

**ASSESS THE KNOWLEDGE ON PREVENTIVE PRACTICES
TOWARDS COVID-19 AMONG PREGNANT WOMEN SEEKING
ANTENATAL SERVICES AT PRIMARY HEALTH CENTRE,
KANCHIPURAM DT, TAMILNADU, INDIA**



**A PROJECT WORK SUBMITTED TO
SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
CHENNAI**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF BACHELOR OF SCIENCE IN NURSING
2019-2023**



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BY

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CERTIFIED WORK DONE BY

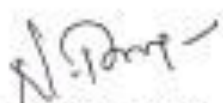
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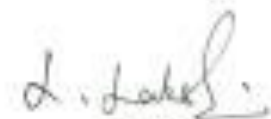
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2019 – 2023


RESEARCH GUIDE
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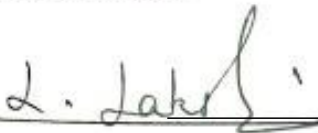
BONAFIDE CERTIFICATE

This is a bonafide work done by **Miss. Nandhini A** and **Miss. Princy V B. Sc Nursing**, III Year Students from Sathyabama college of Nursing, Sathyabama Institute of Science and Technology, Chennai, submitted in partial fulfillment for the Degree of Bachelor of Science in Nursing under the Sathyabama Institute of Science and Technology (Deemed to be University), Chennai.

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This is to certify the project work entitled **“Assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services at primary health centre, Kanchipuram District, Tamil Nadu”** is a bonafide research work done by **Miss. Nandhini A** and **Miss. Princy V** in partial fulfilment of the requirement for the degree of Bachelor of science in nursing.



SEAL AND SIGNATURE OF

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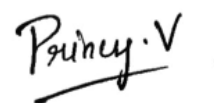
DECLARATION

We hereby declare that the present project report entitled “**Assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services at primary health centre, Kanchipuram District, Tamil Nadu**”. Is the outcome of the original research work undertaken and carried out by us under the guidance of Mrs.Thivya Msc (N), Sathyabama College of Nursing, Chennai. We also declare that the material of this project report as not formed in anywhere, the basis for the award of any degree in this university or any other university.

BY

(Sathyabama college of nursing)





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“He makes all things beautiful in his time”

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ABSTRACT

COVID-19 is severely affecting the respiratory system caused by a single-stranded novel coronavirus. It is an infectious disease and has different signs and symptoms such as fever, cough fatigue myalgia, and dyspnea. We reported the human case of COVID-19 for the first time in Wuhan city, China, in December 2019. World health organization (WHO) reported as COVID-19 was an outbreak of disease in 2019-20 and pandemic disease. COVID-19 can be transmitted through the respiratory droplet, physical contact, feco-oral, and has an incubation period of 2-14 symptomatic.

Assess the knowledge on preventive practices towards COVID-19 among pregnant women at Kanchipuram District, Tamil Nadu. The objectives are to assess the knowledge on preventive practices towards COVID-19 among pregnant women and to associate knowledge of COVID-19 with their Selected Demographic Variables of pregnant women of 18yrs-above 31yrs age group, a sample of 30 pregnant women were selected in primary health centre by using simple random sampling fulfilled the inclusion criteria were selected for the study. An extensive review of literature and guidance by experts formed the foundation to the development of the study. The data collection tool was validated and reliability was established. The data collection for the study was done from the collected data was tabulated and analysed. The frequency distribution in the study shows that majority 1 (75%) were having adequate knowledge regarding COVID-19, 18(>50%) of them having moderate knowledge on COVID-19 and 11 (50 to 75%) of them having inadequate knowledge on COVID-19. There is significant association of preventive practices towards COVID-19 among pregnant women with demographic variable like occupation. But there is no significant association between preventive practices towards COVID-19 among pregnant women with demographic variables like age, religion, education level, source of information and gestational age.

Keywords: pregnant women, primary health centre, COVID-19, knowledge, preventive practices.

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CHAPTER - 1

“We have a secret in our culture, and it’s not that birth is painful. It’s that women are strong.” - Laura Stavoe Harm

“We are in this together-and we will get through this, together.”-UN75

INTRODUCTION

Infectious disease can play a significant role in pregnancy, particularly by affecting maternal and foetal outcomes. Prenatal respiratory infections may also result in stillbirth, miscarriage and preterm delivery. The coronavirus (COVID-19) infection is a unique infectious disease caused by novel coronavirus 2 (SARS-CoV-2). The outbreak first occurred in Wuhan, China in December 2019. The World Health Organization (WHO) announced it as a public health emergency of international concern on January 30, 2020. India registered the first case of COVID-19 on January 30, 2020. The pregnant women are more susceptible to developing severe case of COVID-19 and consequently being admitted to hospital and intensive care units because of their physiological changes.

Even though everybody is at risk of becoming infected, pregnant women are more prone to become the victims of COVID-19 compared with the general population. It is transmitted by airborne droplets; thus is easily inhaled by pregnant women and is difficult to remove due to the change in anatomical structure of the respiratory system during pregnancy. Furthermore, pregnancy is an immune suppressed state and pregnant women are generally more susceptible to viral respiratory infections and their complications. Pregnant women are at an increased risk for severe illness from COVID-19. The rate of morbidity, caesarean section delivery and preterm birth were also found to be increased. Vertical transmission is a matter of debate.

The available data reporting the impact of COVID-19 on pregnancy outcome are not sufficient and are limited to small case series. In the absence of more robust evidence they were identified as a vulnerable group and were advised to take additional precautions as the COVID-19 pandemic unfolded. Pregnant women are considered to be high risk and extensive precautions have been recommended in order not to be exposed to the virus. COVID-19

public health responses such as social distancing, frequent hand washing and use of protective equipment are critical in preventing and containing the spread of coronavirus. Failure to apply these important public health measures might result in poor control and increase likelihood of infection.

Knowledge and attitude towards the disease plays an integral role in determining a society's readiness to accept public health measures. Studies have shown that socio-demographic factors including age, ethnicity, front line job, and obstetrics care and history influence the knowledge, attitude and precaution practice toward COVID-19 among pregnant women. On the other hand, poor knowledge and practices of preventive measures against COVID-19 among pregnant women have been reported particularly in developing countries.

Pregnancy is one of the important milestones in a woman's life. During pregnancy, women are extremely apprehensive and anxious about their progress. According to CDC guidelines, pregnant and breastfeeding women are subgroups that need extra precaution to avoid COVID-19 infection. They are at an increased risk for severe illness from COVID-19 compared to non-pregnant people.

People's adherence to infection control measures will be largely affected by their knowledge, attitude, and practices (KAP). "KAP theory" is a health behaviour change framework wherein factors contributing to human behavioural change are divided into three successive processes, namely the acquisition of proper knowledge, generation of attitudes, and adoption of behaviours (or practices). The public's KAP play a major role in the prevention and control of infectious diseases: thus, it is expected that KAP levels will be a deciding factor in the battle against COVID-19. The public must routinely practice precautionary behaviours to control the spread of COVID-19 and requiring people to adhere to social distancing and appropriate preventative practices can help prevent or contain outbreaks. However, effective pandemic management requires an adequate understanding of the factors that influence behavioural changes, including the ways that KAP affect individuals' adherence to government measures. As the same time knowledge about COVID-19 infection in pregnant women and newborns is scarce.

The issue of pregnancy during this global pandemic deserves a more sensitive approach and mutual understanding among clinicians and other healthcare workers; however, A few studies assessing attitudes and perceptions of the effect of COVID-19 among pregnant

women. As the COVID-19 pandemic continues to intensify globally, it is important to understand the mentality of pregnant women towards COVID-19. The only preventive measures available are social distancing, hand washing and face masks; however, few studies have focused on KAP.

The H1N1 pandemic taught us that knowledge on preventive measures towards infectious disease play a crucial role in precise practices for curtailing the spread of the disease. Anxiety and fear among the population further clouds the efforts to prevent the spread of infection. Adherence to preventive measures by the population is crucial for the control of spread, which is mainly affected by their knowledge on preventive measures toward COVID-19.

The level of knowledge on preventive measures against COVID-19 infection among pregnant women, which constitute vulnerable groups are yet to be evaluated. Therefore, this study aimed to determine the knowledge on preventive measures of coronavirus infection among pregnant women attending antenatal care.

BACKGROUND OF THE STUDY

- As the outbreak of COVID-19 continues to unfold, major concerns are being raised about its effect on pregnancy and the potential risk of vertical transmission.
- Recent evidence suggests that the risk of maternal mortality appears to be high in COVID-19 pregnant women with severe disease.
- Studies have suggested that pregnant women are more susceptible to COVID-19 compared to non-pregnant women.
- However, it's unclear whether pregnant women in India are knowledgeable about COVID-19 and practice preventive measures against it.

NEED FOR THE STUDY

Initially the outbreak of COVID-19 has a stronger impact around the globe. As of the existing data there were nearly 6,403,439 cases tested as positive in which 3, 78,113 deaths confirmed. In India the report taken on June 2nd 2020 apparently 3, 50,000 cases stated as positive and 56,288 deaths occurred. 5,488 cases belong to the state, Tamilnadu and the death

count is 67. Several thousands of pregnant women tested positive in the country, where in Tamilnadu 1,606 cases also confirmed for the same. The case fatality rate of SARS-CoV infection among pregnant women is up to 25%.

COVID-19 is an emerging infectious disease which is a major public health problem worldwide. Given the serious threats imposed by COVID-19 and the absence of vaccines until August 2020, preventive measures play an essential role in reducing infection rates and controlling its spread. This shows the necessity of public adherence for preventive and control measures, which is affected by their knowledge, attitudes, and practices.

India reported its first COVID-19 case on 30 January 2020, in Kasaragod town in the state of Kerala, and had reported 49,391 cases (including 1,694 deaths) by 6 May 2020 (WHO, 2020b). To contain the disease, a nationwide lockdown was declared in India on 25 March 2020, which has been extended at least until 31 May 2020. The citizens were advised to stay at home and maintain social distancing.

COVID-19 is caused by a previously unreported strain of coronavirus, officially named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). It primarily spreads person to person through close contact and contaminated surfaces, often via small droplets produced by the infected person through coughing, sneezing or talking (CDC, 2020a; WHO, 2020c). COVID-19 is most contagious immediately after the onset of symptoms, although the spread through asymptomatic cases has been reported (Bi et al., 2020). The incubation period is around 5 days (range, 2–14 days) and common symptoms include fever, cough and shortness of breath (CDC, 2020b, 2020c; Chen et al., 2020; Elsevier, 2020). There is no known vaccine or effective antiviral treatment for COVID-19 (WHO, 2020c), but only symptomatic management and supportive therapy (CDC, 2020d). Therefore, it is important to empower people by educating them and effectively communicating accurate information about the preventive measures (e.g., hand washing, covering one's mouth while coughing or sneezing, maintaining social distancing and self-isolation).

Ghana reported its first case of COVID-19 on 12th March 2020 in its national capital, Accra. Cases of COVID-19 have since spread to all regions of the country, and as of 8th April 2021, Ghana has recorded a total of 91,109 cases and 752 deaths. Ghana has adopted several measures to fight the virus namely; testing, tracing, and treating, the partial lockdown of some major cities, and practicing COVID-19 safety measures. It has also resorted to the use

of geospatial technology in its effort to enhance contact tracing and improving decision making. Successful control of COVID-19 infection will require a change of individual behaviour, and this is influenced by people's understanding of the characteristics of the disease and its preventive measures. Studies on knowledge and preventive practices in Ghana are focused on health workers and the general public, but not pregnant women.

This study sought to assess the knowledge on preventive measures practices towards COVID-19 among pregnant women seeking antenatal services at Primary Health Centre

STATEMENT OF THE PROBLEM:

Assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services at primary health centre, Kanchipuram district, Tamilnadu, India.

OBJECTIVES:

- To assess the knowledge on preventive practice towards COVID-19 among pregnant women seeking antenatal services.
- To associate the knowledge and preventive practice towards COVID-19 among pregnant women with selected demographic variables.

OPERATIONAL DEFINITION:

ASSESS:

It is the organised systematic and continuous process of collecting data about preventive practices towards COVID-19 among pregnant women.

KNOWLEDGE:

The correct responses of the pregnant women to the knowledge part of questionnaire of the interview schedule related to preventive practices towards COVID-19.

PREVENTIVE PRACTICES:

It deals with the prevention of illness to decrease the burden of disease and associated risk factors.

COVID-19:

Coronavirus disease 2019 (COVID-19) is a severe acute respiratory infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

PREGNANT WOMEN:

Pregnant women means a women during pregnancy without any complications which includes all 1st, 2nd and 3rd trimester attending the selected Primary Health Centre.

SEEKING ANTENATAL SERVICES:

Systemic supervision (examination and advice) of women during pregnancy availing seeking antenatal services in selected primary health centre is called antenatal care.

CHAPTER-2

REVIEW OF LITERATURE:

Farnaz Naqvi et.al published (2022) conducted study on knowledge, attitude and practices of pregnant women related to covid-19 infection in seven countries form the global network for women's and children's health. In all, 25 260 women completed the survey. Overall, 56.8% of women named ≥ 3 COVID-19 symptoms, 34.3% knew ≥ 2 transmission modes, 51.3% knew ≥ 3 preventive measures and 79.7% named at least one high-risk condition. Due to COVID-19 exposure concerns, 23.8% had avoided prenatal care and 7.5% planned to avoid hospital delivery. Over half the women in the Guatemalan site and 40% in the Pakistan site reduced care seeking due to COVID-19 exposure concerns. Of the women, 24.0% were afraid of getting COVID-19 from healthcare providers. Overall, 63.3% reported wearing a mask and 29.1% planned to stay at home to reduce COVID-19 exposure risk.

Seemab Naqvi et.al published (2022) conducted study on knowledge, attitudes, and practices of pregnant women regarding covid-19 vaccination in pregnancy in seven low and middle income countries. No women were vaccinated except for small proportions in India (12.9%) and Guatemala (5.5%). Overall, nearly half the women believed the COVID-19 vaccine is very/somewhat effective and a similar proportion believed that the COVID-19 vaccine is safe for pregnant women. With availability of vaccines, about 56.7% said they would get the vaccine and a 34.8% would refuse. Of those who would not get vaccinated, safety, fear of adverse effects, and lack of trust predicted vaccine refusal. Those with lower educational status were less willing to be vaccinated. Family members and health professionals were the most trusted source of information for vaccination.

Surg Cdr Deep Kamal published (2022), conducted study on knowledge, attitude, and practice toward COVID-19 among pregnant women in a tertiary care hospital during the COVID-19 outbreak. Study scores for adequate knowledge, positive attitude, and good practices were 75.3%, 73.9%, and 92.7% respectively. The analysis of the association of various demographic variables with KAP about COVID-19 revealed significant association. The majority of pregnant women was knowledgeable about COVID-19 and had positive attitude and good practices. However, health authorities may need to take proactive steps for this vulnerable sub population.

Singh C et.al published (2022), conducted study on Knowledge, Attitude, and Practices of Pregnant Women towards COVID-19. Some 302 questionnaires were analyzed: more than 90% of women had correct general knowledge of COVID, but only 12.3% scored 50% or more for pregnancy-related knowledge. Some 67% of women reported more than usual anxiety and 7.7% reported severe anxiety levels. General knowledge improved with age, education, and occupation but pregnancy-related knowledge and anxiety score were unaffected by these variables. Pregnant women's knowledge of COVID-19 infection, in general, is excellent and they have the correct attitude towards preventive strategies. However, knowledge and attitude towards its effect on pregnancy are limited.

Taniya Thapa et.al published (2022), conducted study on Precautionary practices towards COVID-19 among pregnant women attending antenatal care in Nepal. The majority of the women who participated in this study were from aged 20–29 years (71.7%), were Brahmin (48.2%) and 84.6% Hindu. Since 46.2% of women assumed the close contact of mother to child as safe practice with specific precautions, only 17.9% were willing to isolate themselves if infected by COVID-19. Overall, 35.9% of the respondents were only willing to breastfeed their newborn, even with specific precaution if infected. Nearly half of the respondents (47.2%) had poor precautionary practice during the COVID-19 pandemic and the level of precautionary practices was found significantly associated with age and occupational status. Most of the respondents were concerned about the threats of mother to child transmission but found to have poor precautionary practices towards COVID-19. Thus, adequate counselling regarding COVID related issues during an antenatal check-up is required to be provided by health workers to break their perceived stigma for better maternal and neonatal outcomes.

Rose Mania et.al published (2022), conducted study on Knowledge, Attitudes, and Preparedness for Managing Pregnant and Postpartum Women with COVID-19 among Nurse-Midwives in Kenya. Eighty-five participants were included in the final analysis (response rate 72%). Most participants were female ($n = 69$, 81.2%), 52.9% ($n = 45$) worked in labour wards, and 57.6% ($n = 49$) worked in rural hospitals. Overall, 71% ($n = 57$) of participants had sufficient knowledge about managing COVID-19 in pregnant and postpartum women. However, only 63% were willing to receive COVID-19 vaccination. Nurse-midwives working in urban areas were 3.7 times more likely to have positive attitudes than those in rural areas (odds ratio 3.724, 95% confidence interval 1.042–13.31; $p = .043$). Nurse-midwives' responses to the Kenyan government's COVID-19 guidelines for managing and

caring for pregnant women were inconsistent. Continued professional development for nurse-midwives is important to ensure they stay abreast of evolving COVID-19 guidelines for maternal health.

Maxwell Tii Kumbeni et.al published (2021) conducted study on knowledge and preventive practices towards covid-19 among pregnant women seeking antenatal services in Northern Ghana. The prevalence of adequate knowledge and good covid-19 preventive practices were 85.6%, (95% CI: 82.57, 88.59) and 46.6% (95% CI:42.41, 50.95) respectively. Having at least a primary education, residing in an urban area, and receiving covid-19 education at a health facility were positively associated with adequate knowledge on covid-19. Factors positively associated with good covid-19 preventive practices were older age, having at least a primary education, pregnant women with a chronic disease, and living in an urban area. Multiparity was negatively associated with good covid-19 preventive practices. Although majority of women had adequate knowledge of covid-19, less than half of them were engaged in good covid-19 preventive practices.

Yohannes Fikadu et.al published (2021) conducted study on covid-19 preventive measure practices and knowledge of pregnant women in Guraghe Zone Hospitals. The current preventive measure practices and knowledge have gaps. COVID-19 preventive measure practice and knowledge of pregnant women visiting guraghe zone hospitals was 76.2% and 54.84%, respectively. Those aged 20-24 (AOR=1.22, 95% CI:1.15-22.24), 25-29 (AOR=1.32,95% CI:1.20-20.25), and 30-34 (AOR=2.57, 95% CI=2.32-43.38) were more likely to practice covid-19 preventive measures. Those residing in urban area (AOR=2.16, 95% CI=1.24-3.77) and perceiving that covid-19 is worst for people with chronic disease (AOR=5.12,95% CI=1.73-15.17) were more likely to practice covid-19 preventive measures.

Tarang P. kaur et.al published (2021), conducted study on evaluate knowledge, attitude and practices among pregnant women during COVID-19 Pandemic. The participants had adequate mean knowledge score ($\pm$ SD) of 22.5 ($\pm$ 3.5) were following good practices [mean score ($\pm$ SD) = 15.5 ($\pm$ 2.6)] and showed positive attitude for preventive measures against COVID-19 [n (%) = 194(96%)]. Low knowledge score (p -value 0.030) was seen in non-health care workers. As India is battling the second COVID-19 wave and in the absence of definitive cure, strengthening of health policies directed at pregnant women should be prioritized with special focus on significant gaps in KAP.

Merga Besho et.al published (2021), conducted study on knowledge, attitude and practice toward corona virus infection among pregnant women attending antenatal care at public hospitals in three wollega zones, Ethiopia. This study indicates that more than two-thirds (75.4%; 95% CI: 71.1– 79.3%) and 43.6% of the pregnant women had adequate knowledge and good practice about the coronavirus pandemic, respectively. The pregnant women who attended secondary school and above and were urban residents were more likely to have good knowledge, AOR = 2.99 (1.7– 5.0) and 1.6 (1.2– 2.7), respectively. Maternal age ≤ 25 years and being an urban resident were the two predictors of good practice of preventive measures, AOR = 1.7 (1.2– 2.6) and 2.3 (1.3– 4.0), respectively. Special consideration should be given to those who are from rural areas, and to less-educated pregnant women.

Alemu degu et.al published (2021), conducted study on Knowledge and Attitude towards the Current Pandemic Corona Virus Disease and Associated Factors Among Pregnant Women Attending Antenatal Care in Debre Tabor General Hospital Northwest Ethiopia. Overall, 52.1% and 52.6% of participants had a good level of knowledge and positive attitude toward COVID-19, respectively. Level of knowledge was significantly associated with participants' age (15–24 years) (AOR: 4.58; 95% CI: 1.721–12.201), educational status (AOR:7.78; 95% CI: 2.31–15.65) occupation (AOR:2.26; 95% CI: 1.23–4.15), and condition of pregnancy (AOR:4.55; 95% CI: 1.84–11.25). Whereas age (25–34 years) (AOR:2.61; 95% CI: 1.23–5.55), participants husband completed secondary education (AOR=2.75, 95% CI: 1.13–6.70) and college and above (AOR:3.77; 95% CI: 1.1.62–8.76), wanted pregnancy (AOR:2.70; 95% CI: 1.22–5.97) and knowledge (AOR:1.65; 95% CI: 1.06–2.572) were the significant predictors for attitude.

Radi Alsafi et.al published (2021), conducted study on Knowledge, Attitudes, and Practices among Pregnant Saudi Women during the COVID-19 Pandemic. The average knowledge score was 10.4 ± 2.85 out of 19 (54.7%); for attitudes, the average score was 3.4 ± 1.61 out of 5 (68%); and for practices, the average score was 5.9 ± 1.21 out of 7 (84.2%). Higher educational status and healthcare as a profession were significantly associated with improved KAP scores among pregnant women. Participants from the Western region of Saudi Arabia were heavily represented in our study. Pregnant women, especially those subgroups with low KAP scores, should be provided with adequate and updated information regarding COVID-19.

Ezgi Turgut et.al published (2021), conducted study on Knowledge, attitude, and behaviours of pregnant women about COVID-19. A total of 1011 participants were included in the statistical analysis. The mean age and BMI of the participants were 27.09 ± 5.55 and 27.48 ± 4.71 kg/m², respectively. Mean gestational age and parity were 26.20 ± 9.30 and 1.47 ± 1.19 , respectively. Measures taken by authorities for COVID-19 were thought to be “extremely adequate” by 21.4% of the participants and “highly adequate” by 30%. Of the participants, 47.5% trusted healthcare professionals extremely in fighting against the COVID-19 pandemic. Affection and respect for healthcare professionals during the pandemic increased in 89.1% of the participants. Of the participants, 88.5% stated that they would follow the strict quarantine requirements when necessary and 48.3% felt more vulnerable/weak as they were pregnant during the pandemic. Of the participants, 50.6% were intending to decrease their antenatal visits during the COVID-19 pandemic.

Sivasundari Maharajan et.al published (2021), conducted study on Knowledge, Attitude and Practice towards COVID-19 Infection during Pregnancy among Antepartum Women. Among the 465 pregnant women included in the study, 86.02% had good knowledge of COVID-19 and its impact on pregnancy, 89.89% of women held a positive attitude towards battling the pandemic and 98.92% had good prevention practices against COVID-19 infection. There was a significant association between age and knowledge and a significant association between socioeconomic status with the knowledge, attitude, or preventive practices of the patients and between education level and attitude of the women at $p < 0.05$. Knowledge, attitude and prevention were found to be strongly positively correlated indicating that with an increase in the knowledge there is an increase in attitude and practice of preventive measures by pregnant women.

M. Hoque et.al published (2021), conducted study on Knowledge, Attitudes, and Practices towards COVID-19 of Pregnant Women at a Primary Health Care Facility in South Africa. A total of 346 pregnant women participated of which the majority were single (71.4%) and unemployed (52%). The mean age was 26.71 (SD=6.81) years and mostly (81.2%) were between ages 20 to 39 years. More than half (52%) were unemployed and 78% had low education of up to matric. The mean gestational age was 23.77 (SD 6.83) weeks with nearly half being primigravida (48.8%) (Nil parity) and mean parity was 1 (SD=1.0). Half (51.2%) of the respondents had known vulnerable comorbidities for COVID-19. Among

these, the highest was HIV (28%) followed by known hypertension (11.3%), chronic asthma (7%), diabetes (3%) and 11% respondents had more than one comorbidity.

Boma Awoala West et.al published (2021), conducted study on Knowledge, Attitudes and Practices of Pregnant Women Attending the Antenatal Clinic of Rivers State University Teaching Hospital, Nigeria towards the Coronavirus (COVID-19) Pandemic. Two hundred and six respondents (81.4%) were assessed to have good knowledge. Fifty-one (20.2%) had overall good attitude while 67(26.5%) had good practice of preventive measures. The commonest symptoms of COVID-19 recalled were cough 169(27.8%), shortness of breath 153(25.1%) and fever 145(23.7%). Parity, mother's and spouse's level of education and occupation were significantly associated with knowledge levels while age of the mothers was associated with the attitude towards COVID-19 infection. Parity, mother's and spouse's level of education and occupation were significantly associated with the practice levels. There was an association of good knowledge and good attitude levels with good practice level ($p>0.05$).

Ryan Wai Kheong Lee et.al published (2020) conducted study on attitudes and precaution practices towards covid-19 among pregnant women in Singapore. A total of 167 survey responses were obtained over 8 weeks from April to June 2020. The majority of women were aged ≤ 35 years (76%, $n = 127$), were of Chinese ethnicity (55%, $n = 91$), attained tertiary education (62%, $n = 104$) and were not working as frontline staff (70%). Using multiple linear regression models, Malay ethnicity (vs. Chinese, β 0.24; 95% CI 0.04, 0.44) was associated with higher frequency of practicing social distancing. Malay women (β 0.48; 95% CI 0.16, 0.80) and those who worked as frontline staff (β 0.28; 95% CI 0.01, 0.56) sanitized their hands at higher frequencies. Age of ≥ 36 years (vs. ≤ 30 years, β 0.24; 95% CI 0.01, 0.46), Malay (vs. Chinese, β 0.27; 95% CI 0.06, 0.48) and Indian ethnicity (vs. Chinese, β 0.41; 95% CI 0.02, 0.80), and attendance at high-risk clinic (vs. general clinic, β 0.20; 95% CI 0.01, 0.39) were associated with higher frequency of staying-at-home.

Najmeh Maharlouei published (2020), study was conducted on a statistical sample of pregnant women in south western Iran between March and April 2020 to evaluate their knowledge and attitude toward this condition. So, pregnant mothers registered in antenatal clinics affiliated to Shiraz University of Medical Sciences were called and asked to fill in a three-part online questionnaire including socio demographic characteristics, obstetric/medical history, and knowledge/attitude toward COVID-19. P-values < 0.05 were considered

statistically significant. The mean score of knowledge among 540 respondents was 34 (± 4.1) out of 43. Also, 44.3% answered more than 80% of the items correctly. Higher knowledge scores were accordingly associated with marriage duration, area of residence, health insurance coverage, socioeconomic status (SES), and self-rated health status. However, a strong relationship was found between knowledge, SES, and health insurance coverage with reference to multivariate analysis results. Moreover, majority of the pregnant women and their households expressed their concern about using preventive measures against COVID-19. Although most respondents were moderately worried about becoming infected with COVID-19, 264 (48.9%) cases reported that they were very much anxious about their newborns being infected with COVID-19 and 388 (71.9%) individuals asserted that they were worried about their mortality due to this infection.

Mamatha Shivanagappa et.al published (2020), conducted study on pregnant women's knowledge and practice of preventive measures against COVID-19 in Karnataka, India. Out of the 93 responders, majority 71 (76.3%) were in the age group 20-30 years. 17 (18.3%) were in the 30-40 years age group. Regarding number of children 41 (44.1%) had one child 16 (17.2%) had 2 children and 32 (34.3%) were primigravida. With respect to educational status 70 (75.26%) were having graduate degree. 19 (20.4%) were non graduates, but had completed high school. Educational level of the husbands of the respondents was along similar lines with 62 (66.66%) having completed graduation, and 28 (30.1%) had completed high school. 91(97.8%) respondents were correct in identifying virus as the cause of COVID-19. 88 (94.6%) rightly chose mode of spread by sneezing or cough. 1 (0.1%) respondent wrongly indicated that injections were the mode of spread. Main symptoms cough and fever were correctly identified by 80 (86%) respondents. The practice of preventive medicine was low with respect to all aspects of COVID prevention. Only 27 (29.7%) were following frequent handwashing recommendation. Only 26 (28.6%) were following staying indoors advise. 28 (30.8%) of the respondents were wearing masks. However, 82 (90.1%) were following at least one of the preventive measures.

Adejoke et.al published (2020), conducted study on knowledge, attitude and practice of preventive measures towards COVID-19 among pregnant women. Result of this study shows that nearly half of the respondents are within 18-25 (45.0%) years of age, 79(63.6%) are Muslims and 358(93.7%) are from the Yoruba tribe. This study also reveals that the respondents do have significant knowledge on the novel Coronavirus disease and a good

attitude towards the prevention of COVID-19 as they practice frequent hand washing, sanitizer use and maintenance of social distancing. From the hypothesis tested, there is significant association between the education level of the respondents and their knowledge and attitude of preventive measures towards COVID-19 and no association between the age of the pregnant women and practice of preventive measures towards COVID-19.

CHAPTER – 3

RESEARCH METHODOLOGY:

- **Research approach:** Quantitative non-experimental –Evaluative approach.
- **Research Design:** Non-Experimental- Descriptive research design.
- **Population:** The Accessible Population of the present study is pregnant women selected at Primary Health centre, Kanchipuram District.
- **Sample Size:** Sample size $n = DEFF * Np(1-p) / [d^2 / z^{2/*}(N-) + p(1-p)]$ (Schaefer. RL et al 1990).

The Sample size of 30 pregnant women will be selected.

- **Research setting:** The study will be collected in the selected Primary Health Centre at Kanchipuram District, Tamilnadu.
- **Sampling Technique:** Purposive sampling.

Sample Criteria:

Inclusion Criteria:

1. Pregnant mothers includes all first, second and third trimester.
2. Pregnant mother's who are willing to participate in the study.

Exclusion Criteria:

1. Pregnant mother's with COVID-19 symptoms.
2. Pregnant mother's who can understand Tamil and English.

METHOD OF COLLECTING DATA:

Data Collection Instrument: Structured interview schedule was used for data collection.

Data Collection Method: Interview was conducted between 9:00 am to 3 pm depending upon the availability of the sample.

SELECTION AND DEVELOPMENT OF STUDY INSTRUMENT:

As the study aimed at evaluating the existing level of knowledge, the researcher was Constructed demographic variables preform, & structured interview schedule was formed to Assess the level of knowledge on preventive practices towards COVID-19 among pregnant Women.

SELECTION AND DEVELOPMENT OF STUDY INSTRUMENT

1. Demographic variables
2. Self – structured questionnaire knowledge on preventive practices towards COVID-19

SECTION A

It consists of demographic data which includes age in year, religion, area of living, educational level, occupation, source of information and gestational age.

SECTION B

It consist of question was related to knowledge on preventive practices towards COVID-19.

DATA COLLECTION PROCEDURE

The researcher has planned to collect data from knowledge on preventive practices towards COVID-19 among pregnant women and demographic data from school children. The corresponding answers obtained are marked on the data sheet by the researcher.

METHOD OF SCORING

Each correct answer is given “1” mark and each wrong answer is given as “0” mark.

Based on score obtained by the sample they are categorized as follow:

SCORING METHOD

SCORE	PERCENTAGE	INFERENCE
0-5	<50	Inadequate knowledge
6-10	50-70	Moderate adequate knowledge
>10	>75	Adequate knowledge

ETHICAL CONSIDERATION

- Obtained clearance from community health nursing department.
- UG committee clearance was obtained.
- Institutional human ethical committee clearance was obtained from Sathyabama academy of research and education.
- Written permission was obtained from Dean and H.O.D Department of community nursing.
- Written consent was obtained from the study participants.

PLAN FOR DATA ANALYSIS

Analysis and interpretation was done based on objectives of the study. The data was Analysed using descriptive statistics frequency, percentage descriptive mean and standard deviation and inferential statistics like chi-square test. The significant finding were expressed in the form of tables and figures.

CHAPTER – 4

DATA ANALYSIS AND INTERPRETATION

The data deals with the description of the sample, analysis and interpretation of data collected and the achievement of the objectives of the study, analysis of the data is a process by which quantitative information is summarized, organised, evaluated, interpreted and communicated in meaning full way.

Analysis is the categorizing, ordering, manipulating and summarizing the data to obtain answer to research question. The purpose of analysing is to reduce data to intelligible and interpretable form so that the relation of research problem can be studied and tested. This chapter deals with the analysis and interpretation of the data collected from 30 sample of COVID-19 among pregnant women in selected primary health centre, kanchipuram dist.

OBJECTIVES:

To assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services.

To associate the knowledge and preventive practice towards COVID-19 among pregnant women with selected demographic variables.

HYPOTHESIS

H1: There is will be significant decrease in knowledge on preventive practices towards COVID-19 among pregnant women.

ORGANIZATION AND PRESENTATION OF DATA:

The data gathered was tabulated, analysed and interpreted using inferential statistics. Based on the objectives the collected data was presented under the following headlines:

SECTION- A: Distribution of demographic variables of the pregnant women.

SECTION- B: Distribution of frequency % distribution of knowledge on preventive practices towards COVID-19 among pregnant women.

SECTION- C: Distribution of frequency and percentage distribution of association of demographic variables with knowledge on preventive practices towards COVID-19 among pregnant women.

Table-I frequency and percentage distribution of demographic variable of knowledge on preventive practices towards COVID-19 among pregnant women.

S.NO	CHARACTERISTICS	CATEGORY	FREQUENCY	PERCENTAGE
1	Age (Year)	18-25	18	60%
		26-31	10	33.3%
		Above 31	2	6.6%
2	Religion	Hindu	14	46.6%
		Muslim	9	30%
		Christian	7	23.3%
3	Education level	Illiterate	3	10%
		Primary/secondary Education	13	43.3%
		Degree	14	46.6%
4	Occupation	House wife	16	53.3%
		Government employment	7	23.3%
		Private employer	7	23.3%
5	Source of information	Social Media specify	9	30%
		Family & friends	13	43.3%
		Healthcare providers	8	26.6%
6	Gestational age	First trimester (1-3 months)	10	33.3%
		Second trimester (4-6 months)	13	43.3%
		Third trimester (7-9 months)	7	23.3%

Figure 1: shows that majority 18 (60%) were belongs to the age between 18-25 years, 10 (33.3%) of them between 26-31 years 2 (6.6%) of them are above 31 years.

Figure 2: shows that majority of 14 (46.6%) were belongs to Hindu, 9 (30%) of them are Muslim and 7 (23.3%) of them are Christian.

Figure 3: shows that majority 14 (46.6%) have degree, 13 (43.3%) of women have primary/secondary education and 3 (10%) of women are belongs to illiterate.

Figure 4: shows majority 16 (53.3%) are house wife, 7 (23.3%) of women work in government employment and 7 (23.3%) of women are work in private employer.

Figure 5: shows majority 13 (43.3%) gained information from family & friends, 9 (30%) gained information from social media specify and 8 (26.6 %) gained knowledge from health care providers.

Figure 6: shows majority 13 (43.3%) were belongs to second trimester (4-6 months), 10 (33.3%) were belongs to first trimester (1-3 months) and 7 (23.3%) were belongs to third trimester (7-9 months).

Figure: 1 Frequency distribution of age

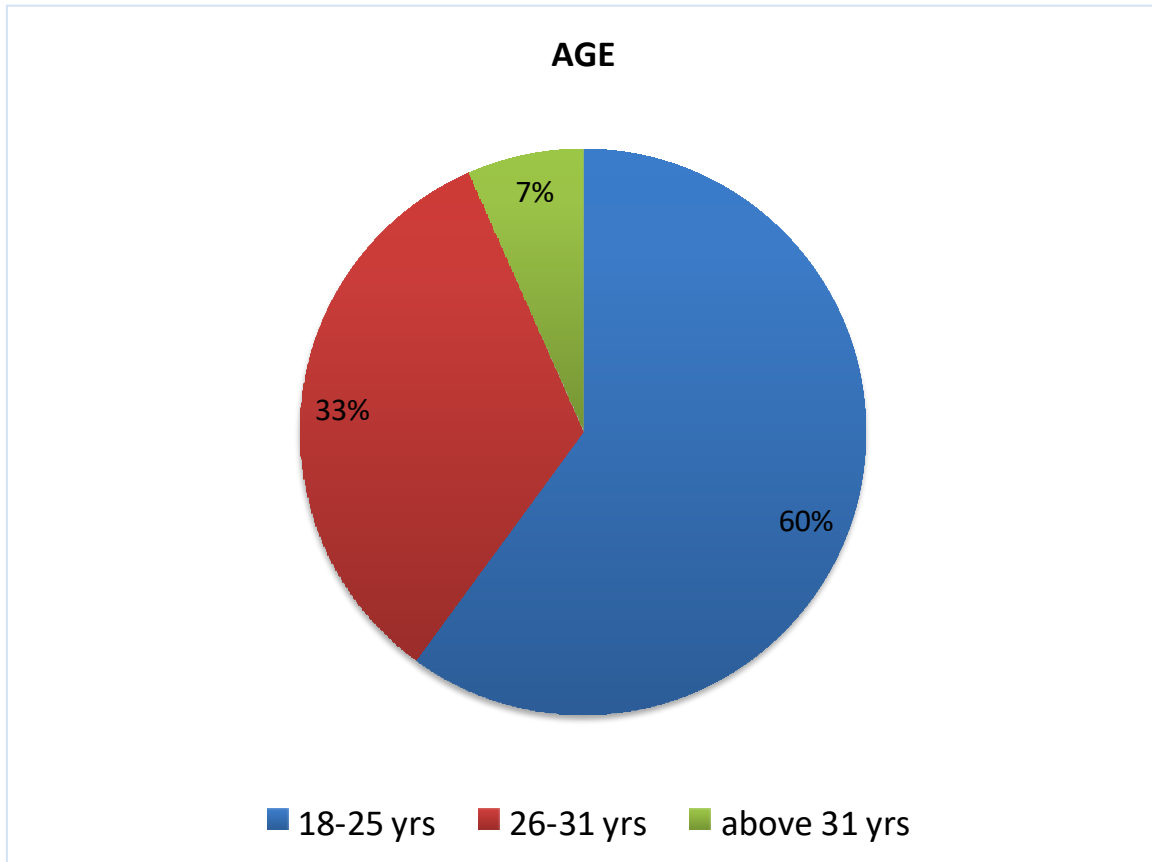


Figure 1: shows that majority 18 (60%) were belongs to the age between 18-25 years, 10 (33.3%) of them between 26-31 years 2 (6.6%) of them are above 31 years.

Figure 2: Frequency distribution of religion

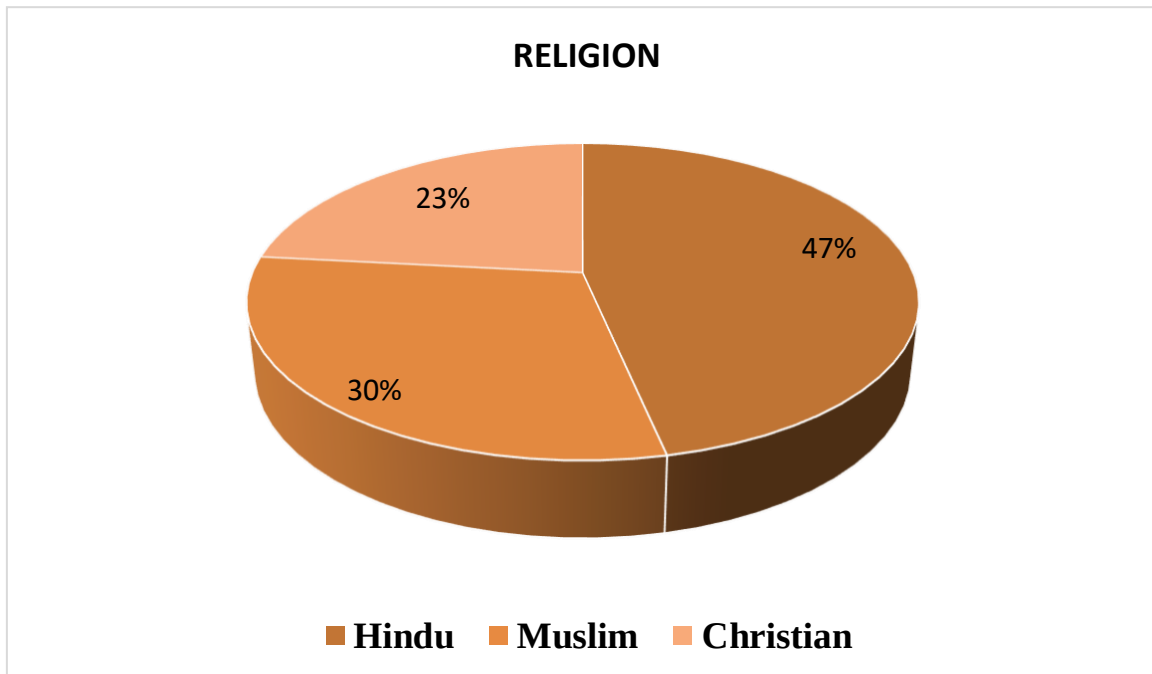


Figure 2: shows that majority of 14 (46.6%) were belongs to Hindu, 9 (30%) of them are Muslim and 7 (23.3%) of them are Christian.

Figure 3: Frequency distribution of education level

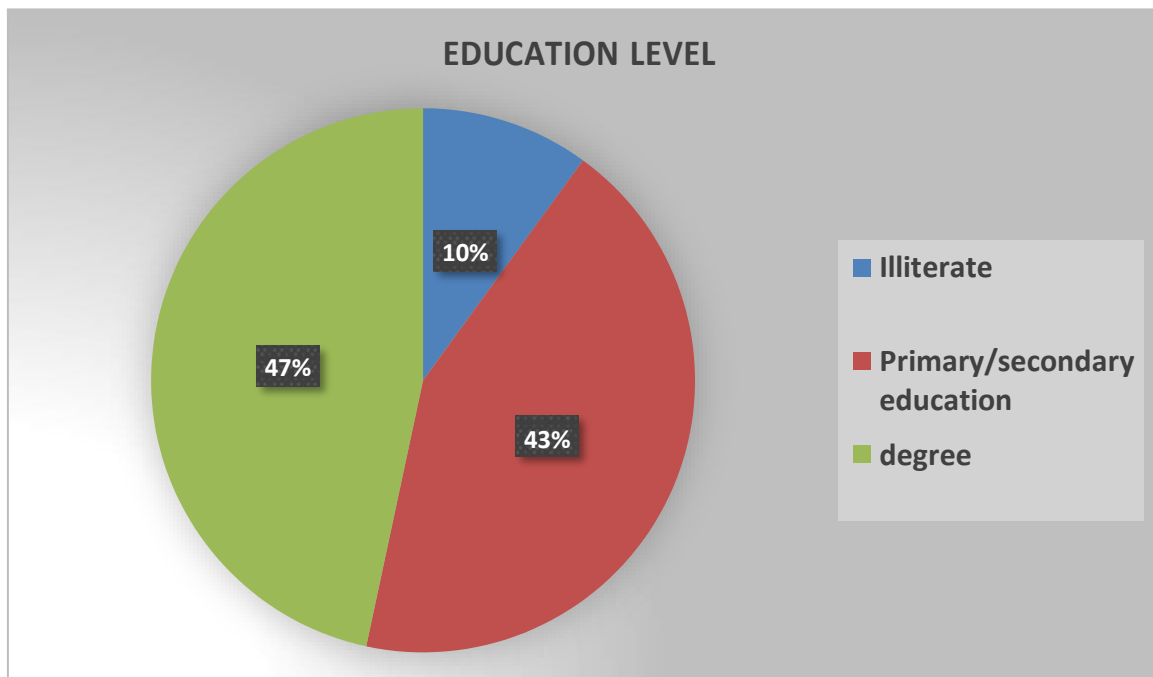


Figure 3: shows that majority 14 (46.6%) have degree, 13 (43.3%) of women have primary/secondary education and 3 (10%) of women are belongs to illiterate.

Figure 4: Frequency distribution of occupation

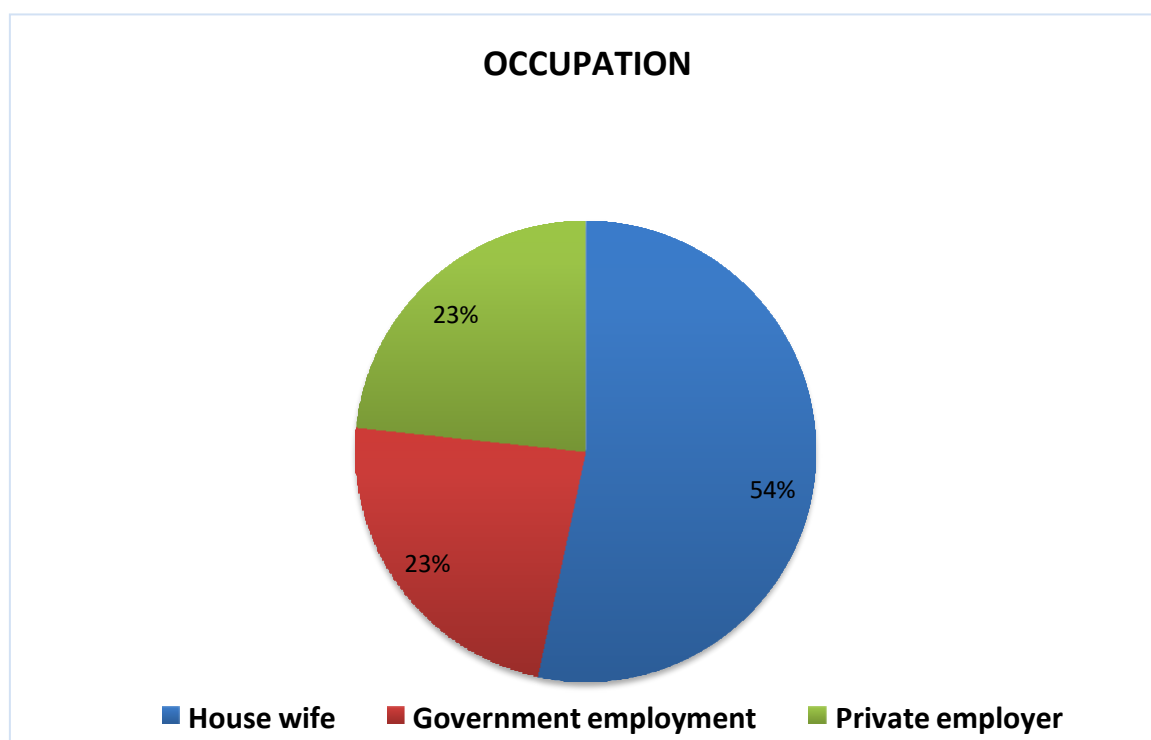


Figure 4: shows majority 16 (53.3%) are house wife, 7 (23.3%) of women work in government employment and 7 (23.3%) of women are work in private employer.

Figure 5: Frequency distribution of source of information

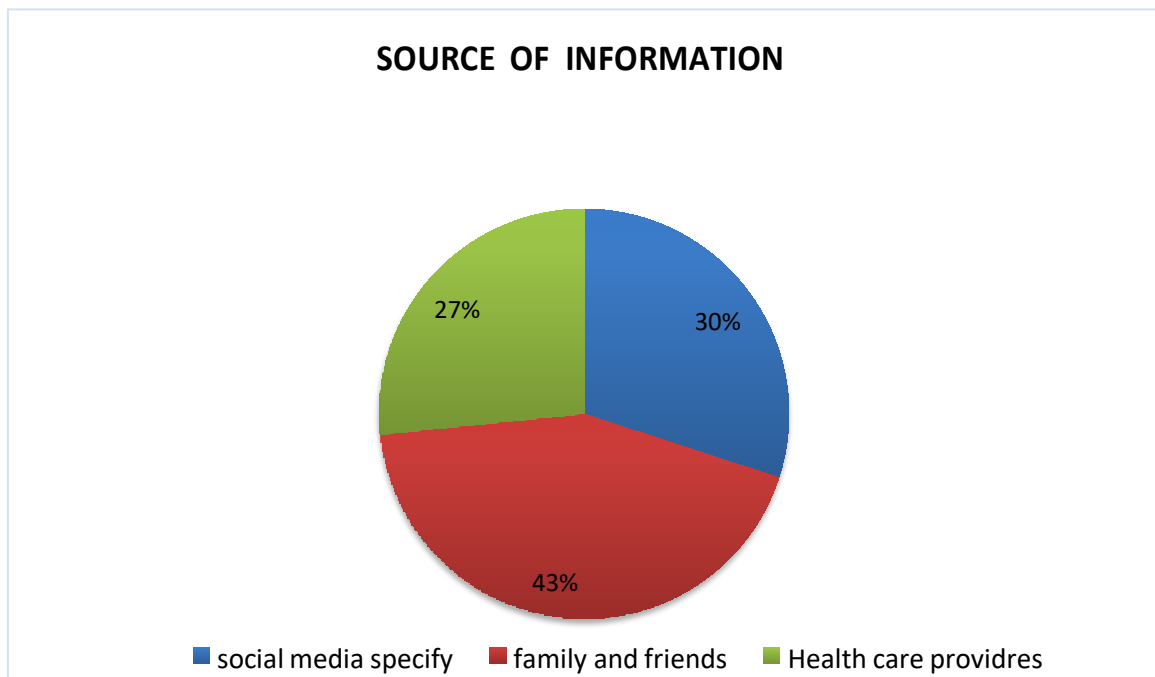


Figure 5: shows majority 13 (43.3%) gained information from family & friends, 9 (30%) gained information from social media specify and 8 (26.6 %) gained knowledge from health care providers.

Figure 6: Frequency distribution of gestational age

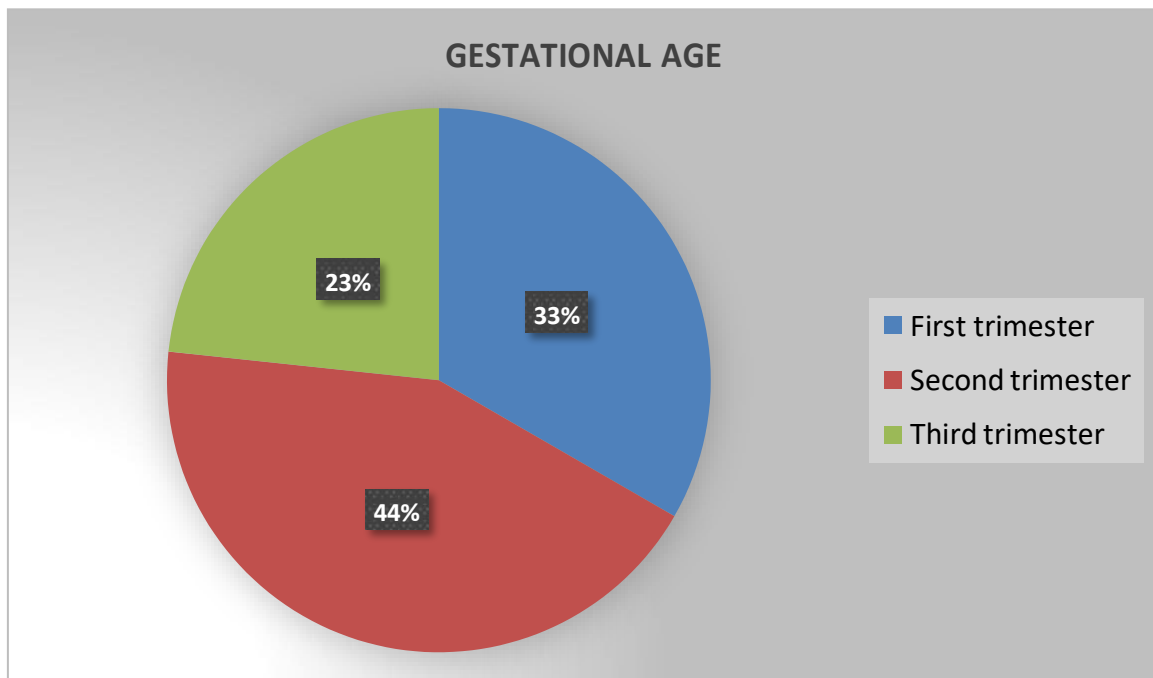


Figure 6: shows majority 13 (43.3%) were belongs to second trimester (4-6 months), 10 (33.3%) were belongs to first trimester (1-3 months) and 7 (23.3%) were belongs to third trimester (7-9 months).

TABLE-II

FREQUENCY DISTRIBUTION OF ASSOCIATION BETWEEN ASSESS THE KNOWLEDGE ON PREVENTIVE PRACTICES TOWARDS COVID-19 AMONG PREGNANT WOMEN SELECTED AT PRIMARY HEALTH CENTRE

Demographic Variables	Classification	Inadequate knowledge		Moderate knowledge		Adequate knowledge		Chi square Test (significance)
		N	%	N	%	N	%	
Age	18-25 yrs	8	26.67%	9	30%	1	3.33%	$X^2 = 4.14$ $P < 9.49$ NS
	26-31 yrs	2	6.67%	8	26.67%	0	0%	
	Above 31 yrs	1	3.33%	1	3.33%	0	0%	
Religion	Hindu	4	13.3%	9	30%	1	3.33%	$X^2 = 2.64$ $P < 9.49$ NS
	Muslim	3	10%	6	20%	0	0%	
	Christian	4	13.3%	3	10%	0	0%	
Education Level	Illiterate	0	0	3	10%	0	0%	$X^2 = 3.11$ $P < 9.49$ NS
	Primary/Secondary Education	5	16.6%	7	23.33%	1	3.33%	
	Degree	6	20%	8	26.67%	0	0%	

Occupation	House wife	6	20%	10	33.33%	0	0%	$X^2 = 48.50$ $P < 9.49$ S
	Government Employment	2	6.67%	4	13.33%	1	3.33%	
	Private employer	3	10%	4	13.33%	0	0%	
Source of Information	Social media-specify	5	16.6%	3	10%	1	3.33%	$X^2 = 6.57$ $P < 9.49$ NS
	Family & friends	5	16.6%	8	26.6%	0	0%	
	Healthcare providers	1	3.33%	7	23.3%	0	0%	
Gestational Age	First Trimester	5	16.6%	5	16.67%	0	0%	$X^2 = 7.05$ $P < 9.49$ NS
	Second Trimester	2	6.66%	10	33.3%	1	3.33%	
	Third Trimester	4	13.3%	3	10%	0	0%	

TABLE II shows that there is significant association of preventive practices towards COVID-19 among pregnant women with demographic variable like occupation. But there is no significant association between preventive practices towards COVID-19 among pregnant women with demographic variables like age, religion, education level, source of information and gestational age.

CHAPTER-V

This chapter discusses the findings of the study derived from statistical analysis and its pertinence to the objectives set for the study and related literature of the study.

OBJECTIVES OF THE STUDY:

1. To assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services.
2. To associate the knowledge and preventive practice towards COVID-19 among pregnant women with selected demographic variables.

Distribution of demographic variables of the preventive practices towards COVID-19 among pregnant women seeking antenatal services at primary health centre:

The study finding revealed that the

- ❖ **Age of Pregnant Women (Years)** in which majority (60%) were belongs to the age between 18-25 years, (33.3%) of them between 26-31 years and (6.6%) of them are above 31 years.
- ❖ **Religion** in which majority of (46.6%) were belongs to Hindu, (30%) of them are Muslim and (23.3%) of them are Christian.
- ❖ **Education Level** in which majority (46.6%) have degree, (43.3%) of women have primary/secondary education and (10%) of women are belongs to illiterate.
- ❖ **Occupation** in which majority (53.3%) are house wife, (23.3%) of women work in government employment and (23.3%) of women are work in private employer.
- ❖ **Source of Information** in which majority (43.3%) gained information from family & friends, (30%) gained information from social media specify and (26.6 %) gained knowledge from health care providers.
- ❖ **Gestational Age** in which majority (43.3%) were belongs to second trimester (4-6 months), (33.3%) were belongs to first trimester (1-3 months) and (23.3%) were belongs to third trimester (7-9 months).
- ❖ It is observed that most of the preventive practices towards among COVID-19 had % were belongs to moderate level of COVID-19, % of them high level of COVID-19, and % of them low level of COVID-19.

Distribution of association of preventive practices towards COVID-19:

- The frequency distribution in the study shows that majority 1 (75%) were belongs to adequate knowledge COVID-19, 18(>50%) of them moderate knowledge COVID-19 and 11 (50 to 75%) of them inadequate knowledge COVID-19.
- Shows that there is significant association of preventive practices towards COVID-19 among pregnant women with demographic variable like occupation. But there is no significant association between preventive practices towards COVID-19 among pregnant women with demographic variables like age, religion, education level, source of information and gestational age.

CHAPTER-VI

SUMMARY, CONCLUSION,

IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

OBJECTIVES OF THE STUDY WERE TO

- To assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services.
- To associate the knowledge and preventive practice towards COVID-19 among pregnant women with selected demographic variables.

RESEARCH DESIGN:

Descriptive study design was used to conduct the study on data obtained on preventive practices towards COVID-19 from April 23, 2022 to April 28, 2022.

Sample of 30 pregnant women in selected primary health centre in kanchipuram district, who met the inclusion criteria were selected for the study by using purposive sampling method instruments used for data collection were structured interview to determine preventive practices towards COVID-19 among pregnant women in selected primary health centre in kanchipuram district.

The investigator planned to collect the data for the period of one week. Prior written permission and consent were obtained from the H.O.D of Community medicine department-CHRI.

Chi-square test was used to find out the association the knowledge on preventive practice towards COVID-19 among pregnant women with selected demographic variables.

TO ASSESS THE KNOWLEDGE ON PREVENTIVE PRACTICES TOWARDS COVID-19 AMONG PREGNANT WOMEN.

The frequency distribution in the study shows that majority 3 (75%) were belongs to adequate knowledge COVID-19, 37(>50%) of them moderate knowledge COVID-19 and 20 (50 to 75%) of them inadequate knowledge COVID-19.

TO ASSOCIATE THE KNOWLEDGE ON PREVENTIVE PRACTICES TOWARDS COVID-19 AMONG PREGNANT WOMEN WITH SELECTED DEMOGRAPHIC VARIABLES

Shows that there is significant association of preventive practices towards COVID-19 among pregnant women with demographic variable like occupation. But there is no significant association between preventive practices towards COVID-19 among pregnant women with demographic variables like age, religion, education level, source of information and gestational age.

CONCLUSION:

Although knowledge on COVID-19 among pregnant women was high, this did not reflect into pregnant women engaging in good COVID-19 preventive practices. There is a need to institute measures to improve COVID-19 preventive practices among pregnant women in Ghana. One of the ways of achieving this is by extending the media campaign to rural areas, where access to electronic media is limited. Also, efforts should be made to improve water, sanitation, and hygiene systems in communities as well as the free supply of facemask to the underprivileged.

We have conducted a research topic on a study to assess knowledge on preventive practices towards COVID-19 in selected primary health centre at Kanchipuram district, Tamil Nadu, India.

30 samples were collected

The study finding revealed that the

- ❖ **Age of Pregnant Women (Years)** in which majority (60%) were belongs to the age between 18-25 years, (33.3%) of them between 26-31 years and (6.6%) of them are above 31 years.
- ❖ **Religion** in which majority of (46.6%) were belongs to Hindu, (30%) of them are Muslim and (23.3%) of them are Christian.

- ❖ **Education Level** in which majority (46.6%) have degree, (43.3%) of women have primary/secondary education and (10%) of women are belongs to illiterate.
- ❖ **Occupation** in which majority (53.3%) are house wife, (23.3%) of women work in government employment and (23.3%) of women are work in private employer.
- ❖ **Source of Information** in which majority (43.3%) gained information from family & friends, (30%) gained information from social media specify and (26.6 %) gained knowledge from health care providers.
- ❖ **Gestational Age** in which majority (43.3%) were belongs to second trimester (4-6 months), (33.3%) were belongs to first trimester (1-3 months) and (23.3%) were belongs to third trimester (7-9 months).

NURSING IMPLICATIONS:

NURSING SERVICE:

- ✓ Nurse as an educator, leader, counsellor, motivator, supervisor and team member in various situation of work.

IMPLICATION FOR NURSING PRACTICE:

- Nurses should take the responsibility to ensure the safety of women and their infants.
- Nurses should provide psychological support as well as encourage pregnant women.
- Additional counselling session was arranged to the family, about COVID-19 during the data collection period.

IMPLICATION FOR NURSING ADMINISTRATION:

- Nursing administrator may use the study findings to improve the quality of caring the community. The concept of the extended role of nurse offers many opportunities for a nurse administrator to improve the quality of life of the public and health care professionals.
- The nurse administrator in the higher level of authority must hold discussion and meetings on the prevailing health status of the health care professionals. Based on that, the knowledge of community nurses can be assessed and related program can be planned and implemented.
- Administrator should organise in service education programs, refers a courses and workshops for health care professionals and encourage them to participate in this activity.

NURSING RESEARCH:

- The finding of the study shows that the majority of samples are at moderate level preventive practices towards COVID-19 among pregnant women.
- The study will motivate new researcher to conduct the same study with the different variable on large scale.

LIMITATIONS:

- Sample size was 30
- Setting was selected at primary health centre Kanchipuram district, Tamilnadu.

RECOMMENDATIONS:

- Studies are needed to develop standardized tool on preventive practices towards COVID-19.
- A similar study can be undertaken by using larger number samples.

SUMMARY:

- ❖ The study was done to determine the knowledge on preventive practices towards COVID-19 among pregnant women with selected demographic variables.
- ❖ The study finding revealed that the frequency and percentage distribution of demographic variables of preventive practices towards COVID-19 among pregnant women.
 - The findings shows that the chi-square value of Age of pregnant women in years 4.14.
 - The findings shows that the chi-square value of Religion 2.64.
 - The findings shows that the chi-square value of Education level 3.11.
 - The findings shows that the chi-square value of Occupation 48.50.
 - The findings shows that the chi-square value of Source of Information 6.57.
 - The findings shows that the chi-square value of Gestational age 7.05.

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PARTICIPANT INFORMATION SHEET (PIS)

Principal Investigator: NANDHINI A

Contact number: 9840875784

The title of the research project is **Assess the knowledge preventive practices towards COVID-19 among pregnant women in selected primary health centre, kanchipuram district**, Tamilnadu, India. The objectives are To assess the Knowledge on preventive practices towards COVID-19 among pregnant women, To associate the Knowledge on preventive practices towards COVID-19 among pregnant women with selected demographic variables. Non-experimental quantitative approach with a descriptive design will be used. The information from the participant will be collected through structured interview schedule on demographic variables preform and knowledge on COVID-19. Data will have collected from the participant is approximately 30 minutes. The study benefits are this research will provide the baseline data, which enables the future researchers to conduct evidence based research and help to create awareness COVID-19. The study is free from infection/risk. Complete freedom for the participate to withdraw from the research participation at any point of time without the loss of treatment benefits.

Consent form (for participants 18yrs-above 31yrs)

Pregnant Mother/ Legally accepted representative (LAR)

Participant's name:

Address:

Pregnant mother/LAR's name:

Title of the project:

Assess the knowledge on preventive practices towards COVID-19 among pregnant women seeking antenatal services at primary health centre, kanchipuram district, Tamilnadu, India.

The details of the study have been provided to me in writing and explained to me in my own language. I confirm that I have understood the above study and had the opportunity to ask questions. I understand that pregnant women participation in the study is voluntary and that I am free to withdraw pregnant mother at any time, without giving any reason, without the medical care that will normally be provided by the hospital being affected. I agree not to restrict the use of any data or results that arise from this study provided such a use is only for scientific purpose.

I have been given an information sheet giving details of the study. I fully consent for the participation of pregnant women in the above study.

Assent of pregnant women obtained (for participants 18yrs-above 31yrs)

Signature of pregnant mother/ LAR

_____Date:

Signature of the witness:

_____Date:

Signature of the investigator:_____

Date: _____

Annexure-6

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PARTICIPANT INFORMATION SHEET

Purpose:

This Performa is used to measure the demographic variables of pregnant women such as (Age, Religion, Area of living, Education, Occupation, Source of information, Gestation age).

Instruction: The investigator will collect the information through interviewing the pregnant women.

Sample No:

1. Age (years):

- a. 18-25
- b. 26-31
- c. above 31

2. Religion:

- a. Hindu
- b. Muslim
- c. Christian

3. Area of living:

- a. rural
- b. suburban
- c. urban

4. Education level:

- a. illiterate
- b. primary/secondary education
- c. degree

5. Occupation:

- a. house wife
- b. government employment
- c. private employer

6. Source of information:

- a. social media-specify
- b. family and friends
- c. healthcare providers

7. Gestational age:

- a. First trimester (1-3 months)
- b. Second trimester (4-6 months)
- c. Third trimester (7-9 months)

STRUCTURED INTERVIEW SCHEDULE OF KNOWLEDGE ON PREVENTIVE PRACTICES TOWARDS COVID-19

Questions Regarding Knowledge on Preventive Practices towards COVID-19

1. What type of disease is COVID-19?

- a) communicable
- b) Both communicable and non-communicable
- c) Non-communicable

2. Which of the following are symptoms suggestive of COVID -19?

- a) fever and cough
- b) breathlessness and myalgia/weakness
- c) all the above

3. How can COVID –19 be transmitted?

- a) respiratory droplets
- b) flies/mosquitoes
- c) Meat products

4. Which of the following are preventive measures for COVID-19?

- a) social distancing
- b) hand hygiene
- c) wearing mask

5. What is the ideal duration of handwashing for hand hygiene?

- a) 20-30 secs
- b) 2-3 mins
- c) >3mins

6. What is the trend of prevalence of COVID-19 in India?

- a) increasing
- b) decreasing
- c) Do not know

7. Does COVID-19 pose additional risk of infection to the pregnancy?

- a) Yes
- b) No
- c) do not know

8. If the answer to question no: 7 is yes, then how?

- a) the foetus will be affected
- b) delivery will be complicated
- c) antenatal complications are associated

9. What is the treatment of cure available for COVID-19?

- a) vaccine
- b) homeopathic/allopathic
- c) no proven treatment yet

10. What is the prophylactic treatment available for COVID-19?

- a) hydroxychloroquine
- b) vaccine
- c) lemon & ginger/garlic

11. What should be the mode of delivery in COVID-19 patient?

- a) vaginal delivery
- b) operative vaginal delivery
- c) caesarean section

12. What are the feeding options for the baby born to COVID-19 mother?

- a. breastfeeding
- b. Expressed breast milk
- c. formula feed

13. What precautions should you ensure if you are tested COVID-19 positive, and you are with the baby?

- a. hand hygiene
- b. wear mask
- c. disinfecting/cleaning surfaces

14. If a pregnant female has been close contact with someone infected with COVID-19 virus, what should be period of isolation for observation of symptoms?

- a) 14 days
- b) 7 days
- c) >14 days

15. If you are residing in the red zone, what is your risk of having COVID-19?

- a) higher than the green zone
- b) green zone
- c) Lower than orange zone

SCORING KEY:

1.	(b)
2.	(c)
3.	(a)

4.	(c)
5.	(a)
6.	(b)
7.	(a)
8.	(a)
9.	(a)
10.	(b)
11.	(a)
12.	(a)
13.	(b)
14.	(a)
15.	(c)

KNOWLEDGE SCORING:

SCORE	PERCENTAGE %	INFERENCE
0-5	<50	Inadequate Knowledge
6-10	50-75	Moderate adequate Knowledge
>10	>75	Adequate knowledge

மமமமமமம - 2

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இ.18 -25
இ. 26-31
இ. 31மமம மமம

2.மமம

இ. மம F
இ. மமம மமம ம.
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3.மமம மம மமம

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இ. மமமம / மமமமமமம மம மம.
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4.மமமமமம

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இ. மமம மமமமமம மம

இ. இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை

5.மமமமமமம மமமமமம

இ. இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை

இ. இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை

இ. இலக்கணத்தினை **F** இலக்கணத்தினை இலக்கணத்தினை

6.மமமமமமம மம **F**

இ. இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை (1-3)

இ. இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை (4-6)

இ. இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை இலக்கணத்தினை (7-9)

மமமமமமமமம மமமம மமமமமமமமம, மமமமமமம-19
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1. மமமமமமம-19 மமம ம F மமம ம மமமமமம மமமம?

- இ. இஇஇஇஇ இஇஇஇஇஇஇஇஇஇ F
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- இ. இஇஇஇஇ இஇஇஇஇ இஇஇஇஇஇ F

2. மமமம மமமமமமமமமமம மமமமமம -19 மமமம மமமம
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- இ. இஇஇஇஇஇ இஇஇஇ இ இஇஇஇ
- இ. இஇஇஇஇஇஇஇஇஇஇ இஇஇ இ இஇஇஇஇ
- இ. இஇஇ இஇஇ இஇஇஇ F இ

3. மமமமமமம -19 மமம மமமம மமமமமமம F?

- இ. இஇஇஇஇஇ F இஇஇஇ
- இ. இஇஇஇஇ / இஇஇஇஇஇஇஇஇ
- இ. இஇஇஇ இஇஇஇஇஇஇஇ

4. மமமம மமமமமமமமமமம மமமமமம - 19 மமமம
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- இ. இஇஇ இஇஇஇஇஇ.
- இஇ இஇஇஇஇஇஇ
- இ. இஇ இஇஇஇ இஇஇஇஇ

5. மம மமமமமமமமமமமமமம மம மமமமமமமமமமம மமமம
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- இ. 20-30 இஇஇஇஇஇஇஇஇ.
- 2-3 இஇஇஇஇஇ இஇ இ.
- >3 இஇஇஇஇஇ இஇ

6. மமமமமமமமமம மமமமமம 19 மமமமமம மமமமமம மமம?

- இ. இஇஇஇஇஇ F இஇஇஇஇ F
- இ. இஇஇஇஇ F
- இ. இஇஇஇஇஇஇஇ

**7.மமமமமமமம மமமமமமமமம மமமமமமம-19
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- இ. இஇஇ
- இ. இஇஇஇஇஇ F இ.
- இஇஇஇஇ

8. மமமமமம மமம :7மமமமம மமமமம மமம மமமமம, மமமமமம?

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9.மமமமமமம 19 மமமமம ☐ மமமம?
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- இ. இ இஇஇஇஇஇஇஇஇ / இஇஇஇஇஇஇ இ. இஇஇ
- F இஇ இஇஇஇஇஇஇஇஇஇஇஇஇஇஇ இஇஇஇஇஇ இ இஇஇஇஇ

10.மமமமமமம-19 மமமம மமம ம மமமமம ☐ மமமம F?
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- இ. இஇஇஇஇஇஇ இஇஇஇ இஇ இஇஇஇஇ/இஇஇஇ இஇ

**11.மமமமமமம-19 மமமமமமமமமமமம மமமமம
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**12.மமமமமமம- 19மமமம மமமமமம மமமமமமமமமமம மமம ம மமமம
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**13.மமமம மமம மமமமமமம -19 மமமமமமமமமமமமமமமமமமம
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- இ. 7 இஇஇஇஇஇஇ
- இ. 14 இஇஇஇஇஇஇஇஇஇஇஇ இஇஇஇ

15.மமமம மமம மமமமமமம மமம மமமமமமமம மமமமமமமமமமமமம
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- இ. இஇஇ இ. □ இஇஇ இஇஇஇஇஇஇ இஇஇ இஇஇஇஇஇஇ இஇஇஇஇஇஇ
 இஇஇ
- இ. இஇஇஇஇஇஇ இஇஇ இஇஇஇஇஇஇ இஇஇ இஇஇஇஇஇஇ

