

To Study The 20 Covid-19 Positive Pregnant Women In Indore(M.P.) (Risk Factors, Clinical Symptoms of Covid-19 Virus, Effect of Education and Effect of Proper Nutrition In The Management of The Disease Based on Biological Data)

Paper Submission: 15/02/2021, Date of Acceptance: 26/02/2021, Date of Publication: 27/02/2021



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Abstract

This is the study of covid-19 positive pregnant women in Indore based on biological data collected from government primary healthcare centers Indore; in these studies we have prepared research questions on covid-19 positive pregnant women. We have tried to find out the answers based on biological data of the patients. The risk factor, most common symptoms of covid-19 disease, and the effect of nutrition management & education level of the patients have been studied. We have made a questionnaire for the systemic review of the studies.

Keywords: Respiratory Illness-Disease Caused By Infection, Headache-Painful Sensation In any Part of Head, Weakness-Decrease In The Strength In One Or More Muscles.

Introduction

Coronavirus disease is a viral disease caused by a newly coronavirus. People got infected with the COVID-19 virus experienced mild to moderate cough, fever and respiratory illness, weakness, loose motion some people have headache too as a symptom of covid-19 disease. People with old age, and with medical problems like heart disease, diabetes, chronic respiratory disease (asthma), and cancer are more likely to develop serious illness. Pregnant women are at high risk because the effect on covid-19 on them during and after delivery of the baby. There is no covid-19 vaccine yet in the world for the pregnant women to deal with the disease, so precautions, nutritional management and self-care are the most important strategy to deal with the covid-19 disease in pregnant women.

We define pregnant women as confirmed covid-19 if they had laboratory confirmation of covid-19 disease and clinical signs of the disease.

Pregnancy is a period of about 9 months. It is the period when the fetus i.e. the unborn baby grows inside the woman's body. The fetus takes all the nutrients required for its growth from the mother's body. The fetus gets nourished by the placenta which is the spongy tissue that develops in the uterus only during pregnancy. The fetus is attached to the mother through the umbilical cord which in turn is attached to the placenta. Within the placenta oxygen, nutrients and waste products are exchanged between the mother's blood and that of the fetus.

Objective of the Study

To Study the 20 Covid-19 Positive Pregnant Women in Indore (M.P.), Risk Factors, Clinical Symptoms of Covid-19 Virus, Effect of Education and Effect of Proper Nutrition in the Management of the Disease Studied based on Biological Data.

Recommended Dietary Intakes for The Pregnant Woman According to RDA (2020)

Nutrients	RDIs	Sedentary	Moderate	Heavy
Weight	55+10	65	65	65
Calories (kcal)	+350	2010	2480	3070
CHO(g/d)	135	135	135	135
Protein (g)	+7.6(2 nd trimester) +17.6 (3 rd trimester)	43.9 (2 nd trimester), 54.9 (3 rd trimester)	43.9 (2 nd trimester), 54.9 (3 rd trimester)	43.9 (2 nd trimester), 54.9 (3 rd trimester)
Calcium (mg)	800	800	800	800
Magnesium(mg/d)	320	320	320	320
Iron (mg/d)	32	32	32	32
Vitamin A (µg/d)	406	406	406	406
Thiamine (mg/d)	1.6	1.6	1.6	1.6
Riboflavin (mg/d)	2.3	2.3	2.3	2.3
Niacin (mg/d)	+2	11	14	17
Ascorbic acid (mg/d)	55+10	65	65	65
Folic acid (µg/d)	480	480	480	480
Vitamin B12 (µg/d)	2+0.2	2.2	2.2	2.2
Fats/oil visible (g)	30	30	30	30

Data source

The data were collected from the government hospital primary health center Indore from (1-8-2020 to 30-11-2020) time.

Methodology

Our systemic study is based on biological data collected by government primary health centers Indore, we have prepared research questions on covid-19 positive pregnant women. We have tried to find out the answers based on biological data of the patients.

1. Selection is done on the test result of covid-19 test the data collected from different fever clinic in Indore where covid-19 test has been done by health care staff, primary health center hospital Indore from (1-08-2020 to 30-11-2020).
2. The clinical test data collected from the government organization when they (pregnant women) found covid-19 positive, like hemoglobin, weight, blood pressure. and symptoms of covid-19.
3. Change in diet done by the health care staff according to the symptoms of covid-19 disease in pregnant women.
4. Home isolation and other precautions followed by covid-19 positive pregnant women under treatment.
5. Based on collected data of 20 covid-19 positive pregnant women, we report our findings on the prepared questionnaires.

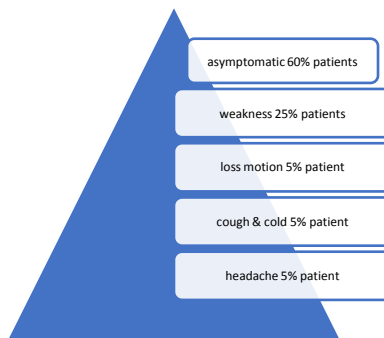
We have made a questionnaire and tried to get their answers.

1. What are common symptoms of covid-19 in all the positive pregnant women???
2. How many women were at high risk of covid-19 / or they were suffering from any other diseases???
3. How many pregnant women were overweight?
4. How many pregnant women 30+???
5. What are their living standards like they are maintaining good hygiene or not?
6. What is the literacy level in the patients????
7. Effect of nutrition management on covid-19 positive pregnant women.

Result & Discussion-1

Pregnant and recently pregnant women with covid-19 diagnosed in this study are less likely to manifest symptoms of fever and myalgia or shortness of breath. Out of 20 women (12 patients) (60%) Asymptomatic, (5 patient) (25%) were weak, one patient had Loose motion (one patient) (5%), one patient had cough and cold (one patient) (5%) and one patient had headache, (one patient) (5%). According to the observation table, the 20 covid-19 positive pregnant women show the following symptoms of covid-19.

1. Asymptomatic (12 patients) (60%)
2. Weakness (5 patient) (25%)
3. Loose motion (one patient) (5%)
4. Cough and cold (one patient) (5%)
5. Headache. (one patient) (5%)



Pyramid (FIGURE-1), Symptoms of Covid-19 Positive Pregnant Women

Mostly women were asymptomatic, and none of the pregnant women shown the symptoms of fever and breathlessness which are the prime symptoms of covid-19.

Risk factors for severe covid-19 in 20 pregnant women include increasing maternal age (30 pulse age,15%), high body mass index that 4(8%) women were overweight, and pre-existing comorbidities like previous miscarriage, more than 3 children (Woman who had lost her previous child (2),10%, Women had caesarean delivery before. (2)-10%, Women have more than 3 kids. (2) ,10%).

The risk factor associated with covid-19 cases in the 20 pregnant women was the following.

1. Woman suffering from diseases such as diabetes, heart disease, high blood pressure. (0) (0%).
2. Age below 18 years or above 35 years. (3, 35 age or above 35) (15%).
3. Woman who had lost her previous child. (2) (10%).
4. Women had caesarean delivery before. (2) (10%).
5. Women have more than 3 kids. (2) (10%).

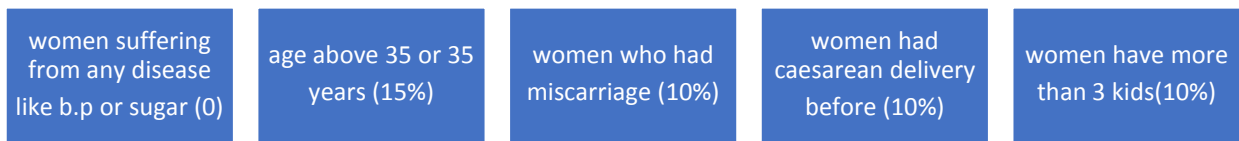


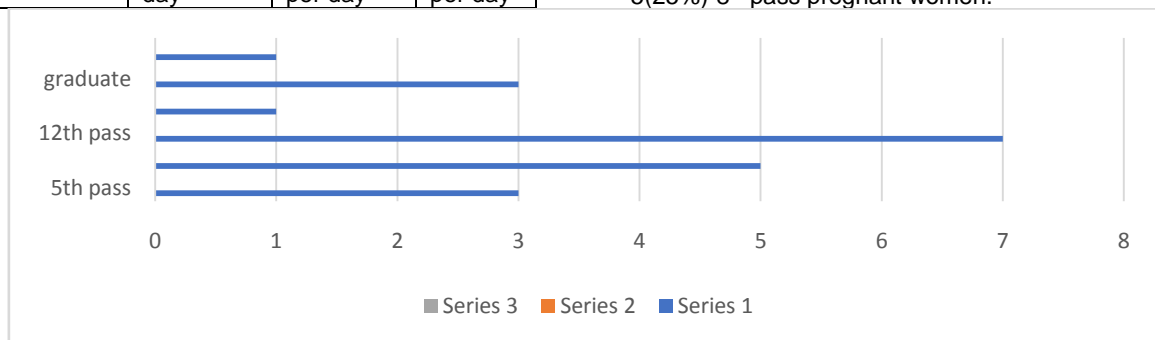
Figure-2 Risk factors of covid-19 positive pregnant women

Nutrition management plays an especially important role in the management of covid-19 symptoms as till, yet no medicine is available to treat covid-19 disease. Diet based on the symptoms of the disease is given to the covid-19 positive pregnant women.

Symptoms of the disease	Protein (gm)	Calories (kcal)	Fat (gm)
Asymptomatic and weakness	60 gm per day	2700 kcal per day	30 gm per day
Loose motion	40 gm per day	2500 kcal per day	30 gm per day

Cough & cold	60 gm per day	2700 kcal per day	30 gm per day
Headache	60 gm per day	2700 kcal per day	30 gm per day

Education plays an important role in controlling the disease, in this study we found only 3(15%) pregnant women who were highly qualified were infected by covid-19 infection, 12th pass pregnant women are 7(35%) out of 20 and 3(15%)-5th pass and 5(25%)-8th pass pregnant women.



(F.NO.-3) Education of covid-19 Positive Pregnant Women

1. This chart shows that education factor plays an important role in covid-19 cases, only 3(15%)

pregnant women who were highly qualified were infected by covid-19 infection.

2. 12th pass pregnant women are 7(35%) out of 20 which shows education is important for the prevention of any infection.
3. 3(15%), 5th pass and 5(25%), 8th pass pregnant women in the list they belong to backward are where education is not an important parameter of persons character.

Conclusion

The study shows the following conclusion.

1. Most common primary symptoms of covid-19 disease have been identified in 20, covid-19 positive pregnant women.
2. The covid-19 positive pregnant women were already at high-risk pregnancy like obesity, previous miscarriages, overage.
3. Effect of education in controlling the COVID-19 disease in covid-19 positive pregnant women has been studied.

4. Nutrition management plays important role in controlling the symptoms of the Covid-19 disease in Covid-19 positive pregnant women.

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