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A comparative study to assess the psychological impact of covid among the pregnant mother

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Abstract
Introduction: The coronavirus disease 2019 (COVID-19) pandemic has recently become the most important issue in the world. Fear and worry about COVID, the impact of the state of emergency on daily life, and the difficulty in predicting the situation have caused much stress and have led to mental health problems.
Method: The researcher adopted quantitative approach were descriptive research design n was used to discuss the phenomenon. A total of 100 pregnant mothers each 50 from rural and urban areas were selected, who underwent inclusion to participate in this study. The tool section were categorized on two parts one includes demographic variable and another structured 22 item questionnaire.
Result: it had been clearly stated that among the mother of the rural areas, 21(42%) of the majority of the pregnant mothers had mild psychological impact, followed by the 18(36%) had no psychological impact of the COVID, 11(22%) had moderate impact of the COVID scenario and none had severe issues. Whereas, discussion about the pregnant mothers of the urban areas, 18(36%) had mild psychological stress, 15(30%) had moderate psychological issues like feeling of hyper arousal, avoidance during the COVID scenario.
Conclusion: The implementation of measures to contain COVID was estimated to negatively affect psychosocial family functioning and may have escalated the risk of depression among mothers.

Keywords: U.P.: Uttar Pradesh, H: Hypothesis, NS: Non Significant

Introduction
Background of the Study
Evidence of COVID and its relation to mental health issues has been published in different countries, and the psychological impact of COVID is already obvious, both in the general population and in people with existing mental disorders. On a clinical perspective, pregnant women have been susceptible to the SARS- CoV-2, but, differently from the Non-pregnant women of childbearing age, they may have a higher risk of developing symptomatic disease and thrombo-embolic consequences, given the pro-thrombotic background of pregnancy itself.

Need of the Study
In December 2019 an outbreak of the new coronavirus pneumonia disease (COVID-19), of unknown etiology, appeared in Wuhan, the capital of Hubei. Thus, in March 2020, a few months after the onset of COVID-19, the World Health Organization (WHO) declared a pandemic caused by the new disease. In this line, different studies conducted during the initial phases of expansion of the previous pandemic caused by Severe Acute Respiratory Syndrome (SARS) showed an increase in psychiatric disorders. These disorders included: anxiety, depression, panic attacks, psychotic symptoms and even cases of suicide. One particularly vulnerable group could be pregnant women due to their condition. In fact, it is well known that during pregnancy the likelihood of experiencing mental disorders increases. For example, 22% of pregnant women have anxiety and 12% experience depression. One of the statistical survey conducted in Japan stated that an online EPDS-based survey of pregnant women during the COVID pandemic was conducted in Japan, the respondents were not compared with a control group that reflected the situation before the COVID pandemic.

Problem statement
A comparative study to assess the psychological impact of COVID among the pregnant mother in selected rural and urban area in Saharanpur (U.P.) India.

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Objectives of the study

- To assess the prevalence of psychological impact of COVID among pregnant mothers living in the urban areas of Saharanpur U.P.
- To assess the prevalence of psychological impact of COVID among pregnant mothers living in the rural areas of Saharanpur U.P.
- To compare the psychological impact of COVID among the pregnant mothers living in rural and urban areas of Saharanpur U.P.

To explore the association between the psychological impact score with demographic variables of pregnant mothers both living in the rural and urban areas of Saharanpur U.P.

Hypothesis
H₁: There will be significant difference between impact of COVID among the pregnant mother in selected rural and urban area.
H₂: There will be a significant association of psychological impact score with selected socio- demographical variables at the level of $p \leq 0.05$.

Assumptions
- The COVID had some psychological distress among the pregnant mothers residing in the selected rural and urban areas of Indore.

Delimitations
- The pregnant mothers residing in the selected rural and urban areas.
- The sample size is limited to 100.
- The study is limited to 4 weeks.

Research Methodology
Research Approach
In this study a quantitative approach was used to assess the psychological impact of COVID among the pregnant mother in selected rural and urban area in Saharanpur U.P., India.

Research Design
In this present study the researcher adopted a non-experimental descriptive research design was applied was used to assess the psychological impact of COVID among the pregnant mothers.

Variables
Research Variable: In the present study the research variable refers to the assessment of psychological impact towards COVID among the mothers.

Dependent variable
In this present study the dependent variable includes understanding the demographic characteristics regarding psychological impact of COVID among the rural and urban mothers residing in the selected rural and urban areas using 22 point Lekert scale.

Demographic Variable
In this demographic variable include age, parity, gestational age, present maternal morbidity issues, educational level, monthly income, use of social media to get COVID information, present history of COVID infection and whether vaccinated with COVID vaccine.

The setting
The present study was conducted in selected rural and urban areas of Saharanpur U.P.

The population
Target Population: In the present study, the target population consisted of all the mothers residing in the Saharanpur U.P.

Accessible Population
In this present study, the accessible population were the mothers residing in the selected rural and urban areas of Saharanpur U.P.

The sample & sample selection criteria
In the present study the sample comprises of 100 pregnant mothers (50+50 each from rural and urban areas.

Sampling technique
In present study the samples were selected through a non-probability convenient sampling technique.

Criteria for the selection of the samples
Inclusion Criteria
- The mothers who are available at the time of data collection
- The mothers who are willing to participate.
- The mothers residing in the selected rural and urban areas of Indore.

Exclusion Criteria
- The mothers not available at the time of data collection.
- The pregnant mothers who are chronically ill.

Result
Section I: Characteristics and Main Features of Subjects

Age	Rural Areas		Urban Areas	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
18-25 Years	18	36%	13	26%
26-30 Years	24	48%	17	34%
31-35 Years	06	12%	16	32%
Above 35 Years	02	04%	04	08%
Parity	Rural Areas		Urban Areas	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Primigravida	24	48%	22	44%
Multigravida	26	52%	28	56%

Gestational Age	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
First Trimester	14	22%	22	44%
Second Trimester	23	46%	18	36%
Third Trimester	13	26%	10	20%
Present Maternal Morbidity Issues	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Diabetes	12	24	16	32
Hypertension	10	20	14	28
Multiple Pregnancy	02	04	03	06
Heart Disorder	00	00	00	00
Epilepsy	01	02	02	04
No issues	25	50	15	30
Educational Level	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Primary & Secondary	21	42	11	22
Higher & Higher Secondary	14	28	16	32
Diploma	12	24	14	28
Graduation & Post Graduation	03	06	09	18
Employment Status	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
House wife	23	46	18	36
Private Job	10	20	16	32
Government Job	03	06	06	12
Business	06	12	07	14
Labor/Daily Wages	08	16	03	06
Monthly Income	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Less than 15000	05	10%	02	04%
15001-20000	14	28%	16	32%
20001-30000	21	42%	26	52%
More than 30000	10	20%	06	12%
Use of Social Medial to get COVID-19 information	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Not using social media	16	32%	06	12%
Less than 2 hours per day	28	56%	20	40%
2 hour per day	04	08%	14	28%
2-4 hours per day	02	04%	09	18%
Average 6 hours a day	00	00%	01	02%
Previous History of COVID infection	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Yes	12	24%	16	32%
No	38	56%	34	68%
COVID Vaccination History of Pregnant Mothers	**Rural Areas**		**Urban Areas**	
	Frequency (N=50)	Frequency Percentage	Frequency (N-50)	Frequency Percentage (%)
Only one dose	01	02%	00	00
Both one and second dose	26	52%	16	32%
All the dose including booster dose	21	42%	34	68%
Not taken vaccination	02	04%	00	00%
Total	50	100%	50	100%

Compare the prevalence of psychological impact of covid among pregnant mothers in the selected rural and urban areas of Indore

Table 1: Comparison between the Psychological impact of COVID among the pregnant mothers of rural and urban areas

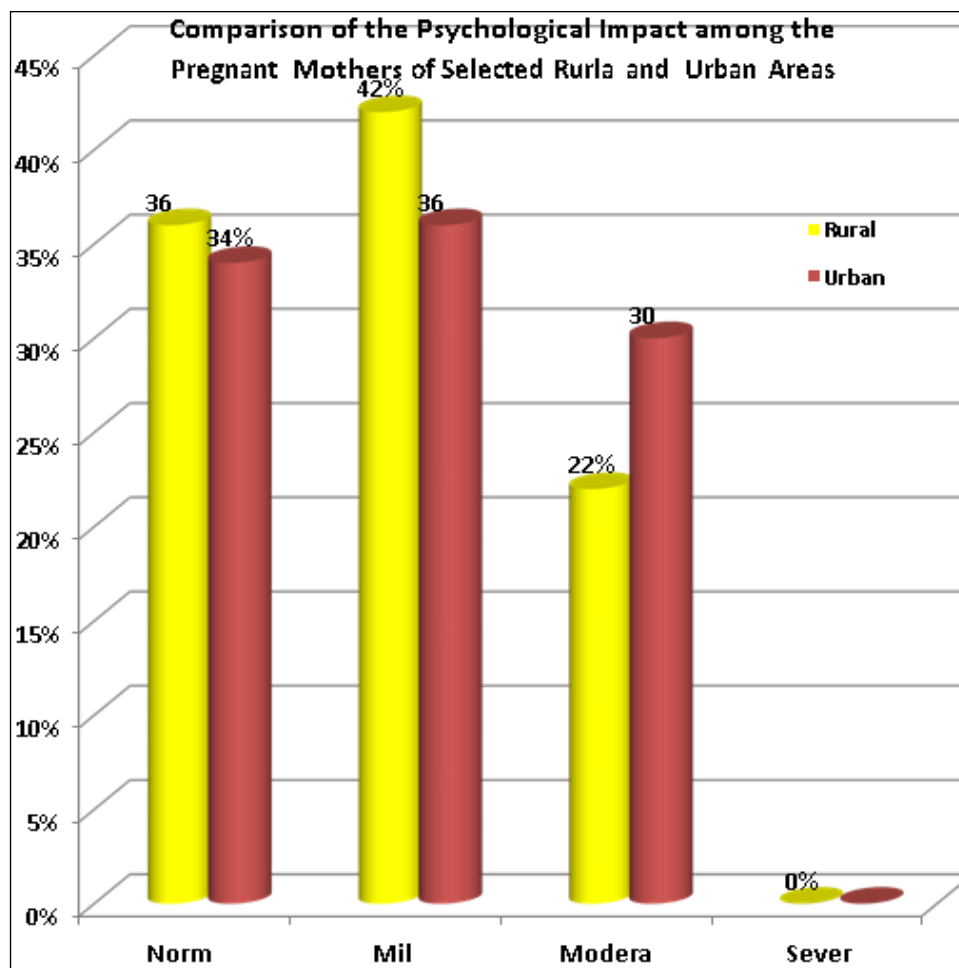| S. No.	Overall Psychological Impact Score	Score	Score of Mothers at Rural Areas		Score of Mothers at Urban Area	
			No.	%	No.	%
1.	Normal	0-23	18	36%	17	34%
2.	Mild	24-32	21	42%	18	36%
3.	Moderate	33-36	11	22%	15	30%
4.	Severe	>=37	00	00%	00	00%
	Total		50	100%	50	100%

Fig 1: Bar diagram Depicting Representing comparison of psychological impact among the pregnant mothers of rural and urban pregnant mothers

Section IV: Find out the Association of Psychological Impact Score of Pregnant Mothers with Selected Demographic Variables

Table 2: Association of Psychological Impact Score of Pregnant Mothers with Selected Demographic Variables Residing at Urban Areas

Sl. No.	Demographic Variable	No	Mild	Moderate	Chi-square value	p-value	Significance
01.	**Age**						
A	18-25 years	06	10	02			
B	26-30 years	09	09	06	2.14	0.86	NS
C	31-35 years	03	02	01			
D	Above 35 years	00	00	01			
2.	**Parity**						
A	Primigravida	09	09	06	0.54	0.822	NS
B	Multigravida	09	12	05			
3	**Gestational Age**						
A	First Trimester	06	03	05			
B	Second Trimester	09	11	03	4.92	.29	NS
C	Third Trimester	03	07	03			
4.	**Present Morbidity Issues**						
A	Diabetes	02	06	04			
B	Hypertension	03	04	03			
C	Multiple Pregnancy	01	01	00	5.763	.6736	NS
D	Heart Disorder	00	00	00			
E	Epilepsy	01	00	00			
F	No issues	11	10	04			
5	**Educational Level**						
A	Primary & Secondary Education	08	10	03			
B	Higher and Higher Secondary Education	04	06	04	1.848	0.933	NS
C	Diploma	05	04	03			
D	Graduation and Post-Graduation	01	01	01			
6	Employment Status				10.13	0.255	NS

		No	Mild	Moderate	Chi-square value	p-value	Significance
A	House Wife	09	07	07			
B	Private Job	03	05	02			
C	Government Job	01	02	00			
D	Business	02	03	01			
E	Labor or Daily Wages	03	04	01			
7.	Monthly Income						
A	Less than 15000	03	01	01			
B	15001-2000	04	07	03	2.21	0.898	NS
C	20001-3000	08	08	05			
D	More than 30000	03	05	02			
8.	Use of Social Media To Get COVID information						
A	Not using social media	06	08	02			
B	Less than 2 hours per day	10	12	06			
C	2 hour per day	01	00	03	8.42	0.208	NS
D	2-4 hours per day	01	01	00			
E	Average 6 hours a day	00	00	00			
09.	Previous history of COIVD infection						
A	Yes	06	04	02	1.341	0.510	NS
B	No	12	17	09			
10	Vaccinated with COVID vaccine						
A	Only one dose	00	01	00			
B	Both one and second dose	08	13	05	7.68	0.262	NS
C	All the dose including booster dose	10	05	06			
D	Not taken vaccination	00	02	00			

Table 3: Association of Psychological Impact Score of Pregnant Mothers with Selected Demographic Variables Residing at Rural Areas

Sl. No.	Demographic Variable	No	Mild	Moderate	Chi-square value	p-value	Significance
1.	**Age**						
A	18-25 years	05	06	02			
B	26-30 years	07	05	05	4.402	0.62	NS
C	31-35 years	03	06	07			
D	Above 35 years	02	01	01			
2.	**Parity**						
A	Primigravida	11	05	06	4.978	0.83	NS
B	Multigravida	06	13	09			
3.	**Gestational Age**						
A	First Trimester	07	08	07			
B	Second Trimester	07	05	06	1.51	0.82	NS
C	Third Trimester	03	05	02			
4.	**Present Morbidity Issues**						
A	Diabetes	07	05	04			
B	Hypertension	03	05	06			
C	Multiple Pregnancy	01	01	01	3.10	0.97	NS
D	Heart Disorder	00	00	00			
E	Epilepsy	01	01	00			
F	No issues	05	06	04			
5.	**Educational Level**						
A	Primary & Secondary Education	04	03	04			
B	Higher and Higher Secondary Education	05	05	06	1.73	0.94	NS
C	Diploma	05	06	03			
D	Graduation And Post-Graduation	03	04	02			
6.	**Employment Status**						
A	House Wife	06	07	05			
B	Private Job	04	05	07			
C	Government Job	03	02	01	4.34	0.9825	NS
D	Business	03	02	02			
E	Labor or Daily Wages	01	02	00			
7.	**Monthly Income**						
A	Less than 15000	01	01	00			
B	15001-2000	04	08	04	4.907	0.555	NS
C	20001-3000	10	06	10			
D	More than 30000	02	03	01			
8.	**Use of Social Media To Get COVID information**						
A	Not using social media	02	03	01			
B	Less than 2 hours per day	07	05	08	5.08	0.74	NS
C	2 hour per day	05	06	03			
D	2-4 hours per day	02	04	03			

E	Average 6 hours a day	01	00	00			
9.	**Previous history of COIVD infection**						
A	Yes	06	07	03	1.47	0.47	NS
B	No	11	11	12			
10.	**Vaccinated with COVID vaccine**						
A	Only one dose	00	00	00			
B	Both one and second dose	08	05	03	2.236	0.36	NS
C	All the dose including booster dose	09	13	12			
D	Not taken vaccination	00	00	00			

Summary

The present chapter shows the data analysis on the matter regarding comparing the psychological impact of the COVID infection among the pregnant mothers residing in the selected rural and urban areas of Saharanpur U.P., India. Further on, for the description the analysis for divided into following sections frequency and Percentage Distribution Of Demographic Variables, evaluating the prevalence of psychological impact of COVID among pregnant mothers in the selected rural and urban areas of Indore, comparing the prevalence of psychological impact of COVID among pregnant mothers in the selected rural and urban areas of Indore and finding out the association of psychological impact score with selected demographic variables.

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