# Exploring Health and Well-being of Mothers during Pregnancy through Postpartum amidst the COVID 19 Pandemic in India

<sup>1</sup>Ritu Singh, <sup>2</sup>Vaishali V. Raval, and <sup>3</sup>Richard Fiene

<sup>1</sup>G.B.Pant University of Agriculture and Technology, Uttarakhand, India

<sup>2</sup>Miami University, Oxford, Ohio, USA

<sup>3</sup>The Pennsylvania State University, Pennsylvania, USA

Along with the isolation resulting from distancing requirement during COVID-19, women during pregnancy through postpartum may experience stress related to the possibility of their baby being infected with the virus, making it a critical period to explore their health and well-being. In the present study, 524 women (60.1% mothers postpartum) from India completed a survey rating their physical, cognitive, social, family, financial, and emotional health, indicating higher concerns for emotional and social health (M= 1.28, and 1.40, respectively on a 3-point scale). The findings will have implications for healthcare systems and promoting well-being for women during a vulnerable time.

#### **Preliminary Results Health**

Health Domains	Moms	Moms To Be	Significance
Physical	.90	.95	NS
Cognitive	1.12	1.07	NS
Social	1.44	1.35	.0001
Family	51	69	.0001
Financial	.79	.62	.001
Emotional	1.33	1.19	.006

Health Domains	Trimester I	Trimester II	Trimester III	Significance
Physical	1.14*	.80	1.04	.0001
Cognitive	1.24**	1.07	1.10	.001
Social	1.43	1.32	1.35	NS
Family	55*	59	85	.0001
Financial	.39	.84**	.47	.0001
Emotional	1.77**	.97	1.20	.0001

Health Domains	Baby's Age1-2mo	Baby's Age3-5mo	Baby's Age5-7mo	Significance
Physical	.75	1.05**	.77	.0001
Cognitive	1.09	1.22***	.95	.001
Social	1.41	1.49**	1.37	.002
Family	28	72**	34	.0001
Financial	1.05	.54**	1.01	.0001
Emotional	1.26	1.45**	1.18	.001

Location ->	COVID Green	COVID Orange	COVID Red	Significance
Physical	.72**	.96**	1.03**	.0001
Cognitive	.74**	1.13**	1.37**	.0001
Social	1.20**	1.40**	1.57**	.0001
Family	86**	46*	51*	.0001
Financial	.88**	.65*	.69*	.001
Emotional	.57**	1.44**	1.65**	.0001

Mom's Age	18-25yrs	26-30yrs	31-35yrs	36-40yrs	40+yrs	Significance
Physical	.98**	.94**	.96**	.68****	1.30****	.0001
Cognitive	1.29****	1.10***	1.08***	.91****	1.80****	.0001
Social	1.29***	1.40***	1.44***	1.32***	1.80****	.0001
Family	40*	51*	54*	-1.03****	50*	.0001
Financial	.84**	.90**	.42***	.77**	.33***	.0001
Emotional	1.60***	1.30***	1.25***	.97****	1.50****	.0001

Health Domains	Nuclear Family	Joint Family	Extended Family	Significance
Physical	.96	.94	.77**	.0001
Cognitive	1.04	1.18**	1.08	.0001
Social	1.42	1.39	1.37	NS
Family	63	49**	70	.002
Financial	.52	.93**	.79	.0001
Emotional	1.22	1.40**	1.11	.0001

Family Size	2-3	4-5	6-7	7+	Significance
Physical	.91*	1.00***	.84*	.83*	.0001
Cognitive	1.04**	1.17***	1.02**	1.30***	.0001
Social	1.44**	1.39*	1.39	1.35*	.05
Family	60	55	65	51	NS
Financial	.51**	.88**	.89**	.43**	.0001
Emotional	1.33*	1.30**	1.09***	1.51**	.0001

Mom's Education	High School	Post	Graduate	Post-Grad	Ph.D.	Significance
Physical	.60***	.80*	.85***	.95***	1.05****	.0001
Cognitive	.60****	1.10*	.99***	1.17**	1.23**	.0001
Social	1.30***	1.50**	1.23***	1.48**	1.48**	.0001
Family	-1.20****	60*	69**	41***	76**	.0001
Financial	1.50****	.80*	.80**	.60***	.75**	.0001
Emotional	.30****	1.10**	1.21**	1.43***	1.19**	.0001

Spouse's Education	High School	Post	Graduate	Post-Grad	Ph.D.	Significance
Physical	.60***	.40***	.90***	.97***	.95**	.0001
Cognitive	.60****	1.10*	1.05***	1.13***	1.30***	.0001
Social	1.30***	1.10****	1.35***	1.43****	1.59****	.0001
Family	-1.20****	.20****	72***	51****	69***	.0001
Financial	1.50****	2.00****	.58***	.69***	.66**	.0001
Emotional	.30****	1.00***	1.22***	1.36***	1.43***	.0001

Mom's Employ	Govt	Private	Business	Freelance	Unemploy	Significance
Physical	.95	.94	1.00	1.10	.90	NS
Cognitive	1.25****	1.05**	1.00*	.50****	1.11**	.0001
Social	1.55***	1.37**	1.20*	1.10***	1.40**	.0001
Family	58*	46**	60	-1.10***	63**	.001
Financial	.30**	.62***	.80*	.00***	.88***	.0001
Emotional	1.31***	1.12***	.10****	.90***	1.36***	.0001

Spouse's Employ	Govt	Private	Business	Freelance	Unemply	Significance
Physical	.71**	1.05***	.66**	1.09***	.71**	.0001
Cognitive	1.00***	1.13**	1.16**	1.26**	.89***	.0001
Social	1.31***	1.43**	1.34**	1.51**	1.41*	.0001
Family	79***	56****	30***	24***	94***	.0001
Financial	.11****	.73****	1.06****	1.36***	1.54**	.0001
Emotional	1.17***	1.29**	1.50***	1.49**	.92****	.0001

SES	Low	Low-Mid	High-Mid	High	Significance
Physical	.81***	1.09***	.94***	.60***	.0001
Cognitive	1.08*	1.21**	1.06*	1.00	.003
Social	1.36**	1.50***	1.41**	1.00***	.0001
Family	48**	54**	69***	-1.20***	.0001
Financial	1.10***	.79***	.33***	.00***	.0001
Emotional	1.31*	1.20*	1.26*	1.80***	.009

(\* - \*\*\*\*) = the number of significant inter-correlations across each row for each of the health domains: physical, cognitive, social, family financial, and emotional.

#### **Regression Analysis:**

Overall Health Score = 6 Health Domain (Physical + Cognitive + Social + Family + Financial + Emotional)

Health Score = Demo1 + Demo2 + ..... + Demo13 (R = .77; ANOVA = F = 67.49; p < .0001)

Demo 8, Location beta weight = .56; Demo 5, Family Type beta weight = .48.

### **Coping Strategies Preliminary Results**

Coping Strategies	Moms	Moms To Be	Significance
Emotional	1.22	1.22	NS
Problem	1.25	1.29	NS

<b>Coping Strategies</b>	Trimester I	Trimester II	Trimester III	Significance
Emotional	1.21	1.21	1.24	NS
Problem	1.27	1.27	1.32	NS

<b>Coping Strategies</b>	Baby's Age1-2mo	Baby's Age3-5mo	Baby's Age5-7mo	Significance
Emotional	1.23	1.21	1.21	NS
Problem	1.29	1.26	1.20	NS

Location ->	COVID Green	COVID Orange	COVID Red	Significance
Emotional	1.23	1.23	1.20	NS
Problem	1.27	1.28	1.24	NS

Mom's Age	18-25yrs	26-30yrs	31-35yrs	36-40yrs	40+yrs	Significance
Emotional	1.17	1.21	1.22	1.25	1.23	NS
Problem	1.25	1.28	1.25	1.26	1.25	NS

Coping Strategies	Nuclear Family	Joint Family	Extended Family	Significance
Emotional	1.24	1.19	1.24	NS
Problem	1.29	1.24	1.26	NS

Family Size	2-3	4-5	6-7	7+	Significance
Emotional	1.23	1.21	1.20	1.25	NS
Problem	1.30	1.26	1.22**	1.29	.04

Mom's	High School	Post	Graduate	Post-Grad	Ph.D.	Significance
Education						
Emotional	1.23	1.23	1.24	1.21	1.21	NS
Problem	1.30	1.17	1.30	1.26	1.23	NS

Spouse's Education	High School	Post	Graduate	Post-Grad	Ph.D.	Significance
Emotional	1.23	1.19	1.23	1.22	1.23	NS
Problem	1.30	1.29	1.27	1.26	1.30	NS

Mom's Employ	Govt	Private	Business	Freelance	Unemploy	Significance
Emotional	1.21	1.21	1.20	1.28	1.22	NS
Problem	1.27	1.25	1.38	1.49	1.26	NS

Spouse's Employ	Govt	Private	Business	Freelance	Unemply	Significance
Emotional	1.23	1.22	1.18	1.24	1.22	NS
Problem	1.28	1.26	1.24	1.29	1.30	NS

SES	Low	Low-Mid	High-Mid	High	Significance
Emotional	1.22	1.20	1.23	1.32	NS
Problem	1.27	1.25	1.27	1.38	NS

## **Selected Correlations**:

Coping x Health = -.12; p < .006

Health Domains	Coping Emotional	Coping Problem	Significance
Physical			NS
Cognitive	11	09	.0001
Social	10	10	.0001
Family			NS
Financial	09	09	.0001
Emotional			NS

Health Domains	Health Total	Significance	
Physical	.52	.0001	
Cognitive	.84	.0001	
Social	.69	.0001	
Family	.66 .0001		
Financial	.55	.0001	
Emotional	.69	.0001	

## **Descriptives (Frequencies):**

Demographic					
Status	Mom	Mom To Be			
	315	209			
Stage	Trimester I	Trimester II	Trimester III		
	32	92	85		
Child's Age	1-2months	3-5months	5-7months		
	31	154	80		
Mom's Age	18-25	26-30	31-35	36-40	40+
	45	238	150	77	14
Family Type	Nuclear	Joint	Extended		
	239	210	75		
Family Size	2-3	4-5	5-7	7+	
	174	197	114	39	
Residence	Green	Orange	Red		
	141	211	172		
Mom's Educ	HS	Post	Grad	Post-Grad	PhD
	19	17	153	252	83
Spouse Educ	HS	Post	Grad	Post-Grad	PhD
	19	16	140	316	33
Mom's Occ	Govt	Private	Business	Freelance	Unemployed
	64	139	3	9	309
Spouse Occ	Govt	Private	Business	Freelance	Unemployed
	100	313	57	24	30
SES	Low	Low-Mid	High-Mid	High	
	201	123	189	11	