be the significant drawbacks of virtual classes.

According to Thierry Volery and Deborah Lord from the study they observed that The Internet is a major technological advancement reshaping not only our society but also that of universities worldwide. Online education has generated tremendous excitement both inside and outside higher education. In the light of this, universities have to capitalise on the Internet for teaching, and one progressive development of this is the use of online delivery methods.

According to Dhirendra Kumar (October 2010)Online method of education can be a highly effective alternative method of education for the students who are matured, self-disciplined and motivated, well organized and having high degree of time management skills, but it is an inappropriate learning environment for more dependent learners and has difficulty assuming responsibilities required by the online courses.

Impact of Covid-19 on student's online education

The switch to online education has been ensuring that students suffer no loss of studies and their progress is being tracked simultaneously with timely evaluation. It is probably a first for India to experiment with the education system and make a paradigm shift to the virtual world, blending classrooms with online learning. Boosting retention of the syllabus by using innovative technology, the universities are also engaging students to learn by choice and not just by their physical presence in a classroom. One of the opportunities to focus amidst the crisis is the virtual internships, which are allowing the students to go beyond their curriculum and learn about the practicality of their professions. Another value addition for the field of education and thus students is the way universities are encouraging them to observe the current scenario and understand the need to automate. This will further allow them to digitalise their fields in the near future along with preparing them for any such situations. The pandemic has been working as a catalyst for the educational institutions to grow and opt for platforms and techniques, they haven't used before. The times are changing, and the theories have always pointed out towards the survival of the fittest. School closures impact not only students, teachers, and families but have far-reaching economic and societal consequences. School closures in response to the pandemic have shed light on various social and economic issues, including student debt, digital learning, food insecurity ,and homelessness ,as well as access to childcare, health, housing, internet, and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work.

Advantages of Online education for students

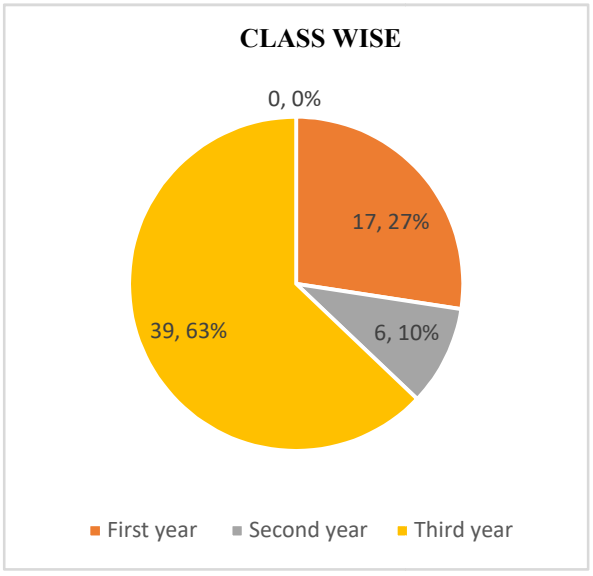
- The ability to learn using different online tools and methods.
- There is no disruption in learning because of the pandemic.
- Students Listening to recorded and live conversations and working at their own speed.
- Convenience is in relation to study location, time, course duration, etc.
- Less Expensive because courses cost less than regular classroom academic or trade school course.
- Technology -students can work on the course just about anywhere they have computer access. Online courses provide an opportunity to learn new technologies and practicing the use of office software, Internet, etc.
- Additional Benefits to the students i.e. they can work with classmates not only from all over the world. but could be around the world. No discrimination among students due to race,

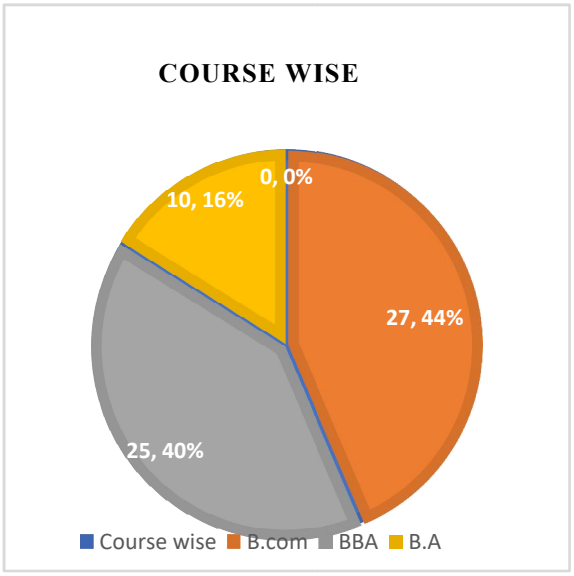
sex, sexual orientation, religion, nationality, age, dress, physical appearance, etc.

Disadvantages

- There is a Lack of free-flowing conversations, debates, and discussions.
- Technological difficulties related to weak devices or access to the internet.
- Getting used to learning and being evaluated online.
- Studying while living at home, with family and other distractions.
- There is a Limited Social Interaction i.e. limited opportunity to interact face-to-face to professors and other students.
- Technology Cost and Scheduling: Some of the key elements are – Computer boot-up time, software programs, and connection to Internet.

Data Analysis And Interpretation



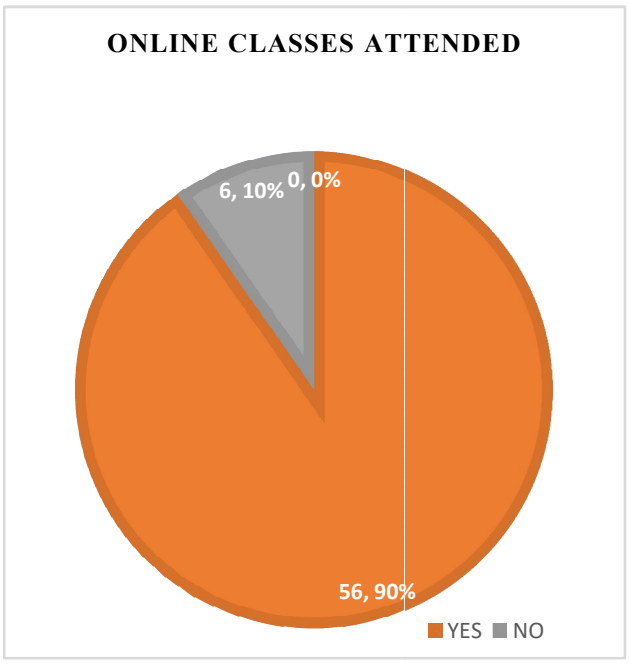


Class wise/Year wise Respondents

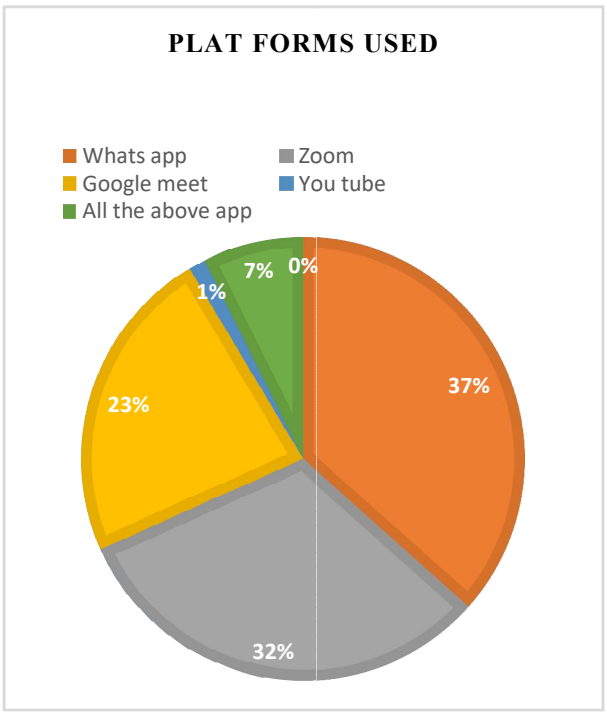
The study involved 27% student respondents from the first year,10%students from the second year and 63% students from the third year.

Course wise Respondents

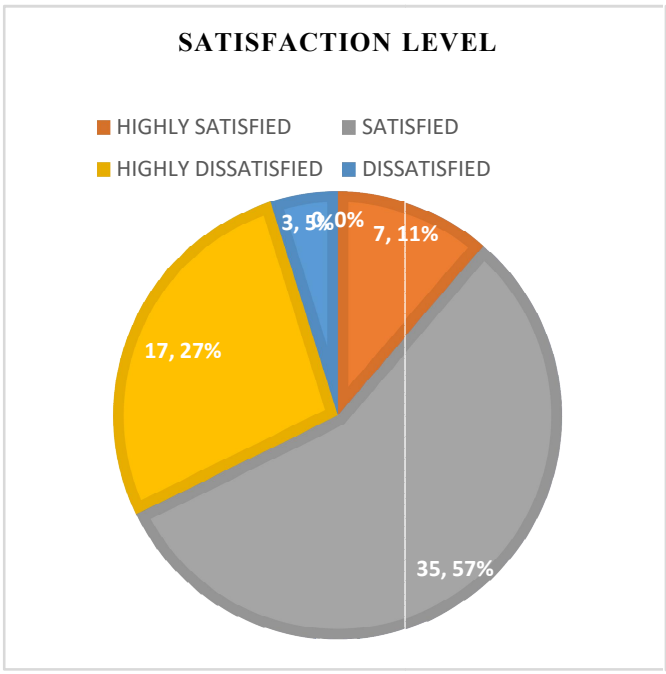
The study shows that 44%students from the B.com, 40 %students from BBA and 16% Students from the Arts section.



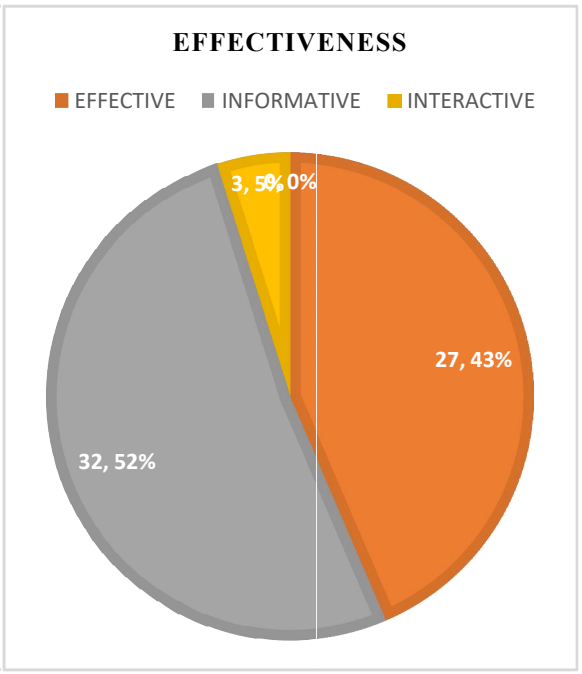
From the study it is observed that 90% students attended online classes and 10% students have not attended.



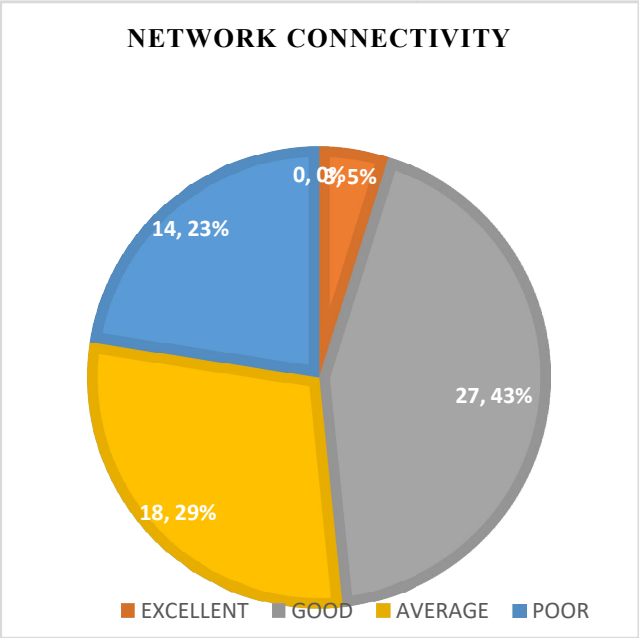
From the study it was found that 37% student respondents used whats app, 32% students used Zoom app,23% students used Google meet ,1% Student used you tube and all the apps used by 7% students.



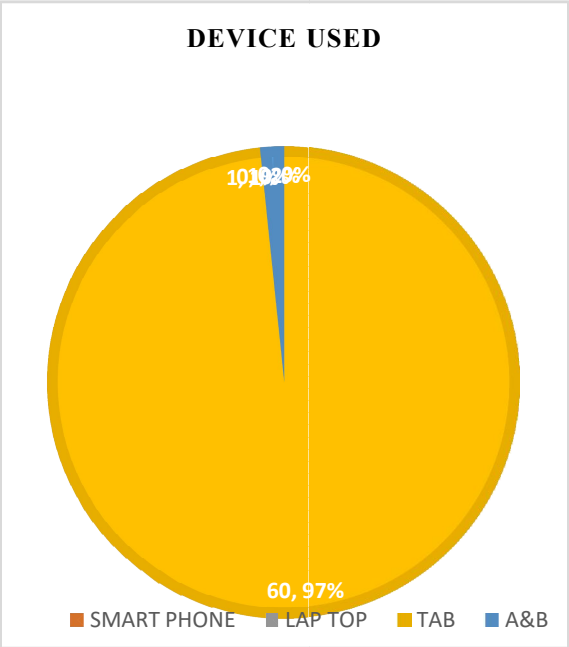
The study revealed that 11% students highly satisfied,57% students saisfied,27% students highly dissatisfied and 5% students dissatisfied about online class.



The study shows that 43%students opinion is online class is effective , 52%students informative and 5% students opinion is interactive.



The study shows that network connectivity during online classes is excellent for 5% students, good for43%students, average for 23% students and poor for 5% students.



The study shows that 97% students used smart phones for the online class, only 2% person used laptop and nobody used tab and 2% person used all the said devices.

Major Findings

- From the study it was observed that 90% of the students attended the online classes.
- The study shows that 97% of the students used smart phones during the online classes.
- From the study it revealed that Only 19% of the students highly satisfied the teaching through online.
- The study shows that 55% student's opinion is that face to face teaching cannot be replaced by online teaching.
- Lack of self discipline, suitable learning materials, or good learning environments when they are self isolated at home.
- Online education is not effective as face to face teaching.
- Because of poor network connectivity students are not able to access it.
- Students like traditional form of class i.e. face to face teaching instead online classes.
- Online class is very difficult to learn.
- Lack of interaction.
- Difficult to understand the practical classes.
- Real class room teaching is better than the online classes.

Suggestions

By giving importance for learning colleges re-open should postpone rather than skipping the exams. All the government colleges they may not have proper facilities to conduct online exams for the students. faculty need to prepare Planbefore classes start and inform students in advance and dividing the teaching content into smaller units to help the students.Body language and facial expressions are subject to restrictions in online teaching, as it is difficult to use these tools via screens, and only "voice" could be fully functional.Therefore, in online teaching, faculty should appropriately slow down their speech to allow students to capture key knowledge points.Before the class, the faculty should communicate fully with the teaching assistants to ensure that they understand each class' objectives, knowledge framework and teaching activities.Faculty should provide feedback to students' assignments and know the learning levels of students and should use a discussion section for students to exchange their understanding based on their reading.faculty should use various methods to moderately modifystudents' homework and reading requirements to

strengthen students' active learning outside of class by combining online learning and offline self learning effectively.

Conclusion

Due to students' characteristics of less concentration in online learning, it is necessary to adjust the teaching speed in order to ensure effective delivery of teaching. Faculty and teaching assistants must provide timely feedback to the students, including online video tutoring and post-class email guidance. principle of good participationis necessary to adopt some measures to improve the degree and depth of students' class participation. Furthermore, is implemented quickly during the outbreak of COVID-19, students' anxiety needs to be relieved in various ways to ensure that they can actively and effectively engage in online learning.

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PSYCHOLOGICAL EFFECT OF COVID–19 ON ELITE SPORT PLAYERS

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ABSTRACT

Today major sports events around the world are postponed or cancelled due to covid–19 pandemic. The mostly elite sports players are directly effected on mentalhealth disorders, which related with psychological matter. The author focuses this Paper of Psychological effects of covid–19 on elite sports players.

keywords: *Psychological, Elite Players, Mental Health Disorders, covid–19, Olympic Games.*

Introduction

Today we are going to very difficult time due to covid-19. The mankind are goes to gathered lot of sad experience during this periods. The covid-19.(corona virus) moved with massively spread across nations, cities and villages. The complete shutdown of economy. Till now the school and colleges are not in proper functioning. The play field and stadium is totally closed, no any national and international sports competition should be organized around the globe. We have never imagined such type of horrible situation, which the death ratio is increased day by day. We have never seen loss of livelihoods when poor are still suffering and loss his /her life. Today due to corona virus disease, covid-19, a negative effects spread on sports. The several national and international sports events postponed or canceled such as 2020 Tokyo Olympic, Paralympics'Games, European Soccer Championship, Tournament in India like IPL etc. Even T-20 World cupCricket Tournament is scheduled to take place in Australia from October 18–November 2015, thrown into doubt by the corona virus, covid-19 pandemic, because the International cricket council (ICC) is try to pushed back this tournament until 2021. Presently the spread of covid-19is directly effects on the mental health of elite and professional players around the world. The elite players are anxious and depressed to their career, because due to the current pandemic situation most of tournaments has now been cancelled or postponed. The many athletes are shocked due to injuries or retirement such as 40, years old Chirrs Gayle ageing elite cricket star of west-indies was hoping to bow of International cricket arena. Mental health disorders is related to psychological behavior includes depression , anxiety, stress, panic,fear and eating disorders etc. presently data shows that up to 35 % ofelite athletes suffer from a mental health crisis which may manifest as stress, eating disorders, burnout or depression and anxiety. Today sports is directly related to professionalism and career development process. The elite players are earned lot of money from various tournaments, advertisement, sponsorships, various prize money, awards and rewards etc. The new talent players are try to build their career through International tournaments such as Olympic qualified athletes or players who has selected to team game for participation the international tournament i.e. World Cup T-20 cricket tournament, EuropeanSoccer Champion, IPL etc. So, at present situation the pandemic covid-19 are directly affected to the elite players of their profession,becausethey are not to earned money or focused in stadium in front of spectators. Hence the players community of around the world are totally isolated in home and directly effected in mental health disorders such as stress, panic anxiety, depression .etc.

Psychology is the science of human behavior, which combination of two Greek words- " Psyche'' means "Soul'' and "Loges'' means "Science'', so it was defined as " Science of soul'' according to crow and crow " Psychology is the study of human behavior and human relationship''.The stress, anxiety, depression, panic and fear are related with mental health disorder or psychiatric disorders. The World Health Organization (WHO) states that "Mental health is an integral and essential component of health. Mental disorders means the condition and effect ofmind that related

with your thinking, feeling, mood and behavior. Mental disorders may be occasional or long- lasting (chronic), which effects your performance or ability and every day function. Due to pandemic covid-19 the psychological effects massively often to identified among the elite players around the globe. Following the causes of psychological effect of elite players are.

- The elite players spend many years forming an athletic identity.Due to covid-19 the 2020 Olympics, have been postponed, hence currently many thousands of elite players anxiety worldwide who are in depressed, because they are failed to produced his/ her athletic identity.
- The elite players who are already stressed and panic to their career due to injuries or retirement.
- Fear that elite players will be less physically fit full upcoming sports events, because the lack of proper practice and sports facilities.
- The elite players are in panic, because they are socially isolated, maintaining social distance around the world.
- The professional elite players are anxious and depressed about poor source of income.
- The elite players are panic and fear of speeding and increasing death ratio of corona virus, covid-19 around the world.
- The elite players are depressed because they are not obtained proper guideline of coaches.
- Loneliness is directly effects of the mental health of elite players, because they are automatically stressed and strain.
- Domesticviolence should be increased the anxiety of elite players.
- Currently the lack of job opportunity should increased the panic of elite players.
- Elite players are anxious about awards and rewards.
- Elite players are stressed about their proper diets and guide lines.

Conclusion

The coronavirus, covid-19 pandemic has spread worldwide. The million of people are affecting and spreading across 213 countries. The people of all ages can be infected by the new coronavirus, covid-19. It is concluded from the above details that pandemic covid-19 should be heavily effected by elite players from several psychological changes such as increased levels of loneliness, depression, fear, stress, anxiety, harmful alcohol and drug use and. Suicidal behavior, this psychological effects are reflected on present and future elite sports players.

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ROLE OF TATA STEEL AND SAIL IN THE ECONOMIC DEVELOPMENT OF INDIA

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ABSTRACT

Iron and Steel Industry is the 'key' of 'basic' industry of India. Rapid industrialization of the country requires rapid development of iron and steel industries. The development of agriculture, consumer goods industry, transport and communication facilities, machine and tools making industry, electrical machinery producing industry, etc. are all to depend on the development and expansion of iron and steel industries of the country.

Indian Steel Industry is the backbone of the economy, depicting the development and performance of the economy. Presently, India is the second largest producer of steel in the world and is improving it's efficiency to become the world leader. Thus, for the success of the Indian Steel Industry in the coming years depend on modernization and upgradation of technology, cost reduction and value-orientation of product portfolio. TATA Steel Ltd. and SAIL has dominated the economical, financial and non-financial aspects of the steel industry of India. The main objective of this paper is to clarify the efficiency of steel industry and the economic development in India. The data has been collected from primary and secondary sources and different statistical tools have been utilized for analysis and interpretation.

Key Words : *Steel Industry, Globalization, Economic Development.*

Introduction

Indian steel industry is the basic industry. Considering different industries, such as engineering, machine tools, electrical and similar others, iron and steel industry is the basic industry. These industries enhanced utilization of iron and steel. In that sense it may be clarified that the iron and steel industry is the mother industry. There is a close connection between the economic growth of GDP of a country and the amount of steel consumption. Therefore, the rapid growth of industrialization and economic development of a country mainly depends on the development of iron and steel industry.

Though production iron and steel is adequate to fulfill the domestic need, however, some quantity of steel is always required to be imported for fulfilling those grades and qualities which are required in small quantities, and so do not depend on setting up of production capacity. In the year 2010 crude steel produced 68.3 million tonnes and it grows to 106.5 million tonnes in 2018-19.

Global steel industry is in the best position in comparison to the last decades. The price has been increasing regularly. The demand for steel products are rapidly enhancing for coming years. The shares of steel industries are also in a high speed. The steel industry is celebrating its 9th consecutive years of growth in terms of supply and demand. And there is many more merger and acquisitions which showed some good results. It is marked that in 2018 world steel production has come to 1808.4 MT. However, steel production and consumption will be supported by continuous economic growth.

Literature Review

In India; politicians get the benefit from, and accordingly pay for sickness of industry. He has concluded that sickness law certainly provides several ways for the firm/stake holders to find advantages in sickness and thereby to get rid of their financial responsibility.

The production of steel in India has been growing up at a steady rate in the last few years. India is also assumed to have the best growth potential in the context of steel and is preceded only by China, which is the eminent steel producing and consuming country of the world. It is expected to become the second largest producer of crude steel in the world by 2018-19.

In the last few years, the rapid and stable growth of the demand side has also prompted domestic entrepreneurs to set up fresh Greenfield projects in different states of the country.

Objective of the Study

1. To study the trend in production of steel in SAIL and TATA steel.

2. To study the current status of SAIL and TATA Steel of India and contribution to GDP in India.

3. To highlights the performance of Indian steel industry

4. To highlight the increase in the economic development through TATA Steel and SAIL.

5. To present the global scenario of steel industry as well as the production and growth of steel industry in India and TATA Steel and SAIL.

Sources of the Data

The Steel being descriptive in nature mainly rely upon secondary data which are gathered from the Annual reports of TATA Steel and SAIL and different steel industries, published materials in the form of books, journals, websites and reports are relevant to the Study. To support the secondary information, primary data has been collected.

Research Methodology

The key objective of the study is understanding the efficiency of Steel Industry of two decades. Thus it is having the intention of finding the growth of steel industry in India and its related impact on different aspects such as production, sales and operating income, profit before and after tax, total assets, etc. The data have been accepted from Tata Steel and SAIL. For the data analysis used different statistical tools available.

Table - 1 : Top 10 Countries and TATA & SAIL Crude Steel Production in 2018-19

Rank	Countries	Production (million tonnes)
1	China	928.3
2	India	106.5 (TATA-12.70, SAIL-15.06)
3	Japan	104.3
4	United States	86.6
5	South Korea	72.5
6	Russia	71.7
7	Germany	42.4
8	Turkey	37.3
9	Brazil	34.9
10	Italy	24.5

Source: World Steel Association Annual Reports 2016-17

The above table 1 highlights the top 10 countries as well as TATA Steel and SAIL of highest steel produce in the world. China produced highest crude steel i.e. 928.3 million tonnes in 2018-19 which is 51.33% of the global total production. India is the second position in the world which produced 106.5 million tonnes i.e. 5.88% of the total production. Similarly, the third position is Japan in the world which produced 104.3 million tonnes.

Table - 2 : Crude Steel Production of World, China and India (TATA and SAIL) from 2010 to 2018

Year	World	China	India				
			Total	TATA	SAIL	% of TATA	% of SAIL
2010	1414	626.7	68.3	6.44	12.63	9.43	18.49
2011	1518	702	73.5	6.69	12.89	9.10	17.54
2012	1559	716.5	77.6	6 .97	12.40	8.98	15.98
2013	1649	822	81.3	7.94	12.38	9.74	15.19
2014	1665	822.7	86.5	8.93	12.88	10.32	14.89
2015	1620	803.8	89.4	9.07	12.84	10.14	14.36
2016	1630	808.4	95.6	9.09	12.38	9.51	12.95
2017	1730	870.2	101.5	11.68	13.86	11.93	14.15
2018	1808	928.3	106.5	12.70	15.06	11.92	14.14

Source: World Steel Association Annual Reports 2018-19

Table-2 shows the world, China and India's and SAIL and TATA crude steel production from 2010 to 2018. In 2010 world total crude steel produced 1414 million tonnes and it reached to 1808.4 million tonnes in 2018-19. SAIL produced 12.63 million tonnes in 2010 and it reaches to 15.06 million tonnes in 2018. TATA Steel produced 6.44 million tonnes in 2010 and it also increased to 12.70 million tonnes in 2018.

Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviatio	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
World	9	394	1414	1808	14593	1621.44	38.542	115.625	13369.02	-250	.717	.428	1.400
China	9	301	627	928	7101	789.00	30.736	92.208	8502.250	-405	.717	-.141	1.400
India	9	38	68	106	780	86.67	4.278	12.835	164.750	.174	.717	-1.054	1.400
Valid N (listwise)	9												

In the given descriptive statistics, Mean statistic of world steel is 1621.44 as well as std. Error is 38.542. China is the highest steel producer which indicates Mean statistic is789.00 and Std. Error 30.736. While India is second highest steel producer country point out Mean statistics 86.67 and Std. Error 4.278. The Std. Deviation has been 115.625 in the world, 92.208 in the China and 12.835 in India. The Variance is mentioned as 13369.028, 8502 and 164.750 respectively in World, China and India. The Skewness Std. Error and Kurtosis Std. Error has become .717 and 1.400 respectively.

From the above table 2 analysis the descriptive statistics shows SAIL mean value 49780.00 and std. Deviation 7720.701 and TATA steel mean value 44591.40 and std. Deviation was 14391.493. The model summary reveals R value .921a, R Square .848, std. Error of the estimate 3191.175. When change in statistics F value 44.681, df1 is 1 and df2 is 8 and significant of change is .000. From Anova test df is 1, Mean square shows 44.681 and significance .000b. Now, it noticed both company SAIL and TATA Saleable steel smoothly growing time to time.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	49780.00	7720.701	10
TATA	44591.40	14391.493	10

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.921[a]	.848	.829	3191.175	.848	44.681	1	8	.000

Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	455014262.883	1	455014262.883	44.681	.000[b]
	Residual	81468795.117	8	10183599.390		
	Total	536483058.000	9			

a. Dependent Variable: SAIL
b. Predictors: (Constant), TATA

Table-3 Sales and Other Operating Income (Net)(Rs. In Crores)

YEAR	SAIL	TATA
2010	44918.67	30187.02
2011	47964.57	34819.89
2012	45562.70	39101.47
2013	47580.99	42498.67
2014	46731.56	42367.78
2015	44469.84	43088.60
2016	50302.71	53675.42
2017	59446.81	61283.03
2018	67500.13	73016.00
Total	454477.98	420037.88
Average	50497.55	46670.78
Income correlation of SAIL and TATA = 0.56		

Source: Annual report of SAIL and TATA Steel

In the above table 3, it states that sales and other operating income (Net) of SAIL and TATA Steel companies. During the period of study total income of SAIL and TATA is Rs. 454477.98 crores and Rs.420037.88 crores. SAIL net income increased from Rs. 44918.67 crores to Rs. 67500.13 crores. It is 1.50 times increased of the study period. TATA has increased from Rs. 30187.02 crores to Rs. 73016.00 crores. . It also increased 2.42 times. The average income of SAIL Rs. 50497.55 crore and TATA Rs. 46670.78 crores. The sales and other operating incomes correlation of SAIL and TATA shows 0.56 which is accepted.

In the descriptive statistics mentions that, SAIL Mean value 49780.00 and Std. Deviation 7720.701 and TATA Mean value 44591.40 and Std. Deviation was 4391.493. From Model summary found that R is .921a, R square .898, Adjusted R square is .829, Std. Error of the Estimate 3191.175. When Change in Statistics, F value 44.681, df1 is 1, df2 is 8, significance F Change is .000. The Anova test found that df is 1, Mean square is 455014262.883, F is 44.681 and Sig. is .000b. Now in Unstandardized coefficients B value .494, Std. Error is .074, Beta is .921 and t value 6.684. From the analysis it is found both industry favourable.

YEAR	SAIL	TATA	SAIL	TATA
2010	7194.31	9776.85	4904.74	6865.69
2011	5150.87	9857.35	3542.72	6696.42
2012	3240.66	7836.60	2170.35	5062.97
2013	3224.55	9713.50	2616.48	6412.19
2014	2358.91	8508.89	2092.68	6439.12
2015	-7007.5	1543.34	(2986.44)	955.65
2016	850.86	5356.93	(2017.62)	3444.55
2017	-758.94	6638.25	(277.23)	4169.55
2018	3337.89	16227.25	1159.07	10533.19
Total	17591.61	75458.95	11204.75	50579.33
Average	1954.62	8384.33	1244.97	5619.93
Correlation on Profit Before Tax=0.72 Correlation on Profit After Tax=0.67				

Table - 4: Profit before Tax **Profit After Tax**

Descriptive Statistics					
	After Tax		Before Tax		N
	Mean	**Std.Dev.**	**Mean**	**Std.Dev.**	
SAIL	2772.40	4620.077	1795.90	2987.332	10
TATA	8267.30	3770.497	5562.70	2524.054	10

Source: Annual report of SAIL and TATA Steel.

Profit Before Tax:

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Waston
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.540a	.292	.203	4124.224	.292	3.294	1	8	.107	.661

a. Predictors: (Constant): TATA

b. Dependent Variable: SAIL

Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56032256.317	1	56032256.317	3.294	.107[b]
	Residual	136073764.083	8	17009220.510		
	Total	192106020.400	9			

a. Dependent Variable: SAIL
b. Predictors: (Constant), TATA

Profit After Tax

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Waston
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.502a	.252	.159	2740.226	.252	2.696	1	8	.139	.359

a. Predictors: (Constant): TATA

b. Dependent Variable: SAIL

Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20246664.217	1	20246664.217	2.696	.139[b]
	Residual	60070692.683	8	7508836.585		
	Total	80317356.900	9			

Dependent Variable: SAIL
Predictors: (Constant), TATA

Table 4 shows profit before tax of SAIL and TATA. In the year 2010 the profit before tax position is Rs. 10132.03 crores and it decrease to Rs. 2358.91 crores in 2015 and in the year 2016 it suffer loss (Rs. 7198.44) crores.TATA got before tax profit Rs. 7214.30 crores in the year 2010 and the profit increased to Rs. 9857.35 crores in 2012 and again it fall down

to Rs. 6126.52 crores in 2016. The total profit is Rs. 59034.01 crores during the study period and average profit is Rs. 8433.43 crores. The correlation on profit before tax of SAIL and TATA is 0.72 which is not favorable for the companies.

It points out that the profit after tax of SAIL and TATA steel companies. The period of study has been taken from 2010 to 2016. In the year SAIL has got profit after tax Rs. 6754.37 crores. It has decreased to Rs. 2092.68 crores in 2015 and in 2016 it shows loss (Rs. 4137.26) crores. The total profit of SAIL is Rs. 17894.08 crores. The average profit is Rs. 2556.30 crores. In the year 2010, TATA got profit aftertaxRs. 5046.80 crores. Its highest profit goes to Rs. 6865.69 crores in 2011. Then it fall down to Rs. 4900.95 in 2016. Every year the profit position is fluctuating but not suffer loss during the study period. The total profit shows Rs. 41414.14 crores and its average profit is 5916.31 crores during the study period. The correlation on profit after tax of SAIL and TATA shows 0.67. It is favorable for the companies.

In the shown Descriptive statistics, Mean value of SAIL is 2772.40 and Std. Deviation 4620.077. The Mean value of TATA point out 8267.30 and Std. Deviation 3770.497. The Model summary shows R is .540a, R square .292 and Standard error of the estimate 4124.224. When change in statistics df is 1, df2 is 8 and Sig. F Change is .107. By the Anova test df is 1 Mean square is 56032256.317, F value 3.294 and significance .107b. Descriptive statistics shows SAIL Mean value 1795.90 and Std. Deviation 2987.332. other company TATA Std. Deviation 5562.70 and Std. Deviation 2524.054. The significance of1-tailed test found .070. The Model Summary noticed R is .502a, R square .252, Adjusted R square .159 and Std. Error of the estimate 2740.226. From the Anova test df is 1, Mean square is 20246664.217, F is 2.696 and Significance is .139b which is favorable and accepted.

Table - 5 : Total Assets (Rs. In Crores)

YEAR	SAIL	TATA
2010	58726.03	78555.91
2011	76337.02	95802.99
2012	84218.46	101876.93
2013	91961.89	111040.41
2014	99326.87	115677.12
2015	98269.44	105114.46
2016	106539.47	111465.41
2017	114189.80	125114.34
2018	116437.73	137498.36
Total	846006.71	982145.93
Average	94000.75	109127.33
Total Assets correlation of SAIL and TATA = 0.94		

Source: Annual Report of SAIL and TATA Steel.

Table 5 indicates the total assets position of SAIL and TATA from the period 2010 to 2016. In 2010 the total assets position of SAIL is Rs. 51242.87 crores, it increased to Rs. 98269.44 crores in 2016

Table 5 indicates the total assets position of SAIL and TATA from the period 2010 to 2016. In 2010 the total assets position of SAIL is Rs. 51242.87 crores, it increased to Rs. 98269.44 crores in 2016.The assets position increased every year of SAIL. The TATA has shows total assets Rs. 64232.78 crores in 2010 and it increased to Rs. 123208.15 crores. The position of total assets of TATA increased every year. The Total Assets correlation of SAIL and TATA steel shows 0.94.

Descriptive Statistics			
	Mean	Std. Deviation	N
SAIL	89724.90	22152.004	10
TATA	104637.70	21362.586	10

Model Summaryb										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Waston
					R Square Change	F Change	df 1	df 2	Sig. F Change	
1	.966a	.933	.925	.6062.941	.933	112.144	1	8	.000	.999

a. Predictors: (Constant): TATA

b. Dependent Variable: SAIL

Anovaa						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4122327585.989	1	4122327585.989	112.144	.000b
	Residual	294074030.911	8	36759253.864		
	Total	4416401616.900	9			

a. Dependent Variable: SAIL
b. Predictors: (Constant), TATA

Coefficients"

Model		Unstar Coeff	drdized icients	Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-	Partial	Part	Tolerance	VIF
1	(Constant)	-15104.801	10083.077		-1.498	.173					
	TATA	1.002	.095	.966	10.590	.000	.986	.966	.966	1.000	1.000

Dependent Variable: SAIL

Table-5 Descriptive statistics Mean value of SAIL shows 89724.90 and Std. Deviation 22152.004. the Descriptive statistics Mean value of TATA point out 104637.70 and Std. Deviation 21362.586. The Sig. (1-tailed) test notice .000. From the Model summary point out R value .966a, R square .933, Adjusted R square .925 and Std. Error of the Estimate 6062.941. When Change statistics, F value .933, df1 is 1, df2 is 8 and Sig. F Change has seen .000. The Anova test indicates df is 1, Mean square is 4122327585.989 and Significance is .000b. The Unstandardized coefficients indicates 1.002, Standardized Error .095, Standardized coefficient (Beta) is .966. The t value 10.590 and Significance is .000 which is positive and accepted.

Conclusion

The position of Indian steel industry is among the top industries of the world. It has many of iron ores, which means that it has lot of resources potential from which we to draw our attention raw material. Steel has played a vital role in the development of modern human civilization. Steel plays a significant role especially in the development of developing economy. Per capita consumption of steel is used as an indicator of socio-economic development of the country as well as an indicator of standard of living of its people. Economic growth of India depends upon the growth of the Indian steel industry. Steel continues to be used in traditional sectors such as construction, housing and ground transportation, special steels has been increasingly used in engineering industries such as power generation, petrochemicals and fertilisers (Planning Commission, 2009). Currently, India is the 4th largest producer of crude steel in the world and is expected to become the 2nd largest producer of crude steel

soon. The steel sector of India employs over six lakhs of people & contributes nearly 2% in the country's GDP. The production rate of steel in India has been growing up at a consistent rate in the last few years. In the recent times, Odisha and Jharkhand have been stated as the influential steel destinations of India - the ones that must provide the Indian steel industry with the required raw material. There are also a number of steel companies in India like Tata and SAIL that are either coming up or have established themselves as prominent forces in the world steel scenario. India has traditionally been considered as one of the top steel producers of the world. In 2018-19, it was ranked as the second largest producers of steel in the world, which is consistent to the standing of the Indian steel industry of world. Finally, TATA Steel and SAIL is playing vital role contributed to the GDP growth, employment generation in the development of our country economically. India is also considered to have the best growth potential in case of steel and is preceded only by China, which is a prominent steel producing and consuming country of the world. As per the Ministry of Steel, India is expected to become the largest producer of crude steel in the world in future.

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IMPACT OF COVID-19 ON INTERNATIONAL RELATIONS

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ABSTRACT

In the beginning of 2020 a novel coronavirus emerged, and it may be the most terrible situation of the early 21st century, upheaval modern lifestyle, globalization, and international relations between countries. The Washington post has been called coronavirus is the tsunami for the disturbance of international relation. The outbreak of COVID-19 is become disastrous crisis of health, more than 4 lakhs people died across the world. There are various ordnance by every country's government to stay at home, travel restrictions to break the chain of transmission of coronavirus. The result of this economic depression, large number of unemployment and financial insecurity. So, Covid-19 made the dramatic changes in international relation. American president Donald Trump stops the funding to WHO and China's reaction on American action.Covid-19 has affected international relations and caused diplomatic tensions. The diplomatic relations have been affected due to the tensions around trade and transport of medicines, diagnostic tests and hospital equipment for coronavirus disease 2019. Leaders of some countries have accused other countries for not controlling the disease effectively and resulting in the uncontrolled spread of the virus. So during the period of Covid-19 we cannot find the smooth international relations between the countries.

Keywords: *Impact of Covid-19, international relation, BRICS, WHO, foreign policy,*

Introduction

This research is clearly focus on the consequences of coronavirus in the world and especially focus on the covid-19 which made the drastic impact on international relation. The ongoing COVID-19 Pandemic is a crisis on a global scale that is currently affecting nations, international bodies, and citizens everywhere. It is times of crisis that tend to test political theories harshly but also often exemplify and cement them. The fact that the Coronavirus is not tied to any particular region. Every global crisis impacts the international system, its structures, norms and institutions. This is the time when international relationships will be reset. Then, modern international relations enriched by the free travel of the people. The virus started to appear in other countries particularly through international travelers, all countries geared up to cancel international flights. Some wealthy countries rescued their citizens from other countries. The virus also appeared in the travelers, in ships many travelers were stranded in the route as countries for such ships rejected docking in their harbors.

Impact on International relation of USA and China

The Chinese government has been criticized by the United States for its handling of the pandemic, which began in the Chinese province of Hubei. In Brazil, the Congressman Eduardo Bolsonaro, son of President Jair Bolsonaro, caused a diplomatic dispute with China when he retweeted a message saying: "The blame for the global coronavirus pandemic has a name and surname: the Chinese Communist party." Yang Wanming, China's top diplomat in Brazil, retweeted a message that said: "The Bolsonaro family is the great poison of this country. The World Health Organization has made it official: Coronavirus is the first "global health emergency" of our new era of major power competition. Thus, its ripples won't stop at global markets but will also reach geopolitics. It's already clear that the coronavirus impact, though too early to fully measure, will be significant on Chinese and global supply chains, markets and economies; on the legitimacy and the trust enjoyed by the Chinese Communist Party with its own people; and on Asian regional politics and US-Chinese relations, where trust already was in such short supply. President Donald Trump steps up attacks on China in recent week over the covid-19 outbreak as the US was struggling to contain the spread of the virus and the economic crisis it triggered. Following sentences are focusing who corona has made the powerful impact in the international relationship between America and China and Trump has taken the powerful action against China. The President Donald Trump first called the novel coronavirus is Chinese virus

triggering energy responses from Beijing. Last month he suggested the US Seek damages from China were the outbreak which begin in one and spread around the world. He has already restricted use of Chinese electrical equipment in the US grid system which are increasing the tension between two countries. Some of official in the administration are providing him to block a government pension fund from investing in Chinese companies are amid at appending capital flow into Asian giant, according to New York times report .This time I meet the crisis Mr. Trump has taken attention to new by endorsing the approval lap theory and creating China the with punishment. Not only American and Chinese national power hit by the crisis but some of it might even be affected due to increasing the strategic rivalry between the two Nation and likely economic decoupling. The international relation of post pandemic world will be crucial. Not only will the virus infect the people but also in behaviour social and political mortification at the micro level and trigger in domestic changes. It will change the foreign policy foreign relationship and foreign affairs administration.

Impact of Covid-19 on BRICS

The disastrous coronavirus has also make the impact on BRICS (Brazil,Russia, India, China, South Africa) .Barring Brazil, other BRICS nations imposed lockdown measures, scrambled up their health infrastructure, and launched measures to protect vulnerable people. India and Russia share borders with China, yet the spread of the virus has been remarkably lower compared to the Western nations. In contrast to other BRICS nations, Brazil continues to be enamored by the "open-sky policy" of President Trump. There is a genuine concern that Brazil could be the next epicentre of coronavirus with an administration in denial, high social segregation and inadequate health infrastructure. Cases are mounting to an unmanageable level with 73, 235Covid positive and 6,003 deaths. In the absence of extensive testing, one cannot be certain of the exact number and actual cases are likely to be much higher. The BRICS reviewed the impact of the current global crisis provoked by the outbreak of COVID-19 on the system of international relations and agreed that there is no alternative to using both bilateral and multilateral forms of co-operation, unite behind efforts without any hidden agenda, in finding a collective response to the challenges and threats posed by the coronavirus pandemic.

Coronavirus has changed almost every sector and field. It not only changes daily human habits but also international relation chief during this covid-19 period. It also given the suggestion to every Nation not to depend on any other Nation and be self-reliant beyond relying on international supply change. Corona has affected the modern behavior and lifestyle of people. Nepal already having a rich Oriental culture of greeting from distance and eating with the selection was not much affected by the changes. Main countries have cancelled the international flights coronavirus has not given them a chance to maintain their international relations.

Impact of covid-19 on India and China relation

Coronavirus has changed almost every policies of each Nation. So I want to throw the lights on international relation between India and China.2020 mark the 17th anniversary of India China diplomatic ties which have been Tamil competitive for the most part of last seven decade. So this research is focused that what will be the relationship between these two country after Corona.

Impact of covid-19 on Japan and South Korea relationship.

There is a negative impact on the international relationship between Japan and South Korea during the covid-19 period, because Japan has declared that all the travellers will be quarantine, who are come from South Korea and South Korea describe that this is the action which is taken by Japan is unreasonable excessive and extremely regrettable and that couldn't help the question whether Japan has other motive than containing the outbreak. So, Corona has disturbed the international relationship between these two countries.

Impact of covid-19 on the relation of Russia and Saudi Arabia

In response to dramatic drop in oil consumption due to the coronavirus pandemic

Saudi Arabia attempted to orchestrate world while decrease in oil production to keep rise at moderate level. This issues is making the disturbance between the relation of two countries. This economic conflict resulted in the drop of oil prices were the spring up 2020 with the surprise becoming negative on April. Ultimately this research is focused on that how coronavirus has made the drastic change and disturb the international relationship.

India's action during covid-19

Indian government has taken the decision to ban the arrival of foreigners who had been to China after January 15 and Indian airlines cancelled flights from that country, despite protest from the Chinese Government. Our Union road and highway Minister Nitin Gadkari has called on Indian companies to take advantage of the great hearted against China right now. In short there is the disturbance between the Indo Chinese international relationship.

Action of WHO on Crisis of Covid-19

The updated statement of WHO declared that covid-19 is become a traffic to run the smooth international relation, in light of the rapidly evolving situation. The director of WHO organization following the advice of emergency committee conveyed under the international health regulation and declared that the current outbreak of Corona is a public health emergency of international concern. Another important statement of WHO that travel and trade should be restricted during the covid-19 outbreak. So in short if international trade and travel will Bann then it will affect the international relationship of the countries.

Conclusion

This research is clearly focused on covid-19 outbreak and its impact on international relations. The coronavirus spread rapidly and it has changed the rhythm of globe and the relation between the countries. Each and every country is giving the priority to save the life of their citizen. The most obvious consequences including economic depression, crisis of global governance, trade policies, culture and travel exchanges have all been restricted. So, I want to say that covid-19 has made the disastrous impact on the international relation.

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IMPACT OF COVID-19 ON INDIAN SOCIETY

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ABSTRACT

COVID-19 pandemic is global health disaster that world is facing this year including India. It is considered to be the greatest challenge for our nation after independence. The spread of this disease started from Wuhan (China) in December 2019 and within less than four month it spared all over the world. Till today there is no exact evidence of that from which animal the disease comes. The outbreak of COVIN-19 has created crisis for whole world and it affected on the everyday life of all the people socially and economically. The rate of transmission is very high and it threatens our sense of agency. But we can avoid spread of the virus and protect people by using face mask and doing hand wash regularly for more than 20 second. Making social distancing from one another is also important solution to avoid corona infection. The virus affected not only undeveloped country but also all developed countries. Scientist are working very hard to find out corona vaccine and to stop spread of corona virus. Arcenic Album is also recommended from government to improve immunity against corona virus. Large number of front line worker and people are using Arcenicalbumto avoid infection. People are also using some Aurvedic medicine to improve immunity power. This paper deal with how corona virus has done impact on society and social life of the people. Corona virus had major impact on life of workers, women's, elders, disable, children and other vulnerable groups. This epidemic had very adverse impact on social, economical aspect of the people's life. Millions of workers have migrated from urban to rural area. People are facing problem of food, medicine, unemployment and mental health.Government and NGO are working for to help the people.

Key word: Covid-19, Transmission, Social Distancing, Quarantine.

Introduction

About Corona Virus: In wuhan (China) in December 2019 some cases of Pneumonia was identified. The characteristics of this disease were new and identified as β-corona virus.initially this virus was named as 2019-novel coronavirus by WHO in Januray 2020. WHO also declares this disease of a pandemic on March 11, 2020 and later on this disease named as COVID-19.The origin of this pandemic traces begins from unexplained pneumonia cases in December 2019. This pandemic is originated from a seafood and live market in Wuhan, Hubei Province of China. The most common symptoms of COVID-19 are fever, dry cough, and tiredness. Other symptoms that are less common and may affect some patients include aches and pains, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell or a rash on skin or discoloration of fingers or toes(WHO). Most people (about 80%) recover from the disease without needing hospital treatment (WHO). The transmission of COVID-19 happens from one person to others who have the virus. The disease spreads primarily from person to person through small droplets from the nose or mouth, which are expelled when a person with COVID-19 coughs, sneezes, or speaks. We can stop transmission of the disease by maintaining social distance (physical Distance) from infected person. We can also wash our hand regularly and use mask to avoid spared covis-19 and protect the people from infection. Some homeopathic and aurvedic medicine are useful against corona as a immunity booster. As per WHO report on 18 June 2020the current outbreak of COVID-19, has affected over 8553454 people and killed more than 4, 44813 people in more than 200 countries throughout the world. In India it has affected more than 366946 people and killed more than 12237 people all over the country. Scientist are working very hard to find out antiviral drugs or vaccines that are effective against COVID-19 but, till now there is no report of any clinically approved drugs or vaccine. In India Covid-19 has rapidly spread in the all state of the country, posing enormous health, economic, environmental and social challenges to the entire human population of the country.

Impact of Covid-19 on Society

The COVID-19 outbreak affects all segments of the population and is particularly detrimental to members of those social groups in the most vulnerable situations, continues to affect populations, including people living in poverty situations, older persons, persons with disabilities, youth, and indigenous peoples. Early evidence indicates that that the health and economic impacts of the virus are being borne disproportionately by poor people. For example, homeless people, because they may be unable to safely shelter in place, are highly exposed to the danger of the virus. People without access to running water, refugees, migrants, or displaced persons also stand to suffer disproportionately both from the pandemic and its aftermath – whether due to limited movement, fewer employment opportunities, increased xenophobia etc.

Impact on worker

The central Government has imposed the lockdown and closed majority of business when India reached around 500 cases of COVID-19. Lookdown in all states of country amidst the COVID-19 pandemic has critically dislocated its migrant population. "In India, with a share of almost 90 percent of people working in the informal economy, about 400 million workers in the informal economy are at risk of falling deeper into poverty during the crisis (ILO). Workers in informal sector loosed their job very instantly without any alarm. Workers during this covid-19 faced problem of job, money, food and transportationfacility. Due to loss of jobs millions of workers and lack of transportation, they were forced to walk hundreds of miles back to their home. During this journey many workers died due to food, water and road accident. Local Government measure response slowed down the transmission of disease as compare to America and European country. But it also raised inequalities and vulnerabilities among workers and their family.

Impact on Elder people

The COVID-19 pandemic has had an unprecedented effect on the lives of people, irrespective of social demographics. But this corona disease has hit older people very hard than other age group all over the world. The main reason behind this is older adults are more likely to already have some health issues, such as cardiovascular disease, diabetes, respiratory illness and other health problem. Elderly also have weak immunity system as compair to other age group and it makes them more susceptible. More than 95% of the covid-19 deaths are among elder people who having age of more than 60 years and more than half of all death occurred in people of 80 years(WHO, April 2020). The elderly people facing more challenges as compare to other age group, so its responsibility of healthcare professional to identify and provide adequate solution on their problem. It will help to protect and support elderly people in this global crisis. If elderly people do not get support then they will face several mental and psychological problems. In normal circumstances elderly are prone to social isolation and this lockdown increased their vulnerability. They generally have a close circle of friends with whom they do chat, but this corona situation has changed the life of elder people. They generally do not have social media for entertainment and friends can't come and these entireproblem leads disturbance and anxiety in their life. India authorities have enforced strict lockdown to control corona transmission and it had created more problem for poor and single elder people. Many elder faced problem of food, medicine and money, which created stress and anxiety among them. Regular exposure to news on Social and electronic media about the death of elder people created disturbance in the life of elerly.

Impact on women

This covid-19 is exposing and exploiting inequality of all kinds, including gender inequality. This gender inequality will have impact on women's Health, right and freedom. Women are already suffering the impact of lockdown and Quarantine. Restrictions are useful to avoid transmission of corona virus but it will increase risk of violence towards women from their partners and family. This lockdown have increased violence against women's. Generally Women's are located in into poorly paid jobs without any benefits such as domestic worker casual labour, street vendor and in

small service like hairdressing. It will make them more vulnerable as compared to men and other group of society. Lockdown has stopped working outside in the formal and informal sector but the burden on women's working at home remains same. Men are at home without work but women have to do do all domestic work and there is no redistribution in it. In India Frontline health workers like nurses and others are women and they show more chances of infection by covid-19 is higher among these women health workers. Working at home and in hospitals will increase the problem of Mental Health among this woman's health worker. The burden of care and responsibility of extended family members can make the situation more stressful for the women. Gender based violence also increased in the square of household due to lock down. Due to reduction in house household income resources are reduced and women are more likely to be left with very inadequate food and nutrition. to stop vulnerability of women Government have to work at policy level and have to implement programs for catering the needs of women. Men also have to help women in the house work. Family member have to take care of women working as healthworker. It will increase confidence among women and will reduce vulnerability.

Impact on Disable

Lockdown for or disabled have created problem in accessing all the resources which are useful for them. Disable people are the most neglected human being in the developing country. In our country each 10 household has a disabled member the (Census, 2011). People having disabilities are more susceptible to corona virus as compared to two other common human beings. They are unable to go for hand washing regularly and they are having limitation to follow rules and regulation said by government for to protect against covid-19. They are having lack of public toilets for them, social distancing, most PW D depends on others due to psychosocial constant. Some disable have to visit hospitals and Rehabilitation centre but due to this lockdown they had faced several problems. Due to lockdown situation and spread of Corona, sometime caregiver also unable to to help disabled people. People having visual disabilities depend on touch function for work and mobility but it increases the risk of infection. The person having locomotors disability cannot go alone for washing hands and other work. Disabled person who is working as contractual labours, migrant worker and beggars, majority of them are homeless. This lock down and fear of corona virus have increased vulnerability among disabled people. It also leads Stress, anxiety and fear among disable people. To increase confidence level among disable people there should be separate Quarantine and rehabilitation centres for them. Government should provide special training for health professional who are working for PWD in this pandemic situation. Government and NGO have to work together to help these PWD people to get out of this situation.

Impact on Children

Lockdown and covid -19created restriction of movements, childrens are not having to access to socialization, play, and even physical contact. This will leads mental illness and will be harmful for their psychosocial well being and development. School and colleges roses are preventing children from access to learning and limiting their interaction with their friends. in rural area schools and anganwadis are closed and children do not have access to Mid day meals. Children's belong to poor family not having access to food due to this lockdown. This covid-19 situation puts small children at an your high risk of death and poor children will have no access to quality food. With lack of food during lockdown the rate of malnutrition is going to increase and ultimately they would be more vulnerable to covid-19. During this situation children may feel confused and at loss with the current situation leading to frustration and anxiety which will only increase with the exposure to mass and social media especially among adolescent. Children who are being current time at government institutions are the worst suffers as it renders them isolated from their parents. Being current time and away from family members increase stress and anxiety among the children. Hundreds of millions of children around the world will likely face increasing threats to their safety and wellbeing – including

mistreatment, gender-based violence, exploitation, social exclusion and separation from caregivers – because of actions taken to contain the spread of the COVID-19 pandemic (UNICEF). Stigma related to COVID-19 has left some children more vulnerable to violence and psychosocial distress.

To protect children in this covid-19 and lockdown situation UNICEF has suggested some following measure.

1) Train health, education and child services staff on COVID-19 related child protection risks, including on the prevention of sexual exploitation and abuse and how to safely report concerns

2) Train first responders on how to manage disclosure of gender-based violence, and collaborate with healthcare services to support GBV survivors

3) Increase information sharing on referral and other support services available for children

4) Engage children, particularly adolescents, in assessing how COVID-19 affects them differently to inform programming and advocacy.

5) Provide targeted support to interim care centres and families, including child-headed households and foster families, to emotionally support children and engage in appropriate self-care.

6) Provide financial and material assistance to families whose income generating opportunities have been affected; and

7) Put in place concrete measures to prevent child-family separation, and ensure support for children left alone without adequate care due to the hospitalization or death of a parent or caregiver; and

8) Ensure the protection of all children is given the utmost consideration in disease control measures.

Conclusion

This Pandemic situation exposes all the limitation of human being. It also had positive impact on environment and pollution reduces drastically. But covid-19 hits very hard to human society. If we don'taddress it properly through policy and program, then the social crisis created by the COVID-19 pandemic may also increase inequality, exclusion, discrimination and nationwide unemployment in the medium and long term. Government, corporate and people have to work harder to overcome this disaster. Government should provide work for migrant workers at their own village through MGNREGA. Timely and adequate pension should be provided with health support to the eligible and needy elder people. Counselling centre should be established for women at village level in ruaral area and ward level in urabn area to help women's. Special care and protection is needed for elder people and children. Both are most vulnerable group and most susceptible for Covid-19. Government should create one policy for each sector and for each group according to the need and situation. We have increase health facility at each district level to facility to covi-19 patient. Government should support all type business including start-up, also have to create employment in urban as well as rural area. Goverment, NGO, corporate and society working together can win the battle against corona-19.

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EXPLORING INFORMATION SECURITY BEHAVIOUR AMONG STUDENTS IN FACULTY OF EDUCATION

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ABSTRACT

Today in times of COVID 19 pandemic when education has taken a great leap to keep connected with the students and to continue learning, technology has come as a boon. This scenario is promising that the education sector and especially the teachers and students have quickly adapted to using digital platforms. But on the other hand, with students and teachers both online, we seldom realise the security issues in technology. Therefore the study aimed to find out Information Security Behaviour among Students in Faculty of Education. The 132 respondents were either pursuing or had completed a teacher education program (Bachelors of Education/ Diploma in Elementary Education/Early Childhood and Education Program). They were from different academic backgrounds of Arts, Science or Commerce streams. The results showed that the students' information security behaviour was significantly different based on their age and no significant differences were found with respect to the Teacher Education program or level of education i.e. the academic stream of Arts, Science and Commerce.

***Keywords**: Information Security, Students, Faculty of Education*

Introduction

Today in times of COVID 19 pandemic when education has taken a great leap to keep connected with the students and to continue learning, technology has come as a boon. The online classes are conducted through various digital platforms like Zoom, Google Meet, Microsoft Teams and many other. Along with this, online assessments and interactions are also steered through digital platforms. Students access technology much more than they were used to. Technology is used by them at every step, right from checking emails, using social media, submitting assignments, learning online, video conferencing, and much beyond that. This scenario is promising that the education sector and especially the teachers and students have quickly adapted to using digital platforms. But on the other hand, with students and teachers both online, we seldom realise the security issues in technology. Use of technologies and the internet brings with it the problems of digital security. According to Yoon, C., Hwang, J. W., & Kim, R. (2019), dependency on technology, brings with it, its own drawbacks such as leaving sensitive information on the net, being exposed to serious information security threats like hacking, malware and viruses. Currently Zoom being in news for security issues, it becomes even more important that students be made aware of information security. We cannot assume that the young studentsinspite of being a digital native, will be exhibiting behaviour which takes care of information security.

Literature Review

Ng, B. Y., Kankanhalli, A., &Xu, Y. C. (2009) studied 134 users' computer security behaviour from a health perspective. Results indicated that perceived susceptibility, perceived benefits, and self-efficacy determined the email related security behaviour. Perceived severity moderates the effects of perceived benefits, general security orientation, cues to action, and self-efficacy on security behavior.

A study of information security behaviour of smartphone users of University of Dhaka was conducted by Nowrin, S., &Bawden, D. (2018). They found out that the students possess a moderately secure behaviour in terms of avoiding harmful behaviours, utilizing useful phone settings and add-on utilities and disaster recovery. At the same time, the study also highlighted that the students do not behave securely in all aspects of using different security features in the same way, it varied somewhat according to gender and between faculties and institutions.

The current state of cyber security behaviour among higher education students in Malaysia was studied by Muniandy, L., Muniandy, B., &

Samsudin, Z. (2017). The analysis of the returned questionnaires showed that cyber security behaviour among respondents was generally unsatisfactory in all five cyber security issuesviz. password usage, phishing, social engineering, online scam and malware.

Park, M., &Drevin, L. (2016) surveyed security behaviourof 217 tertiary students regarding mobile device security. The findings revealed that tertiary students have diverse behaviour levels concerning mobile device security. In the results the statistics indicated that certain aspects need more attention (e.g. read security messages) and in certain areas the respondents are reasonably security minded (e.g. adoption rates of protection mechanisms).

Aim

Today's digital natives have different attitudes towards information security practices. Information Security is critical in this age of knowledge explosion and ever-increasing use of the internet. In this research, we examined factors that motivated students' Information Security Behaviours (ISB) from the faculty of Education, since they are now more than ever exposed to technology.

Hypothesis

H1: There is no age wise significant difference in the Information Security Behaviour among students from the Education Faculty.

H2: There is no significant difference in the Information Security Behaviour among students from the Education Faculty with respect to the Teacher Education program pursued.

H3: There is no significant difference in the Information Security Behaviour among students from the Faculty of Education with respect to level of education.

Methodology

Descriptive Survey method was adopted since the researchers wanted to study the current Information Security Behaviour of the students from the Faculty of Education, as they are using more digital technologies during COVID19 times.

Demographic Details of the Respondent

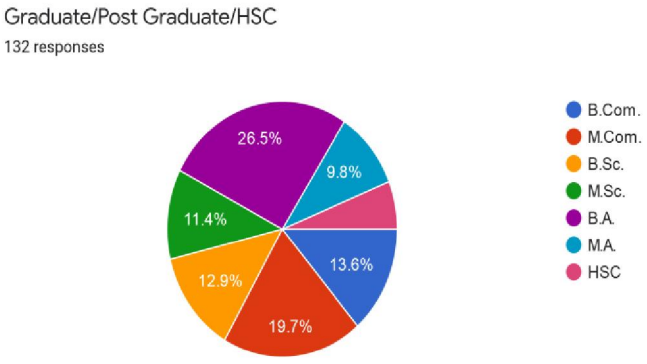

Figure 1 Showing the Level of Education

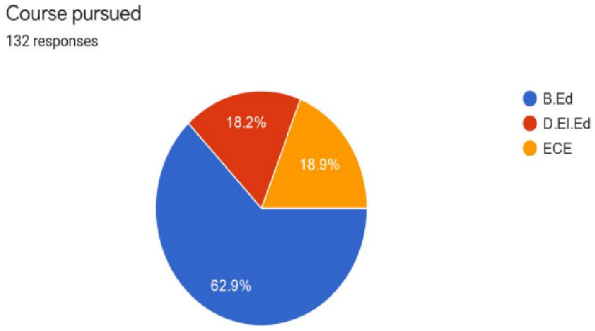

Figure 2 Showing the Teacher Education Level

Data was collected from 132 students who were from the Faculty of Education. Age varied from 18 to 43 years. Gender demographic indicated that 122 respondents were females and only 10 males were there. The respondents were from varied education levels. 48 students had completed their graduation and post-graduation from the Arts Stream, 32 graduates and post graduates were from Science Stream, 44 graduates and post graduates were from Commerce Stream and the remaining 8 were Students who had only finished their Higher Secondary level. All 132 either had or were pursuing a Degree/Diploma/Certificate Course in Education. 83 students were Bachelors' in Education, 24 were Diploma in Elementary Education and 25 were Certificate in Early Childhood Education.

Following Table 1 shows the descriptive statistics of respondents' characteristics

Measure	Value	Frequency(%)
Gender	Male	10 (7.57%)
	Female	122(92.42%)
Age	Younger than 20	5 (3.79%)
	20-24	53 (40.15%)
	25-30	59 (44.70%)
	Older than 30	15 (11.36%)
Degree of computer usage (hour per day)	Less than 1	33 (25%)
	<3	54 (40.91%)
	<5	31 (23.48%)
	More than 5	14 (10.61%)

The **questionnaire** was developed by Yoon, C., Hwang, J. W., & Kim, R. A Likert scale of 7 point was adapted to a 5 point scale of strongly agree, agree, neutral, disagree and strongly disagree in the present study. Yoon, C., Hwang, J. W., & Kim, R performed the Average Variance Extraction wherein they found that the measures ranged from 0.53 (for information security behaviors) to 0.83 (for response efficacy), which also exceeded the recommended level of 0.50 (Fornell and Larcker 1981). The results, therefore, demonstrated a reasonable reliability level for the measured items. The instrument measured nine constructs viz. Information Security Behaviour (3 items), Behavioural Intention (3 items), Perceived Vulnerability (2 items), Perceived Severity (2 items), Response efficacy (3 items), Response Costs (2 items), Self Efficacy(3 items), Subjective Norm (3items) and Security Habits (2 items) .

Data was collected with the help of google forms. The mails were sent out to 300 students out of which o132 responded to the questionnaire. The response rate was 44%.

To test the hypothesis One Way ANOVA was performed using vassarstats.net and icalcu.com

H1: There is no age wise significant difference in the Information Security Behaviour among students from the Education Faculty.

Table 2 ANOVA Summary for Age wise Distribution

ANOVA Summary 4					
Source	**SS**	**df**	**MS**	**F**	**P**
Treatment [between groups]	1658.2164	3	552.7388	8.77	<.0001
Error	8071.4427	128	63.0541		
Ss/B1					
Total	9729.6591	131			

The above table indicates that the F value is significant. Therefore, the null hypothesis that there is no age wise significant difference in the Information Security Behaviour among students from the Education Faculty is rejected.

Finding: There was a statistically significant difference between groups as demonstrated by one-way ANOVA ($F(3,128) = 8.77$, $p = .0001$).

Tukey HSD Test

HSD[.05]=8.05; HSD[.01]=9.8 M1 vs M2 nonsignificant M1 vs M3 P<.01 M1 vs M4 P<.01 M2 vs M3 nonsignificant M2 vs M4 nonsignificant M3 vs M4 nonsignificant	Tukey's HSD (alpha=0.05): |Group1-Group3|=11.2983 (p=0.0144); |Group1-Group4|=11.2 (p=0.0358); |Group2-Group3|=6.5209 (p=0.0002); |Group2-Group4|=6.4226 (p=0.0327);	Group 1 - Younger than 20 years Group 2- 20 to 24 years Group 3 25 to 30 years Group 4= Older than 30 years

Since there is a significant difference between the groups that is not related to sampling error then it is necessary to run Tukey HSD Test to test the means between the groups.

Tukey's HSD test showed no significant difference in the age groups of students Younger than 20 and 20 to 24 years. A Tukey post hoc test showed that the students from the Education Faculty in the age group Younger than 20 exhibited better information security behaviour as compared to the age group of 25 to 30 years and age group of students older than 30 years.

Discussion

Probably the students who are younger than 20 years are digital natives born in the age with digital technologies exposed to them from a very young age. They are more aware of how to handle the gizmos and also how to keep their sensitive information secure. These young students have been interacting with gadgets from childhood. Familiarity with the digital technology and more awareness about digital handling may have helped them to securely behave with their information.

H2: There is no significant difference in the Information Security Behaviour among students from the Education Faculty with respect to the Teacher Education program pursued.

Table 3 ANOVA Summary for Distribution with respect to Teacher Education Course Pursued

ANOVA Summary 3					
Source	**SS**	**df**	**MS**	**F**	**P**
Treatment [between groups]	182.5547	2	91.2774	1.23	0.295697
Error	9547.1044	129	74.0086		
Ss/B1					
Total	9729.6591	131			

The above table indicates that the F value is not significant. Therefore, the null hypothesis that there is no significant difference in the Information Security Behaviour among students from the Education Faculty with regard to the Teacher Education program pursued is accepted.

Finding: Not statistically significant difference between groups was demonstrated by one-way ANOVA ($F(2,129) = 1.23$, $p = 0.295697$).

Discussion: The results indicate that the information security behaviour was not influenced by the Teacher Education pursued by the student. Whether the student has completed or is pursuing a Bachelor of Education, Diploma in Elementary Education or Early Childhood Education Programme does not have any bearing on the Information Security Behaviour. Although the programmes have courses related to Information and Communication Technology, probably it is through these courses they are made aware of how to handle technology safely to a certain extent. In addition, probably the hands-on experience on using Information and Communication Technology may be exposing them to practically be safe for their sensitive information.

H3: There is no significant difference in the Information Security Behaviour among students from the Faculty of Education with respect to level of education.

Table 5 ANOVA Summary for Distribution with respect to Teacher Education Course Pursued

ANOVA Summary 4					
Source	**SS**	**df**	**MS**	**F**	**P**
Treatment [between groups]	46.1023	3	15.3674	0.2	0.896220
Error	9683.5568	128	75.6528		
Ss/B1					
Total	9729.6591	131			

The above table indicates that the F value is not significant. Therefore, the null hypothesis that there is no significant difference in the Information Security Behaviour among students from the Education Faculty with regard to the level of Education is accepted.

Finding

Not statistically significant difference between groups was demonstrated by one-way ANOVA ($F(3,128) = 0.2$, $p = 0.896220$).

Discussion

The results indicate that the level of education did not influence the information security behaviour of the student. Whether the student is from the Arts background, Science background, Commerce background or even if the level of education is just Higher Secondary level did not affect the information security behaviour. Graduation or Post graduation from a stream of Arts, Science or Commerce also did not have any bearing on the information security behaviour. The probable reason might be that the students are digital natives and the academic level of education did not play any role. They know how to secure their confidential information over the internet or while using technology. This finding is not supported by a finding in the study done by Ngoqo, B., &Flowerday, S. V. (2015), where they found that the student users of mobile phones showed poor security behaviour. The students in their study were mostly undergraduate students.

Conclusion

The result of the study indicates that the digital natives have the understanding of securing their sensitive information over the digital platform, except for those who are 25 years and above. The education level i.e. the academic stream of the student and the teacher education programme does not have any bearing on the information security behaviour. Information security threats can be minimised if the individuals involved in its use understand the dimensions and practice them to keep their sensitive information private, as expressed by Hussein, R., Lambensa, F., &Anom, R. B. (2011).

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HOUSEHOLD HERBS, SPICES AND AYURVEDIC PRODUCTS AS EFFECTIVE REMEDIES TO FIGHT AGAINST COVID-19

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ABSTRACT

Viral infections in general are tough to deal and antibiotic treatment is ineffective against them. Our Immune system also faces big challenges posed by these tiny microbes. Most of the anti viral medications currently available to treat specific viral infections cause adverse side effects. Our mother nature provided us with certain remedies to treat these tiny agents in the form of kitchen herbs. These herbal remedies by boosting our body's natural defence mechanisms help to fight the viral infections. The current review mainly discusses various common house hold herbs as effective anti viral remedies. The paper also discusses the effectiveness of certain ayurvedic preparations against viral infections.

Key Words:*Viral infections, Immune system, antiviral medications, kitchen herbs, ayurvedic preparations.*

Introduction

Viruses, SARS-CoV-2

Viruses, the sub microscopic infectious agentscontaineither RNA orDNA as a genetic material surrounded by a protein coat called capsid and in some cases capsid is surrounded by an envelope [1]. Viruses infect the host cells and utilize the host cell machineryfor their reproduction. The surface molecules which vary from virus to virus [1]aid in the attachment of virus to gain entry into the host cell. The viruses cause a range of infections as simple as common cold to as severe as the current pandemic, COVID 19 (**Co**rona **Vi**rus **D**isease 20**19**) caused by a very dreadful virus SARS-CoV-2.

SARS-CoV-2, the virus that is shaking the globe, infecting lakhs of people has taken its birth in Wuhan city, Hubei province of China on 30th December 2019 [2]. The virus has rapidly spread to almost all countries thus making the WHO (World Health Organization) to declare Public Health Emergency of International Concern on 30th Jan 2020. The virus is named temporarily as 2019-nCoV (2019 novel corona virus) by WHO [3] and the disease it causes as COVID 19 meaning, **Co**rona **Vi**rus **D**isease 2019. It belongs to beta-corona virus group of family Coronaviridae. The virus closely resembled SARS-corona virus that caused a SARS pandemic in 2002 and is therefore named permanently as SARS-CoV-2 by WHO. China is the birth place of these 2 pandemics. Nearly 8422 people were infected between November 2002 and August 2003 by SARS-CoV causing 919 deaths with a case-fatality rate of 11%. Around 32 different countries were affected by SARS Corona virus [4] whereas SARS-CoV-2 infected 7, 553, 182 people with 423, 349 confirmed deaths from the point of its first infection reported in 2019 December, affecting 216 countries, areas or territories (report by WHO as on 13th June 2020; https://www.who.int/emergencies/diseases/novel-coronavirus-2019). The virus is find to have a broad host range and infects humans, bats, birds, mice, snakes and other animals [5, 6]. Bats are considered to be the reservoirs of SARS-CoV-2 thus transmitting the virus to humans via intermediate hosts [7, 8]. Recent reports indicated that Pangolins are intermediate hosts in the transmission of virus from bats to humans [9]. The mode of transmission of SARS-CoV-2 is shown in Figure 1.

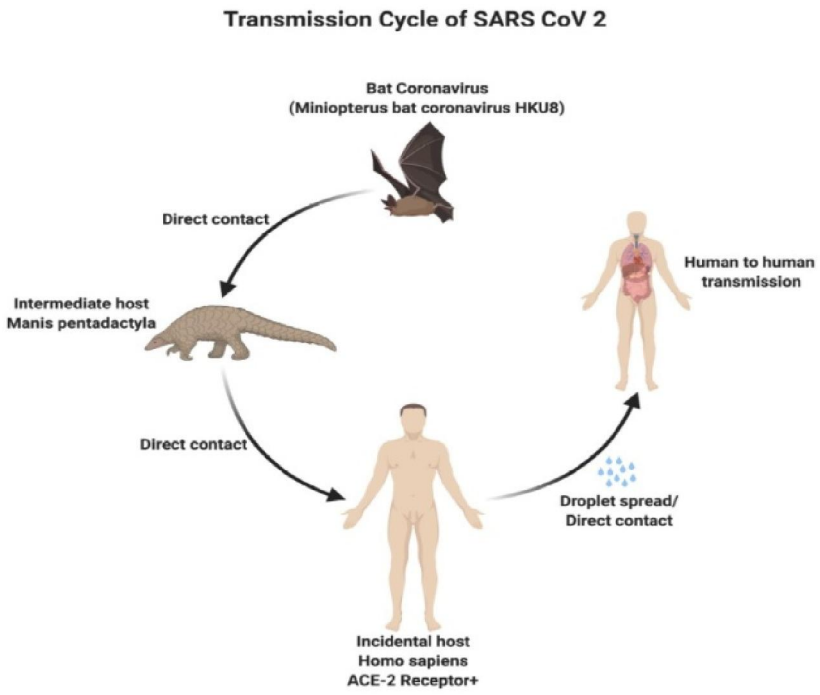

Figure 1 SARS-CoV-2 Transmission

*Contributed by RohanBir Singh, MD; Made with Biorender.com

Droplets coming from the coughing, sneezing activities, touching the infected surfaces, person to person contact by shaking hands, hugging, vertical transmission from mother to fetus, hidden transmission were found to be main ways of virus spreading [10,11, 12, 13]. Figure 2 shows the different ways of virus spreading. Among infected persons, 80% exhibit mild to moderate symptoms like cough, high fever and only around 20% of them develop severe symptoms such as pneumonia and acute respiratory distress syndrome (ARDS) [14, 15, 16].

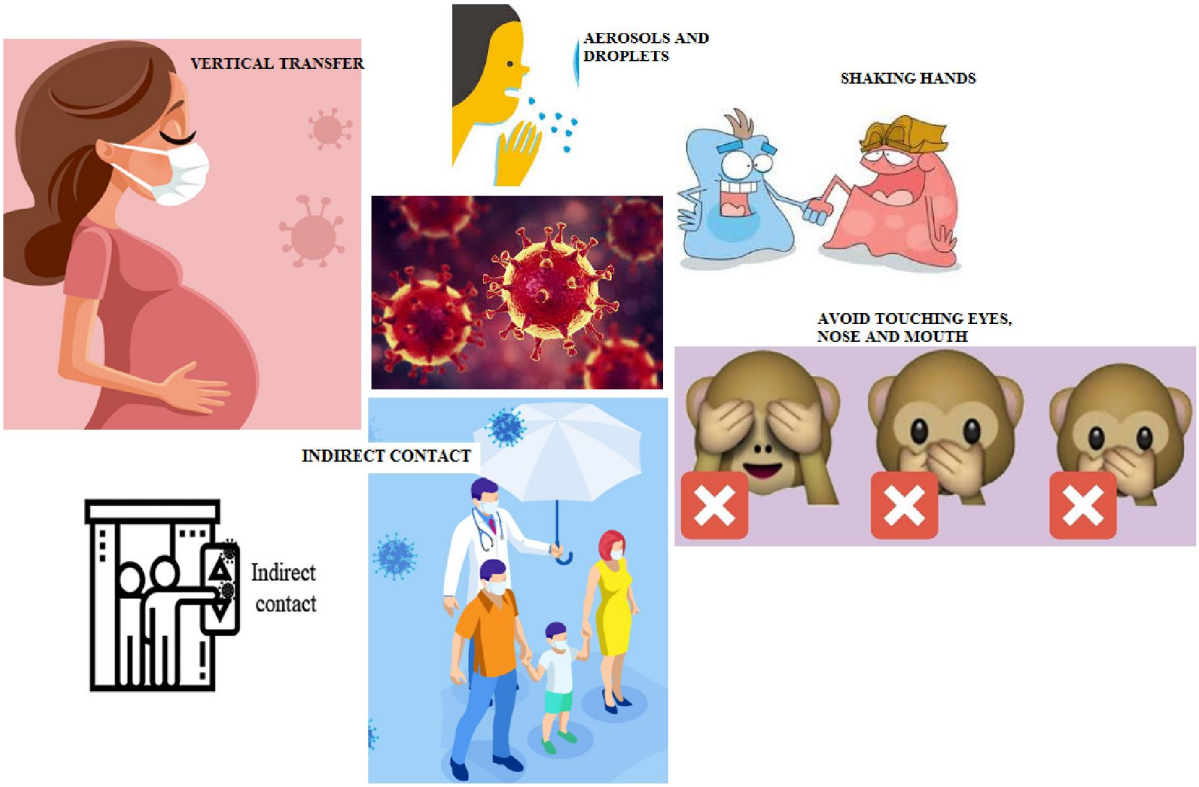

Figure 2 Spreading of SARS-CoV 2 through different ways

SARS-CoV-2 genome sequencing revealed a sequence similarity of 88% with other bat-derived viruses, indicating its origin and SARS-CoV-2 exhibited a sequence identity of 79.5% with SARS-CoV [8, 17]. SARS-CoV-2 virus contain positive-strand RNA and the genome codes for four different proteins viz., the spike protein (S), nucleocapsid protein (N), membrane protein (M), and the envelope protein (E) [16]. Figure 3 shows the structure of SARS-CoV-2. The key protein that permits passage of virus into the host cell is 'S' protein and it is a transmembrane protein with a short intracellular tail, a transmembrane anchor, and a huge ecto domain. The ecto domain comprises of 2 sub units, S1 subunit, implied for receptor binding and a S2 subunit implied for membrane fusing [18]. The two CoVstrains(SARS-CoV and SARS-CoV-2) utilize the same host receptor i.e. Angiotensin-Converting Enzyme 2 (ACE 2) to get entry into the host cell[19, 20]. The renal tubular epithelium, vascular endothelial cells, and the Leydig cells of testes [21, 22] are the key cells involved in ACE-2 expression and the receptor expression is as well seen in lung, kidney, and gastrointestinal tract related cells [23, 24, 25].

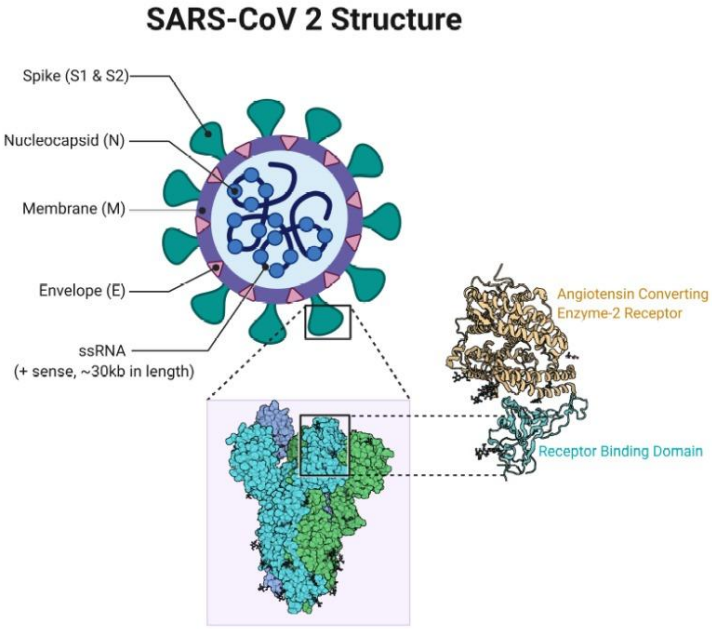

Figure 3SARS-CoV-2 structure

*Contributed by RohanBir Singh, MD; Made with Biorender.com

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The Virus principally infects respiratory system either by droplets, respiratory discharges or through direct contact and causes respiratory illness [26]. The virus can be isolated from fecal swabs and from blood during different courses of transmission [27]. ACE2 receptors are more on lung alveolar epithelial cells and enterocytes of small intestine [28] indicating these are the prime sites of infection. Figure 4 shows the entry of the virus into the host cells by binding to ACE 2 receptors. The exact incubation time of SARS-CoV-2 seems to be uncertain, previously it was though 14 days[29]but now in some cases the viral infection symptoms are appearingeven after 21 to 28 days.In such cases, the infected people seem to be asymptomatic and serve as carriers of the virus and this is the main reason for the spread of virus.

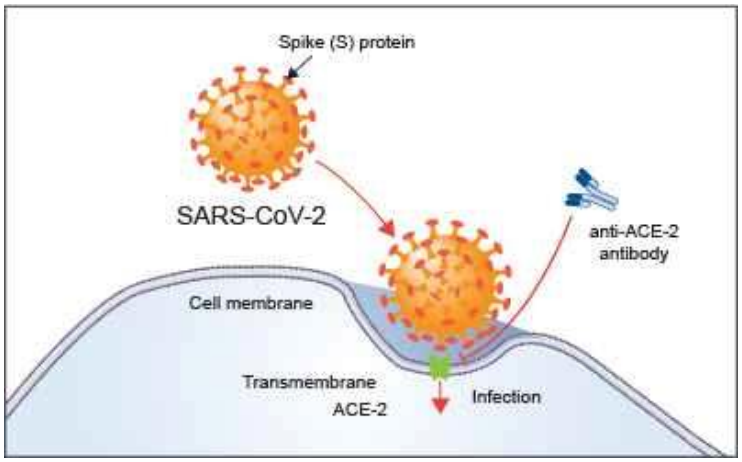

Figure 4 ACE-2 receptors on the host cell- entry points of the SARS-CoV-2

*Source: https://www.rndsystems.com/resources/articles/ace-2-sars-receptor-identified

The viral infection will affect both upper (nose, sinuses and throat) and lower respiratory tracts (air routes and lungs). The infection of the upper respiratory tract results in runny nose, sniffling, nasal blockage, sore throat, cerebral pain and achy muscles. Besides these general symptoms, COVID 19 upper respiratory tract infection also results in cough, brevity of breath, fever, and sleepiness [30]. The indicational symptoms of lower respiratory tract are serious cough with mucous secretion, brevity of breath, chest congestion and wheezing. If the infection spreadsdeep into the lungs it may end up with pneumonia. In case of normal healthy people, when they breathe in, the lungs and their alveoli (small air sacs) load up with oxygen and breathing out disposes the carbon dioxide through alveoli and pass oxygen into the veins. The alveoli become tainted and aggravated in pneumonia and it brings about the gathering of liquid and fiery cells in to the lungs. The accumulation of fluid in the lungs causes difficulty in breathing and as well absence or very low oxygen in the blood (hypoxemia).

The individuals with severe lung disorders, Diabetes, Chronic coronary illness, Immune smothered conditions, and liquor addiction are more susceptible to pneumonia with COVID-19. The side effects of extreme pneumonia caused by COVID-19 are Cough, brevity of breath, fever, loss of hunger, exhaustion, migraine, muscle throbs, chest pain under the breast bone, quick breathing, sweats etc. Another more serious condition is ARDS (Acute Respiratory Distress Syndrome), which is principally brought about by injury to the lungs (Could be by secondary infections). The injury brings about the spillage of liquid into the lungs. This causes extraordinary trouble in breathing and results in critical decrease in oxygen in the circulation system which eventually brings about harm to brain, different organs and body tissues. In the vast majority of the cases, individuals who are infected with SARS-CoV-2 experience mild influenza like indications and just a few individuals experience serious symptoms and create ARDS, combined with different organ failure and even death [31]. The elderly individuals and the people with specific issues like diabetes, constant obstructive aspiratory malady, hypertension, cardiovascular sickness are more vulnerable to ARDS [31].

At this point there is no particular prescribed treatment to treat SARS-CoV-2 infection. The current treatment methodology includes indicative treatment coupled to oxygen treatment. Patients with respiratory failure are usually treated with mechanical ventilation. Patients with septic shock need hemodynamic help. The immunity in the body plays a fundamental in the control of SARS-CoV-2infection[32]. Proper intake of dietary nutrients and regular exercises (especially yoga and pranayama) improves immune responses and as well lung capacity.

The principle motivation behind this article is to give knowledge about the normal household herbs, spices and some ayurvedic items with proven antiviral activities as possible solutions

to protect ourselves from the dreadful SARS-CoV-2 infection.

SARS-CoV-2 and antiviral agents

Scientists across the globe are struggling hard to identify potential drugs and vaccines for COVID-19.Antiviral drugs which are used to treat other illnesses and viral infections are currently used to treat people who are infected with SARS-CoV-2.With confirmed COVID-19 cases worldwide surpassing 6.4 million and continuing to grow, scientists are pushing forward with efforts to develop vaccines and treatments to slow the pandemic and lessen the disease's damage. Three medicines viz., chloroquine and hydroxychloroquine, the anti-malaria drugs; remdesivir, the anti-viral drug and the drug used to sedate people on ventilator received EUA (emergency use authorization) from FDA (Food and Drug Administration) as of May 8th [33].

Drug development is not a simple task and the drugs developed have to undergo so many steps starting from laboratory synthesis or development; then move to testing on laboratory animals and finally involves clinical trials in people. The entire process may take years to develop and release a new compound in to the market. Vaccine development could even take a longertime. So doctors and scientific community are mainly focussing their attention on available antiviral drugs to treat COVID 19 patients. These antiviral drugs include Remdesivir, which is developed a decade ago and was found to be safe for use in people. The drug was effective in controlling viral replication in MERS; Kaletra, a combination of lopinavir and ritonavir that works against HIV; Favipiravir, a drug used to treatinfluenza;Arbidol**,** antiviral was tested along with Kaletra (lopinavir and ritonavir) as a treatment for COVID-19[33].Scientists are also suggesting Ibuprofen, anti-inflammatory drug because of its role in easing breathing problems associated COVID 19. The drug Hydroxychloroquine and chloroquine which initially receivedemergency use authorization from the FDA was currently not in use due to safety issues[33]. At the end of May, WHO announced that it was stopping its clinical trials onhydroxylchloroquinedue to safety issues. Some of the countries like France, Italy, and Belgium also stopped the usage of this drug for treating COVID-19. Apart from these drugs other treatments included synthesis of monoclonal antibodies thattrigger the immune system to attack the virus; Blood plasma transfers (Blood plasma collected from convalescent patients (patients who have recovered from COVID 19) containsantibodies against SARS-CoV-2);Stem cell therapy(phase II/III clinical trials are under way in United States); Immune suppressants (to suppress the over active immune responses (cytokine storm) in patients with severe SARS-CoV-2 infection who develops ARDS) such asbaricitinib, a drug for rheumatoid arthritis; CM4620-IE, a drug for pancreatic cancer; and IL-6 inhibitors[33].

Vaccine developments for COVID 19 are also under way and more than 100 projects around the world are mainly involved in the development of a vaccine against SARS-CoV-2. Vaccines not only protect the people who are vaccinated but also the community known as herd immunity [33].

Kitchen Herbs and Ayurvedic products with effective antiviral properties

The metabolic properties of viruses make them very difficult to control and even there are only few antiviral agents synthesized so far to treat viruses [34]. The synthetic drugs also prove ineffective owing to their narrow range of activity, toxicity, limited therapeutic usefulness and resistant viral strains [35]. Most of the antiviral drugs mainly targets different stages of viral replication cycle [36]. The major drawback with the antiviral drugs is virus adaptation to these drugs and development of drug resistance by rapid mutations in target regions. The broad spectrum antiviral drugs although found to be less prone to drug resistance, their efficacy depends on cytotoxicity and antiviral effects [37].

In general most of the antiviral drugs are nucleoside analogues and have potentialembryo toxic, teratogenic, carcinogenic and anti proliferative activities. Some of the adverse effects of antiviral drugs include bone marrow depression, neurotoxicity, and gastrointestinal effects. The antiviral drugs also exhibit shared

toxicity when given with other agents. Given the adverse side effects of antiviral drugs and their severe drug interactions, antiviral therapy is suggested for severely ill patients who exhibit severe symptoms[38].

The development of new drug compounds with effective antiviral property is the need of hour. As synthetic drugs faces the challenges of drug resistance, developing compounds from natural sources offer effective antiviral agents to treat viral infections. Medicinal plants are sources of a variety of chemical compounds that have ability to inhibit both RNA and DNA viruses. Compounds from natural sources are of interest as possible sources to control viral infection. The following tables (1, 2, 3) shows the list of herbs, spices and ayurvedic products with proven antiviral properties. These sources also found to be effective against SARS-CoV-2.

Conclusion

We all are aware that COVID-19 is shaking the entire globe almost affecting every country in the world.Scientists across the globe are struggling hard to find out specific drug candidates to treat this dreadful disease. It's a known fact that viral diseases are tough to deal with and all currently available antiviral drugs left with potential side effects. In this scenario medicinal plants, our nature's gifts offer certain solutions to treat this pandemic. Even WHO is also insisting to conduct clinical trials on plant derived natural products. The current review is mainly focused on certain household herbs, spices and ayurvedic products that have already proven for their antiviral activity.

Conflict of Interest

The authors do not have any conflict of Interest.

Table 1 Common household herbs and their antiviral properties

S. No.	Name of the Herb (common name)	Scientific name	Family	Active Ingredient	Antiviral activity	References
1.	Garlic	Allium sativum	Amaryllidacea e	Allicin and Allion	HIV infection such as fungal infections	[39]
2.	Ginger	Zingiber officinale	Zingiberaceae	Elixirs, teas, and lozenges, Zingiberene, Zingiberol, Gingerole, Paradol, volatile oils, and vitamins A, B, and C.	Anti-avian influenza virus H9N2, Norovirus.	[40], [41], [42]
3.	Oregano	Origanum vulgare	Lamiaceae	Origanum Oil and carvol	Herpes simplex virus type 1 (HSV-1). Rotavirus	[43]
4.	Sage	Salvia officinalis	Lamiaceae	Safficinolide	Anti-HIV-1 activity	[44]
5.	Basil	Ocimum basilicum	Lamiaceae	Apigenin and Ursolic acid	Herpes virus, Hepatitis B and Enterovirus.	[45], [46]
6.	Fennel	Foeniculum vulgare	Apiaceae	Essential oil, Phenylpropanoids and Sesquiterpenes	Herpes Simplex Virus type 1 (HSV-1)	[47]
7.	Lemon balm	Melissa officinalis	Lamiaceae	Essential oil	Avian Influenza (AI), Herpesvirus, HIV-1 and Enterovirus 71,	[48]
8.	Peppermint	Mentha piperita	Lamiaceae	phenolic acids and flavonoids	RSV, antiviral, anti-inflammatory, and antioxidant activities	[49]

9.	Licorice	Glycyrrhiza glabra	Fabaceae	Flavonoids, Glycyrrhizin, Liquorice. liquiritigenin, and glabridin	anti-HIV activity, anti-HSV activity, Immunostimulatory properties and inhibit viral production	[50], [51], [52]
10.	Echinacea	Echinacea purpurea	Asteraceae	Cichoric acid and Echinacoside, as well as Caffeic acid	Human and avian influenza viruses, Herpes simplex virus, Respiratory syncytial virus, and rhinoviruses	[53], [54]
11.	Rosemary	Rosmarinus officinalis	Lamiaceae	Oleanolic acid	Herpes virus, HIV, Influenza and Hepatitis	[55], [56], [57]
12.	Sambucus	Sambucus nigra	Adoxaceae	Flavonols, quercetin-3-glucoside and quercetin-3-rutinoside	Influenza and colds	[58], [59]
13.	Astragalus	Astragalus lentiginosus AstragalusMembranaceus	Fabaceae	Saponins, flavonoids, and polysaccharides	Herpes Simplex Virus Type 1, Antiviral, embryo toxic and cytotoxic activities, Anti-influenza virus activity	[60] [61] [62]

Table 2 Spices and their Antiviral properties

S. No.	Name of the spice	Scientific name	Active Ingredients	Antiviral acrivity	References
1.	Haldi	Curcuma longa	Curcumin, volatile oils, vitamin A, and proteins.	Effective against HIV, Influenza, HSV-1, HSV-2, Coxsackie virus, HBV, HCV, HPV, JEV, HTLV-1 etc.	[63, 64, 65]
2.	Long pepper	Piper longum	Piperine	Anti-HBV activity	[66]
3.	Jeerak	Cuminumcyminum	Cumaldehyde, vitamin A, vitamin C, Cuminal, Cuminic alcohol, γ-Terpinene, Safranal, p-Cymene, volatile oils and β-Pinene	Herpes Simplex Virus Type 1	[67]
4.	Adarak	Zingiberofficinale	Zingiberene, Zingiberol, Gingerole, Paradol, volatile oils, and vitamins A, B, and C	Human Respiratory Syncytial Virus (HRSV).	[68]
5.	Lanka or chili	Capsicum annum	Capsaicin, capsaicinoids, volatile oils, and vitamins C and E	Herpes Simplex Virus Type-1, Herpes Simplex Virus Type-2	[69]
6.	Methi	Trigonellafoenum-graecum(Fenugreek)	Volatile oils, calcium, phosphorus, iron, trigonalin, Vitexin, β-sitosterol, and tigogenine.	Herpes Simplex Virus (HSV)-2.	[70]
7.	Tejapatra	CinnamomumtamalaNees	Monoterpenes, sesquiterpenes, volatile oils, eugenol, and phellandrene.	Anti-HIV	[71]
8.	Daruchini, Cinnamon	CinnamomumZeylanicum Breyn (Cinnamon)	Cinamaldehyde, eugenol, cinnamic acid, and cinnazeylanin	H1N1 and HSV1 viruses	[72]
9.	Lavang, clove	Syzygiumaromaticum	Eugeniin	Herpes simplex virus type 1 (HSV-1) and Influenza A virus,	[73]

				Hepatitis C virus	
10.	Marich or Pepper	Piper nigrum	Piperine, piperidine, chavicine, vitamin B, and volatile oils	Inhibits coxsackie virus type B3 (CVB3), HRV-2	[74]
11.	Mustard	Brassica juncea	Brassinosteroids(naturally occurring polyhydroxysteroids)	Anti influenza virus A/H1N1	[75]
12.	Heeng	Ferula asafoetida	α-pinene, diallyl-sulfide, luteolin, ferulic acid, Vanillin	Influenza A(H1N1)	[76]
13.	Kumkum (Saffron)	Crocus sativus	Crocin, picrocrocin, and volatile oils	Anti-HSV-1 and Anti-HIV-1 activities	[77]
14.	Pepper mint/Mentha balsamea wild.	Menthapiperita	Phenolic acid and flavonoid	Anti RSV (respiratory syncytial virus)Activity	[78, 79]

Table 3 Ayurvedic products with antiviral properties

S. No.	Common name	Scientific Name	Plant parts	Active Ingredient	Anti viral activity	References
1.	Aswhagandha	*Withania* somnifera	Root, berry	steroidal lactones ("withanolides"), alkaloids and saponins	Ranikhet disease virus, vaccinia virus,	[80]
2.	Guduchi	Tinosporacordifolia	Root, stem and whole part	diterpenoid lactones, glycosides, steroids, sesquiterpenoid, phenolics, aliphatic compounds, essential oils, a mixture of fatty acids, and polysaccharides	Anti HIV	[81]
3.	Yasthimadhu	Glycyrrhiza glabra	Root	18ßglycyrrhetinic acid, Glycyrrhiza aqueous extract, Glycyrrhizin, biochanin B, glabrone	Varicella zoster virus, Kaposi sarcoma-associated herpesvirus, Herpes Simplex Virus-1, Epstein Barr virus, Human Cytomegalo virus, etc and RNA viruses such as Influenza A virus (IAV), H5N1 virus, H1N1 virus, Hepatitis C virus, Newcastle disease virus, Rotavirus, SARS-associated coronavirus, Human Immunodeficiency Virus	[82]
4.	Pipli	Piper longum	Fruit	Piperine, Glycosides, amide alkaloids	anti-HBV activity	[83]
5.	Ayush 64'	Polyherbal formulation	Saptaparna stem bark (Alstoniasholaris), Katuki root (Picrorhizakurroa), Chirayata whole plant (Swertiachirata), Kuberaksha seed (Caesalpinia crista)	Indole alkaloids and total alkaloids (Alstoniasholaris), Picroside II (Picrorhiza), Bellidifolin and Swerchirin (Swertiachirata), gluco-arabinan (Caesalpiniacrista)	Anti malaria, Micro filarial, Chikungunya, Influenza like Illness	[84]
6.	Chyavanprash	Formulated by processing around 50 medicinal herbs and their	• Amla (Indian Goosberry), Yashtimadhu (Glycyrrhizaglabra	Ascorbic acid, polyphenolics, flavonoids, gallic acid molecules	antibacterial, antiviral, anti-inflammatory, antiallergic, antithrombotic, and	[85]

		extracts	), Brahmi (Bacopamonnieri), Bilya (Agelemarmelos), Gokshura (Tribulusterrestris), Pippali (Pipallongum), Guduchi (Tinosporacordifolia), Haritaki (Terminaliachebula), Shatavari(Asparagus racemosus), Ashwaganda (Withaniasomnifera), Bala (Sidacordifolia) •		vasodilator effects	

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COVID-19 PANDEMIC: STRESS MANAGEMENT AND YOGA BENEFITS

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ABSTRACT

Stress the executives is a wide range of procedures and psychotherapies planned for controlling an individual's degree of stress, particularly ceaseless pressure, for the most part with the end goal of and for the rationale of improving regular working. In this specific circumstance, the term 'stress' alludes just to a worry with huge negative outcomes, or pain in the wording supported by Hans Selye, as opposed to what he calls eustress, a pressure whose results are useful or something else.

Introduction

Coronaviruses are significant human and creature pathogens. Toward the finish of 2019, a novel coronavirus was distinguished as the reason for a group of pneumonia cases in Wuhan, a city in the Hubei Province of China. It quickly spread, bringing about a pandemic all through China, trailed by an expanding number of cases in different nations all through the world. In February 2020, the World Health Organization assigned the infection COVID-19, which represents coronavirus illness 2019 [1]. The infection that causes COVID-19 is assigned extreme intense respiratory disorder coronavirus 2 (SARS-CoV-2); already, it was alluded to as 2019-nCoV.

COVID-19: regular responses

As the COVID-19 pandemic and its broad ramifications keep on unfurling all around and in our locale, it's typical for individuals to encounter a wide scope of musings, sentiments and responses including:

- Feeling pushed or overpowered
- Anxiety, stress, or dread
- Racing contemplations
- Sadness, sorrow, loss of enthusiasm for common pleasant exercises
- Physical indications, for example, expanded pulse, stomach upset, exhaustion, or other awkward sensations
- Frustration, fractiousness, or outrage
- Restlessness or tumult
- Feeling powerless

These encounters are on the whole justifiable despite this critical test. There has been death toll, quick changes to our lifestyle (e.g., study, work, parties), and upset plans because of movement limitations and social (physical) removing measures in our endeavors to slow the spread of transmission. Individuals are normally worried for their own and their friends and family's wellbeing and security. There is still a lot of vulnerability.

It's critical to perceive the earnestness of the general wellbeing challenge confronting our locale, and be careful that responding from a position of frenzy and dread is typically unhelpful, particularly in the long haul. Caring for our prosperity in occasions such as this can assist with lessening pressure, and is vital in empowering us to even now make quiet and powerful move amidst this worldwide emergency.

Steps to oversee pressure

1. Exercise Regularly

Aerobic activities should in any case be possible inside the dividers of your home or the compound of your condo, for example, strolling, running or climbing steps. In any event, playing with your children or pets can help consume off certain calories. Exercising helps discharge endorphins inside your framework, which assume an imperative job in raising your state of mind and keeping an inspirational mentality. Extending activities and yoga likewise help keep you fit and your brain quiet. Buy in to simple to-follow YouTube recordings or wellness and health sites for basic exercise regimens to do at home.

2. Take a Break

The continually negative news can be a ton to deal with. Choose the measure of introduction to the news that works for you. Particularly if

there are kids included, ensure you open them to just age-fitting material. Often disengage genuinely and intellectually from anything to do with the Coronavirus inclusion. Play with puzzles, read a book, rearrange or clean.

3. Connect with Others

During these seasons of vulnerability or dread, it is basic to interface with others. Being in separation and all the ridiculous dread can prompt pressure and wretchedness. Connect with family, companions, and partners consistently through calls, messages or messages. Mind the individuals who are living without anyone else and the old individuals from your family. It likewise assists with defending your feelings of trepidation and be educated on how they are getting along.

4. Take Adequate Rest

Stress and uneasiness made by the developing news and data over-burden can be exasperated by an absence of rest. Getting the suggested measure of tranquilizers in overseeing pressure and remaining centered during the day. Stay away from energizers like caffeine, liquor or nicotine before sleep time. Having a sleep time routine is additionally suggested, for example, cleaning up, or having some non-charged home grown tea before you rest. Making arrangements for the following day likewise reduces worry because of vulnerability.

5. Maintain a Healthy Diet

Superfluous pressure can make you indulge or eat undesirable, antagonistically influencing your digestion. Maintain a strategic distance from passionate eating by recognizing trigger factors and avoiding the inclination. Keep sound snacks around you, for example, natural product bowls, nuts or even granola bars. Keeping your glucose levels stable for the duration of the day manages your disposition and feelings. Great sustenance additionally keeps your invulnerable framework sound.

6. Practice Good Hygiene

Be extra careful and follow the precautionary measures that have been exhorted. Keep your floors clean and purify hard surfaces normally. Ensure you clean up each day and are keeping up an everyday individual cleanliness schedule.

Yoga and reflection

Probably the best type of physical, mental and otherworldly practice, Yoga is most appropriate for this isolate period. "Practice of yoga deals with all these psychological issues. Yoga alongside breathing and contemplation can be considered as an inside and out exercise which will deal with our body, brain and soul. Hatha yoga rehearses are most appropriate for tenderfoots. These practices likewise can have various varieties which can make one flawless in the last postures. A portion of these practices incorporate Tadasana, Trikonasana, Ardha Kati Chakrasana and Veerbadrasana," says Kutteri. Dandwate says that Yog Nidra is the most gainful during these occasions. He says, "One of the most significant and incredible strategies that can be utilized is Yog Nidra. 20 minutes of Yog Nidra consistently can help gigantically in defeating pressure and tension."

Conclusion

Stress delivers various physical and mental side effects which shift as indicated by every individual's situational factors. These can incorporate physical wellbeing decrease just as discouragement. The procedure of stress the executives is named as one of the keys to a cheerful and fruitful life in present day society.[1] Although life gives various requests that can demonstrate hard to deal with, stress the board gives various approaches to oversee tension and keep up by and large well-being. Yoga and contemplation is helpful for dealing with the pressure.

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TOURISM IN GUHAGAR AREA OF RATNAGIRI DISTRICT DURING COVID-19

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ABSTRACT

Tourism is considered as one of the most emerging sectors of economy, India as developing country has a wide scope for growth as many areas of the country are still unexplored. By the end of the year 2020 it is expected that tourism sector in India would contribute around Rs. 8,50,000 crores.Therefore, it has so much to show and it is so vast that even after exploring there will be something that is still being unexplored. And as far as Travel and Tourism industry is concerned it has always shown a growing trend, because as people from different country travel to India this helps in generation if foreign currency as well as the places which gets more preferences by the tourists, starts getting developed, employment is generated as well as the local traditions get a global exposure.It is a thing of pride that certain thing which is manufactured in a small village kind of area gets to roam the globe. New people, different cultures, languages and everything gets connected just because of travelling. In case of tourism there is a chance to earn lot of foreign currency without much exploitation of the material resources because in this case we are just selling subjective satisfaction to the tourist. There are various states in India having endowed with heavenly natural beauty, good locations. The states like Goa, Kashmir, Nainital, Dehradun, etc. are capitalising on this, majority of the population from these places have accepted tourism as their livelihood, their entire economy is dependent on tourism. But due to the covid-19 the tourism business is badly affected. In the present situation of continuous lockdown everyone is struggling very hard to survive. Tourism in Guhagar area of Konkan is a challenging task to be undertaken. The entire Konkan area is evergreen and endowed with heavenly natural scenic beauty. Those who are in tourism business should capitalise on this.During this period also if proper precautions are undertaken it is possible to cope up with the present situation.

Keywords:*Tourism, Covid-19, Destination**, **S**ubjective satisfaction*

Introduction

Guhagar which is located in Ratnagiri district of Maharashtra, India. Located at 264 km south from Mumbai, with beaches, greenery, temples and proper accommodations, Guhagar has become one of the most popular weekends and short holiday destination for the people from Mumbai, Pune and nearby towns and cities.

Many people from the state as well as from country are coming every year, it has also been observed that many of local people staying near the beaches have created guesthouses for the tourists, because of which the tourists are able to get a taste of local food along with a family friendly environment.

Even being little bit isolated and covered with forests it is still considered to be a safe destination for travellers to explore the town even during the night time, thanks to the local authorities working over there. Their efforts have made the place safe for the tourists, availability of buses and local transport is made easy to the public, which encourages them to roam around freely.

People visit the place irrespective of the weather, no matter which season it is, people love preferring that place, but the real beauty of Guhagar is seen during monsoons where there is a lush of greenery and an aroma of soil, fragrance of flowers along with a cool breeze freshen ups the mood. So, it is advised to visit the place during monsoons.

Just like Goa and Alibaug you can easily rent cycles, two-wheeler and four wheelers to explore the city, sometimes the hotels or the accommodations you stay have these facilities. And due to this, the people get time to roam and enjoy the place as per their convenience. Many cyclists visit the place every year. Even the National Geographic Traveller Magazine, India has described about the beauty and the cuisines of Guhagar in their report of 26th December 2016.

Problem of the study

There is ample opportunity of tourism development in India. It has remarkable contribution to the national income. Unlike Goa there is vast scope to develop tourism in

Konkan area. The main purpose of the present study is to explore the tourism opportunities inGuhagar area.

Objective of the Study

- To understand the importance of tourism Indian economy.
- To study tourism opportunities in Guhagararea of Ratnagiri district during covid-19

Scope of the study

The present study namely "Tourism in Guhagar Area of Ratnagiri District During COVID-19" it covers only the Guhagar area of Ratnagiri district. The study would include the opportunities to tourism development in the said area.

Research Methodology of the Study

In order to accomplish the objective, secondary source of data is used and collected with the help of few web sources and published sources like journals, books, etc.

Significance of the study

The present study would explore various tourist destinations in the Guhagar area. They will be helpful to the tourism department government of Maharashtra to understand the potentials of this area and frame the policies of tourism development accordingly.

History of Guhagar

The name Guhagar is came from two word "Guha" and "Gar", where Guha refers to caves and Gar refers to house therefore it is known as "House of Caves". Guhagar has a mythological importance as Lord Parshurama who is considered as an incarnation of Lord Vishnu has his existence in that place. This shows that the place exists since ancient times.

The places like Kanakaditya temple, Dashbhuja Ganesh Temple and Vyadeshwar Temple have historical importance as Dashbhuja Ganesh Temple was built by the Peshwas and as per an ancient text Vyadeshwar temple was built in the 12th Century. There are many other temples which are built over 500 years ago. This shows that the city was even in the history of before and after Christ.

How to Reach

By Road Mumbai – Guhagar (264.5 Kms)

State Transport (ST) buses, Private buses or rented Cars

By Railway Mumbai (Dadar, Kurla) – Chiplun

And from Chiplun you can take roadways to reach Guhagar

Places of Interests in the View of Tourism business

Guhagar Beach

Guhagar Beach is 5-6 kms long which stretches till Asgoli, it is a vast blue and clean sea covered with coconut trees.

Velneshwar Beach

Velneshwar village is located 20 km from Guhagar and over there Velneshwar Beach is one of the most visited tourist destinations being isolated from the main city, it is considered to be a quiet place where one can spend a quality time.

Dashbhuja Ganesh Temple, Hedavi

The temple is situated at 10-11 kms form Velneshwar Beach, it is one of the oldest temples in Hedavi. It is said the it was funded by Peshwas. The temple is located at a height where we can reach by walking through the

steps as well as road is built for vehicles to reach at the place. It is claimed that the idol is made of pure marble and was created in Kashmir, the idol is called as 'Dashabhuja' as it has 10 hands and it is a warrior depiction of Lord Ganesh which is rarely seen anywhere.

Vyadeshwar Temple

Guhagar is known for this temple, it's a Shiva Temple which was build in 12th Century according to an ancient sanskrit text "Shree Vyadeshwar Mahatmya", but from these texts it is also found that the idol in the temple is prior to 12th century.

Gopalgad Fort/ Anjanvel Fort

One of the most important fort if Ratnagiri district, the fort is situated in Anjanvel Village whichh is 13-15kms from Guhagar. The fort was ruled by Adil Shah of Bijapur which was then captured by Shivaji Maharaj in 1660 during the battle of Dabhol Creek.

Chandika Mandir

The speciality if this temple is that, it is 15-16 feet underground and situated in caves. It is believed that the deity has appeared at that place on its own. The temple was discovered three centuries back.

What to buy form Guhagar

Various kinds of homemade food products can be bought from Guhagarlike Amba Poli, Phanas Poli, KokamAgal, Pickles, Jams, Flours, Kokamsarbat, Karwanda Sarbat, Aaola Sarbat, Amba Poli, Papad, Amchur.

Conclusion and Suggestions

This is the overall view of Guhagar a small village but loaded with natural beauty, it is our responsibility to take the care of that.Guhagar is an isolated place in the district of Konkan, so even though it is quite it lacks certain facilities which should be taken care of, along with that roads should be maintained properly so as to facilitate smooth transport.

In the situation of Covid-19 as the lockdown is opening up slowly and gradually, the tourists will start coming to this place again, in order to maintain the safety of them the hotels should follow the orders and instructions given by the government authorities from time to time. They should well equip themselves with doctors so that the tourists will feel secured.During this lockdown period also, they can come out with new packages to attract the people who have left the overcrowded cities such as Mumbai, Pune and gone to their native places. If these people are assured of social distancing and proper hygiene and sanitisation they can be converted as tourist. There are tremendous opportunities for the development of tourism in

the entire Konkan are and particularly the Guhagar area. The government should give due attention to provide sufficient funds for the development of supporting infrastructure like transport, hotels, banking etc.

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THE ROLE OF E-BOOKS AND E-LITERATURE IN COVID- 19

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ABSTRACT

Human history is observing a very strange time fighting an invisible enemy the novel COVID-19 coronavirus. In this pandemic situation e-books and e-literature plays an active role in the life of students as well as teachers. Since the COVID-19 has caused educational institutions worldwide go online, students are now totally reliant on digital classroom material as schools remains closed to stop the spread of virus. E-books and E-literature platform have gone a 16 percent traffic has increased between January and March 2020. Overall websites selling books and reading materials online generated 1.51 billion visits in March 2020, up from 1.34 billion global visits in January. This is of course due to the global coronavirus pandemic which, among other things, has forced people worldwide to stay at home and forego their usual sorts of outdoor entertainment. Approximately, it effected the learning of 285 million young learners and make them self- isolated. The present paper deals with the role of e-books and e-literature during the crucial situation COVID-19.

Keywords: *Digital Classroom, e-book, e-literature,*

Introduction

As the whole world is going through a very tough time fighting with a dangerous enemy the novel COVID-19. Initially it spreads out in Wuhan, a city in China but it has covered the whole world. As the virus spreads across the world, information about disease, messages on, preventive measures, news of cures in the process of development, all these are of prime importance. The COVID-19 has affected educational system worldwide, leading to the near total closures of schools, colleges and universities. As the days pass by with no immediate solution to stop the outbreak of COVID-19, schools and university closures have a long-term impact on the continuity of learning for more than 285 million young learners. This is of course due to the global coronavirus pandemic which, among other things, has forced people worldwide to stay at home and forego their usual sorts of entertainment. Furthermore, millions of school children and students are now reliant on digital classroom materials as schools remains closed to stop the spread of the virus in this troublesome situation. In this pandemic situation the role of e-books and e-literature has become more important. As of 7 June 2020, approximately 1.725 billion learners are affected currently due to school closures in response to the pandemic.

E-Books

We live in the age of electronic everything. With the development of technologies and ease in design for mobile devices has allowed e-books to naturally evolve into interactive e-books. The term electronic books or e-books are defined as self- contained digital text whose basic structure mimics traditional books are viewed on an electronic screen and are used by students with the knowledge of information and communication technology. Now it has become possible for the students to store number of e-books in their tablets, smartphones and computers which contains large number of personal libraries in their hands and pockets. These portable libraries provide a cost-effective learning infrastructure that enables anytime, anywhere, self-paces and interactive learning. E-books have become increasingly popular in computerbased education across a range of subject domains and education levels. Most of the students prefer e-books because of the pandemic, ease of access, ease of storage and sustainability. E-books helps to create effective learning experiences and makes the learner independent. E-books are also considered as powerful learning tools that provide important opportunities for learners with interactive content.

E-Literature

E-literature and electronic literature is also known as digital literature. The Electronic Literature Organization was founded in 1999 to

foster and promote the four English skills: reading, writing, listening, speaking and understanding of literature as it develops and persists in changing environment. It is a genre of literature encompassing works created exclusively on and for digital devices such as computers, tablets and smart phones. A work of electronic literature can be defined as "a construction whose literary aesthetics emerge from computation", work that could only exist in the space for which it was written- the digital space." E-literature is an emerging cultural form as much a collective creation of terms, keywords, genres, structures and institutions as it is the production of new literary objects. The Electronic literature Organization (ELO) formulated and published an excellent definition in January 2007. According to it, "Electronic literature refers to work with important literary aspects that take advantages of capabilities and context provided by the stand-alone or networked computer". As electronic literature communities emerge around the world they bring with digital media For Example, N. Katherine Hales ` periodization of electronic literature into two generations – early text based works up to 1995 and multimedia intensive contemporary period after that year – is centered on the U.S, Canada, England and Australia in its perspective.

The role of E-books and e-literature

The role of e-books and e-literature during COVID-19 is very significant. As we know that the whole world is going through a very tough time due to coronavirus. This situation has made the people to stay at home and live in isolation. Even the Government has closed down all the schools because of pandemic. In this situation e-books and e-literature has become more advantageous. As the students are not able to go to school as it is not possible to maintain social distancing. It has made them too reliant on digital classroom. Now this is the time for the digital reading to finally shy as its sales are estimated to be anywhere between 3% to 8% of total sales of books. In the past few weeks major publishing houses such as Penguin Random House, India and Harper Collins, India have set up exclusive e-books stores on Amazon India in partnership with Kindle with their titles available at discounted prices.

In order to help students, the digital libraries are also contributing a lot. Keeping in view the current scenario, the Government has made The National Digital Libraries free of cost to help the students. In this connection, The National Digital Library of India (NDLI) sponsored by MHRD is also helping students by providing them number of books free of cost. Students can utilize these books available in NDLI, written by different authors in different languages. Here, the students can read the digital version of 64 lakh books written in 250 languages by using any digital device like smartphones, tablets and computers. This is a great opportunity for students to read the highly knowledgeable books without paying any price. Not only this, the students can also download number of audio lectures, video lectures and thesis written by different scholars from the NDLI website.

The pandemic has totally transformed the different countries -traditional chalk-talk or old classroom teaching model to digital classroom teaching driven by technology. In this situation the Government has suggested open sources digital learning solutions so that the teacher can conduct online teaching classes. In this context, Telecom Operator Bharti also stepped out to make books free to support people by providing them thousands of top books and novels. Students can read these books freely anytime, anywhere by doing nothing but by simply downloading the app. Different publishers are also working hard in this context by providing online books time to time.

As literature is the reflection of society from time to time. Since the coronavirus has gone worldwide, the people are more interested in hearing or reading the news about coronavirus. E-literature is helping the students in this lockdown to focus on their favorite thing - reading. Literature has a history of different epidemics like Black Death, plague etc. Along with that again one more time literature is making people aware about coronavirus pandemic. Margaret Atwood has written a book "MADDADDAM" a trilogy set in a near-future dystopian society, where humanity is

very much wiped out by a manmade virus which contains the very similar story as we are going through the similar situation. Small children can read number of children stories or fables freely written by different English authors. They can entertain themselves. In literature one of the poems THE FALL OF THE ROME by W.H Auden also strange lyrical and worldly: the perfect response for our current moment. There are number of books available in our literature through which the people can get encouragement and strength to cope up with the situation.

Conclusion

The role of e-literature and e-books cannot be denied in the current situation. As literature is the reflection of time, it is continuously working for the entertainment of people. It teaches the people that how to live in isolation. E-books and e-literature is playing a very important role in the life of people .It is only the e-books which are helping the students worldwide to continue their study in this crucial time even in the absence of school, colleges and universities.

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IMPACT OF COVID-19 PANDEMIC ON INDIAN MUSIC TEACHING - LEARNING & PERFORMANCE

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ABSTRACT

The novel corona virus disease (COVID-19) has put various sectors such as economic, real estate, automobiles etc. in difficult time. Arts sector, especially music industry, has also been significantly affected by the pandemic. Numerous music events, which include international Music festivals, Concert tours, and private mehfilshave either been cancelled or postponed sine die. The COVID-19 pandemic is proving to be the most devastating challenge, never faced before by the musician community. Especially, freelance performers, bands, small-group musicians, orchestra artists, restaurant singers, bhajan singers, private school music teachers, private class teachers etc. are facing loss of earnings. Due to this crisis on musicians, their income is abruptly cut-off. Many music communities have come together and are appealing to their fans to help them or the needy ones by raising funds. Artists are also performing online on various virtual platforms for the same purpose. Financially settled artists /musicians have come together and taking efforts to collect fund for people whose income have severely affected by COVID-19 initiated lockdown. On the other side, many musicians are involved in promoting themselves by using various virtual platforms and gaining popularity. Live Facebook concerts are being conducted by various organizers and individuals merely to get publicity. Innovative ideas such as composing of songs on COVID-19have become a trend for many experimental musicians.These songs are being widely spread through the internet and are receiving both, appreciation as well as criticism. Corona warriors like doctors, police and social workers are spreading awareness messages through these songs. So, we find a constructivemessage of social distancing, cleanliness and immunity building being spread through music. Unfortunately, in India, during this tough period, there is no assistance to daily wage musicians from the Government. Many artists have appealed to the government to declare an economic package for them, so as to enable them deal with the trying times.

Keywords *– Music, COVID 19, Lockdown, Pandemic*

Introduction

Around December 2019, Novel Corona Virus Disease (COVID-19) started spreading like a wildfire across the world, brining one-by-one every country under its sway. This forced the World Health Organization to declare the disease a pandemic.

Foreseeing the impact, the Indian government started taking serious steps to combat the pandemic. One notable measure being the initiation of countrywide lockdown that started from the last week of March 2020.

As the spread of the disease intensified, the lockdown, too, got subsequent extensions. Lockdown compelled people to stay indoors. This has had a telling effect on almost all fields, thereby adversely impacting the careers of people working in those fields. Performing arts is one such area which has been significantly impacted by the lockdown. Especially, the field of music, which forms a crucial component of performing arts, has suffered a lot during this period of the pandemic initiated lockdown.

In music domain, various professionals have been practicing. Some of them are well established performing artists of international and national acclaim. Some are them are into training and teaching working with government institutes or well-known private autonomous institutes. And then, there are freelancers and small-time artists, for whom performance is a primary source of income. Amongst all, it is the third category of artists that has suffered a lot during the period of lockdown. Prevention of mass gatherings for functions and celebrations left no scope for musical performances. This directly impacted the financial prospects of these artists, who solely rely on performances.

The field of music witnessed a marked increase in the training and teaching through online medium during the lockdown. Also, some artists made an attempt to gain fame through performing online. Internet has been a good medium to accomplish this; however, the feasibility of online education in the field of music doesn't have as much relevance as in any other field. The complexities involved in

the field of music make it practically more difficult to learn the concept through online mode, though some of its proponents have been making such an attempt.

This paper attempts to discuss the impact of COVID-19 and the pandemic initiate lockdown on the field of music in detail. The focus is to understand how the pandemic adversely impacted lives of those artists for whom music is bread and butter. The paper also discusses supplementary aspects such as rise of online teaching and training, performances and how it can become an agent to dilute the quality of music.

Teaching and learning

Oral tradition is considered as the main source of music education. A large number of students are learning music from various institutes which includes university departments, music colleges, private institutes and private music classes. The process of teaching and learning has severely suffered during this pandemic lockdown. With the outbreak of the disease, government announced closure of schools and colleges and other institutes. But the teachers and students have come up with innovative ideas to continue the process of teaching and learning even during this tough time. Institutes have turned towards digital platforms for providing musiceducation. They are hosting online classes, which students can attend within the safety of their homes (Upadhyaya, 2020). However, e-learning has its own advantages and disadvantages. One of the advantages is that pre-recorded videos, online exercises, and quizzes offer students to learn the concepts at their convenience. Physical guidance is a crucial part when a student is learning a musical instrument, which is not possible with online learning. This is the biggest disadvantage of using e-learning for music. Further, to avail e-learning facilities, a student needs to have high-end gadgets and access to high-speed internet connection coupled with a personal motivation to use the medium. Given these requirements, poor students can hardly afford e-learning (Musical U, 2017).

Virtual Platform

The COVID-19 pandemic compelled lockdown situation has prevented mass gatherings in many countries. This affected music festivals, concert tours, live performances etc., which would have occurred had the pandemic not occurred. Numerous music events, which include international music festivals, concert tours, and private *mehfils*have either been cancelled or postponed sine die.Live performances, concerts, and festivals are arranged by many renowned artists to please the audiences. Many organizers have started hosting regular concerts over social media platforms such as Facebook, Twitter, YouTube and other virtual platforms. Musical quizzes, competitions, webinars and interviews of eminent artists are being organized by various organizations, individuals etc. to keep in touch with the music community and keep the things happening. But one unanswered question arises, which is “are these artists getting any sort of remuneration for their performances on these platforms? Unfortunately, there are no such paid concerts on virtual platform. As a result of this, there may be a trend in the future when artists will have to perform for free. This is because, nowadays, some of the artists are posting their live performance video, without expectation of any remuneration, mere for the publicity, notunderstanding the future repercussions.

Lockdown Crisis

The lockdown conditions have significantly ruined the field of performing arts. These conditions have practically left no scope for musicians to perform as there’s no certainty as to till when mass gatherings, music concerts and performance tours will not be conducted. Many private music schools and institutes have been shut down. Similarly, many recording studios have been completely closed and not operating. During these challenging times, freelance musicians, recording artists, tutors etc. are facing unprecedented financial disaster (Lunny, 2020).Freelancer and small-time artists such as orchestra singers, accompanists, marriage singers, band party troupe, *bhajan – kirtan* artists and all the folk music fraternity are struggling hard. This isbecause the entire

world has come to a standstill, whichhas left no scope for entertainment programs to happen. Musicians say that they have been left with no work and majority of them are not tech-savvy to use the social media to reach out to an audience or even raise their voice (India, 2020).

Fortunately, we have some well-known and established artists of international and national acclaim, who have come together to raise funds for the needy musicians. These artists are raising funds by doing concerts at home. The Indian artists worldwide have been uniting and making an attempt to help the needy musicians in India during these difficult times. For instance, The Global Carnatic Musicians Association is providing support and essentials to economically weaker sections of music practitioners, by collecting funds from artists in the USA, India and other countries (Sivakumar, 2020). Local music groups, communities are also uniting and gathering funds to provide essential support to the poor and badly suffered artists to enable them feed their families.

Music and Corona Warriors

Several musicians are coming up with motivational and meaningful songs specially composed on COVID-19 pandemic. Through these artistic compositions, they are making a positive attempt to create awareness amongst people, and also paying tribute to the COVID-19 warriors like nurses, police personnel, medical staff, and all those who are putting their lives at stake and effectively doing their duties to counter the disease. For instance, the legendary music director Ilaiyaraja has composed a song ***Bharathbhoomi,*** which has been sung by SP Balasubrahmanyam and Shaan in Tamil and Hindi versions respectively (TNN, 2020). Coming together, many classical musicians have composed songs in order to motivate theaudiences and common people by giving an encouraging message, so that each individual can act as a corona warrior to fight against the virus. In a way, these musical compositions have become highly effective campaigns to spread awareness about social distancing, washing hands, cleanliness, staying at home etc. Even COVID-19 warriors, including police personnel, doctors, nurses, and social workers, are using songs as an effective medium to spread positive awareness messages and imploring people to stay indoors.

Conclusion

- The Musicians and teachers have come up with innovative ideas to get connected to their audience and students by using various types of virtual platforms which proved that ‘Learning Never Stops’.
- Established and settled artists have united to help the self-employedfreelance musicians whose livelihood, especially the economic prospects, has been severely affected by the pandemic. Artist associations have been formed and funds are being raised from various sources.
- A large no of musicians from rural and remote areas, and those who are financially strong enough to afford hi-tech gadgets are not techno-savvy.Hence it is impossible for such artists to perform on virtual platforms and stream for money.Also,in India, there is no such culture or practice of paying for digital concert, as a result of which the artists have to perform on e-platforms without any remuneration.
- Governments of many countries such asthe UK, Germany etc. have declared financial assistance to the artists working in the cultural fieldincluding self-employed freelance musicians. However, in India no such financial or economic assistance or relief package has been declared till date by the government, especially for self-employed artists. However, economicpackages have been declared for farmers and daily wages workers in the country.
- Corona warriors like doctors, nurses, police personnel and social workers are using music to spread awareness during the COVID-19 pandemic effectively. Musicians are performing online on various platforms to entertain their fans and audiences. Further, through these performances, musicians are keeping the audiences stress free and easing the anxiety.

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EXISTENCE OF $\frac{1}{\sqrt{2}}(y+z)$ -TYPE PLANE GRAVITATIONAL WAVES IN BIMETRIC RELATIVITY

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ABSTRACT

In this paper, $Z=\frac{1}{\sqrt{2}}(y+z)$ - type plane gravitational wave is studied with source Cosmic Cloud Strings in Rosen's Bimetric theory of relativity. It is shown that there is nil contribution of Cosmic Cloud String in this theory. Only vacuum model can be constructed.

Keywords: *Plane gravitational waves, Cosmic cloud strings, Bimetric Relativity*.

AMS Code-83C05 (General relativity)

Introduction

The general theory of relativity is one of the most beautiful structures in all theoretical physics. In an attempt to get rid of the singularities, appear in the Einstein's General Theory of Relativity (GR), Rosen[8-9] has proposed a modified theory of gravitation within the framework of general relativity, which is called Bimetric Theory of Relativity (BR). In this theory, he has proposed a new formulation of the general relativity by introducing a background Euclidean metric tensor γ_{ij} in addition to the usual Riemannian metric tensor g_{ij} at each point of the four dimensional space-time. Withthe flat background metric, γ_{ij} the physical content of the theory is thesame as that of the general relativity.

Thus, now the corresponding two line elements in a coordinate system x^i are –

$$ds^2 = g_{ij}dx^i dx^j \quad (1.1)$$

$$d\sigma^2 = \gamma_{ij}dx^i dx^j \quad (1.2)$$

Where ds is the interval between two neighboring events as measured by means of a clock and ameasuring rod. The interval $d\sigma$ is an abstract or geometrical quantity not directly measurable.One can regard it as describing the geometry that would exist if no matter were present.H. Takeno [5] propounded a rigorous discussion of plane gravitational waves, definedvarious terms by formulating a meaningful mathematical version and obtained numerous results.

Using definition of plane wave, we will use here, $Z=\frac{1}{\sqrt{2}}(y+z)$ type plane gravitational waves by using the line elements,

$$ds^2 = -A\left(dx^2+dy^2\right)-C\left(dz^2-dt^2\right) \quad (1.3)$$

The theory of plane gravitational waves have been studied by many investigators,H Takeno [6]; S. N. Pandey [15]; I. Goldman[7];R.H. Gowdy[11]; H. Bondi, et.al.[4];C.G.Torre [2]; P. A. Hogan [10];Deo and Ronghe[1];Deo and Suple [12],[13],[14] and they obtained the solutions .

In continuation of this, we will study $Z=\frac{1}{\sqrt{2}}(y+z)$ type plane gravitational wave with Cosmiccloud string and will observe the result in the context of Bimetric Theory of Relativity.

Field Equations In Bimetric Relativity

N. Rosen [1, 2] has proposed the field equations of Bimetric Relativity from Variation Principle as

$$K_i^j = N_i^j - \frac{1}{2} N g_i^j = -8\pi\kappa T_i^j \quad (2.1)$$

Where $N_i^j = \frac{1}{2}\gamma^{\alpha\beta}\left[g^{hj} g_{hi|\alpha} \right]_{|\beta}$ (2.2)

$$N = N_\alpha^\alpha, \kappa = \sqrt{\frac{g}{\gamma}} \quad (2.3)$$

and $g = |g_{ij}|$, $\gamma = |\gamma_{ij}|$ (2.4)

Where a vertical bar (|) denotes a covariant differentiation with respect to γ_{ij} .

Z = $\frac{1}{\sqrt{2}}(y+z)$ Type Plane Gravitational Wave With Cosmic Cloud Strings

For Z = $\frac{1}{\sqrt{2}}(y+z)$ plane gravitational wave, we have the line element as

$$ds^2 = -A\left(dx^2 + dy^2\right) - C\left(dz^2 - dt^2\right) \quad (3.1)$$

where $A = A(Z), C = C(Z)$ and Z = $\frac{1}{\sqrt{2}}(y+z)$

Corresponding to the equation (3.1), we consider the line element for background metric γ_{ij} as

$$d\sigma^2 = -\left(dx^2 + dy^2 + dz^2\right) + dt^2 \quad (3.2)$$

And, T_i^j the energy momentum tensor for Cosmic Cloud Strings is given by

$$T_i^j = T_{i\ strings}^j = \rho v_i v^j - \lambda x_i x^j \quad (3.3)$$

together with $v_4 v^4 = -1$ and $x_3 x^3 = 1$ where v_i is the flow vector of the cloud of particles, x^i is the direction vector representing the direction of anisotropy(x-axis)and ρ is the rest energy density for a cloud of strings with particles attached along the extension. Thus $\rho = \rho_p + \lambda$ where ρ_p is the particle energy density and λ is the tension density of the strings. In co-moving coordinate system,we have

$T_{3\ strings}^3 = -\lambda$, $T_{4\ strings}^4 = -\rho$ and $T_{i\ strings}^j = 0$ for i, j=1, 2 and for i ≠ j

Using equations (2.1) to (2.4) with (3.1) to (3.3), we get the field equations as

$$\left(\frac{C'^2}{C^2} - \frac{C''}{C} \right) = 0 \quad (3.4)$$

$$\left(\frac{A'^2}{A^2}-\frac{A''}{A}\right)=-16\pi\kappa\lambda \quad (3.5)$$

$$\left(\frac{A'^2}{A^2}-\frac{A''}{A}\right)=-16\pi\kappa\rho \quad (3.6)$$

Where $A'=\frac{\partial A}{\partial Z}$, $A''=\frac{\partial^2 A}{\partial Z^2}$, $C'=\frac{\partial C}{\partial Z}$, $C''=\frac{\partial^2 C}{\partial Z^2}$

Using equation (3.4) to (3.6),

we get $\lambda-\rho=0$ (3.7)

This equation of state is known as false vacuum.In view of reality conditions (Hawking S.W. and Ellis G.F.R) [3]

$\lambda+\rho>0,\ \lambda-\rho>0$ (A)

Where λ is the tension density of the matter and ρ is the rest energy density of the matter, implies $\lambda=0,\ \rho=0$ i.e. $\lambda>0,\ \rho>0$ must hold.

Equation (3.7) is an analogue of condition [A].

Thus, Equation (3.7) immediately implies that $\lambda=0,\ \rho=0$ i.e. Cosmic Cloud Strings does not exist in Z= $\frac{1}{\sqrt{2}}(y+z)$-type plane gravitational wave in Rosen's Bimetric theory of relativity.

Hence, for vacuum case $\lambda=0=\rho$, the field equation reduced to

$$\left(\frac{A'^2}{A^2}-\frac{A''}{A}\right)=0 \quad (3.8)$$

and

$$\left(\frac{C'^2}{C^2}-\frac{C''}{C}\right)=0 \quad (3.9)$$

Solving equations (3.8) and (3.9), we get

$$A = R_1 e^{S_1 Z} \quad (3.10)$$

and

$$C = R_2 e^{S_2 Z} \quad (3.11)$$

where R_1 , S_1 and R_2 , S_2 are the constants of integration.

Thus substituting the value of (3.10) and (3.11) in (3.1), we get the vacuum line element as

$$ds^2=-R_1 e^{S_1 Z}\left(dx^2+dy^2\right)-R_2 e^{S_2 Z}\left(dz^2-dt^2\right) \quad (3.12)$$

Thus, it is found that in plane gravitational wave $Z = \frac{1}{\sqrt{2}}(y+z)$, Cosmic Cloud Strings does not survive in Bimetric theory of relativity and only vacuum model can be constructed.

By proper choice of co-ordinates, the metric (3.12) can be transform to

$$ds^2 = -e^{\alpha Z}\left[dx^2 + dy^2 + dz^2 - dt^2\right] \quad (3.13)$$

which is free from singularity at t = 0 and the spatial volume of the model is given by

$$V^3 = (-g)^{\frac{1}{2}} = e^{2\alpha Z} \quad (3.14)$$

This study can further be extended with the introduction of cosmological constant λ in the field equation, which is defined as $N_i^j = \lambda g_i^j$

Thus,

We get, $$\left(\frac{A'^2}{A^2} - \frac{A''}{A}\right) = \lambda \quad (3.15)$$

And $$\left(\frac{C'^2}{C^2} - \frac{C''}{C}\right) = \lambda \quad (3.16)$$

On solving equation (3.15), we have

$$A = \mathbf{exp}\left[\frac{\lambda Z^2}{2} + EZ + F\right] \quad (3.17)$$

where E and F are constants of integration.

On solving equation (3.16), we obtain

$$C = \mathbf{exp}\left[\frac{\lambda Z^2}{2} + GZ + H\right] \quad (3.18)$$

where G and H are constants of integration.

Thus, substituting the value of A and C [using (3.17)-(3.18)] in the line element (3.1) which reduces to

$$ds^2 = -\mathbf{exp}\left[\frac{\lambda Z^2}{2} + EZ + F\right]\left(dx^2 + dy^2\right) - \mathbf{exp}\left[\frac{\lambda Z^2}{2} + GZ + H\right]\left(dz^2 - dt^2\right) \quad (3.19)$$

Thus, $Z = \frac{1}{\sqrt{2}}(y+z)$ plane gravitational wave exists in Bimetric relativity with or without cosmological constant λ respectively.

Conclusion

In this paper, it is shown that, in the study of $\mathbf{Z} = \frac{1}{\sqrt{2}}(y+z)$-type plane gravitational wave; there is nil contribution of Cosmic Cloud Strings in Bimetric theory of relativity respectively. It is observed that the matter fields Cosmic Strings cannot be a source of gravitational field in the Rosen's Bimetric theory but only vacuum model exists. Hence, Bimetric theory does not help in any way to study gravitational effects of cosmic stringsat the early stages of evolution of the universe.

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POST CORONA EFFECT ON MIGRANT WORKERS

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ABSTRACT

The issues dealt in the said paper are the social and economical status of the internal migrant workers in India. Their unfinished struggle for existence is described. The various reasons behind migration are dealt. They are very much in trouble in the COVID-19 led lockdown period. Govt. policies could not help them to return to their home town safely. Each and every one was suffered during the lock down period, but the misery of migrant workers was very painful and compel to each one to think about them. We called India is developing country but it is not seen in the period of lockdown. Few workers died of starvation in the country where there is a plenty of food production yielded by our Farmers, but we failed to survive the most of the workers. Our National Govt. could not follow the 17 SDGs goals which were mandatory to follow by the members of UN. Unfinished struggle for livelihood after lockdown period is dealt. Their exploitation in unorganized sectors is also one of the major issues of their poverty. National Govt. and State govt. should have taken convenient precautionary measures in such critical condition regarding the issues of migrant workers. It concludes with expectation for better and easy going life for migrant workers.

Abbreviations:

UN:	United Nation
UNESCO:	United Nations Educational, Scientific and Cultural Organization
COVID:	'CO' stands for corona, 'VI' for virus, and 'D' for disease.
SDGs	: Sustainable Development Goals
HRDM:	Human Resource Development Ministry
MSME:	Micro, Small, and Medium Enterprises

Introduction

A novel corona virus was recorded first in Wuhan, Hubei Province, China in the month of December, 2019. Now at present it spreads on six continents and more than 100 countries. The outbreak of corona virus is capturing us under its infection. Corona viruses are a large family group of zoonotic viruses, it causes various illness from common cold to severe respiratory diseases. The zoonotic viruses are able to transmit from animal to human. Scientific study shows that, there are numbers of corona viruses which are transmitted to human from animals but they are not yet infected human being. But COVID- 19 which is named by WHO to corona virus disease, is the virus that transmitted to human body recently and broke into pandemic. In India, first corona positive case was found in 30th January, 2020 in Kerala. But we got late to put lockdown in the country as a precautionary measure which was suggested by WHO. Perhaps it might not be considered as serious issue from the public point of view.

Interpretation with review of literature

Each and every one was suffered in the lockdown period, but most suffered population of the country was the migrant workers. Most part of India specially Uttar Pradesh, Bihar, Orissa, Madhya Pradesh, Rajasthan, Chhatisgad and very few other states have numbers of migrant workers, who go to Maharashtra, Delhi, Punjab, Haryana, Gujarat, Karnataka and Kerala etc. for labour work. In few region of India three out of four are in a household are migrant workers. UNESCO survey says in India three people out of ten are internal migrant workers. They are engaged in low paid wages in informal or unorganized sectors. Though there is huge impact and significance effect on the national growth, national economy and society. Generally more than 500 millions are considered as labour workers in unorganized sectors. Few of them go to foreign countries for labour work. Their contribution of is most remarkable in the national growth. During COVID-19 led lockdown period the problems of migrant workers, their living standard, social condition,

economical status and their struggle to go to their home town show us our national failure regarding the issues of internal migrant workers. In is the developing country but it is not observed in the COVID-19 led lockdown period.

Migration of the workers from one place to other is in search of developed livelihood and it is general feature of human history. In India some regions are left behind in capacity to support their native population so these workers move ahead in search of work and find out the emerging opportunities. But it is not only thing which is happened to them, with the migrant workers his parents and wife suffer. It burden double responsibility on the shoulder of the migrant workers. We observed his struggle for survival of his parents and wife with children. We are the witness of this panic scene in the COVID-19 led lockdown period.

Industrialization made the widen gap between rural and urban area. So the workers migrate towards industrial area. Most populated regions of India uptill not developed themselves for providing work to the hands of workers in their own native region. So it compels to the workers to migrate to the developed state or industrial region in search of work. The migration of workforce towards industrial area or region, its main cause is the population growth in India. Generally numbers of survey and studies show migration of workers hugely influenced by social, educational, cultural and economical issues. And it differs from men to women, group and region.

The process of migration is running continuously from region to region, from undeveloped to developed region. If it happens regularly, it leads towards the slavery, this practice is against the moral of democracy. The poor rely upon various types of labour works and frame livelihood. Labour works and cultivation are most important to them. The study in earliest period shows that the poor households participation in migration. But recent study shows migration is the only significant livelihood for poor households in numbers of dense populated region of India. When one looks towards the plight of migrate workers in such developing nation in the period of COVID–19, at that time it become realized that the time is come to take such initiative regarding the policies for migrant workers, by which their struggle for existence and survival of life become diminish and they also feel proud to call themselves as Indian national, because Indian Constitutiongives each one the right to live with respect and dignity. The existing certain laws aim to improve the condition of migrant workers and prevent them from their exploitation. There are separate social sector ministries such as HRDM, Health and Family Welfare, Food and Consumer Affairs, Urban Affairs and Social Justice etc. are serving for the welfare of the society since a long period of Independence. But when we review the condition of poor migrant, it is found false that the poor getting more poor. So, in the period of COVID-19 it is a big challenge to the policy makers to the rethink and reviews the policies for the better, sustainable, respectable and dignified life for each one. To migrate from one place to another in search of bread and butter is not good for the healthy practice of democracy. It grooms the culture transmission in new places. And the new culture mix with original one. But at same time the safety and security of migrant workers especially financial point of view should be ensured, in any part of the region regarding migrant workers.

Only economy is not the issue for the migration but social, cultural, educational and religious issues are also there for migration from one place to another. It is observed in the period of COVID-19 led lockdown no any authentic data related to the migrant workers is enrolled in native state or the state where they worked. No any state knows how many numbers of migrant workers are working in their states and what is their condition. The issues migrant workers broke out and came in limelight before the nation during the COVID-19 led lockdown period, when they are leaving for their native states or hometown.

The real misery of migrant workers starts from the period of first lockdown on 24th March, 2020. In the beginning no one could guess the seriousness of COVID-19 and its bad impact on migrant workers. Mostly these migrant workers are working in unorganized sectors,

rickshaw pulling, taxi driving, street vending, and laundry owner's minor industry sectors and so on. There is no any assurance of their wages in such unorganized sectors during the lockdown period. Whatever they earned and their saving it spent during the lockdown period and was nothing in their hand.

In near future it is expected to end of Corona virus-led lockdown but may not be the end of troubles for migrant and other workers. The end of lockdown will likely begin a new stage of trouble for them, such as labour exploitation may increase significantly in the area or region where is an oversupply of workers. The exploitation of labour workers may rise after lockdown is over, as numbers of migrant workers will try to regain their jobs in an unorganized sector once they worked.

Gayatry Vasudevan, Executive Chairperson and Co-Founder of Labour Services told, "In a post lockdown world, there are going to be work deficit zone and work surplus regions. In the work surplus area, the situation will be grim as there is going to be an abundance of returning workers with relatively higher skills and thus the exploitation could commence." This threat can be seen because 90 per cent of labourers in India are working in unorganized and informal sectors and are casually employed and being unprotected by any law. The drawback of the situation, the burden of force labour may have to work overtime for which there should be hardly any perk be given to them. The Uttar Pradesh government has approved an ordinance exempting businesses from the purview of almost all labour laws for the next three years. And it affects on the migrant workers. After lockdown lifted the things for migrant workers will get worse. Because the labour class worker are already desperate to get wages for survival. At present he is in his home state where he could not get work, so he will return back to his work place. But he is not assured that the work which was lost due to lockdown is available for him or not. And if available but he could not assured about his salary, which he received before lockdown. This problem is not so easy, only the migrant workers is not suffering, his complete family suffered. Before the independence workers were working for 12 hours instead of 8 hours, but after lockdown lifted they will be working for 16-18 hours, few experts say. As the result of lockdown and COVID-19 affect numbers of unorganized sectors MSME and small industries are closed down. Migrant worker's condition will likely improve in the work deficit region where there is not enough labour available. But such situation will not be available in the most of the region. Numbers of cities and industrial areas are suffering from work deficit, as the migrant skilled workers who are in large majority of such workforce have gone to their home town and home states.

For decades, millions of migrant workers migrated from state to state, place to place and abroad also for ensuring and looking better opportunities and better livelihood for them and their family. The effect of COVID-19 pandemic was worldwide, no one left unaffected by this pandemic. But in this critical stage migrant worker's issues became more painful, not only for the worker but whole society and nation also. The development of any nation could not be enjoyed by neglecting the contribution of these migrant workers. These are the workforce behind the success and development of the nation. Without considering the value of migrant worker in national economy the nation could not be enjoyed the benefits of development. It is only COVID-19 period and lockdown who compelled us to think about the importance and contribution of migrant workers. No nation can be called oneself developing or developed by ignoring the contribution of migrant workers. In the COVID-19 period specially in lockdown, we are finally acknowledging the existence, work and the contribution of migrant workers in huge context. We have not taken them seriously before lockdown but now the time is come to rethink and to frame migrant workers oriented policies in the coming period hereafter. Migrant workers have directly and badly affected by COVID-19 led lockdown because they make money by moving from one place to another but it stopped now, so money also stopped. We see migrant workers everywhere such as small industries, construction area, metro station, railway station, hotels, malls, beside footpath of cities,

tourism places etc. for making money by various legal means. No one has taken them seriously before lockdown. But policy makers should have frame such policies and make them assures the better and dignified life. In any state they are not organized by any organization. But now they came in limelight and their poor plight also. Central govt. and respective state govt. policy makers, economists, even leading politicians, and other concerning officials now knew that they can't take the issues of migrant workers lightly hereafter.

Uptil we have underestimated the role and contribution of migrant workers in national economy. It seems that we failed to recognize their role and contribution in the national development. We knew their existence but not acknowledged their spirit. The studies and survey show more than 500 million people are considered as internal migrant workers and severely affectedby COVID-19 led lockdown. There is no any authentic study or survey by the Govt. about the internal migrant workers, otherwise it might be helpful to the govt. to offer assistance and manage them during returning to their home town during lockdown period. But it is the time to make study of internal migrant workers and to keep the relevant information and maintain the record of each one for designing the future welfare policies.

We generally talked about smart cities but that cities need workers and it will get from migration. Can one imagine the city like Mumbai, Kolkata, Delhi, and Chennai without migrants? After lockdown lifted no any wheel of factories will run without the migrant workers. Without the migrant worker Indian economy could not speed up. No one can run the economy without the migrant workers. Industries can reopen but can't function without workers. During COVID-19 led lockdown period numbers of migrant workers suffered and they face troublesome situation in their home town also without wages or work. In such miserable situation it becomes the responsibility of state, local govt. and local administration to ensure them about their bread and butter and their livelihood. It is needed now to frame such policies and make them available the work or other needed govt. schemes to uplift their living. The policy framing and implementation should be coordinated with the local, private sector, small scale industries and other sectors also.The precaution should be taken that no one be left behind and away from the social and economical flow of the nation. The skilled workers who want to return to the destination of workplace, the state Govt. and local administration make the arrangement of keeping all relevant information and required date before migrating to their work places.

United Nation General Assembly in September, 2015, adopted the 2030 Agenda for sustainable development that includes 17 Sustainable Development Goals (SDGs), design on the principle of "Leaving No One Behind". It is the holistic approach to achieving sustainable development for all and it should not be accomplished without migrant workers. All the members of United Nation are committed to achieve SDGs Agenda 2030 by constituting 17 goals and 169 targets, including three dimensions of economic, social and environmental development. It became mandatory of UN to all members states that the National Govt. of the state has to translate the goals and targets into their national policies, to resource and implement these policies and to measure their implementation. The policies of National and State Govt. should be based on the 17 SDGs framework of UN General Assembly, ' Leave No One Behind' and 'A Life of Dignity for All'.

Conclusion

People of any nation migrate for various reasons such as to climate change, extreme weather, social and cultural issues, religious cause and mostly in search of employment. But wherever they migrated by any reason, it is the legal and moral responsibility of the govt. to take all precaution measures regarding their better, respectable and dignified livelihood and better life as per the 17 SDGs of UN General assembly so that the migrant workers should be away from poverty, there should be zero hunger, good health and well being, quality education, clean water and sanitation, gender equality etc. All the precautionary measures

should be taken and genuinely followed by the national government for the better future of migrant workers. Because COVID-19 led lockdown period taught us the lesson that no one should be left behind. We also realized the importance and existence of migrant workers. He is equally important for the nation building. No any single person of my nation should die due to starvation. Food security to each one must be strictly practiced and followed. Death due to starvation is not a proud thing for us. And if it happened in our great nation, then we have no moral right to call ourselves social democratic and developing country.

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FIGHTING CORONA VIRUS WITH COMMON SENSE

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ABSTRACT

Present research paper is based on the outburst of COVID -19 in the whole world. In the first part of the paper there is the general information of COVID 19 and its impact on human beings. In the second part there is the detailed description of how we can prevent this virus by doing simple things in our routine life.With the disaster of Corona Virus all around, people in common seem to be scared of it. But instead of getting threatened from it, we need a little common sense and follow the preventive measures. Authorities identified the new Corona Virus outbreak in China that has now reached other countries. The canters of disease control and Prevention (CDC) started monitoring the outbreak of the new corona virus, SARS-COV-2, which causes COVID-19.

Corona Virus is a family of virus that can cause a range of illness in humans including common cold and more sever forms like SARS and MERS which are life threatening. The virus is named after its shape which takes the form of a crown with protrusions around it and hence is known as corona virus.This new Corona Virus has been responsible for millions of infections globally, causing lacks of deaths in most of the countries.The COVID-19 epidemiccame to know when on December 31, 2019, China informed the World Health Organisation (WHO) that ample of cases of pneumonia of an unknown cause in Wuhan city in Hubei Province.Authorities first identified the virus in China. Since then, the virus had spread to nearly every country, leading the world health organization (WHO) to declare the pandemic.

Though there is no recently available vaccine for COVID-19, many of the warning signs can be treated and getting early care from a health care provider can make the disease less hazardous.

Key words: *COVID-19, Corona Virus, Preventive Measures, Social Distancing, Immune System*

Introduction

Not only India but the whole world is fighting with the unseen Corona virus. All the countries are groping in darkness and trying to find out the way through it. But it seems that it's not easy to overcome this calamity. We can say that the world is at war with a hidden enemy. At present the whole world is passing through a period of very grave disaster. Normally, when any natural calamity hits, it is restricted to a few countries or states. But this time the crisis is such that it has put all of mankind in emergency. World War 1st and 2nd did not influence as many countries, as have been affected by COVOD-19 today. Though this disease is spreading all over the world every day, we can get rid of it by applying the common phrase 'Prevention is always better than cure', in our daily routine. Only this prevention can help us in the period of this crisis.

Preventive Measures

Most people, who are affected with COVID19, will have a mild form of the virus.According to the WHO around 80% of people who get COVID 19 will recover without any need hospitalization. The remaining 20% become seriously ill and develop difficulty in breathing. There is currently no cure for the cold-like illness caused by corona virus. Treatments include self care and over the counter meditation.

With the disaster of Corona Virus all around, people in common seem to be scared of it. But instead of getting threatened from it, we need a little common sense and follow the preventive measures. These tricks are sufficient to save our family. By maintaining social distance, avoiding going out again and again, washing our hands, cleaning our house regularly and boosting our immunity with the bliss of Ayurveda, we can definitely win over this crisis. From the available facts right now no effective medicine is available for viral infectious disease. Therefore it becomes necessary to follow the given preventive measures which includes control of the source of infection, early detection of patients, cutting off transmission, and protecting susceptible population are paramount. Doctors, cleaners and police are already working for our safety without thinking their own families. So it's our duty to minimise their stress and save our Nation. Among human beings CoronaVirus

infection most occurs during winter and early spring.

Social distancing is the best way to overcome this disease but it is surprising that even educated people are not mentally accepting the importance of keeping away from huge events at least for the time being. It's natural that in a large gathering, it is impossible to maintain the social distance of a meter. Therefore smaller the gathering easier it is to avoid this pandemic.Also mobile and social media help everybody to remain physically detached without developing the feeling of 'isolation'.

A major step of prevention is a food discipline and boost ones immune system. India already has a well developed Ayurvedic tradition and the movement should be aim at providing the advantage of this tradition to the people at large. With the help of Ayurveda we can boost our immunity.Majority of the infected people worldwide got cured without any specific vaccination. It is true that other medicines helped them but had their immunity been week they would not have survived. We could learn from this situation that to maintain our immunity is very important. We all know that strong immunity is necessary to fight any kind of foreign body or virus. The widespread situation due to the virus outbreak has pointed out the importance of our internal immunity.The corona spread must bring out the best of India throughcharity. The business of travel, civilization and entertainment, have to take their infrastructure maintenance to a new level of efficiency and clinical attention. It's a time of self discipline and social awareness being in place even when the virus is gone.

The first thing we can do is to keep germs away by following good personal hygiene habits. Hence we canstop infection before it begins spreading it to others.As the threat of the virus remains on the surfaces, hand sanitisation is one of the preventive steps. Talking from a particular distance, avoiding a handshake or a hug and cleaning up hands before touching anything or eating meal are some simple things that we should adopt. If surfaces are dirty, clean those by using a detergent and water to make itdisinfected because depending on the surface type and environmental conditions, COVID19 virus survives on surface for many hours.

The most important form of Covid19 transmission is through respiratory droplets produced when an infected person coughs, sneezes, or talks. Droplets that settle on the infected person's eyes, nose, or mouth, leads to the transmission of infection. Transmission can also occur by touching the face with infected hands. Respiratory droplets do not remain present in the air for long period; hence a distance of six feet away from an infected person may be considered safe.

Other preventing measures are eating properly and working out regularly. It creates a great difference because our safety is in our hands. Mother Nature has already provided us the defence mechanism. Our sincere duty is not let that mechanism get weaker.One more best way to prevent or decrease our risk of COVID 19 infection is to avoid contacting infected people and the places they have visited. Infected people can help minimise the chance of infecting other people by strict quarantine that keep the infection isolated from others.

Conclusion

After detailed study of this situation, we can come on three basic conclusions. The first is that the incidence of this virus might spread in the coming days considering the global exposure and a large country like India had already had the 'area of contact' that our population as a whole would have created by now. The second thing is, corona is a flu virus and therefore every symptom of cold and cough would not be the assumption for the bigger threat unless calling for quick testing. And the third point is, it is known that the virus lie hidden on 'surfaces' or catches on through droplets from an infected individual. This awareness helps to prevent an 'attack'. These basic information needs to acquire everyone to deal with this adversary.

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SOCIOLOGICAL STUDY OF GOVERNMENT PRIMARY SCHOOLS IN RURAL AREAS OF NAGPUR DISTRICT

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ABSTRACT

Education is not only a formal process of learning lessons from Guru. It meant living with Guru in his own ashram, following strict rules and regulations and providing all kind of services to him. It was a complete process of strong character building and gaining knowledge of Vedas, Puranas, Upnishadas, philosophy and classical literature. The school along with families, communities and temples participated in the socialization process of young generation. Socialization is a process of transmitting the culture of the society from one generation to another. The word 'culture' means a complex of whole which a person acquires in his life such as knowledge, ideas, belief, skills and attitude through the process of communication and interaction with other members of the family and society. In ancient time pupils lived with Guru and learnt the skills which were needed to perform their future role such as reading, writing, grammar, philosophy, Vedas, archery etc.

Knowledge in Indian culture considered as a beam of light which gives power to the oppressed and ignored people to liberate themselves from the oppressive realities and provide them all the basic human rights for peaceful coexistence. An educated man was considered as enlightened person with highly cultured and admired moral character. For him discipline is not due to social control but because of self control which he had internalized through socialization. Community leaders, kings and princes gave respect and consulted them on various issues.

Keywords- *Education, need, efforts, basic, necessity, requirement, development etc*

Introduction

Gandhi began his experiment with educational activities in Wardha. In the Wardha model Gandhi had clarified there is close relation between education and life of young child, i.e. his family, his community, crafts, industries and occupation of the village.

The basic education is a combination of integrated school and community activities at primary school level. Basic education aims at educating the essential handicraft of the community to the young children of the village. This means it develops a close bonding between the skills you learn in school and work you performed in the community. Such a close bonding will enable children to carry the skills and attitudes learn in the school campus into outside world. This will enhance their skills, efficiency, dignity, self-esteem and social service in the community life.

The teacher of basic education conducts such activities which are being usually conducted by the community as the basis to plan his lessons. He connects his academic symbols to the everyday activities of the pupils which they bring in the school. It is very common that we learn more from our everyday experiences and mistakes than our books. Whatever they do and experience in the community life is the beginning of their learning process. The teacher tries to collect all the resources available at local level to make proper use of them in making lesson plan in the school. Constructive learning or learning by doing is the universal principle of any education. When school conduct activities on constructive principle, it automatically connects its activities to the daily life of person in the community.

For the development of basic education effectively in schools, Gandhi advocated a strong bonding and cooperation between community and schools and he also supported that teachers should play dynamic and active role for making village self sufficient and to educate adult.

In the same way, for promoting compulsory primary education programme educationist have advocated to develop strong bonding and cooperation between community and schools and they also supported that for making village self sufficient and to educate adult, teachers needs to play dynamic and active role.

Educationist also understood that the problem of drop-outs at early stage in primary education is closely attached with large number of illiterate people in the country. These are the children of illiterate poor parents who never enrolled in the schools or drop out at very early stage. These all problems can be sort out by school and community cooperation.

Some work studied related to government primary schools which help to understand the situation in current scenario

Bhojwani L.S. (2006)Studied education in a municipal corporation primary school of Baroda with an objective to study the structure and functioning of school in terms of infrastructural facilities, human resources, daily routine, organisation of co-curricular activities , performance of the students. It was found that the infrastructure facilities were not adequate in all four schools which she had studied. In Marathi and Hindi medium schools teachers showed interest in teaching students during Curriculum Transaction in spite of additional responsibilities. The level of performance of students in all the four schools fluctuated between 30 to 40% and no student had so far done anything remarkable in academic or co-curricular activity (Bhojwani, 2006).

SimaranjeetKaur (2016) in paper titled "Inclusive Education in India" tried to understand the problems faced by children with disabilities admitted to the schools and the provisions made to provide quality education to these children with other normal children. Inclusive schools are those recognised schools which try to fulfil the diverse need of their students from especially able to normal student's different rates of learning. The research found that many teachers do not feel equipped to teach children with disability and complain that they need more time to teach these students. Some parents also don't want to send their children to school for fear of their abuse or neglect in the classroom. The poor quality of educational provisions is reflected in many schools (Kaur, 2016).

ChhaviGautam (2015) in the research on the topic "An assessment of education quality indicators: A study on the quality of elementary education in India based on the Annual Status of Education Report (ASER) said that SarvaShikshaAbhiyan in India has been successful in improving the infrastructure standards of the schools in the country. There has been significant rise in enrolments and retention but it is accompanied by a deterioration of learning outcomes. The study shown that there has been significant increase in the enrolment in private school in rural areas, but in spite of this, learning outcomes are in crisis. All parents, whether rich or poor want to send their children to private schools. According to ASER there is an increase in enrolment in private schools in rural areas and even poor parents living in kutcha houses are sending their children for private tuitions. The government school children are also taking private tuitions (Gautam, 2015).

Anup Kumar (2014) studied the development of primary education in Haridwar district (Uttarakhand) from 2001 to 2014 by using primary and secondary data. The research found that the growth of primary schools in Haridwar district is not up to the mark. Due to midday meal and SarvaShikshaAbhiyan enrolment rate has been increased but not in linear manner. Many posts of teachers are still vacant due to which pupil-teacher ratio is badly affected. In most of the schools the pupil teacher ratio is more than 50; however the actual pupil teacher ratio should be 30 to 35 in primary schools. The study reveals that enrolment in primary school is not increasing instead it is shifting towards private schools (Kumar, 2014).

Woodhead, Frost and James (2012) studied does growth in private schooling contribute to education for all? Evidence from a longitudinal two cohort study in Andhra Pradesh, India. The study found that uptake of private education has increased dramatically since 2002 with 24 per cent of the older cohort attending private school at the age of 7-8 in 2002, nearly doubling to 44 per cent of the younger cohort at the same age of 7-8, only seven years later, in 2009. Analysis has shown that though private schooling is highly concentrated in urban areas, but biggest growth in the sector has been seen in rural areas, where only 10 per

cent of the older cohort attended compared to 32 per cent of the younger cohort in the same decade. Household wealth is a key determinant of school choice and children's changing school trajectory (Woodhead, Frost, & James, 2012).

Akila (2004) studied reaching global goals in primary education with focus on gender concern for Tamil Nadu. The study suggested that the quality of schooling offered with currently available funds should become a central concern. Schooling availability and access is not problems as far as lower primary schooling is considered but the upper primary data shows that only 81 per cent of Tamil Nadu's people have an upper primary school within 1 km. The need is to focus on to bridge between lower and upper primary schooling to reduce high dropout in classes four and five especially among girls (Akila, 2004).

Colclough and De (2010) studied the impact of aid on education policy in India. Study found that aid to education in India has very little impact on the change of Indian policy objectives, but it has very high impact on management practice, financial reporting, accounting and monitoring arrangements. Aid has provided additional resources for education in India, particularly it provided resources for states to increase their non-salary spending for quality education (Colclough & De, 2010).

Dholakia and Iyengar (2008) studied access of poor households to primary education in rural India, and they found that in most of the government primary schools in almost all the states, most of the school teachers are frequently absent or irregular from the school campus due to pathetic conditions of school buildings and classrooms. Inadequate number of classrooms to accommodate all the students of different standard students in different classrooms leads to multiple standards students sitting in the same classroom at the same time. Non availability of supporting staff diverts teacher's attention, regularity and punctuality in teaching students. Lack of separate toilets for boys and girls, drinking water facility and electricity also affect the attendance in schools. Most of the teachers do not stay in the same village due to lack of civic facilities in the village. These all things adversely affect the quality of primary education in almost all the rural government schools (Dholakia & Iyenger, 2008).

Various newspapers reported problems related to government school in India. The Maharashtra Times, dated 19 February 2016 reported that in rural Maharashtra 3534 primary school have only one teacher and there is no teacher in 46000 schools for some specific subjects. According to the 2015-16 report there are 97084 schools in Maharashtra in which 656673 teachers are teaching and in 42407 schools of Maharashtra only two teachers are teaching and about 80000 students are studying in single teacher school. That is why many schools have to be closed when even the single teacher is on leave or absent. To date 69% of all schools (this means 66988 schools) do not have a Head Master.

Conclusion

Article 45 of the Constitution stipulates that the 'State shall endeavour to provide, within a period of 10 years from the commencement of the Constitution, for free and compulsory education for all children until they complete the age of 14 years.' However, the task of providing basic education for all, with concrete plans of action, gained greater momentum only after the National Policy of Education (NPE), 1986 (revised in 1992). With the World Declaration on Education for All (EFA) adopted in Jomtein in 1990, basic education in all its facets (Early Child Care Education (ECCE), elementary education, education for adolescents, adult education, gender equality and quality improvement) has been the focus of international attention. These international developments, together with several positive developments within the country, brought the need for recognising basic education as a fundamental right of every citizen to the centre stage (Mission.N).

The government schools cater to the education needs of the children, especially those of rural areas. In spite of the fact, most of the villages have at least one government school, yet about

one third of all Indian children are out of school (Kumari N, 2016).

Education plays an invaluably pivotal role in the economic growth and social development of a country. Sustainable economic development for any country can only be achieved when substantial investment in human capital is made. Primary school education is the foundation for this; it not only provides literacy and numeracy, but also, the preparatory basis upon which higher level education is dependent and shaped (Odongo, 2010).

Education is the best legacy a nation can give to her citizens especially the youth. This is because the development of any nation depends largely on the quality of education and the basis for any meaningful development must begin with the development of the human resource thus formal education remains the vehicle for socio-economic development and mobilization in any society.

Education doesn't just lead to individual freedom and empowerment; it also lays the foundation of a country's social prosperity and economic development (Pal, 2016).

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