A Study to Assess The Knowledge and Practice Towards COVID-19 Among the Clients Attending Out- Patient Department of Selected Community Health Facility.

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Background: Coronavirus disease 2019 (COVID-19) is an emerging respiratory disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) virus. COVID-19 outbreak has been declared as pandemic by WHO on March 11, 2020.India tried to curb its increase by vaccination, nationwide lockdown, varying levels of contact tracing and self-isolation or quarantine, and promotion of public health measures including hand washing, respiratory etiquette, and social distancing.COVID-19 is still alarmingly increasing because of poor knowledge and practice towards COVID-19. **Aim:** The aim of the study was to assess the knowledge and practice towards COVID-19 among the clients. **Methodology:** Descriptive research design, purposive sampling technique was used. Sample size was 300. **Results:** In the present study mean percentage of overall knowledge obtained was 59%. The mean percentage score for practice towards COVID-19 was 49%. There was strong positive(r= 0.5910) correlation between knowledge and practice. The study revealed that most clients had only moderate knowledge towards COVID-19 and the practice towards COVID-19 was inadequate among most number of clients. So, there is a need to create awareness and behavior change among community people regarding COVID-19.

Key words-: Knowledge, Practice, COVID-19, Clients.

I.   INTRODUCTION:

Coronavirus disease 2019 (COVID-19) is an emerging respiratory disease caused by Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) virus. The disease was first identified in December 2019 in Wuhan, the capital of Hubei, China. On March 11, 2020, (1770 confirmed cases, including 213 deaths) the World Health Organization (WHO) declared that COVID-19 is a pandemic disease. [1]

In India, the first case of COVID‑19 was reported on 27th Jan 2020 in Thrissur, Kerala with outbreak of cases within various states and union territories, the largest COVID‑19 national lockdown was enforced from 24th March 2020 onwards, with exception to those associated with essential commodities.[2]

Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between people, such as with MERS- CoV, SARS-CoV and now with this new virus, SARS-CoV-2. The SARS-CoV-2 virus is a beta coronavirus, like MERS-CoV and SARS-CoV. All 3 of these viruses have their origins in bats.[3]

Corona virus (COVID-19) is spread by human –to-human transmission through droplet, faeco-oral, and direct contact. The virus spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe heavily. These liquid particles of different sizes transmit as larger 'respiratory droplets' among people who are in close contact with each other to smaller 'aerosols' in specific settings, particularly in indoor, crowded and inadequately ventilated spaces, where infected person(s) spend long periods of time with others. Infected people appear to be most infectious just before they develop symptoms (namely 2 days before they develop symptoms) and early in their illness. People who develop severe disease can be infectious for longer. Asymptomatic patients can be a carrier. [3]

COVID-19 affects people of all age groups but greater risk of developing severe diseases with complication, are the children, pregnant women, elderly people , people having other Co-morbidities factors are obesity, underlying medical conditions such as diabetes mellitus, systemic hypertension and other cardiac disease, and immune compromising diseases such as HIV infection.[4]

COVID-19 causes morbidity in the range of mild respiratory illness to severe complications characterized by acute respiratory distress syndrome, septic shock, and other metabolic and hemostasis disorders and death. So far, no successful anti-viral treatment has been reported. Therefore, applying the preventive measures is the utmost critical intervention[5.]

Viruses constantly change through mutation, and new variants of a virus are expected to occur. Sometimes new variants emerge and disappear. Other times, new variants persist. Multiple variants of the virus that causes COVID-19 some variations allow the virus to spread more easily or make it resistant to treatments or vaccines. Those variants must be monitored more carefully. We are monitoring multiple variants.

India tried to curb its increase by vaccination, nationwide lockdown, varying levels of contact tracing and self-isolation or quarantine, and promotion of public health measures including hand washing, respiratory etiquette, and social distancing. COVID-19 is still alarmingly increasing.[5] The knowledge and practices of the people towards COVID-19 is critical to understanding the epidemiological dynamics of the disease and the effectiveness, compliance and success of infection prevention and control (IPC) measures

adopted in the country. Hence, this study seeks to determine the level of Knowledge and practice towards COVID-19 among residents of Dadra and Nagar Haveli.

Purpose of the study

The purpose of the study was to to determine the level of Knowledge and practice towards COVID 19 among residents of Dadra and Nagar Haveli.

Objectives of the study:

The objectives of the study were to:

- assess the knowledge towards COVID-19 among the clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.
- assess the practice towards COVID-19 among the clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.
- find the correlation between the knowledge and practice towards COVID-19 among the clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.
- find the association between the knowledge towards COVID-19 and selected baseline characteristics among clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.
- find the association between the practice towards COVID-19 and selected baseline characteristics among clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.

Conceptual framework:

Conceptual framework adopted in the present study was a modified general system theory by **LudwigVon Bertanloffy's General system theory (1968).** General system theory is a general science of wholeness. The systems are generally made of elements such as environment, output, input, throughput, equilibrium and boundaries.

II. METHODOLOGY:

Research approach: Quantitative research approach was used in this study to assess the knowledge and practice regarding COVID-19 among the clients attending out-patient department of community health center Rakholi in Dadra and Nagar Haveli.

Research design: In this study descriptive research design was used to assess the knowledge and practice towards COVID-19 among the clients attending out-patient department of community health center Rakholi in Dadra and Nagar Haveli.

Variables - Research variable - Knowledge and Practice towards COVID-19.

Demographic variables - In this includes age, gender, religion, education, monthly family income, types of family, occupation.

Research setting: This study was conducted in the out-patient department of community health center, Rakholi in Dadra and Nagar Haveli.

Population: This study consisted of clients above 15 years of age attending out-patient department of community health center Rakholi in Dadra and Nagar Haveli

Target population: In this study, the target population was clients above 15 years of age, staying in Dadra and Nagar Haveli.

Sample: In this study samples were clients attending out-patient department of community health center, Rakholi, who are willing to participate in study &who fulfill the inclusion criteria and exclusion criteria

Sample size: Sample size was 300 as determined by statistical analysis.

Sampling technique: In present study purposive sampling technique was used to select samples

Sampling Criteria: The following criteria are used in the present study to select samples.

 Inclusion criteria:

In this study inclusion criteria include:

- Clients who are above 15 years of age

- Clients who are attending OPD of selected community health facility

- Clients who are willing to participate in the study

- Clients who able to speak and understand Gujarati/ Hindi

Exclusion criteria:

- Clients who are below the 15 years of age

- Clients who are not willing to participate in the study

- Clients who are mentally retarded

Data Collection Tool: Data was collected by Structure interview schedule.

- **SECTION I: Baseline characteristics with 14 items**

- Demographic proforma collects data about the characteristics of the sample population.

- In this study section I included age, gender, religion, education, monthly family income, types of family, occupation and other relevant baseline characteristics related to COVID-19

- **SECTION II: Structured knowledge questionnaire on COVID-19 with 24 items**

- A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from the respondents.

- In this study a structured knowledge questionnaire was developed which consisted of 24 multiple-choice questions regarding COVID-19.

TABLE 1: CRITERIA SCORING AND CATEGORY FOR KNOWLEDGE

Score	Level of knowledge in percentage	Category
0-12	< 50 %	Inadequate knowledge
13-18	51 -75 %	Moderately adequate
19-24	>76-100 %	Adequate knowledge

SECTION III: Structured practice checklist on COVID-19 with 25 items

- Practice is to do or perform (something) repeatedly in order to acquire or polish a skill.

- This study used structured practice checklist consisting 25 items. It had a minimum score of 0 and maximum of 25.

TABLE 2: CRITERIA SCORING AND CATEGORY FOR PRACTICE

Score	Level of practice in percentage	Category
1-13	< 50 %	Poor Practice
14-19	51 – 75 %	Good Practice
20-25	>76 -100 %	Excellent Practice

Reliability of the tool: The data for reliability of the tool was collected by administering the tool to 10 clients at Health Wellness Center Vasona. Later reliability was established using Karl Pearson's correlation coefficient (r=0.89) for knowledge and for practice checklist Cohen's kappa-inter rater reliability (r= 0.8) was used, which showed the tool was reliable.

Pilot Study: The pilot study was conducted in Health Wellness Center, Vasona from 3/4/2021to 4/4/2021. The sample size for the pilot study was 30 clients.

Data Analysis: Data obtained was analyzed by using descriptive and inferential statistics on the basis of objective of the study.

III. RESULTS AND DISCUSSION:

The analysis and interpretation were done according to the objectives of the study

Section I– description of demographic variables

The sample characteristics revealed that out of 60 sample 21 (35%) children were in the age group between 4 and 5 years, 37 (61.7%) were males, 18 (30%) were studying in pre-nursery, 19 (31.7%) mothers had middle school education. Most of the fathers (40%) had primary school education. 86.7% father were semi-professional workers, monthly income of family 57 (95%) were getting Rs 10,002-29,972, majority 50 (83.3%) were Hindu. Birth order of the children most of them (45%) were second born. 53.3% were admitted in previously in that 46.7% children were hospitalized for 1-5 days.

SECTION 2: ANALYSIS OF THE DISTRIBUTION TO ASSESS THE KNOWLEDGE TOWARDS COVID-19 AMONG THE CLIENTS ATTENDING OUT-PATIENT DEPARTMENT.

Table 3: Frequency and percentage wise to assess the level of knowledge towards COVID-19 among the clients

n=300

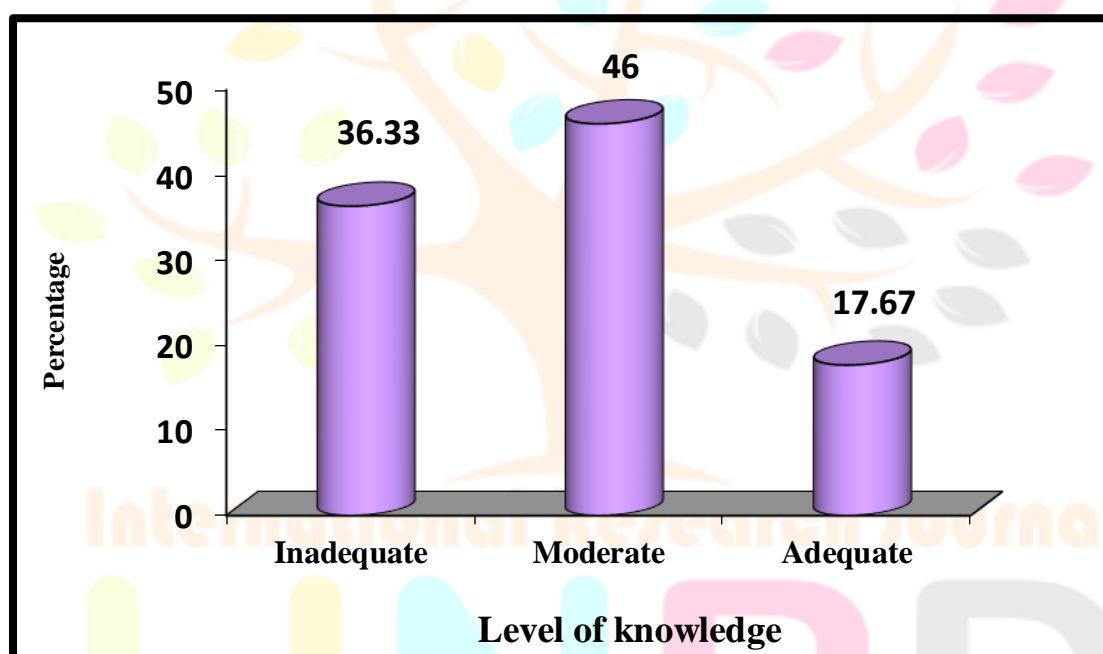| Level of knowledge	Knowledge Score	
	F	**%**
Inadequate	109	36.33
Moderate	138	46
Adequate	53	17.67
Total	300	100

Figure 1: Percentage wise to assess the level of knowledge towards COVID-19 among the clients

The above table and figure shows the frequency and percentage of level of knowledge towards COVID-19. Out of 300 clients, 109 (36.33%) had inadequate knowledge, 138(46 %) of the clients had moderate knowledge and only 53 (17.67%) clients had adequate knowledge.

SECTION 3: ANALYSIS OF THE DISTRIBUTION TO ASSESS THE PRACTICE TOWARDS COVID-19 AMONG THE CLIENTS ATTENDING OUT-PATIENT DEPARTMENT.

Table 5: Frequency and percentage wise to assess the level of practice towards COVID-19 among the clients

n= 300

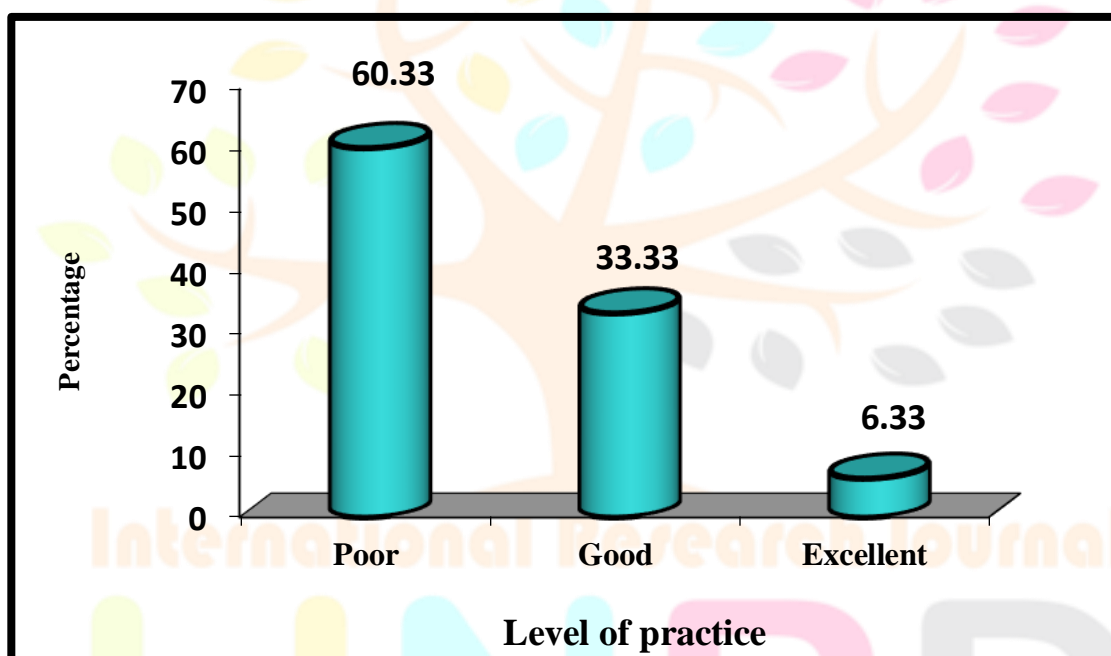| Level of practice	Practice Score	
	f	%
Poor	181	60.33
Good	100	33.33
Excellent	19	6.33
Overall	300	100

Figure 2: Percentage wise to assess the level of practice towards COVID-19 among the clients

The above table and figure shows the frequency and percentage of level of practice towards COVID-19.In that majority 181(60.33 %) of the clients had poor practice, 100(33.33%) of the clients had good practice. Only 19(6.33%) clients had excellent practice.

SECTION 4: CORRELATION BETWEEN KNOWLEDGE AND PRACTICE TOWARDS COVID-19 AMONG THE CLIENTS ATTENDING OUT-PATIENT DEPARTMENT.

Table 6: Correlation between knowledge and practice towards COVID-19 among the clients

Overall knowledge and overall practice	'r' value	p-value
	0.5910	P<0.001***(HS)

HS- Highly Significant,   NS- Not significant.

The above table shows the correlation between knowledge and practice, which was calculated by Karl Pearson correlation coefficient. There was moderately positive correlation between knowledge and practice with r value (0.5910).Hence, research Hypothesis H_1 (There will be a significant correlation between the knowledge and practice regarding COVID-19 among the clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.) was accepted.

SECTION 5: ANALYSIS OF ASSOCIATION BETWEEN KNOWLEDGE AND SELECTED BASELINE CHARACTERISTICS

The association between the knowledge and selected baseline characteristics with age (0.001<0.05), educational level (0.0001<0.05), monthly family income (0.008<0.05), occupation (0.001<0.05), family member infected with COVID-19 (0.048< 0.05), Aarogya Setu app (0.001<0.05), attended any training (0.001<0.05), Home remedies for prevention (0.001<0.05). Hence, research Hypothesis H_2 (There will be a significant association between the knowledge and selected baseline characteristics regarding COVID-19 among the clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.) was accepted.

SECTION 5: ANALYSIS OF ASSOCIATION BETWEEN PRACTICE AND SELECTED BASELINE CHARACTERISTICS

There is association between the practice and selected baseline characteristics with educational level (0.001< 0.05), monthly familyincome(0.001<0.001),occupation(0.001p<0.05),ArogyaSetuapp(0.001<0.05), attendedany training to COVID-19 (0.001<0.05), home remedies for prevention(0.001< 0.05).Hence, the research hypothesis H_3 (There will be a significant association between the practice and selected baseline characteristics regarding COVID-19 among the clients attending out-patient department of selected community health facility in Dadra and Nagar Haveli.) was accepted.

IV Conclusion

The study revealed that most clients had only moderate knowledge towards COVID-19 and the practice towards COVID-19 was inadequate among most number of clients. So, there is a need to create awareness and behavior change among community people regarding COVID-19

References:

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