Experience with COVID19 : A Study among COVID positive Adolescence in Poonthura Fishing Community

DEPARTMENT OF SOCIAL WORK

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ABSTRACT

In the current scenario the number of COVID positive cases and the death rate in India is rising. Many of the COVID positive patients show severe symptoms and some of them don't show symptoms. Through the study researcher explore more on experience of COVID positive adolescence, their challenges at the time of quarantine, the coping strategies they used to overcome the challenges and the role of support system during the quarantine period. Qualitative approach is adopted for the study and multiple case study design was used to collect data. A semi structured interview guide was used as a tool for collecting data. The data was collected from three COVID positive adolescence in poonthura fishing community. Thematic analysis was done to analyse the data. The findings of the study suggest that Adolescence with symptoms show more physical, psychological and social challenges during quarantine period.The major physical challenges faced were high fever, fatigue, vomiting, and headache. And the psychological challenges faced were uncontrolled emotions, anger, sad, loneliness, and anxiety. The major social challenge faced was isolation from family members and friends. The coping strategies used are taking pain killer like paracetamol, drinking lot of water, taking immunity boosters like gooseberry, lemon water, chavanaprakasham. Also the support systems helped the adolescence to cope up with the challenges.

CHAPTER – I

INTRODUCTION

1.1 INTRODUCTION

COVID-19 is an infectious disease caused by corona virus. Firstly, the disease was referred as '2019 novel coronavirus' or '2019-nCoV.' Then later it referred as COVID, 'CO' stands for corona, 'VI' for virus, and 'D' for disease. It is a new virus which have a link with SARS (Severe Acute Respiratory Syndrome) and with some other type of common cold. (WHO, key messages and actions for COVID-19 prevention and control in schools, 2020)

The new corona virus was recognized on 31st December 2019, and the first case was reported in Wuhan, China. (WHO, Corona virus) In the initial stages the Wuhan wholesale food market was the major source of the outbreak. The markets were closed in starting of January 2020.So that we could control the spread of this unknown virus. The SARS-CoV-2 was identified in early January and its genetic sequence shared publicly on 11-12 January. The close genetic relations of SARS-CoV-1, SARSCoV-2 and other coronaviruses, suggest that they all have their ecological origin in bat populations. (WHO, Coronavirus disease 2019 (COVID-19) situation report, 2020)

Corona virus start to spread from person to person all over the world. The first case of COVID-19 infection reported in Kerala was on 27 January, 2020. A 20 year old female admitted to the Emergency Department in General Hospital, Thrissur, with one-day history of dry cough and sore throat. There was no history of fever, rhinitis or shortness of breath. She said that she was coming back to Kerala from Wuhan city, China, on 23 January, 2020 due to the COVID-19 outbreak situation there. (M.A. Andrews, 2020)

On 22 March 2020, Sunday, Prime Minister Narendra Modi, declared a 'Janata Curfew' which was against the spread of COVID-19 in India. Following this, when the number of confirmed positive coronavirus cases in India increased upto 500 on 24 March 2020, he announced a nationwide lockdown from midnight of that day, to a period of 21 days. He also said that the only solution to control the spread of coronavirus was to break the cycle of transmission through social distancing. Following this on 15 April 2020 - 3 May 2020 (19 days), 4 May 2020 -17 May 2020 (14 days), 18 May 2020 - 31 May 2020 (14 days) lock downs occurred in India. (wikipedia, 2020)

Due to the COVID-19 pandemic chief minister of Kerala, Pinarayi Vijayan declare restrictions in Kerala too. Which include restriction in mass gatherings, festivals, cultural programs etc. And also announced closing of the schools from march 2020. (onmanorama, 2020) Also the government has announced that not more than 10 people could participate in any social event or political demonstration. The participants should wear masks and maintain the minimum mandatory physical distance from each other. The number of people in a shop or commercial establishment should not exceed 20 at a time. Also people should get prior permission to travel from one district to another. The registration in COVID-19 Jagratha E-platform is mandatory for the permission to enter Kerala from abroad or within the country (Hindu, 2020)

The first wave of COVID-19 had mainly affected the Northern Kerala and the second wave was most severe in Thiruvanathapuram district. (wikipedia, COVID-19 pandemic in Kerala, 2020) On July 1 2020, the number of active cases in Thiruvananthapuram was 78. On Friday, July 24 2020, the number was 2,650. Of the total 3,094 cases reported till July 24 in Thiruvananthapuram, 2,719 were through local transmission and the rest were imported cases (people who came to the state from other places). When the number of local transmission increases it will lead to a community spread. In Poonthura and Pulluvila the coastal regions of Thiruvanathapuram district, had faced high community spread. (Minute, 2020) In Pulluvila, 97 people of Karimkulam panchayat tested, in that 57 were found positive. while in Poonthura, 26 have tested positive out of the 50 samples tested in Ayush hospital. (Firstpost, july)

Poonthura, has been described by government officials as an area witnessing 'super spread' of the coronavirus infection. A super spread indicates the transmission of the virus from one or more persons to a large group of people through primary or secondary contact. The origin of the infection in the area is suspected to be a wholesale fish vendor at the local Kumarichanda market. Since then, dozens of people including auto rickshaw drivers, fishermen and their families have tested positive for the virus. The main reason was the constant movement of fish workers between villages like Poonthura and Kanyakumari in Tamil Nadu border.

Fishing activities have been suspended in Poonthura until further notice. Coast Guard, Coastal Security and Marine Enforcement wing of the state police have been deputed to prevent the movement of fishing boats between Poonthura and the villages on the Tamil Nadu border. Special Armed Police (SAP) commandos have been posted in the village as part of the lockdown security. Since a majority of the residents in Poonthura and adjoining villages have livelihoods strung to fishing, the government decided to provide five kilograms of free ration to families in the area. However, elderly persons and children are not allowed to go out to ration shops. Only one member per family is allowed to obtain rice and other provisions from the shops. (varma, 2020)

T Peter, General Secretary of National Fishermen Forum says that Poonthura is a thickly populated area and there is a population density of more than 5,000 per sq km. It was necessary to control habitual gatherings of people and implement physical distancing. But the sudden announcement of a triple lockdown didn't give people the time to prepare for it.

Dr Dyuthi Haridas, a government doctor said, when people had no symptoms, they refused to believe they had the disease. "I think this could also be due to the fact that death rates have dropped from 20% to 7% and most people who harbour the disease remain asymptomatic or mildly symptomatic and hence, the fear of disease as such has come down among the people. (Minute, 2020)

In Poonthura fishing community the people first stand against the health workers and government but when they start to know the reality they work together with the officers and

followed rules. Majority of the people who tested positive in poonthura were asymptomatic, this gave them an impression that they don't have corona virus and also there is no any serious impact for the virus. And this ignorance leads to violation of rules like no proper wearing of mask, no social distance etc. Also this was the main reason for community spread.

Some of the community people believes that due to the intake of fresh fish they have good immunity power so that they won't get affected by corona virus or if they get affected also it won't show any symptoms in our body.

1.2 Viruses, Types, Corona virus

Virus is a small infectious agents that can be replicate only inside the living cells of an organism. Viruses can infect all types of organisms from animals, plants, to bacteria. Viruses are simple structures with two or three compounds, The inner nucleic acid, which can be either RNA or DNA, and in both cases the nucleic acid can be either single-stranded or double-stranded. Then surrounding the nucleic acid there will be a protein coat that's in the form of capsid. The viruses are smaller in size, (20-40nm). They reproduces within the living cells. Viruses invades a host cell and takes over the cell causing it to make copies of viral DNA or RNA. And destroys the host cell releasing new viruses. Viral diseases ranges from minor common cold to terrifying diseases such as rabies, AIDS etc. They may be sporadic, endemic, epidemic, or can cause a pandemic. The treatment for virus are vaccines which prevent the spread and antiviral medications which help to slow reproduction of viruses but cannot stop it completely. (Gladys Francis, 2013)

All viral diseases are not contagious. That is they aren't always spread from person to person. But many of them are. Common examples of contagious viral diseases include the flu, the common cold, HIV, and herpes. Other types of viral diseases spread occur through other means, such as the bite of an infected insect.

Common human viral diseases:

Respiratory viral diseases are contagious and commonly affect the upper or lower parts of your respiratory tract.

Gastrointestinal viral diseases affect our digestive tract. The viruses that cause them are contagious and usually lead to a condition called gastroenteritis, also called the stomach flu.

Exanthematous viruses cause skin rashes. Many of them cause additional symptoms as well. Many of the viruses in this category, such as the measles virus, are highly contagious.

The hepatic viral diseases cause inflammation of the liver, known as viral hepatitis. The most common types of viral hepatitis are hepatitis A, B, and C.

Cutaneous viral diseases cause lesions or papules to form on the skin. In many cases, these lesions can stick around for a long time or come back after disappearing for a while.

Hemorrhagic viral diseases are severe conditions that involve damage to your circulatory system. Some viruses can infect the brain and surrounding tissues, causing neurologic viral diseases.

Coronaviridae family are corona viruses with pleomorphic envelop around 100nmm, with unique club shaped peplomers projection as fringe from the surface, resembling solar corona. Cause upper respiratory diseases in human, diarrhea, hepatitis etc. (schulman, 2019)

Till 1950 viruses was classified based on the disease they cause. The human viruses were classified as Dermotropic that producing skin lesions (small pox, chicken pox, measles), Neurotropic that affect the nervous system (poliomyelitis, rabies), Pnemotropic that affect the respiratory tract (influenza, common cold) Viscerotropic that affect the visceral organs (yellow fever, hepatitis). From 1950s viruses began to classify on the basis of their physiochemical and structural features. Viruses are classified into two main divisions depending on their nucleic acid type Riboviruses and Deoxyriboviruses

The DNA viruse are poxiviridae family, herpesviridae family, adenoviridae family, papovaviridae family, parvoviridae family, hepadenaviridae family. The RNA viruses are: picornaviridae family, orthomyxoviridae family, paramyxoviridae family, togaviridae family, flaviviridae family, bunyaviridae family, arenaviridae family, rhabdoviridae family, reoviridae family, coronaviridae family, retroviridae family, caliciviridae family. (Gladys Francis M. K., 2013)

The first human coronavirus was identified in 1965. It caused a common cold. Later the scientist found a group of similar human and animal viruses. Mainly human can be affected by Seven coronaviruses they are:

1. Human coronavirus OC43 (HCoV-OC43)
2. Human coronavirus HKU1(HCoV-HKU1)
3. Human coronavirus 229E (HCoV-229E)
4. Human coronavirus NL63 (HCoV-NL63)
5. Severe acute respiratory syndrome coronavirus (SARS-CoV)
6. Middle East respiratory syndrome related coronavirus (MERS-CoV)
7. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

SARS-CoV, MERS-CoV, and SARS-CoV-2 human corona viruses produce severe symptoms.

COVID-19 is an 2019- 2021 pandemic which cause respiratory disease, which presents as a wide range of illness from asymptomatic or mild through to severe disease and death. COVID-19 virus is transmitted by contact, droplets and fomites.COVID-19 show symptoms after 5-6 days.

(WHO, Corona virus) COVID-19 have the highest no of positive cases and death caused all over the world. The main symptoms are fever, dry cough, and dyspnea.

SARS outbreak was happened on 2002 to 2004 it can be cause severe viral respiratory illness. It was emerged in southern China in 2002 and quickly spread to 28 other countries. More than 8,000 people were infected by July 2003, and 774 died. This coronavirus causes fever, headache, and respiratory problems such as cough and shortness of breath. SARS was spreaded from infected civets to people

MERS is a viral respiratory disease that was first started in Saudi Arabia in 2012. Almost all of the nearly 2,500 cases have been in people who live in or travel to the Middle East. This coronavirus is less contagious than its SARS but more deadly, killing 858 people. It has the same respiratory symptoms but can also cause kidney failure. MERS spreads from infected dromedary camels to people. (NIAID.NIH, 2020)

1.3 COVID-19

COVID-19 is an global pandemic disease caused by a new coronavirus called SARS-CoV-2. It was first discovered in Wuhan city, china on December 2019. In early period the no of cases was very few, and cases were found only in Wuhan, but later, the spread of COVID-19 from the mid of the January was so fast. And now 220 Countries and Territories around the world have reported a total of 153,507,160 confirmed cases of the COVID-19 and a death toll of 3,216,711 deaths. And as a good news 130,848,502 people recovered from COVID19.

According to the data provided in May 2021, North America has highest no of cases and death rates in United States its around 33,180,44 cases and 591,062 died due to COVID19. India stands in 2nd position of high no of COVID positive cases. In India the no of total cases are 19,925,604 and the death rate is 218,959.

COVID-19 is generally spread from person to person. Modes of transmission of SARS-CoV-2, including contact, droplet, airborne, fomite, fecal-oral, blood borne, mother-to-child, and animal-to-human transmission. Infection with SARS-CoV-2 primarily causes respiratory illness ranging from mild disease to severe disease and death, and some people infected with the virus never develop symptoms.

Transmission of SARS-CoV-2 can occur through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions or their respiratory droplets, which are expelled when an infected person coughs, sneezes, talks or sings.

Airborne transmission is defined as the spread of an infectious agent caused by the dissemination of droplet nuclei (aerosols) that remain infectious when suspended in air over long distances and time.

Respiratory secretions or droplets expelled by infected individuals can contaminate surfaces and objects, creating fomites (contaminated surfaces). Viable SARS-CoV-2 virus and/or RNA detected by RT-PCR can be found on those surfaces for periods ranging from hours to days, depending on the ambient environment (including temperature and humidity) and the type of surface.

SARS-CoV-2 RNA has also been detected in other biological samples, including the urine and feces of some patients, in either plasma or serum, and the virus can replicate in blood cells, viral RNA fragments have been found by RT-PCR testing in a few breast milk samples of mothers infected with SARS-CoV-2. (WHO, Transmission of SARS-CoV-2: implications for infection prevention precautions, 2020)

The most common symptoms of COVID-19 are Fever, Dry cough, Fatigue

Other symptoms that are less common and may affect some patients include:

Loss of taste or smell, Nasal congestion, Conjunctivitis (also known as red eyes) Sore throat, Headache, Muscle or joint pain, Different types of skin rash, Nausea or vomiting, Diarrhea, Chills or dizziness.

Symptoms of severe COVID-19 disease include:

Shortness of breath, Loss of appetite, Confusion, Persistent pain or pressure in the chest, High temperature (above 38 °C).

Other less common symptoms are:

Irritability, Confusion, Reduced consciousness (sometimes associated with seizures), Anxiety, Depression, Sleep disorders,

More severe and rare neurological complications such as strokes, brain inflammation, delirium and nerve damage.

Some people will be asymptomatic, they don’t show any of these symptoms

The prevention of transmission is best achieved by identifying suspect cases as quickly as possible, testing, and isolating infectious cases. The incubation period of COVID-19, which is the time between exposure to the virus and symptom onset, is on average 5-6 days, but can be as long as 14 days. The people are request to undergo quarantine if they have a primary or secondary contact with the infected person. Quarantine should be in place for 14 days from the last exposure to a confirmed case. Use of contact and droplet precautions by health workers caring for suspected and confirmed COVID-19 patients, and use of airborne precautions when aerosol generating procedures are performed. Continuous use of a medical mask by health workers and caregivers working in all clinical areas, during all routine activities throughout the entire shift. At all times, practice frequent hand hygiene, physical distancing from others when

possible, and respiratory etiquette; avoid crowded places, close-contact settings and confined and enclosed spaces with poor ventilation; wear fabric masks when in closed, overcrowded spaces to protect others; and ensure good environmental ventilation in all closed settings and appropriate environmental cleaning and disinfection. (WHO, Transmission of SARS-CoV-2: implications for infection prevention precautions, 2020)

To prevent further spread of the coronavirus on 23 March, Chief minister Pinarayi Vijayan announced a statewide lock-down till 31 March. Lock down prevent the unwanted move of people from one place to another and could reduce the spread of disease. District were classified as red, orange and green districts, and containment zones were demarcated. red, orange, green operational at the macro level, and the demarcation of containment zones, which works at a more micro level, is likely to remain as long as the disease is spreading. In containment zones, the entire demarcated area is barricaded and the entry and exit points closed. Only the very basic supplies and services are allowed inside.

The major safety measures for COVID-19 is wear a mask, wash hand frequently with soap and sanitizer, keep physical distancing, avoid social gathering, closure of schools, work at home, stay home etc. Many awareness programs like break the chain undergo by the initiative of Kerala government. Community kitchens started in different parts of cities and villages, food kit and mask distribution by different organization, Tele counseling, Apps for getting knowledge on COVID, Website for Registration of people who come from abroad. And should follow home quarantine or institutional quarantine. The return of expatriates caused a increase in cases from May to August. At this phase, there was community spread. In July, a large local group of cases was identified at the Kumarichantha fish market in Thiruvananthapuram.

1.4 Fishing community

The World Factbook states the total length of coastlines in the world is 1.16 million kilometres. India has a coastline of 7516.6 km-- 5422.6 km of mainland coastline and 1197 km of Indian islands. Indian coastline touches nine states-- Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal and two union territories-- Daman and Diu and Puducherry. The two Island territories of India are-- Andaman and Nicobar Islands in Bay of Bengal and Lakshadweep Islands in the Arabian Sea.

Kerala has the fifth largest coastline of 580 km in India and is called Malabar Coast. It starts from the south-western coast of Maharashtra and along the coastal region of Goa, through the entire western coast of Karnataka and Kerala and reaches Kanyakumari. It has the Arabian Sea on the west and the Western Ghats on the east. The density of population is very high all along the coastline as compared to the midlands and the highlands. There are 222 fishing villages in the marine and 113 fishery villages in the inland sector, where fishing and related aspects provide livelihood to a vast majority of the population. Out of the two types of fishermen, the marine and the inland, the concentration of marine fishermen is more in Trivandrum district, followed by

Allapuzha, and then by Kollam and Kozhikode districts, while the inland fishermen are concentrated in Ernakulum, Allapuzha and Kollam districts respectively.

Fisher community is the community where people live with a we feeling, having common intrest in fishing, and related works. The fishing villages are characterised by a very high density of population along the coast and are made up of a large number of houses clustered together and occupying the coastal fringes of the state. Nearly 12% of the fisherfolk depend on allied activities like marketing/repairing nets, fish vending, processing and other fishery related activities, for their livelihoods. The state's fisheries sector is a huge one, comprising of 19,173 crafts out of which 7% are mechanised, 44% motorised and the remaining 49% are non-motorised crafts. Fisherfolk always face a shortage of money and live on a day to day basis. They have a high rate of dependence on moneylenders and traders.

Fishermen are deeply religious and they fully depend on the sea and the other natural forces that control it. Fisherfolk in Kerala come from three different religious groups - the Hindus, Muslims and the Christians. Each of the groups has its own social organisation. Hindu fisherfolk are mostly found in the central and northern districts of Kollam, Allapuzha, Thrissur and Kasargode districts of Kerala. They come from the caste groups of ‘arayans’, ‘velan’, ‘mukkuvas’ and the ‘marakkans’, respectively. The Hindus worship Bhagvati and Kali, but also have their own culture of cult worship. Christian fisherfolk are concentrated in the southern and central parts of Kerala. They belong to the Latin Catholic community and are mostly converts from the Mukkuva caste groups. The Church is the main institution around which the social organisation and the community of the Christian fisherfolk is organised. The priest is the main leader who looks after not only the religious concerns, but also the socio-economic concerns of the community.Muslim fisherfolk live mostly in the northern districts of Kerala. They also have a very strong organisational set-up with social cohesion and class differentiation. The main religious body amongst these fisherfolk is the Mosque. The elected council of the Mosque decides on ethical matters of the community. The life of the fisherfolk is centred around the fishing seasons, the fish they catch and the technology they use.

The major challenges of fishing community are socio-economic conflicts, low income to the common fishermen, low catch per unit effort, over exploitation of marine resources, unsustainable harvesting and also susceptibility to hazards related to climate change, damaged roads due to coastal erosion and flooding, alcoholism, school dropouts etc.

COVID-19 also bring many challenges in their life. In July 2020 a second wave of COVID-19 hit on the fisherman community of poothura and poovar in Thiruvananthapuram district. Thus both the coastal community is known for first community spread areas. on july 09, 2020 the region, comprising Poonthura, Mankiyavilakam and Puthenpally wards, has reported an alarming positivity rate with close to 200 cases, mostly due to local transmission, being identified among over 600 people. In this critical situation the district administration has declared the region a critical containment zone. The adjacent wards like Vallakadavu, Beemapally East, Beemapally,

Valiyathura and Muttathara has been designated as buffer zone of the critical wards. These areas were barricaded to prevent movement to and from the region. Government has stationed 500 police personnel including senior police officers in the region. The public have been directed to remain strictly at home, except to seek essential healthcare, medicines, food supplies, and ration. The Coast Guard and Coastal Police have intensified patrol along the coast to enforce the prevailing ban on fishing activities in the district.

It was not so easy for them to digest people start to protest against the government. The protest, fuelled partly by lack of access to essential items and partly by false rumours regarding testing. The people said that state government has been reporting a larger number of cases in Poonthura than actually exists. Many believe that the rapid antigen tests are not accurate and even people with mild symptoms are testing positive. The reporting of cases from the adjacent Manikyavilakam and Puthenpallly wards under Poonthura's name, as it belongs to the same cluster of virus spread, has also led to much anger among the people. The health minister Ms. Shailaja said that"Since July 6, we have conducted 1,192 tests in Poonthura alone, of which 243 were found to be positive. The three wards have a total of 31,985 people, out of which 5,611 are old persons and 2,250 are children below the age of 5. The area also has 184 persons under palliative care. It is in such an area, with a high risk of virus spread, that such protests are being instigated. We are not sure who is behind this, but whoever that might be, this is not the time for such attempts. You are putting the lives of people in danger. The Health Department has opened ten help desks which can be contacted to clear any doubts," Tourism Minister Kadakampally Surendran, in charge of the district, announced easing of some of the restrictions. He said that mobile units of the Supplyco and Consumerfed will travel around the wards to provide essential items at affordable rates. The local population will be allowed to carry out fishing for their own needs.

1.5 Adolescents

Adolescence is defined as the period of growth. United Nations defines adolescents as the age group between 10 and 19. It is the stage of life between childhood and adulthood. Adolescence is the stage of human development, were experience rapid physical, cognitive and psychosocial growth. It is a critical time of life were people become independent individuals, form new relationships, develop social skills and learn behaviors that will last the rest of their lives. It can also be one of the most challenging periods. (WHO)

Adolescence begins at 10-12 years and ends at 21-22 years. This period can be divides into two Early adolescence and Late adolescence. Early adolescence begins at age of 10-15 and Late adolescence begin at an age of 16 and continue up to an age of 22 years. The main characteristics of Early adolescence are physical changes, significant cognitive changes, and social changes. It give great importance to peer approvals and the main developmental characters of late adolescence are independence from family, and personal identity. Adolescence is a period were young people became more concern about their physical appearance. (Jose. B Ashford)

The statistics says that 1.2 billion (16%) of world's population is adolescents. India has the largest adolescent population in the world, its 253 million and every fifth person is between 10 to 19 years. Kerala has the lowest positive population growth rate in India, highest Human Development Index, highest literacy rate, highest life expectancy, and highest sex ratio. (UNICEF, 2019). In Kerala the Sex Ratio among Adolescent Population in 2011 was 963. The total no of males in 2011 was 27,67,216 and total no of female was 26,66,106. (UNFPA, 2011)

In 2012 an estimated 1.3 million adolescents died. The mortality rate decreased from 126 to 111 per 100 000 between 2000 and 2012. This modest decline of about 12% continues the trend of the past 50 years. Mortality rates dropped in all regions and for all age groups except 15–19 year old males in the Eastern Mediterranean and the Americas regions. The leading causes of death among adolescents in 2012 were Road injury, HIV, suicide, lower respiratory infections, and interpersonal violence. (WHO, Adolescent health epidemiology)

They are often exposed to harmful products such as tobacco, alcohol and drugs, they face greater risks of violence (including homicide) and road traffic injuries than in childhood, and can experience devastating mental health issues such as depression, anxiety, self-harm, substance abuse and addiction to video games, as well as eating disorders and suicide. Depending on where they live adolescent may face an even wider range of threats to their health, including racial or gender discrimination or violence, human rights violations, conflict or social disruption from natural disasters, being overweight or obese, female genital mutilation (FGM), forced child marriages or sexual exploitation and abuse. (WHO)

The major biophysical hazards faced by adolescence are nutritional needs for growth and development, unhealthy eating habit, weight issues like obesity and underweight, dysmenorrhea, acne, headaches etc. The major psychological hazards are risk for suicide, conduct disorder, parent- Adolescence conflict, peer pressure, body image issues, etc. The major social hazards are adolescence pregnancy, lack of sex education, alcohol and drug use, juvenile delinquency etc (Jose. B Ashford)

The major challenges faced by fishing community adolescence is school dropout, increased drug usage, early marriage, dowry, suicide etc. Due to poverty and other difficult socio-economic conditions, the boys and girls of this community may not have a good environment for learning in their homes. The boys may be eager and even encouraged to participate in fishing at a relatively young age and the requirement to acquire the skills to be proficient in this occupation may work against their education. Some important skills required in small-scale fishery, like navigating the boat in rough seas, hoisting sails, casting the net and working with small engines, are best imbibed by a process of 'learning by doing' under the tutorship of the older fishermen. Girls were also involved in marketing or processing fish or compelled to spend a greater part of their time taking care of household chores while their mothers participate in these fishery-related activities. These factors have led to the educational under-achievement of children from fishing communities.

Depression is one of the leading causes of illness and disability among adolescents, and suicide is the third leading cause of death in people aged 15–19 years. Half of all mental health disorders in adulthood start by age 14, but most cases are undetected and untreated. Violence, poverty, stigma, exclusion, and living in humanitarian and fragile settings can increase the risk of developing mental health problems. The consequences of not addressing adolescent mental health conditions extend to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults.

Drinking alcohol among adolescents is a major concern in many countries. It can reduce self-control and increase risky behaviours, such as unsafe sex or dangerous driving etc. It can also lead to health problems in later life and affects the life expectancy. Worldwide, more than a quarter of all people aged 15-19 years are current drinkers. Cannabis is the most widely used psychoactive drug among young people. Alcohol and drug use in children and adolescents is associated with neurocognitive alterations which can lead to behavioural, emotional, social and academic problems in later life.

Girls in fishing community will marry so early by giving a huge amount as dowry. After marriage girls are not allowed to go for further education or job. They want to stay in their house and treat their husband and family. The amount of dowry given by different strata of fishermen households varies according to their income level. The different strata of households on the basis of level of income are households of mechanized boat owners, motorized-craft owners & fish merchants and others including working fishermen, fishermen with traditional crafts and fishermen engaged in fishing and allied activities. fishermen of traditional craft and others will never be able to settle their debts due to the payment of dowry. The main reasons for their falling into such a deep debt trap are – low income due to non mechanization of their fishing craft, higher rate of interest on the borrowed sum as they are coming under low income group bordering the risk factor with regard to repayment of principal sum and higher cost of marriage which is far beyond their economic capacity.

1.6 STATEMENT OF THE PROBLEM

Corona virus is a new infectious virus first found in wuhan, china on December 2019. Its referred as a global pandemic because it had spread all over the world with a small time span. In kerala corona virus was first discovered on 30th January 2020, in 3 students who was traveling all the way from wuhan to Thrissur, Alappuzha and Kasargod. In the initial phases the number of cases and the death rate was very less but as days passed the no start to increase. Many of the people were symptomatic and the major symptoms of COVID-19 were fever, dry cough, breathing difficulties, headache, fatigue, and loss of smell and taste. Symptoms may begin one to fourteen days after exposure to the virus. And some were asymptomatic, due to this people was unaware of the spread of disease. That situation lead to community spread in many part of our state. To prevent the spread its important to get immediate results on tests, take preventive measures like wearing mask, washing hand with soap and sanitizer, social distancing etc. it was

not so easy for the people to adapt to new changes. People was anxious about the news, stressed on staying home with restrictions, it affect the socio economic stability of many families. people who tested positive face both physical and mental challenges. Home quarantine and self isolation was new for people, in the early period COVID positives were stigmatized from their own house and community. Even if the people who were not tested positive also face similar situation. For giving psychosocial support to the patients DMHP started Tele counselings and also the health workers called patients for reminding them on their test dates and other needs. But due to the increase in no of cases many of the people are not getting these services. We know that due to lack of vaccination and violation of rules the no of cases are increasing every single day. And also now a days the corona virus started to show variants. So the indepth study in this field is important for future. Also we all know that children and aged group are more vulnerable ones. By conducting a study among adolescence could help other children too. So by this study researcher could motivate the people by sharing the experience of adolescence who fight against COVID-19.

1.7 SIGNIFICANCE OF THE STUDY

The global pandemic COVID-19 had affected almost all the countries around the world within a short span of time. The COVID-19 pandemic has led to a dramatic loss of human life in all around the world and cause challenges in public health, food systems, education system and work. The economic and social disruption caused by the pandemic is devastating, many people face extreme poverty all around the world. Around 3,405,669 death had happen so far from the COVID-19 outbreak till May 18, 2021. Many people fight against the corona virus disease and survived, 1800179 out of 2169370 have recovered from COVID-19 till may 18 in Kerala. Even though people tested negative many face after effects like breathing difficulties, stroke, seizure etc. COVID-19 bring great changes in our life's, people start to wear mask, followed social distancing, schools closed, work at home, restrictions in celebrations, home quarantine, deaths of dear ones and people were unable to attend the funeral ceremony of dear ones and many more. This badly affect the mental health of many individuals, people start to show symptoms of anxiety, depression, stress etc. As it is a recently identified disease there is a wide scope of exploring many other areas too. There have been only limited studies conducted on this area, in that majority of the studies have been conducted in other countries, and mainly taken place in urban areas. Researcher could identify a big research gap in the area. Some studies conducted in international level states that people face many mental health issues due to quarantine and COVID-19. Also they state that women face more challenges during the COVID-19 pandemic period than men. So researcher wish to bring new out breaks in the area and love to explore more less focused group like a fishing community. The studies related to fishing community during COVID-19 is a less discussed topic. Fisherman community was the first community spread area in Kerala and they were different from other groups because many of them were asymptomatic and unaware about their disease condition. Also the study focused on adolescences group who are so important in our society. Children are considered as a vulnerable group, studies among

them are so important. This study aims to explore and better understand the experience of COVID positive adolescence in a fishing community. Study provide information regarding how COVID positive adolescence spend their quarantine life, how they cope up with physical and psychological challenges. Also could understand the support they receive from social support systems. The study could provide motivation to the people who are suffering from the deadly disease COVID-19. And also aim to enrich the already existing data.

CHAPTER 2

REVIEW OF LITERATURE

2.1 INTRODUCTION

A literature review is a comprehensive summary of previous research on a topic. A literature review surveys books, scholarly articles, and any other sources relevant to a particular issue, area of research, or theory, and by so doing, provides a description, summary, and critical evaluation of these works in relation to the research problem being investigated. It should give a theoretical base for the research and helps the author determine the nature of your research. Literature reviews are designed to provide an overview of sources you have explored while researching a particular topic and to demonstrate to your readers how your research fits within a larger field of study.

This chapter is a review of relevant studies conducted in the areas of COVID-19, studies on **COVID-19** and related pandemics, experience of COVID positive patients, challenges faced by COVID positive patients, coping strategies of COVID positive patients, role of support system in COVID positive patients. The studies are evaluated at the end of the study in order to identify the gaps in the literature.

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. (WHO, Coronavirus, 2020) COVID-19 is a disease caused by a new strain of corona virus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. The COVID-19 virus is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold. Symptoms can include fever, cough and shortness of breath. In more severe cases, infection can cause pneumonia or breathing difficulties. More rarely, the disease can be fatal. The virus is transmitted through direct contact with respiratory droplets of an infected person also can be infected from touching surfaces contaminated with the virus and touching their face (Bender, 2020).

Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic (Cennimo, 2021)

2.2 Studies related to pandemics

When we look on the spread of influenza we can see that in 1918–1919 ‘‘Spanish influenza,’’ A (H1N1) take place, in 1957–1958 ‘‘Asian influenza,’’ A (H2N2) occured and in 1968–1969 ‘‘Hong Kong influenza,’’ A (H3N2) spread was founded. In this study researcher try to explore the mortality rates during each pandemic period. Half of influenza-related deaths during the 1968–1969 influenza A (H3N2) pandemic and large proportions of influenza-related deaths during the 1957–1958 influenza A (H2N2) and the 1918–1919 influenza A (H1N1) pandemics occurred among persons < 65 years old. The study says the large proportion of influenza related deaths during each pandemic and the following decade among persons < 65 years old should be considered in planning for pandemics. (Lone Simonsen, 1998)

In the study "perceptions and behaviors related to hand hygiene for the prevention of H1N1 influenza transmission among Korean university students during the peak pandemic period" Jae-Hyun Park find that Korean students increased their frequency of hand hygiene practices during the pandemic, 30.3% of participants reported increasing their hand washing frequency. In that female students were more likely to have more frequent hand wash. The public education campaigns regarding hand hygiene are effective in individual at the peak periods of influenza transmission. (Jae Hyun Park, 2010)

In the study "Systematically comparing COVID-19 with the 2009 influenza pandemic for hospitalized patients", researcher found that The incidence rates of fever, cough, shortness of breath, sore throat, rhinorrhea, myalgia, muscle pain, and vomiting were found to be significantly higher in influenza patients when compared with COVID-19 patients. The incidence rates of comorbidities, including cardiovascular disease, hypertension and diabetes, were significantly higher in COVID-19 compared with influenza patients. Comorbidities such as asthma, chronic obstructive pulmonary disease, and immunocompromised conditions were significantly more common in influenza compared with COVID-19 patients. (Pengfei Li, 2020)

"Non pharmaceutical Measures for Pandemic Influenza in Non healthcare Settings International Travel-Related Measures" is a study which focus on the measures used related to international travel, including entry and exit screening of travelers for infection, travel restrictions, and border closures at the time of influenza pandemic. The reviews state that, effect of screening travelers

on entry to a country or region is very limited, this screening help to inform travelers about the risk of spread of infection and provide travel advice on avoiding travel to certain regions after departure or how to seek treatment after arrival. It also light up the threat of economic consequences as a major barrier to implementation of travel restrictions. NPIs implemented at the early phase might delay the start of a local epidemic by a few days or weeks, which is important to reducing the effect of the epidemic. (Sukhyun Ryu, 2020)

The study "Pandemic-related behaviors and psychological outcomes; A rapid literature review to explain COVID-19 behaviors" identified three pandemics (COVID-19, MERS-CoV, Influenza A(H1N1)) in which several psychological outcomes including anxiety, mental distress, post-traumatic stress disorder, and anger, and several behaviors identified during pandemics and categorized them into protective, preparedness, and perverse behaviors. The effects of pandemic (COVID-19, HINI MERS) on behavior change are mediated by the effect of psychological outcomes. Also, the psychological outcomes have a significant impact on the behavior change of the population when there is a pandemic. Also the effects of psychological outcomes on behavior change could be influenced by individual factors (e.g. socio-demographics). (Kim Usher, 2020)

In a study conducted among first year university students at Yeditepe University find that, most of the university students were aware about H1N1 outbreak in country and all over the world and believed that they had sufficient knowledge about it, but had less knowledge about the availability and effectiveness of antiviral drugs. Non-medical prevention measures are well accepted and have been carried on by most of the participants. But there was a negative attitude toward influenza A/H1N1 vaccine despite the recommendations of the MOH. The terms of seasonal influenza and pandemic influenza were confused with each other, most of the students thought that swine influenza was a modified form of seasonal influenza. Most of them knew that H1N1 influenza virus transmits from human to human. Although more than half of them believed that swine influenza could cause fatalities, most of them thought that if they caught the infection, the disease progress would have been mild. The former studies shows that Mass media was the most important information source for students. Also the studies show that the risk perception was higher in females than males in the whole group, but this difference was not observed among the students in health sciences. (Hulya Akan, 2010)

A cross-sectional study among adult from various shopping malls across Riyadh and Jeddah were conducted to know their knowledge, attitudes, and use of precautionary measures in relation to the H1N1 influenza pandemic. And the study results shows that more than half (54.3%) of the participants showed high concern, 43.7% showed a low level of knowledge, and 60.8% had taken minimal or no precautionary measures. (Hanan H Balkhy, 2010)

2.3 Preventive measures

In the study "Travel-related control measures to contain the COVID-19 pandemic: a rapid review" says that, when travel restrictions implemented at the beginning of the outbreak, may lead to a reduction in the number of new cases of between 26% to 90%. The screening approaches should follow to reduce the spread, which involving symptom screening of all individuals at departure or upon arrival, followed by quarantine, and different procedures for observation and PCR testing over a period of at least 14 days. Also a 14-day quarantine suggests a reduction in the number of cases. Some of these travel-related control measures during the COVID-19 pandemic have a positive impact on infectious disease outcomes and thus it may limit the spread of disease across national borders. (Jacob Burns, 2020)

The study "Adolescents Motivations to Engage in Social distancing during the COVID-19 pandemic: Associations with Mental and Social Health" was conducted among 683 adolescents residing in the United States, between the ages of 13 and 18 year. Adolescents most commonly reported engaging in social distancing for pro social reasons including recognition that social distancing is a social responsibility and to help ensure that others do not get sick. Motivations concerning state or city lockdowns, parental rules, and social responsibility were associated with greater social distancing. Disease related threat has been shown to prompt feelings of anxiety in youth and those who were social distancing because of friends recommendations reported greater depressive symptoms. And the youth who reported social distancing because of parental rules also reported feeling a greater sense of belongingness. (Benjamin Oosterhoff, 2020)

The article "COVID-19 experience in Bergamo, Italy" is the experience of Michele Senni MD. FESC, chief cardiologist, who was affected from COVID-19. Bergamo is a town in Italy, which was greatly affected by the COVID-19 epidemic, with more than 9000 COVID-positive cases, and 2300 deaths. The consequences of the COVID-19 emergency for the entire ‘Papa Giovanni

XXIII' Hospital of Bergamo have been dramatic, from a total of 779 hospital beds; more than 500 were occupied by COVID-positive patients. Some suggest that could help medical team to be prepared and to face this health emergency are (i) give priority to the protection of hospital health staff; (ii) provide adequate protective systems for the health staff and masks for hospitalized patients, outpatients, helpers, and visitors; (iii) adjust the hospital organization, with units dedicated to the treatment of COVID-positive patients, who should be separated from other patients; (v) change the triage for non-COVID patients; and (vi) use telemedicine or telephone calls by nursing staff to manage patients with chronic cardiovascular disease.

Travel measures played an important role in shaping the early transmission dynamics of the COVID-19 pandemic. On analyzing the travel measures like suspended transportation, border restrictions, entry or exit screening and entry quarantine during COVID-19, shows the reduction in no of cases. Wuhan travel measures led to a 70%–80% reduction in cases exported in the first few weeks, also reduction in the number of flights to countries, had additional effects at reducing the number of imported cases. Few studies investigated the effectiveness of measures implemented in other contexts. Early implementation was identified as a determinant of effectiveness. Most studies of international travel measures did not account for domestic travel measures thus likely leading to biased estimates. (Karen Ann Grepin, 2021)

2.4 Psychological challenges

According to the study "Mental health and its correlates among children and adolescents during COVID-19 school closure: The importance of parent-child discussion" conducted in primary and secondary school students in china says that mental health problems and resilience are coexisting among children and adolescence during COVID outbreak. A open discussion or communication with parents could help the children and adolescence to cope with mental health issues in public health crisis. (suqin tang, 2021)

In a study of "Compliance and Psychological Impact of Quarantine in Children and Adolescents due to Covid-19 Pandemic" come to a finding that Quarantined children and adolescents experienced greater psychological distress than non-quarantined children and adolescents. Worry (68.59%), helplessness (66.11%) and fear (61.98%) were the most common feelings experienced under quarantine (Kumar Saurabh, 2020)

A study conducted in parents and caregivers of children in Italy and Spain says that, the common changes occur during quarantine among children is difficulty in concentrating (76.6%), felt more bored than usual (52%), were more irritable (39%), were more restless (38.8%), were more nervous (38%), felt lonelier (31.3%), were more uneasy (30.4%), were more worried (30.1%), were more likely to argue with the rest of the family (29.7%), were more dependent on them (28%), were more anxious (28.4%), were angrier (25.9%), were more reluctant (24.7%), were sadder (23.3%), were afraid of COVID-19 infection (23.1%), were more worried when someone left the house (22%), and ate more than usual (21.9%). (mireia orgiles, 2020)

A study in UK adult population aged 18 years and above, about depression, anxiety, and traumatic stress by using Patient Health Questionnaire-9 (PHQ-9) scale, Generalized Anxiety Disorder 7-item Scale (GAD-7) scale, International Trauma Questionnaire (ITQ) found that depression was 22.1 %, anxiety was 21.6 %, and traumatic stress was 16.79 % . The prevalence of depression and anxiety was higher in females (31.7 %) than for males (23.4 %). And higher prevalence of traumatic stress in males (18.9 %) than that of females (14.9).The COVID-19 anxiety prevalence was 21.3 % and was higher in females (24.6 %) than that of males (17.7 %) (Mark Shevlin, 2020)

The study focus on mental health of Italian general population during three to 4 weeks of lockdown and also explores the impact of COVID-19. Post-traumatic stress symptoms (PTSS), depression, anxiety, insomnia, perceived stress, and adjustment disorder symptoms (ADS) were measured using Global Psychotrauma Screen, post-traumatic stress symptoms subscale (GPS-PTSS), Patient Health Questionnaire (PHQ-9), Generalized Anxiety Disorder scale (GAD-7), Insomnia Severity Index (ISI),Perceived Stress Scale (PSS), International Adjustment Disorder Questionnaire (IADQ) were used. The findings from the study shows (37%) of Post Traumatic Stress Symptoms, (17.3%) for depression, (20.8%) for anxiety, (7.3%) for insomnia, (21.8%) for high perceived stress and (22.9%) for adjustment disorder. These outcomes were associated with a number of COVID-19-related risk factors, including being under quarantine, having a loved one deceased by COVID-19, working activity discontinued due to lockdown measures, or experiencing other stressful events (i.e. working, financial, relationship, or housing problems) due to the pandemic or lockdown measures. (Rodolfo Rossi, 2020)

In the study "COVID-19 pandemic-related anxiety in teenagers" shares the experience of a 18 year old girl with severe symptoms of anxiety related to COVID-19 infection. She use to spend her lock down days on watching news channels about COVID-19 updates throughout the day. She was anxious about how the lives of people have been affected in different Western countries and in China, how the infected persons were dying and family members were unable to help their infected relatives/near ones, how the health-care workers were getting affected, etc. Over the period of 4–5 days of this routine, she started remaining worried that everyone on the Earth is going to get infected and die. These worries were associated with autonomic symptoms of anxiety such as palpitations, feeling restlessness, and dryness of the mouth. After 4–5 days, started to avoid the news and social media, but if she would accidentally hear anything about COVID-19 infection, her anxiety would increase further, which was now associated with intense palpitations, breathlessness, sweating, tremors, tingling sensations in the body, nausea, and feeling of impending doom. These episodes would be followed by intense crying spells. The frequency of these episodes would be 3–4 times/day, and she had to be calmed down by family members. Resultantly, she was not able to sleep, her appetite decreased, and she would mostly remain worried about her own health and that of family members. She was diagnosed with anxiety disorder (not otherwise specified) and managed with tablet clonazepam 0.5 mg and with supportive psychotherapy sessions. She was psycho educated regarding anxiety leading to the autonomic symptoms and was taught relaxation exercises. She was followed up on telephonically and with these interventions, she showed improvement in her symptoms over the next few days. (Swapnajeet Sahoo, 2020)

Children quarantined under the suspicion of having covid-19 or diagnosed with the disease are likely to develop mental health disorders such as anxiety, acute stress, and adjustment disorders Separation from parents, stigmatization, fear of an unknown disease, and social isolation can all have a negative psychological impact on children. Studies show that negative psychological impact from quarantine can be detected even after months and years (Nazish Imran, 2020)

A total no of 2812 respondents participated in an online survey conducted for studying the psychological distress among Italian People during COVID-19 pandemic. People who are above 18 and lives in Italy during the period of 18 - 22 march 2020 attended the survey. The scales used for the study are Depression, Anxiety and Stress Scale–21 items (DASS-21) and Personality

Inventory for DSM-5–Brief Form–Adult (PID-5-BF). The study shows that 67.3% of respondents had an average level of depression, 17% have high range, and 15.4% were in the extremely high range of depression. The 81.3% of respondents had an average level of anxiety, 7.2% had high range of anxiety, and 11.5% had extremely high range of anxiety. Also 72.8% of respondents had an average range of stress, 14.6% had high range of stress, and 12.6% had extremely high range of stress. The results also indicated that female gender was associated with increased anxiety, depression, and stress. other finding was persons with a history of trauma or suffer from long-term effects of the trauma often in the form of psychological symptoms that can flare up or re-emerge during situations of psychological uncertainty, such as that of the current COVID-19 outbreak. Also having a family member infected with COVID-19 and being young in age and needing to leave one's domicile to go to work were found to increase anxiety and stress levels. (Cristina Mazza, 2020)

In the study "Reported Changes in Adolescent Psychosocial Functioning during the COVID-19 Outbreak" Sabina Kapetanovic finds that, Majority of the adolescents reported that they had more internalizing symptoms, such as being sad, anxious, and lonely, and externalizing symptoms, such as being angry and arguing, now compared to before the COVID19 outbreak. Girls had poorer mental health during the COVID-19 outbreak. Girls had reported having poorer sleep, being more anxious, sad/depressed, angry, getting in more arguments, feeling more lonely, stressed, and less satisfied now than before the outbreak.

Reviewing a total of 83 articles like MEDLINE, PsycInfo, and Web of Science published between January 1, 1946, and March 29, 2020 by Maria Elizabeth Loades, Eleanor Chatburn conclude that, Children and adolescents are more likely to experience high rates of depression and anxiety during and after enforced isolation. Clinical services should offer preventive support and early intervention where possible and be prepared for an increase in mental health problems. In the articles 63 were reports on the impact of social isolation and loneliness on the mental health of previously healthy children and adolescents, 61 studies were observational, 18 were longitudinal, and 43 were cross-sectional studies assessing self-reported loneliness in healthy children and adolescents. One of these studies was a retrospective investigation after a pandemic. (Maria Elizabeth Loades, 2020)

In the study 'Factors affecting the anxiety levels of adolescents in home quarantine during COVID-19 pandemic in Turkey' conducted in 745 adolescences, find that, About 88.2% of adolescents followed the developments in the COVID-19 process and obtained the most information from the television, The study observed that the state anxiety scores increased 2.41 times more in the group, using mostly television as a source of information about COVID. These results show that exposing children to excessive information causes elevated levels of stress and anxiety. The methods used for collecting the data was through Google form survey, from 13 different schools in turkey. The tools used in the study was State Trait Anxiety Inventory, UCLA loneliness scale. (Senay Kilincel, 2020)

2.5 Physical challenges

In a study of 19 COVID positive adolescence say that 37% had sore throat,32% had nausea or vomiting, 26% had cough, shortness of breathing and fever, most common medical comorbidity was asthma(32%) and the most common psychiatric comorbidity was posttraumatic stress disorder(63%) (polina krass, 2020)

In a study "Changes in physical activity and sedentary behaviors from before to during the COVID-19 pandemic lockdown: a systematic review" among sixty six articles, sixty four of them shows changes in physical activity. The majority of studies reported decreases in physical activity and increases in sedentary behaviors during their respective lockdowns across several populations, including children and patients with a variety of medical conditions. Forty-five studies examined physical activity changes in healthy adults. Two studies reported increases in time spent in ‘leisure-time PA’ and one study reported increases in time spent in ‘endurance training’ in elite cyclists, although total PA still decreased in all three studies. Of the 26 studies examined changes in sedentary behaviors, 18 were conducted in healthy adults. Increased sedentary behavior was reported in all 26 studies. (Stephanie Stockwell, 2021)

In the study "Changes of Physical Activity and Ultra-Processed Food Consumption in Adolescents from Different Countries during Covid-19 Pandemic: An Observational Study" conducted among 726 adolescents from Brazil, Chile, Colombia, Spain, and Italy. Most participants were female and aged 16–19 years, finds that Adolescents living in Latin American countries (Brazil, Chile, and Colombia) being physically inactive during quarantine and the

physical activity levels among adolescents in European countries are high. Brazil being the country with the highest prevalence of physical inactivity before/after social isolation. On the other hand, boys were more active before/during quarantine. Also the consumption of ultra-processed food was high during this period in all countries, but their habitual use was more prevalent in Latin America. (Maria Belen Ruiz-Roso, 2020)

In 2019, an estimated 38.2 million children under the age of 5 years were overweight or obese. Once considered a high-income country problem, overweight and obesity are now on the rise in low- and middle-income countries, particularly in urban settings. In Africa, the number of overweight children under 5 has increased by nearly 24% percent since 2000. Almost half of the children under 5 who were overweight or obese in 2019 lived in Asia. (WHO, Obesity and overweight, 2020)

The study "Adolescent and Young Adult ME/CFS after Confirmed or Probable COVID-19" says that the presence of persistent fatigue and impaired daily physical and cognitive function has led to speculation that like SARS-CoV-1 infection, COVID-19 will be followed by myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). The study shares the experience of COVID positive adolescence. A 19 year old adolescent show symptoms like cough, sore throat, headache, and fatigue from 3rd day after the exposure. Despite sleeping 3–4 hr more than usual per night, he felt exhausted and flu-like, and his SARS-CoV-2 RNA nucleic acid quantification test was positive on June 18. He experienced a loss of sense of smell which persisted for several months. Two weeks after the onset of his symptoms, his attempts to resume running resulted in an increased cough, labored breathing, and lightheadedness. In July starting he felt lightheadedness, an increase in fatigue, and coughing. He also developed chest pressure, intermittent chest pain, and a significant increase in his heart rate after basic tasks such as walking to another room or showering. After 2 months of the onset of the COVID-19 infection, show symptoms included constant fatigue, unrefreshing sleep, PEM after mild increases in activity, bi-frontal and bi-temporal headaches, chest pain, occasional cough, leg pain, insomnia, frequent awakening, and mild anxiety and depression. He also had a pre-COVID-19 history of mild asthma, allergic inflammation, and several food intolerances. After 6 months of illness, he satisfied the Institute of Medicine criteria for ME/CFS. Seven months post-COVID-19, his ability to function as he had pre-illness remains markedly decreased. The study results all three

participants met criteria for ME/CFS 6 months after the onset of symptoms. ME/CFS symptoms had been present from day one of the illness. None of the participants had a prior medical history of ME/CFS. (Lindsay S. Petracek, 2021)

In the study "Children and adolescents with eating disorders during COVID-19 confinement: Difficulties and future challenges" Montserrat Graell finds that almost half of the children and adolescents studied experienced reactivation of Eating Disorder symptoms despite treatment(41.9%) especially eating restriction, excessive exercising and worries and fear of gaining weight, increased emotional symptoms and also severe patients (25%) presented self-harm and suicide risk.

Adolescents decreased their PA during the COVID-19 pandemic. In the study "Physical Activity in Adolescents During the Social Distancing Policies of the COVID-19 Pandemic" Ragab K. Elnaggar finds that the Physical Activity Level reduced more clearly in boys during the imposed social distancing. Boys may engage in competitive sport more frequently but the sports activity was banned during the pandemic, and this may explain the boy's Physical Activity Level decline.

2.6 Social challenges

In the study "COVID-19 and E-Learning: the Challenges of Students in Tertiary Institutions" researcher focus on the challenges of lecturer issues, social issues, academic skills, cost, and access to internet and learner motivation among students in tertiary institutions in Ghana. The study found out that accessibility is the most important challenge students are facing in a complete online learning, which include internet connectivity, using compatible smartphones and laptops. The current study revealed that students were not ready for an online learning experience in this pandemic era. Also think that pandemic era is a period for family deliberations on how to get basic necessities and not for academics. The conventional classroom teaching where students and teachers interact face-to-face, participating in group works, assisting each other to perform assignments, is very key to promote socialization. These things are minimal when students engage in an online learning situation. Social issues and lecturer issues were significant among the students in Ghana. (Emmanuel Aboagye, 2020)

A study on Canadian adolescent high school students were conducted, to study the fear about the spread of COVID-19, time spend in social media, daily activity, Depression (Brief Symptom

Inventory (BSI), Loneliness (UCLA Loneliness Scale) and Physical activities (Godin Leisure-Time Exercise Questionnaire). The researcher found that, Seventy-two percent of teens reported being “very” concerned with how the COVID-19 crisis will impact their school year. Social media usage shows increased use from before COVID-19 to after COVID-19. The largest response category in the 6 months prior to the crisis was 2–3 hr per day (31.1%), while the largest response category for the 3 weeks after the crisis began was 5–10 hr (35.4%). Many participants reported no physical activity in each category over the past 7 days, particularly for intense exercise. COVID-19 stress was related to more loneliness and more depression, especially for adolescents who spend more time on social media. Beyond COVID-19 stress, more time connecting to friends virtually during the pandemic was related to greater depression, but family time and schoolwork was related to less depression. (Wendy E. Ellis, 2020)

In the article "Mental health considerations for children & adolescents in COVID-19 Pandemic" Nazish Imran says that at the times of social isolation, children and teens are becoming exposed to the excessive media coverage of the pandemic. On one hand, electronic and social media is providing continuous updates on nationwide situation, and advising people to adopt social distancing but on the other hand, it is also creating sensationalism and spreading misinformation. The screen time of children and adolescents has increased as they are confined to their homes. Research has shown that, excessive television exposure led to increased incidences of Post-Traumatic Stress Disorder (PTSD) and other mental health disorders.

In the study "The psycho-social effects of COVID-19 on Italian adolescents attitudes and behaviors" researcher was aiming to explore more on the emotional and behavioral experience of Italian adolescence during the COVID19 pandemic. The study shows that majority of adolescents declared to be worried but not too much, also they are less anxious than their parents. The information conveyed by the mass media considered by the majority of the respondents as correct and adequate. Level of discussion about the pandemic in the family remained very high , medium with friends and low with teachers. Provisions of public authorities, such as the lockdown, the consensus for disease prevention and contrast provisions was very high and increased. 36.8% think negative consequences in school education at the time of COVID-19 pandemic. A total of 69.6% had more communication through social network and less meeting with their friends and dear ones. (Carlo Buzzi, 2020)

The social impact identified in the study “Hey, we also have something to say”: A qualitative study of Portuguese adolescents’ and young people's experiences under COVID-19” are, Decrease in social skills, loss of social competencies related to less contact with others and relevant life moments, such as final academic year celebrations, like the prom and finalists trip and other family parties. Increased feelings of distrust, Absence of routine makes life disorganized and confusing, Low productivity and procrastination, no desire to do anything. Greater use of technologies and substances, increased family Fights, disagreements and constant discussions, Economic impact on the household, School overload, with more school work, Increase domestic violence and divorces (Colette Kelly, 2020)

In the study "Barriers and facilitators to changes in adolescent physical activity during COVID-19" Kwok Ng finds that, Half the adolescents (49.7%) reported doing less Physical Activity during the lockdown period. Almost a third (31.2%) reported doing the same amount of Physical Activity, and one in five (19.1%) reported they did more Physical Activity during lockdown. lack of physical activity is due to COVID-19. The club training cancelled, health concerns, low motivation, no school, too much schoolwork, closed facilities, lack of resources, mental health, time, lack of routine and other.

In a study conducted among adolescents and young people in south Africa says that majority of the participants face difficulty in meeting their basic necessities they felt food insecurity, hunger, loss of livelihood. They felt ‘being stuck’, life being ‘on hold’ and a lack of purpose. Also they express stress, anxiety and sadness. (Lesley Gittings, 2021)

2.7 Role of support system

The study ‘The Effect of Social Support on Mental Health in Chinese Adolescents during the Outbreak of COVID-19’ was conducted among adolescents aged 14 to 18 years. The study measures the depression rate of adolescence using Patient Health Questionnaire (PHQ-9), Anxiety was assessed by the 7-item Generalized Anxiety Disorder (GAD-7), and Social support was assessed by the Social Support Rate Scale (SSRS). The study shows that, the levels of social support were reported as high by 24.6%, medium by 70%, and low by 5.4%. The prevalence of depression and anxiety symptoms among rural residents was significantly higher than urban residents. There was a statistically significant higher prevalence of anxiety symptoms of

individuals living with others compared with those living with their parents. The prevalence of depression and anxiety symptoms was higher for adolescents who reported exposure to COVID-19 than those without COVID-19 exposure. The lower level of social support, the higher rate of depression and anxiety symptoms. (meng qi, 2020)

In the study "Impacts on Children and Adolescents' Lifestyle, Social Support and Their Association with Negative Impacts of the COVID-19 Pandemic", Shimin Zhu conducted a study on Hong Kong primary and secondary school students. The finding about the social support during the pandemic was, More than half of participants reported that they perceived the same social support as before. Also increased social support was more than those reporting decreased social support. More girls than boys shared feelings with others when feeling blue and cared for family members' feelings. More boys reported decreased support from friends and decreased support from family members. Compared to participants, more primary school participants reported increased support from friends and family and a decreased support from friends. Participants from the low family income group has reported a greater decrease of social support than those from high socio-economic families.

2.8 Coping strategies

Belgium adolescents between 13 and 19 years old completed the survey for the study "How Adolescents Use Social Media to Cope with Feelings of Loneliness and Anxiety During COVID-19 Lockdown". Measures used in the survey were, Center of Epidemiological Studies-Depression Scale, General Anxiety Disorder Scale (GAP-7, Loneliness was measured by a 6-item scale (RULS-6). The study shows that, most of the adolescents indicated a highest social media use during the lockdown. Both anxiety and loneliness were negatively associated with happiness. Higher feelings of anxiety and loneliness are associated with lower feelings of happiness. Anxious people use social media more often to actively handle the crisis and keep in touch with others and lonely people are using social media more often to keep in touch with others. (Verolien Cauberghe, 2021)

When a study conducted among graduate and professional Students during the time of COVID-19 find out that, the major problems reported were productivity and work-related stressors (27.3%), Health concerns (25.6%), and Emotional Problems (13.8%). The effective strategies

used by the students were Behavioral Activation (49.1%), Distraction (16.1%), and Social Support (13.2%). (Akash R. Wasil, 2021)

The study by Colette Kelly find that the coping strategies in Portuguese adolescents and youth during COVID-19 were, Communicate regularly with family and friends through video calls, Carry out pleasurable activities (e.g., exercise, reading, training, playing an instrument, playing games, watching television series, etc.), Lead life calmly and positively, Have a routine and scheduled times to eat and sleep. This help them to cope up with the pandemic.

The study "Adolescent Lifestyle Behaviors, Coping Strategies and Subjective Wellbeing during the COVID-19 Pandemic: An Online Student Survey" aim to study the lifestyle behaviors and coping strategies among Italian adolescents, in relation with ongoing COVID-19 pandemic. The study says that, most students planned their daily routine (57.8%), also deciding to organize their time in a different way (82%) and to engage in different activities (54.6%) than before. Most common activities doing were physical activity (67.3%), getting interested in cooking (47.4%), playing videogames (36.3%), reading (30.1%), and playing board games (17.6%). Also one in every two students tended to frequently withdraw into their bedroom (50.7%), and one third reporting a significant increase in family quarrels (31.7%), a substantial proportion of adolescents let their parents know their feelings (40.5%) and a slightly lower percentage revaluated their parent–child (29.4%) or sibling relationships (39.7%). Students having a romantic relationship, the large majority reported missing their partner and supporting each other (90.2%). Almost all students used social networks to keep contact with their friends (93.5%) and some of them made new acquaintances online (19.3%). Apart from a few students, all kept remote contacts with their teachers (92.2%). Most adolescents considered positively the offered distance learning (79.1%), reporting being able to do their homework (63.1%) and to balance school commitments and free time (63.1%). Personal computers were the most commonly used devices for distance learning (55.2%). However, more than half of the students feared a negative impact of the ongoing period on their educational path (56.2%) For most students, it was hard to stay at home (66%). One in two students felt considerably changed by the experience of the pandemic (50.7%) and noticed a significant change in their psychological wellbeing (49.3%). More than one third reported being particularly anxious about the ongoing situation (39.9%). Even though three out of four students reported going to bed late often or always (81%), most of

them self-evaluated their sleep–waking cycle as generally preserved (59.2%). Students who found it hard to stay at home argued more easily with family members and feared a negative impact of the ongoing period on their educational path and were all more likely to report a subjective change in their psychological wellbeing. Female doing physical activity and engaging in different activities than before. Both personal and environmental coping resources are relevant to subjective wellbeing in adolescence and should be taken into account for prevention and early intervention in youth mental health. (Yolande Pigaiani, 2020)

In the study "Physical Activity Protects Against the Negative Impact of Coronavirus Fear on Adolescent Mental Health and Well-Being During the COVID-19 Pandemic" Laura J. Wright says that physical activity during the Coronavirus pandemic can counteract the negative effects of Coronavirus fear on adolescent mental health and well-being. Therefore, physical activity should be promoted during lockdown to support good mental health and well-being. Coronavirus fear was associated with higher levels of perceived stress, anxiety, depressive symptoms, general fatigue, reduced activity, mental fatigue, and reduced motivation, and was associated with lower levels of vitality and general health. Higher levels of physical activity were associated with lower levels of perceived stress, depressive symptoms, and all five fatigue subscales, as well as higher levels of vitality and perceived general health.

The study "Stress and coping during COVID-19 pandemic: Result of an online survey" says that, almost one in five (21.2%) had moderate to severe anxiety symptoms, 15% of the respondents had moderate and moderately severe depressive symptoms and the one third respondents could be considered for Post-traumatic stress symptoms. The higher level of anxiety, depression, and post-traumatic stress disorder was among students, singles, university-educated and 20-30 year olds. When Comparing health care workers with other people they had less level of anxiety, depression and post-traumatic stress symptoms. The major coping strategies used by the people are hoped for the best, being busy in activities, problem solving, sharing feelings, and talking to others. (Nilamadhab Kar, 2020)

On a study conducted on 1,480 parents of children aged 3–18 years from three European countries (Spain, Italy, Portugal) shows that the most used coping strategy among children and adolescence was acceptance, with more than half of the parents reporting that their children use acceptance as a coping strategy. Other commonly used coping strategies were collaborating with

social activities such as drawings on windows or collective applauses, Also 35.5% of children ignore the problem and acting as if nothing was happening, 35.1 % take the advantages of being at home and seeking comfort from others, and 30.1% was not showing any concern about what was happening. In the adolescent group (13–18 years),69.9% accepts what's going on, 37.9%take the advantages of being at home, and 32.2% acts as if nothing is happening. When comparing the three countries, Portuguese children were more likely to use humor when parents talked about the quarantine or COVID-19. Spanish children were more likely to act as if nothing was happening, collaborate in social activities, and seek comfort from others. Italian children were more likely to act as if they were not worried about what was happening. Overall, an emotional-oriented coping style was directly correlated with a greater presence of anxious symptoms, as well as to mood, sleep, behavioral, and cognitive alterations. Task-oriented and avoidance-oriented styles were related to better psychological adaptation (considered a low presence of psychological symptoms). (Mireia Orgiles, 2021)

2.9 Conclusion

The review of literature shows that the studies were mainly take place in internationally, the studies related to the topic are less explored in India. Also the studies related to the COVID positive adolescences are very limited and few in number so that the researcher found the importance of exploring more in that area. Majority of the pandemic studies were related to influenza and those studies shows that influenza like H1NI had more symptoms than COVID-19. The studies says that through proper social distancing, travel restriction like checking at entry and exist, border closure etc can prevent the COVID-19 spread. Also the health systems have a great role in prevention, through early detection of patients, separate treatment facilities proper usage of mask and sanitizer we can prevent the spread. The studies says that COVID-19 have great impact on psychological distress. Many studies conducted internationally states that adolescence face depression, stress, anxiety, loneliness, angry, irritability etc at the time of COVID-19. Also the studies shows that women and girls are mainly affected by the psychological distress like depression, anxiety, anger, loneliness, stress etc. But a study says that male face high traumatic stress than female. Also the studies show adolescences who are quarantined are more exposed to psychological distress than non-quarantined ones. The studies say that the media and news create a negative impact on children they make people more

anxious. Also the studies says that people who are suffering from long term trauma, young people, and when the family members get infected are facing more stress and anxiety. In the studies related to physical challenges it says that COVID positive people show physical difficulties like sore throat, cough, nausea or vomiting, shortness of breathing, fever, headache, fatigue. Also some studies says that COVID-19 have long term impact like shortness in breathing, loss of smell and taste, light headiness. Also a study says about the comorbidities, the medical comorbidity like asthma and psychiatric comorbidity like PTSD. Some of the studies focused on the physical activity, sedentary pattern of children during the lockdown period they says that the physical activities during lockdown period decreases and the sedentary behavior increased in children. Also obesity and overweight among children increased while staying in home. The studies related to social challenges discussed about the effectiveness of online class, socialization decrease due to online education and lack of physical activeness. The studies related to coping strategies says that through social media we can connect with people, bringing behavioral activation, distraction, social support, video calls, pleasurable activities like exercise, reading, watching T.V, cooking, board game etc help people to cope up with the situation. Also the studies say that people who are physically active have low stress and depression. Also people use ignorance of the problem as a method of coping. The studies related to support system say that low level of social support lead to high rate of depression and anxiety. Also the study says that boys have more support from their friends than family and primary school children get more support from their family members. Social challenges and support systems during COVID-19 are less explored areas.

This study aim to explore more on the experience of COVID positive adolescences their challenges, coping strategies and the social support that they get during their quarantine period.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

This chapter gives an outline of research methods that were followed in the study. It provides information on the participants, that is, the criteria for inclusion in the study, who the participants were and how they were sampled. The researcher describes the research design that was chosen for the purpose of this study and the reasons for this choice. The instrument that was used for data collection is also described and the procedures that were followed to carry out this study are included. The researcher also discussed the methods used to analyse the data. Lastly the ethical issues that were followed in the process, as well as assumptions, limitations and scope are also discussed.

3.2 TITLE OF THE STUDY

Experience with COVID-19: A study among COVID positive adolescence in Poonthura fishing community

3.3 RESEARCH QUESTIONS

General Research Questions

Experience with COVID-19: A Study among COVID positive Adolescence in Poonthura Fishing Community

Specific Research Questions

1. What was the experiences during COVID positive quarantine period?
2. What were the challenges experienced during COVID positive period?
3. What were the coping mechanisms adopted to overcome the challenges?
4. How did the support systems help to overcome the situation?

3.4 DEFINITION OF CONCEPTS

COVID positive

Conceptual definition: COVID-19 is the disease caused by a new coronavirus called SARS-CoV-2. The new virus was recognized on 31 December 2019, following a cluster of cases of 'viral pneumonia' in Wuhan, China. The most common symptoms of COVID-19 are Fever, dry cough, fatigue (WHO, COVID-19, 2020)

Operational definition: An individual who tested positive to COVID- 19 , and undergone home quarantine for 14 days. The person may or may not be symptomatic.

Adolescent

Conceptual definition: Adolescents is a person between 10-19 years age. It is the period of transition from childhood to adulthood. Adolescence is a period of life with specific health and

developmental needs and rights. It is also a time to develop knowledge and skills, learn to manage emotions and relationships, and acquire attributes and abilities that will be important for enjoying the adolescent years and assuming adult roles. (WHO)

Operational definition: In the study adolescents refers to individuals in an age group of 15 to 18 year old, who are tested positive for COVID-19 during the month of September to December

Fishing community

Conceptual definition: A fishing community is a community that is substantially dependent on, or substantially engaged in, the harvest or processing of fishery resources to meet social and economic needs; the fishing vessel owners, operators, crew and fish processors that are based in such a community. (fishing community, 2001)

Operational definition: fishing community is a community of fisherman and related job people living together near a coastal area with a we feeling.

3.5 RESEARCH DESIGN:

Research design is the framework of research methods and techniques chosen by a researcher. An impactful research design usually creates a minimum bias in data and increases trust in the accuracy of collected data. The research design adopted in this study is multiple case study research design.

3.6 PILOT STUDY

A pilot study is the preliminary examination conducted in for evaluate the feasibility, time, cost, adverse events, and affect size in an attempt to predict an appropriate sample size and improve upon the study design prior to performance on the complete research. The researcher assessed the feasibility of the study and the availability of the respondents through the pilot study. The researcher conducted the pilot study at Poonthura fishing community. Researcher meet vicar of st Thomas church Ponthura, community people, health workers etc as a part of pilot study. From this the researcher understood the feasibility of the study. And it help the researcher on further data collection and studies.

3.7 RESEARCH APPROACH

Research approaches are plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation. Qualitative approach is adopted for the study and multiple case study design was used to collect data for the purpose of the study. Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. In qualitative research researcher use mainly words than numbers and open ended questions than closed ended questions. The process of research involves emerging questions and procedures, data typically

collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. Those who engage in this form of inquiry support a way of looking at research that honors an inductive style, a focus on individual meaning, and the importance of rendering the complexity of a situation.

3.8 DESCRIPTION OF RESEARCH SITE AND PARTICIPANTS

The study was carried out in Poonthura fishing community. Poonthura is a fishing community in Thiruvanathapuram district. Poonthura is a thickly populated area and there is a population density of more than 5,000 per sq km. Researcher meet poonthura st Thomas church vicar for building a rapport with community people. Under his guidance researcher collect data of COVID positive adolescence from Poonthura CHC with the permission of DMO of Thiruvanathapuram district. Researcher collect data of COVID positive adolescence of an age group of 15 to 18, who were tested positive in the early periods (September to December). Researcher conduct telephonic interview to collect data.

3.9 SAMPLING STRATEGY & CRITERIA/SELECTION OF RESPONDENTS

A non-probability, purposive sampling method was used to select the sample for the study. The participants have been chosen to participate in telephonic semi structured interviews.

Participants for the study have been selected according to a set of specific criteria.

3.10. 1 Inclusion Criteria

The criteria for selecting the respondents were as follows:

- The person should belong to an age group of 15 to 18 year old
- The person should tested positive in the early period of the spread (September to December)

3.11. 2 Exclusion criteria

- The adolescences belong to an age group below 15 years and above 18 years
- The person who was tested positive after the month of December
- The person who tested positive but unwilling to cooperate with researcher

3.11 DATA COLLECTION

Data collection is the primary and most important step for research, in the field of research. it is the procedure of collecting, measuring and analyzing accurate insights for research using standard validated techniques. A researcher can evaluate their hypothesis on the basis of collected data.

In the study researcher collected the data from three COVID positive tested adolescence in Poonthura fishing community. Researcher first collected the details of adolescence from the Poonthura CHC and then conducted a telephonic interview with all those adolescence. Researcher recorded all the phone calls with the permission of the respondents. The telephonic interview was conducted in Malayalam. The demographic details and the semi structured questions were noted during the interview. Each telephonic interview takes nearly one hour. Also researcher could meet the parish vicar, community people, health professionals for collecting secondary data. They give an outline about the situation during that period.

3.11.1 Sources of Data

Primary source :

The primary data was collected from the adolescence who was tested positive to COVID-19 in a time period of September to December.

Secondary source:

Secondary data comprises of information from health workers, community people, books about adolescence and fishing community, news reports and other related studies, literature related to COVID-19 pandemic

3.11.2 Tools for Data Collection

Many different methodologies can be used for data collection and analysis. Interviews are probably the most common tool used in planning, monitoring and evaluation. They can be carried out with one person at a time (individual interviews) or groups of people. They can be administered formally or informally. They can be carried out face-to-face or through remote media such as telephone and Skype. Interviews can also be conducted through written questions via letters or email. Interviews may be structured, semi-structured or open-ended. Structured interviews are based around a core set of questions that are always asked in the same order. Semi-structured interviews also contain a core set of questions, but allow the interviewer to ask supplementary questions, or change the order in which questions are asked. (Simister, 2017)

In this study the researcher prepared a interview schedule to find out the socio-demographic profile of adolescences. This schedule consists of closed ended questions, which deals with the socio-demographic profile like "age, sex, religion, education, school, occupation of parents, income, type of family, size of family etc. A semi structured interview guide which including more than 15 questions were prepared, based on the research questions for collecting data. It helped the researcher to collect relevant data from the respondents . Also researcher give the space for respondent to freely express his feelings at the time of Telephonic interview. This mode of data collection make the study more rich and authentic.

3.12 DATA ANALYSIS

The data collected through telephonic interview is subjected to the process of analysis in qualitative research with the primary aim to understand from respondents perspective. Analysis was done by thematic analysis, themes were set on the basis on research questions.

The research questions were:

1. What were the experience during COVID positive quarantine period
2. What were the challenges experienced during COVID positive period
3. What were the coping mechanism adopted to overcome the challenges
4. How did the support systems help to overcome the situation

3.13 CHAPTERISATION

The chapterisation of the research dissertation is as follows:

Chapter I: Introduction

Chapter II: Review of literature

Chapter III: Research Methodology

Chapter IV: Case Description, Data Analysis and Interpretation

Chapter V: Major findings, suggestions

Chapter VI: Conclusions

Chapter VII: Bibliography and Appendix

3.14 ETHICAL CONSIDERATION

Research ethics is a core aspect of the research work and it is the foundation of research design. The research design must address specific research questions. An individual should at no point feel any coercion to participate in a study and Informed consent states that an individual must give their explicit consent to participate in the study.it is an agreement of trust between the researcher and the participants. The confidentiality of the information supplied by research subjects and the anonymity of respondents must be respected. The Ethics are said to be the norms or rules that help a researcher distinguish between what is acceptable and not acceptable while conducting a research. Ethical standards prevent against the fabrication or falsifying of data and therefore, promote the pursuit of knowledge and truth which is the primary goal of research. Therefore, every ethical consideration is unique and varies according to the field of research.

The researcher also considered the IFSW code of ethics and the section 5 of ethical standards of NASW code of ethics related to research such as active participation in research as a responsibility towards the profession and to maintain the integrity of the profession. The researcher put a high value on the participants privacy, and dignity. The participants were informed of their right to withdraw from the research at any time.

The researcher get the permission from the District Medical Officer of Thiruvananthapuram for collecting data of COVID positive adolescence. Researcher approach the medical officer of Poonthura for getting the data, and received the details of COVID positive tested adolescence. Researcher give an idea about the research to the respondents and assure not to disclose the respondents identity anywhere and will maintain full confidentiality, the data will only be used for study purpose and don't use it for any other purposes.

3.15 LIMITATIONS OF THE STUDY

- The major limitation of the study was time limit
- Lack of studies in the field
- Limited sample size
- Fear of spread of COVID-19 while collecting data

3.16 CONCLUSION

The researcher was able draw how systematically and properly the study was taken place. This chapter will give an clear idea about the methods used in the study for selecting samples, collecting data and analysis of data. Using these methods, the researcher was able to conduct study in more systematic and scientific manner.

CHAPTER 4

CASE PRESENTATION

Case description

CASE A

Socio-demographic profile of the respondent:

Case	A
Age	17 year old
Gender	Male
Religion	Hindu
Educational qualification	+2
School	St joseph higher secondary school
Parents education	Both are 10th qualified
Parents occupation	Father: automobile mechanic at gulf, Mother: homemaker
Economic status	BPL
Tested positive and negative on	21/10/2020 to 30/10/2020

Case A is a 17 year old boy, who is studying in 12th standard at St joseph higher secondary school Palayam and lives at Poonthura. His family consist of five members, father, mother, sister, grandmother, and himself. His Father is working at gulf as automobile mechanic and mother is a home maker, his sister is studying in UKG, and the grandmother is working in an eye hospital nearby.

During COVID-19, one day evening when he and his grandmother was alone in the house she started to show some symptoms of COVID-19 infection like fever, breathing problem, fatigue. At that time his mother and sister was in his relatives house. The very next day they took antigen test from Poonthura CHC and found that both of them was COVID positive.

My grandmother (mother's mom) is working in an eye hospital, nearby the general hospital, from her I get infected. She had a primary contact with a COVID positive patient and on that evening when she came back she start to show some symptoms like fever, fatigue, and breathing problem. So the next day morning grandmother took a test for COVID-19 and find that she was positive. On that night I was the only one in the home with grandmother so I also took a test for COVID-19 and my result also was positive.

It is so easy to get infected while living in the same house by sharing things and having a close contact with each other. COVID-19 can be get infected by inhaling the droplet which containing virus, and through direct contact with eye, mouth, and nose. Also virus can be spread easily in a poorly ventilated room.

COVID -19 can be symptomatic or asymptomatic for him COVID was asymptomatic he had no any symptoms. He has undergone testing only because his grandmother show some symptoms or else he won't take a test for COVID-19. He was healthy throughout the quarantine period and the only difficulty he faced was lack of taste for food and lack of intrest in eating.

No, there was no any particular symptoms or difficulties during the quarantine period. But I lost the sense of taste and had no intrest on eating something.

when he was tested positive the health workers in Poonthura CHC took him back to house in an ambulance and stick a notice infront of the house showing quarantine period. They give him support and ask him to follow room quarantine upto 14 days.

On 21st October 2020 i was tested positive for COVID-19 and after few days on 30th October 2020 i was tested negative. When I was tested positive the people from hospital take me back to home in an ambulance and place a notice infront of the house showing the quarantine period.

He followed room quarantine till he was tested negative. He had a bed and Television facility in that room. The toilets were common so they cleaned it by using bleaching powder after each use. He had separate plate and glass for having food, his dresses were washed separately and all the members in the family wear a mask inside the house too.

I followed room quarantine for nearly one and half week. I always stayed in my room. Food, water and other necessary things will keep at my door step, I had separate plate and glass in that time, also my dress washed separately. I think on the second or third day of my quarantine period the health workers sanitized my home and surroundings.

On quarantine days he use to wake up at 8 in the morning. He spend his time on watching movies, youtube videos, web series etc. Since he is studying in 12th standard he spend some time for studying. Also kept engaged in some other activities like drawing, listening music etc. At 10 in the night he go for sleeping.

Usually i wake up at 8 in the morning and after having tea, i will be in online and watch some series, films, youtube video. And also i spend some time for drawing pictures, hearing music, studying, and for doing physical activities like indoor exercise. But majority of the time I will be in online. And at 10 in the night i will go for sleeping.

During quarantine period he didn't face any kind of physical, psychological or social challenges. For him quarantine period was as same as other days, he didn't find any kind of biophysical difficulties during quarantine days. He was able to do his works as regular days. He was asymptomatic so he didn't had any symptoms like fever, dry cough, or tiredness. So he feels himself healthy and was active in quarantine days too. The only difficulty he faced due to COVID-19 was lack of intrest in taking food, he lost his sense of taste so he didn't felt taste for food. So he find some difficulty in eating food

I didn't face any kind of physical challenges, for me it was like usual days.

For him quarantine period was not at all a difficult period. He was engaged in different activities so that he was not at all aware about the psychological difficulties. Also his family members give him good care and support so that he don't felt lonely or sad. He didn't receive any kind of tele counseling service during the quarantine period so that he was unaware about the importance of Tele-counseling services during quarantine period.

No, I didn't felt any kind of psychological issues during quarantine period.

He maintained his social relationships through online platform. Also he didn't say everyone that he was tested positive. He don't like that over concern from people so he said that he was positive once he became negative only.

I use to chat with my friends than calling them

For him quarantine period was not that difficult to handle. He didn't face physical difficulties so that he didn't take any kind of medication. Also he was healthy so he didn't drink any kind of immunity drinks or food. He make his body more fit by doing some indoor exercises and take lot of water.

No, i didn't follow any particular diet or medicine at that time we don't feel to eat anything

For making my body more active at that time I use to do some physical activities like indoor exercise.

Also I drink lot of water

He get good support and care from his family members thus he could handle the situation more easily. Through engaging in activities like watching web series, movies, drawing, listening to music he could deviate the negative thoughts from his mind and it helped him to stay positive in that period. Also he didn't reveal that he was positive so that he didn't faced many questions regarding his quarantine period.

The health workers of poonthura hospital helped us for sanitizing the house, guidance for quarantine, and testing.

The people from the hospital posted a notice infront of my house when I was tested positive and also they sanitize my house and surround on nearby days.

They had said me to do a test after 10 days to know whether I am negative or not. Thus on 10th day 30/10/2020 I did my COVID test again and the result was negative

Also he received support from his relatives and neighbour for buying essential things form shops. During his quarantine period his family members also didn't go outside the home so the relatives buy them necessary things for cooking and provide other needs.

When I was positive my maman and mami brought us rice and other things. Their house is nearby us, so they will come and enquired my condition in those days

He was studying in 12th standard, at first the classes were delivered through google meet then the classes were through zoom. He was attending the classes through his laptop, it was not so difficult for him to study in online. He attended the classes even though he was tested positive. Also he didn't inform his class teacher or other classmates that he was positive, but when they come to know that he had COVID-19 then they show their concerns and asked about his current condition, difficulties etc.

I didn't say that I was positive to anyone in my class but when I said that teacher asked about current condition, difficulties at that time..

And my friends scold me for not saying them that I was positive.

When he tested negative and start to go outside his community people also started to show their love and concern, they also enquire about his current situation and difficulties.

Case B

Socio demographic profile of respondent:

Case	B
Age	18 year old
Gender	Female
Religion	Muslim
Education qualification	Degree
College	Christ college Vizhinjam
Parents education	Both are B.com graduates
Parents occupation	Father: businessman, mother: wellness consultant
Economic status	APL
Tested positive and negative on	30/9/2020 to 12/10/2020

Case B is a 18 year old girl, who is doing her under graduation in B.com commerce and tax. Her family consist of five members fathers is a businessman, mother is working in a company and she have a brother who is studying in 10th standard and a sister who is 4 year old.

On 30th September 2020 she started to show some symptoms of COVID19 and thus she took an antigen tested and the test result was positive. She don't know the origin of the infection, also she was the only one who was tested positive in her family.

I felt high fever, headache, vomiting, and fatigue so that my parents take me to a nearby hospital for having an antigen test and I was tested positive for corona virus.

She shows symptom for corona virus. For more than a week she had headache and tiredness also she had high fever and vomiting on first few days. She also lost her sense of taste and smell. And show no intrest on eating food. She was following room quarantine for nearly two weeks. She stayed in her room for throughout the quarantine period, food, water, medicines and other necessary things were kept in her door step.

First few days I had high fever and vomiting and for one week I had headache and tiredness

She use to wake up at 9 in the morning after fresh up she take steaming after that she had her breakfast then she will spend her time by using mobile phone, reading books, watching youtube videos. Also she spend her quarantine days more creative by making dolls, dress stand etc.

I will wake up at 9 in the morning, after being fresh I will take steaming, then I will have breakfast. Some days I will be so tired those days I will be on bed full time, other days I spend my time by using phone, reading books, youtube videos like vlog, mainly I spend more time on chatting in whatsapp.

Creative side… I made a dress stand, made some dolls

The health workers from the hospital had asked her to take a corona test after 10 days of being positive. So on 12th October 2020 she take an antigen test for corona virus and the result was found to be negative.

For her the positive quarantine period was a period of hardship. she was so week at that time, her body felt so tired, she was emotionally not stable she can't control her feelings. It was so difficult for her to stay in a room for long time without seeing her parents and siblings.

I was staying in my room for nearly two weeks. It was difficult for me to stay in a room for so long without seeing my parents and siblings. I felt so lonely

Quarantine room facility was ok for me, ummi will keep food, water and other medicines in my doorstep. All my needs were fulfilled but still it was so difficult..

Her body show many physical difficulties like body pain, fever, vomiting, headache, tiredness. She felt herself week on some days on those days she will be fully on bed by having food and medicines. She lost her sense of taste and smell due to COVID-19.

I had no taste and smell during that period also I had no intrest to eat food

She compliance that no one from health department or hospital had enquired about her health status. Also she felt the importance of mental health support at that time. She faced some psychological challenges at that time. She was anxious about the spread of coronavirus, she was

afraid while thinking that will she be the reason for spreading the disease among her family members. Also she was unable to control her feelings like anger, sadness, and loneliness. She get angry for small things like eating tasteless food, for can't leave the room.

I felt like I can't control my feelings…sometimes I will be so sad, sometimes I get so angry, sometimes I felt so lonely

I use to shout on my mother for giving me tasteless food and when she ask me to finish my food I get angry and shout on her for giving the food that I don't even like.

she didn't find difficult on maintaining relations at that time. Eventhough she was having her room quarantine she use to video call her friends and other relatives, so it was not a challenge for her to maintain relationship at that time. She get good support and care from her friends at that time.

I use to chat and video call my friends regularly so I didn't felt distance in relationships

During her COVID-19 positive period she was searching for her under graduation course, she had just finished her higher secondary and looking for a course. So she was busy on searching her under graduation course. Her ambition is civil service so she was looking for some civil service coaching also at that time.

At that period I just finished my +2 and I was searching new course and college.

She overcome her physical challenges through a good diet and medication. She avoid fatty food at that time, drink lot of water and lemon water. Also she eat chavanaprakasham, gooseberry for getting more immunity for her body. Also she use to steam when she wake up and also before bed. She self-motivated herself for having a healthy body. During that period she didn't do any kind of exercises but she had a controlled and healthy diet. Also for having a relief from body pain and headache she take paracetamol.

During lockdown days onwards I had taken good care for my body I use to drink lot of water, consume more vitamin c foods

I didn't do any kind of exercise during that period but I avoid oil food from my diet to prevent weight gain

Her mother was working in a wellness Centre so that she get so many medicines from there also. It helped her to gain more immunity and helped to fight against COVID-19.

To overcome her psychological challenges she made herself engage in many activities like reading book, making dress stand, calling friends it helped her to keep her mind more positive and active. She faced difficulties in controlling emotions like anger, sadness, loneliness at that time she will keep busy with different activities. She also felt the need of counseling at that time. She want some support from experts to help her on controlling her emotions. At that time she

stop hearing news related to COVID-19 death. And focused on positive things, also she deviate her mind by watching feel good movies, youtube vlogs etc.

I made myself busy in different activities like reading books, making cloth stand, making dolls, watching videos, chat and video call with friends and relatives.

I felt the need of counseling but I didn't received any support from mental health department or health workers

She overcome the social isolation through phone. She use to chat with and video call her friends and family.

She get good support and care from her family, her mother take good care in boosting her immunity. Also check whether she eat all the food, did she take steam etc.

Ummi gave me chavanaprakasham, gooseberry, lemon water to boost my immunity

Her friends was also so supportive they call regularly and enquired about her current situation also they gave her advices on how to improve immunity and stay healthy during the period

They call me regularly and asked about my current situation also advise me to drink lot of water, include more fruits in diet and steaming regularly

Also some of my friends shared good movies with me

She didn't receive any kind of support from health workers. They don't come and sanitize the house or enquire about the current condition. Also she didn't received any kind of psychological support from the mental health department

It will be good if COVID positive patients receive some kind of support from mental health department. I had lot of negative thoughts during that period so if someone get good guidance or counseling it will be very much useful for them

Neighbours, relatives and community people show their concern when she once get ok. Relatives use to call her during quarantine period also community people come and talk when she start to go outside.

Case C

Socio demographic profile of respondent:

Case	C
Age	15 year old
Gender	female
Religion	Muslim
Educational qualification	10th
School	Cordova higher secondary school Ambalathara
Parent education	Father: degree Mother: MA, B.Ed.
Parent occupation	Father: business Mother: teacher
Economic status	APL
Test positive and negative on	25/11/2020 to 7/12/2020

Case C is a 15 year old girl who is studying in 10th standard at Cordova higher secondary school, Thiruvananthapuram. Her family consist of five members, father, mother, brother, sister and herself. Her father is a businessman and mother is a higher secondary Hindi teacher, her sister is studying in 5th standard and brother is in UKG.

She was tested positive on 25th November 2020. Her father travelled to Trissur for a business purpose and when he returns home he show some symptoms of COVID-19 so all the members in the family took an antigen test and the result shows that she was positive.

I didn't had any symptoms for coronavirus but my father had travelled to Trissur for a business purpose and when he reached home he start to show symptoms like high fever and cough, so we also tested and find to be positive

I took an antigen test from nearby hospital

In her family both father and she followed room quarantine. Other members in the family also used mask inside the house. The house use to clean everyday with soap solution and also the plates and glass they used were sterilized in hot water before and after their use.

I didn't face any difficulties in room quarantine. I self-isolate myself and use to stay always in my room.. food, hot water and other things were given to me in my room.

She was busy in her studies even in quarantine period. Her teachers asked her to take rest so that she can't sit in online class so she watched many youtube videos related to her syllabus.

On quarantine days i use to spend more time on phone watching youtube videos related to my studies.

Also I use to call my friends for knowing things that happen on that day's class

She tested negative on 7th December 2020. The health workers had given them the instruction to take a test after 10 days of being positive so she tested on 7th December and find the result negative.

I was tested negative on 7th December 2020

She didn't had any kind of symptoms for COVID-19, she was physically healthy and was okay. She felt those days as same as usual days. The only difficulty she faced was loss of taste for food.

On those days I didn't get taste for food

She didn't face any kind of psychological challenges. She was physically and mentally fit on those days. Her emotions were controlled and didn't feel lonely on those days. She was engaged in her studies and was ambitious to get good result in 10th standard.

I was busy in preparing 10th exams so I don't feel any kind of psychological challenges on those days. For me quarantine days were same as other days.

She didn't had any kind of symptoms on those days, so she don't took any kind of medicines at that time. Also she felt herself physically fit so she didn't follow any particular diet or home

remedies. She use to drink lot of water in those days and include more vegetables in diet than chicken.

I use to drink lot of water on those days and also include more vegetables in my diet.

She didn't face any kind of psychological challenges. She was busy with her studies so she don't face any kind of loneliness or sadness.

She didn't felt isolated from the society. She use to connect with her friends through mobile phone also her relatives and other near ones called her parents and asked about their current situation. Her teachers also show good care and support they asked to take rest and use to call her frequently to know about her health condition. In that period she watched youtube videos and prepared notes for her exams.

I didn't felt isolated from the society. I use to call my friends for notes and for knowing things that happen on that days class

My relative use to call my mother to ask about our health condition

She get great support from her family, friends and teachers. Her mother took good care of her. She give good food, hot water frequently. Also she use to clean the house using soap solution and sanitize the things that they use common. She used plate and glass which were sterilized in hot water.

My mother take good care of me. She use to clean the house every day using soap solution and sanitize things also she use to sterilize the plates and glass using hot water before and after the use

I use to call my friends for notes and for knowing things that happened on that days class. And also they asked me about my health condition everyday

She didn't received any kind of help or support from hospital or mental health department. The people from the hospital post a notice of quarantine infront of her house and give some guidelines for quarantine and asked to took a test after 10 days of positive. Also no one came for sanitizing the house and surrounding.

I had heard about the counseling services provided for COVID positive patients but nobody call me for counseling

The health workers in the hospital said that I have to take another test after 10 days to find the result. Also they asked us about the quarantine facilities on the ist day but they didn't contact us again for knowing our medical condition.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

ANALYSIS AND INTERPRETATION

Introduction

Data analysis in qualitative research is defined as the process of systematically searching and arranging the interview transcripts, observation notes, or other non-textual materials that the researcher accumulates to increase the understanding of the phenomenon. (Wong, 2008) Qualitative data analysis is a process of qualitative data that have been collected and moved into some form of explanation, understanding or interpretation of the people and situations that is being investigated. Thematic analysis is one of the most common forms of analysis in qualitative research. It helps in focusing on examining and recording patterns or themes within the data available. In this study researcher examine the data through thematic analysis.

Profile of cases

case	A	B	C
Age	17	18	15
Gender	Male	Female	Female
Religion	Hindu	Muslim	Muslim
Education qualification	12th standard	Degree	10th standard
School/college	St joseph HSS	Christ college	Cordova HSS
Parents education	Both are 10th qualified	Both are b.com	Father: degree Mother : M.A, B.E.D
Parents occupation	Father: automobile mechanic, mother: homemaker	Father: business Mother: wellness consultant	Father: business Mother: teacher
Economic status	BPL	APL	APL
Tested +ve and -ve	21/10/2020 30/10/2020	30/9/2020 12/10/2020	25/11/2020 7/12/2020

The profile of the respondents gives a basic idea about the socio-economic background of the respondent. The researcher conducted 3 case studies among them 1 was male and 2 were females of the age groups 17, 18 and 15 respectively. One of the respondent was from Hindu community, and other two were from Muslim community. All the three cases were students. One of the respondent was below poverty line and other two were above poverty line. They were all tested positive in the time period of September to December 2020.

RESEARCH QUESTION 1

What was the experience during COVID positive quarantine period?

Theme 1: COVID positive quarantine period experience

Here the researcher tries to explain the journey of COVID patients from their COVID positive period to COVID negative period. The respondents shared the details about their infection origin, symptoms, testing procedure during being positive and negative, quarantine experience and their daily routine was shared. Two of the respondents were aware about the origin of their infection and the other one don't know how she get the infection. Two respondents didn't felt any kind of symptoms other than loss of smell, taste and appetite but the other one was symptomatic she show symptoms like fever, vomiting, headache, tiredness. All of the respondents tested antigen test to detect the virus. The health workers posted a notice infront of all the respondents showing the quarantine period and asked them to undergo antigen test after 10 days of being positive. All the 3 respondents followed room quarantine and two of the respondents had one other positive case in their family. Two of the respondents had online class at that time and one was searching for next course. All the respondents spend majority of their time on phone and laptops for watching youtube videos, web series, for chatting. Also they used their quarantine days productive by reading books, drawing pictures, doing creative works like making dolls, stands. Also one respondent engaged in physical activity like indoor exercise.

Sub theme 1: journey from positive to negative

The journey from COVID positive to negative contains the details about the origin of infection, testing experience, symptoms, and quarantine facilities. All the three respondents had different experience

Origin of the infection

The two respondents were aware about their origin of their infection and the other one was unaware about the origin of the infection she go for an antigen test when she shows some symptoms.

Case A state that: *My grandmother (mother's mom) is working in an eye hospital, nearby the general hospital, from her I get infected. She had a primary contact with a COVID positive patient and on that evening when she came back she start to show some symptoms like fever,*

fatigue, and breathing problem. So the next day morning grandmother took a test for COVID-19 and find that she was positive. On that night I was the only one in the home with grandmother so I also took a test for COVID-19 and my result also was positive.

Case C states that: *my father travelled to Trissur for a business purpose and when he reached home he started to show symptoms like high fever and cough*

Symptoms

Only one respondent shows symptom towards COVID-19 other two respondents were asymptomatic. The major symptoms shown by the respondent are high fever, vomiting, headache, fatigue and felt low immunity.

Case B states that: *First few days I had high fever and vomiting and for one week I had headache and tiredness*

I lost my sense of taste and smell due to COVID and also i had no intrest on eating food at that period.

Testing procedure

All the 3 respondents took an antigen test and found that they are COVID positive and take another test after 10 days and at that test they found to be negative.

Case A states that: *On 21st October 2020 i was tested positive for COVID-19 and after few days on 30th October 2020 i was tested negative. When I was tested positive the people from hospital take me back to home in an ambulance and place a notice infront of the house showing the quarantine period.*

Case B states that: *I felt high fever, headache, vomiting, and fatigue so that my parents take me to a nearby hospital for having an antigen test and I was tested positive for corona virus.*

I was tested positive on30th September 2020 and after 10 days on 12th October 2020 when I again tested I found to be negative.

Case C states that: *on 25th November 2020 we took an antigen test from nearby hospital. After 10 days on 7th December 2020 I found to be negative*

Quarantine period

All the three respondents followed strict room quarantine. The quarantine rooms had facilities only one respondent was using common toilets but also they were using it by proper sanitation and cleaning. All the respondents had separate plate and glass during quarantine period.

Case A states that: *I followed room quarantine for nearly one and half week. I always stayed in my room. Food, water and other necessary things will keep at my door step, I had separate plate*

and glass in that time, also my dress washed separately. I think on the second or third day of my quarantine period the health workers sanitized my home and surroundings.

I was staying in a small hall with bed and Television facility. We have common toilets so that we use to clean the toilet after each use by using bleaching powder. Also we were wearing a mask inside the house too.

Case B states that: *I was staying in my room for nearly two weeks. It was difficult for me to stay in a room for so long without seeing my parents and siblings. I felt so lonely*

Quarantine room facility was ok for me, ummi will keep food, water and other medicines in my doorstep. All my needs were fulfilled but still it was so difficult

Case C states that: *I didn't face any difficulties in room quarantine. I self-isolate myself and use to stay always in my room. food, hot water and other things were given to me in my room.*

My mother use to clean my house everyday with soap solution. The plates and glass we used were sterilized in hot water before and after the use. And also we used masks inside the house.

Sub theme 2: daily routine during quarantine days

All the three respondents follow particular time for waking up and going back to bed. Two of the respondents wake up at 8 in the morning and one wake up at 9 in the morning and all the respondents go to bed at 10 in the night. Also they were engaged in different activities during quarantine period. One of the respondent was preparing for SSLC examination during that time. One had online class and he attended the classes on those days also the other one was in search of new course and college for joining under graduation. They use their leisure time differently by reading books, watching films, youtube video, web series, making creative things, doing physical exercise etc.

Waking up and bed time

All the respondents follow their own sleeping and waking up pattern. All the respondents sleeps at 10 in the night and two of the respondents wake up at 8 n the morning and the other one wake up at 9 in the morning

Case A states that: *usually I wake up at 8 in the morning and sleep at 10 at night*

Case B states that: *I use to wake up at 9'o clock in the morning and will go to bed at 10 pm*

Case C states that: *I wake up at 8 in the morning and sleep at 10 at night*

Major activities

All the three respondents spend the time productively and engaged in many activities like reading books, studying, watching web series, doing some physical activities, doing creative works like making dolls, stand.

Case A states that: *i will be in online and watch some series, films, youtube video. And also i spend some time for drawing pictures, hearing music, studying, and doing physical activities like indoor exercise. But majority of the time I will be in online.*

Case B states that: *I will take steaming at morning and evening. Some days I will be so tired those days I will be on bed full time, other days I spend my time by using phone, reading books, youtube videos like vlog, I spend more time on chatting in whatsapp.*

As creative side… I made a dress stand, made some dolls

Case C states that: *On quarantine days i use to spend more time on phone watching youtube videos related to my studies.*

Also I use to call my friends for knowing things that happen on that day's class

RESEARCH QUESTION 2

What were the challenges experienced during COVID positive period?

Theme 2: challenges during COVID positive period

The major difficulties faced by the respondents were loss of taste, smell and lack of intrest in taking food. Two of the respondents didn't had severe symptoms for COVID-19 so they didn't face much challenges during that period. For them it was like normal days. Their body and mind was healthy at that time but one of the respondent had symptoms of COVID-19 so she was so week and tried on those days. She faced physical and psychological challenges at that period. The respondents didn't face lot of social challenges because now a days all of are connected with each other in internet and mobiles.

Sub theme: 1 Physical challenges

Two of the respondents didn't had any symptoms other than loss of taste and smell so the only difficulty for them was difficulty in taking food. But the other respondent had symptoms for COVID-19 and she felt tiredness, low immunity due to high fever, vomiting, headache and fatigue. Majority of the time she felt herself week and tired.

Case B states that: *For the first few days I had high fever and vomiting and for one week I had headache and tiredness*

Some days I felt like my body is too week and tired on those days I will be on the bed full time

I had no taste and smell during that period also I had no intrest to eat food

Sub theme: 2 psychological challenges

The respondents who didn't face any physical challenges also don't face any psychological challenges. for them quarantine days were just similar to other days. But for the other respondent she faced psychological challenges. she faced difficulty on controlling her emotions, felt lonely, get sad, angry for small things.

Uncontrolled emotions

She couldn't control her emotions. Sometimes she feel happy, sometimes she felt sad, and sometimes she felt lonely.

Case B states that: *I felt like I can't control my feelings…sometimes I will be so sad, sometimes I get so angry, sometimes I felt so lonely*

Angry

She get angry for small things. Sometimes she get angry on her mother for tasteless food or she may get angry when something get spoiled during making doll

Case B states that: *I use to shout on my mother for giving me tasteless food and when she ask me to finish my food I get angry and shout on her for giving the food that I don't even like.*

Lonely

She felt lonely while staying in that room alone for all day. She miss her parents and siblings so much during quarantine days.

Case B states that: *I was staying in my room for nearly two weeks. It was difficult for me to stay in a room for so long without seeing my parents and siblings. I felt so lonely*

Anxious

She was so anxious about spread of infection. She always thinks that 'will I be the reason for spread the virus among my family members'

Also the news and social media make her more anxious on the deaths due to COVID-19

Sub theme: 3 social challenges

The respondents didn't felt lot of social challenges because they were connected through internet and mobiles. But also the respondents felt challenges in maintaining relations with each other. One of the respondent didn't said his positivity to his friends and class teacher. Also the respondents couldn't full fill all their roles as a child and as a student

Isolation

Staying in room give case B a feeling of isolated from others and felt lonely. Case A didn't say any of his friends that he was positive.

Case A states that: *I didn't say that I was positive to anyone in my class*

Case B states that: *I was staying in my room for nearly two weeks. It was difficult for me to stay in a room for so long without seeing my parents and siblings. I felt so lonely*

Case C states that: *I didn't felt isolated from the society. I use to call my friends for notes and for knowing things that happen on that days class*

Education

The two respondents were only having online class at that time. Both of them could attend the class without any difficulties because they were asymptomatic. One of the respondent didn't inform his classmates and teacher that he was positive so that he enter the class as regular. The other respondent informed her teachers and friends so that teacher asked her to take rest on those days and friends helped her to write notes. She also use youtube platform for education at that time.

Case A states that*: I am studying in 12th standard, at first the classes were delivered through google meet then the classes were through zoom. I attend the classes through my laptop, it was not so difficult for me to study in online. I attended the classes even after i was tested positive. At that time i didn't inform my class teacher or other classmates that i was positive.*

Case C states that: *I use to call my friends for notes and for knowing things that happen on that days class*

RESEARCH QUESTION: 3

What were the coping mechanism adopted to overcome the challenges?

Theme: 3 coping mechanism

Respondents share the details about their coping mechanism at the time of their physical challenges, psychological challenges and social challenges. the one respondent state that she follow a healthy diet to overcome the physical challenges. Also a respondent said that he spend time on physical activity to make his body more active. The coping mechanisms for psychological challenges were engaging in other activities. And respondents use internet, mobile phones, video calls to fight against social challenges.

Sub theme: 1 coping mechanism for physical challenges

The respondents use the strategies like taking of medicines, immunity boosters, fresh fruits and vegetable, avoid oil food, drinking lot of water etc to fight against the physical challenges

Mediation

One of the respondent was symptomatic and had symptoms like fever, vomiting, headache, tiredness so that respondent take paracetamol for pain relief and also use steaming to destroy the virus.

Case B states that: *I had taken paracetamol at the time of quarantine as a pain reliever*

Every day morning and night I use to take steaming

Diet

All the respondents try to take healthy food at that time and add more vegetables into diet. Also they drink water frequently. One of the respondent take immunity boosters like gooseberry, lemon water.

Case A states that: *No, i didn't follow any particular diet or medicine at that time we won't feel to eat anything*

Also I drink lot of water

Case B states that: *During lockdown days onwards I had taken good care for my body I use to drink lot of water, consume more vitamin c foods*

I eat chavanaprakasham, gooseberry and lemon water for getting more immunity for my body

Case C states that*: I use to drink lot of water on those days and also include more vegetables in my diet*

Physical activities

Only one respondent follow doing some kind of physical activities. He use to do indoor exercise to make his body more fit and active.

Case A states that: *For making my body more active at that time I use to do some physical activities like indoor exercise.*

Case B states that: *I didn't do any kind of exercise during that period but I avoid oil food from my diet to prevent weight gain*

Sub theme 2: coping mechanism for psychological challenge

The respondents overcome the psychological challenges by getting engaged in different activities. Only one respondent felt psychological challenges during quarantine period. She was physically week, the physical body and mind are interconnected and when we are physically

week it will affect our mind and also when we face some psychological distress it will affect our body also.

Positive behavioral change

We can bring a positive coping strategy which will help us to overcome our psychological challenges. All the three respondents were aware about their condition and they use their time and energy for productive things

Case A states that: *I get good support and care from my family members thus i handle the situation more easily. Through engaging different activities like watching web series, movies, drawing, listening to music i deviate the negative thoughts from my mind and it helped me to stay positive in that period*

Case B states that: *I made myself busy in different activities like reading books, making cloth stand, making dolls, watching videos, chat and video call with friends and relatives.*

Case C states that: *I didn't face any kind of psychological challenges, i was busy with my studies. On my quarantine days also i prepared notes by watching youtube.*

Also I get good support and care from my family and friends. I use to call my friends every day for knowing things that happened on that days class. And also they asked me about my health condition everyday

Sub theme: 3 coping mechanism in social challenges

The respondents use the coping strategy by connect with people in phone, internet. Through social media we can reduce the feel of physical distancing. All the respondents had good connections with their dear ones.

Case A states that: *I maintained my social relationships through online platform.*

I use to chat with my friends than calling them

Case B states that: *I use to chat and video call my friends regularly so that I didn't felt distance in relationships*

Case C states that*: I didn't felt isolated from the society. I use to call my friends for notes and for knowing things that happen on that days class*

My relative use to call my mother to ask about our health condition

RESEARCH QUESTION: 4

How did the support systems help you to overcome the situation?

Theme 4: support system

The support system have a great role on reducing the challenges that may face during the quarantine period. All the three respondents had a good supporting system. Their family and friends provide good care and supported for them. The support systems that present in the society are family, friends, teachers, community people, health workers. The respondents say that they get good support and care from their family members and friends. Their family members take good care of them during their quarantine period. Food, water and other necessary things were given to them whenever they need. Also the mother's try to keep their house and surrounding neat and clean by using sanitizer and soap solution and sterilize the plates and glass they used.

Sub theme :1 Family as support system

Family was one the back bone of respondents during that period. The mother's give good care and support to their children. All the respondents took antigen test with their family members, and when they found to be positive the family members help them in room quarantine and give healthy food and immunity boosters.

Case A states that: *I get good support and care from the family members thus i could handle the situation more easily.*

I followed room quarantine for nearly one and half week. I always stayed in my room. Food, water and other necessary things will keep at my door step, I had separate plate and glass in that time, also my dress washed separately. In our house the toilet were common so we use to cleaned it after each use by bleaching powder

Case B states that: *Quarantine room facility was ok for me, ummi will keep food, water and other medicines in my doorstep. All my needs were fulfilled but still it was so difficult..*

Ummi gave me chavanaprakasham, gooseberry, lemon water to boost my immunity

Case C states that: *My mother take good care of me. She give me good and healthy food and also give me hot water frequently*

She use to clean the house every day using soap solution and sanitize things also she use to sterilize the plates and glass using hot water before and after the use

Sub theme : 2 Friends as support system

All the respondents get good support from theirs friends. Two of the respondents were attending online class among them one didn't inform his friends about his positivity he only informed them once he became negative. The other one get good support from friends they called her every day and shared notes. The other one respondent also get good support and motivation from her friends. They suggested home remedies for her to get well soon.

Case A states that: *I didn't say that I was positive to anyone in my class but when I said that to my friends they scold me for not saying them that I was positive*.

Case B states that: *They call me regularly and asked about my current situation also advise me to drink lot of water, include more fruits in diet and steaming regularly*

Also some of my friends shared good movies with me

I use to chat and video call my friends regularly so I didn't felt distance in relationships

Case C states that: *I use to call my friends for notes and for knowing things that happened on that days class. And also they asked me about my health condition everyday*

Sub theme :3 Relatives and neighbours as support system

They also get good support from their relatives and neighbours. The community people didn't stigmatize them or stayed away from them. During quarantine days the necessary things were brought by neighbours and relatives.

Case A states that: *When I was positive my maman and mami brought us rice and other things. Their house is nearby us, so they will come and enquired my condition in those days*

When i was tested negative and start to go outside the community people enquire about my current situation and quarantine difficulties.

Case B states that: *once i start to go outside neighbours and community people asked me about my current condition*

My relatives use to call my parents and asked about me during quarantine days

Case C states that: *My relative use to call my mother to ask about our health condition*

Sub theme :4 Health department as support system

The health workers give guidance to all the respondents when they tested positive. They asked the respondents to take a test after 10 days and also asked to follow room quarantine. The people from health come and stick a notice showing quarantine period infront of the houses of respondents. one of the respondent said that his house and surrounding were sanitized by the health workers. All the three respondents didn't receive any kind of counseling support from the mental health department.

Case A states that: *The people from the hospital posted a notice infront of my house when I was tested positive and also they sanitize my house and surround on nearby days.*

They had said me to do a test after 10 days to know whether I am negative or not. Thus on 10th day 30/10/2020 I did my COVID test again and the result was negative

Case B states that: *The health workers from the hospital had asked me to take a corona test after 10 days of being positive.*

It will be good if COVID positive patients receive some kind of support from mental health department. I had lot of negative thoughts during that period so if someone get good guidance or counseling it will be very much useful for them

Case C states that: *The health workers in the hospital said that I have to take another test after 10 days to find the result. Also they asked us about the quarantine facilities on the first day but they didn't contact us again for knowing our medical condition.*

I had heard about the counseling services provided for COVID positive patients but nobody call me for counseling

CHAPTER 6

FINDINGS, SUGGETIONS AND CONCLUSION

FINDINGS SUGGESTIONS AND CONCLUSION

6.1 FINDINGS

A. RESEARCH QUESTION: 1 The experience during COVID positive quarantine period

- The two respondents were aware about their origin of their infection and the other one was unaware about the origin of the infection she go for an antigen test when she shows some symptoms. The early detection of the coronavirus infection can prevent the spread of COVID-19.
- Only one respondent shows symptom towards COVID-19 other two respondents were asymptomatic. Being asymptomatic can lead to unawareness of the infection in their body and it can further lead to spread of the disease to other people. The major symptoms shown by the respondent were high fever, headache, vomiting, and fatigue. Also symptomatic people face more physical and psychological challenges than asymptomatic people during COVID-19 quarantine period
- A strict room quarantine, proper sanitation and cleaning of house and surrounding, using separate plates and glass, usage of mask and maintaining social distancing can prevent the spread of disease to other members in the family
- Having a proper sleep and wakeup pattern helped the respondents to use the quarantine days more productively and keep them active. Asymptomatic respondents didn't felt tiredness during that period so they didn't take frequent rest on those days, but symptomatic respondent take rest whenever she felt tired.
- Both the symptomatic and asymptomatic respondents use their quarantine days more productive by engaging on different activities like reading books, watching web series, movies and youtube videos, doing craft work, drawing, listening to music, studying, physical activities this help them to reduce the physical and psychological distress during the quarantine period and make the body more active.

B. RESEARCH QUESTION: 2 The challenges experienced during COVID positive period

- The asymptomatic respondents didn't feel any kind of physical challenges other than loss of sense for smell and taste. Also all the respondents show lack of intrest in eating food. Symptomatic respondent show physical difficulties like high fever and vomiting for first few days and one week long headache and fatigue. Symptomatic respondent faced more physically challenges than asymptomatic during the COVID positive quarantine period
- Also asymptomatic respondents didn't show any kind psychological challenges but symptomatic respondent show psychological distress like uncontrolled emotion, angry, sad, lonely, anxious during the COVID positive quarantine period
- The symptomatic respondent felt isolated due to room quarantine

- The asymptomatic respondents could spend time on their studies. For asymptomatic respondents COVID positive quarantine days was as same as other days.

C. RESEARCH QUESTION: 3 The coping mechanism adopted to overcome the challenges

- Both the respondent drink lot of hot water during COVID positive quarantine period this help them to keep their hydrated and prevent dehydration and fatigue.
- Symptomatic respondent take paracetamol as pain killer and find relief from pain and tiredness. Also home remedies like steaming, lemon water, gooseberry, chavanaprakasham helped her to gain immunity
- All the respondents overcome the psychological challenges by getting engaged in different activities. Only symptomatic respondent felt psychological challenges during quarantine period. Physically weakness body will reflect on mind and will make the mind also weak.
- Respondents use activities like reading books, drawing, listening to music, studying, craft work, physical activity, chatting, watching youtube video, web series and movies to keep themselves engaged so that they won't get any negative thought in their mind.
- Good support from family and dear ones can also help in coping the psychological distress.
- The respondents cope with the social challenges by connecting with friends and family on internet and through phones.

D. RESEARCH QUESTION: 4 role of support systems to overcome the situation

- All the respondents get good support and care from their family members. Mainly mother's take good care of everything including quarantine facility, preventive measures, and precautions
- Friends also give good support to the respondents they enquired about their current situation, share home remedies to get well soon, also share the notes and information about classes.
- Relatives and neighbours support the respondents by helping them on buying necessary things. Also enquired about their condition and give great support
- The health workers in the hospital give information on next testing date and provide guidelines on room quarantine, they stick a notice infront of the respondents house also sanitize the house and surroundings of a respondent. Researcher found that once the testing procedure finished they are not contacting the patients any further for asking their current medical condition or facilities during quarantine period.
- All the respondents were aware about the counseling facilities provided by mental health department but they didn't received any kind of counseling services. Asymptomatic respondents didn't find the need for such counseling but symptomatic respondent felt

psychological distress during the COVID positive period and find its importance during quarantine period

6.2 SUGGESTIONS

- Early testing and detection of corona virus can prevent the spread of virus. We can conduct community based testing using mobile units. This can prevent the rush in testing centers and hospitals and can prevent the spread of COVID-19
- Though following all the safety guidelines provides by health department we can prevent the spread of COVID-19. Many of the community people were not using the mask properly also were not following social distancing this was the major reason for community spread in poonthura
- Follow a healthy diet and drink lot of water to stay hydrated and healthy. Also by having a pattern for sleeping and waking up will help us to spend the time more productive and creative also a good sleep can make our body and mind healthy. Also through engaging in different activities we can stay positive and productive throughout the quarantine period. The Physical activities at this period will help our body to stay active and energetic
- A frequent enquiry from the health department will be useful for the patients who are suffering from COVID-19. Many of the patients will see the symptoms as minor ones and stay at home but some people will be in need of hospital care so through frequent enquiry and awareness we can educate the people and understand their current condition
- Promote more counseling and mental health services to people who are tested positive with symptoms so that they can control their psychological distress. People staying alone in a room for 14 days will start to show some kind of psychological difficulties this may lead to further psychological trauma or disorders so early detection and prevention of psychiatric disorders help people to stay positive during quarantine
- Adolescence spend majority of their time on mobile phones and laptops for studying purpose and entertainment this can lead to eye problems, body pain and other long term difficulties so the people who are in their quarantine days should spend more time on creative works and indoor physical exercise, games etc this can make the body and mind healthy
- Quarantine period is not at all a period of social distancing it’s just a period of physical distancing. So during quarantine days we can get connect with our dear and near ones through online platforms
- There is a great scope for research in this area only few studies have been conducted on COVID positive adolescence. Also majority of the studies were at international level. Studies among COVID positive adolescents who shows symptoms is an important area and should explore more

6.3 CONCLUSION

Through the study researcher try to explore the experience of COVID positive adolescence. The study focus mainly on the COVID positive period to COVID negative period, the challenges experienced during that period, the coping mechanism to overcome the challenges and the support that adolescents get during quarantine period.

The experience of symptomatic and asymptomatic COVID positive adolescence were studied. From the study researcher could conclude that adolescence with symptoms show more physical, psychological and social challenges and for asymptomatic adolescents it was easy for them to cope with quarantine period. The major physical challenges faced were high fever, fatigue, vomiting, and headache. And the psychological challenges faced were uncontrolled emotions, anger, sad, loneliness, and anxiety. The major social challenge faced was isolation from family members and friends. The coping strategies used are taking pain killer like paracetamol, drinking lot of water, taking immunity boosters like gooseberry, lemon water, chavanaprakasham. Support systems also helped adolescence to cope up with the challenges. All the respondents get good support and care from their family, friends help to cope with psychological distress also they help respondents in sharing notes and information that give in class. The neighbours and relatives help in buying things from shop also they show the love and concern towards the COVID positive adolescence. The health workers also helped in testing and detecting corona virus and give them guidelines for quarantine and for next testing after 10 days of positivity. Also the study show the importance of counseling and other services of mental health department in COVID positive symptomatic adolescence.

CHAPTER 7

BIBLIOGRAPHY AND APPENDIXES

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APPENDIXES

TOOL FOR DATA COLLECTION

Research tool

As this study is a qualitative research the researcher decided to conduct semi structured in depth interview using a semi structured interview guide. Data was collected from three respondents, and the interview was done on the basis of the research questions.

Demographic details

NAME	
AGE	
GENDER	
RELIGION	
EDUCATIONAL QUALIFICATION	
SCHOOL/ COLLEGE	
PARENTS EDUCATION	
PARENTS OCCUPATION	
ECONOMIC STATUS	
TESTED +VE AND _VE ON	

Interview guide

1. What were the experience during COVID positive quarantine period
    A. How was the journey of being COVID positive to COVID negative
        - Origin of infection
        - Symptoms
        - Testing
        - Quarantine facilities
    B. How did you spend the time during the period

2. What were the challenges experienced during COVID positive period

A. What were the physical difficulties faced during the period
    - Symptoms

B. What were the psychological difficulties faced during the period
    - Psychological distress (anxiety, depression, sadness, loneliness, anger)
    - Stigma

C. What were the social difficulties faced during the period
    - Social isolation
    - Relationship gaps
    - Educational difficulties

3. What were the coping mechanism adopted to overcome the challenges
    A. Have you followed any particular medication or diet during the period
    B. What were the strategies use to overcome the psychological difficulties
    C. How did you keep your relationships active during that period
    D. How did you keep yourself engaged during that period

4. How did the support systems help to overcome the situation
    A. What are the support and care you received by the support system during that period
    (family, friends, teachers, school counselors, religious etc)