Table 1: Socio-demographic parameters of the subjects:

|  |  |
| --- | --- |
| **Parameters** | **N (%)** |
| Demographic characteristics | |
| Age (years), mean ± SD | 25±3.9 |
| Residence  Urban  Rural  Semi-urban | 739(87.8)  45(5.3)  58(6.9) |
| Residence in containment zone | 19(2.3) |
| Education  Professional or honors  Graduate or postgraduate  Intermediate or post-high school diploma  High school certificate  Middle school certificate  Primary school certificate  Illiterate | 3(0.4)  118(14)  73(8.7)  238(28.3)  283(33.6)  96(11.4)  31(3.7) |
| Family income (rupees per month)  ≥ 78,063  39033-78062  29200-39032  19516-29199  11708-19515  3908-11707  ≤ 3907 | 2(0.2)  15(1.8)  29(3.4)  85(10.1)  220(26.1)  439(52.1)  52(6.2) |
| Occupation  Full-time job  Part-time job  Does not work | 19(2.3)  76(9.0)  747(88.7) |
| Occupation of the family head  Full-time job  Part-time job  Does not work | 482(57.2)  359(42.6)  1(0.1) |
| Married | 841(99.9) |
| Family type  Nuclear  Joint | 365(43.3)  477(56.7) |
| Husband supportive | 808(96.0) |
| Addiction in husband | 415(49.3) |
| Overcrowding | 502(59.6) |
| Domestic abuse | 52(6.2) |
| Financial loss during COVID pandemic | 748(88.8) |
| N, number of subjects; %, percentage; SD, standard deviation | |

Table 1: Baseline parameters of the subjects (continued):

|  |  |
| --- | --- |
| Parameters | N (%) |
| Clinical characteristics | |
| Pregnant  1st trimester  2nd trimester  3rd trimester | 271(32.2)  2(0.7)  16(6.0)  253(93.3) |
| Gravida  1  2  3  4  ≥5 | 415(49.3)  326(38.7)  87(10.3)  10(1.2)  4(0.5) |
| Postpartum  1st week  2nd week | 571(67.8)  534(93.5)  37(6.5) |
| Parity  Primiparous  Multiparous | 521(61.9)  321(38.1) |
| Gestational complication | 103(12.2) |
| Past history of Obstetric complications | 137(16.3) |
| Previous history of child loss | 38(4.5) |
| High risk pregnancy | 184(21.9) |
| Medical comorbidities | 154(18.3) |
| Type of comorbidity  Diabetes  Hypertension  Hypothyroid  Renal diseases  Cardiac diseases | 4(0.4)  46(5.5)  99(11.7)  1(0.1)  1(0.1) |
| Addiction | 3(0.3) |
| Outpatient | 52(6.2) |
| Inpatient | 790(93.8) |
| Past history of psychiatric illness | 28(3.3) |
| SARI symptoms | 47(5.6) |
| Possible contact history | 13(1.5) |
| COVID-19 infected  Mild disease  Moderate disease | 172(20.4)  103(59.9)  69(40.1) |
| SARI, severe acute respiratory infections. | |

Table 2: Comparison of socio-demographic and mental health parameters among COVID-19 infected (Group 1) and COVID-19 non-infected (Group 2) subjects:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameters** | **Overall (N=842) (%)** | **Group 1(N=172) (%)** | **Group 2(N=670) (%)** | **P** |
| **Socio-demographic parameters** |  |  |  |  |
| Age, mean±SD | 25±3.9 | 25.9±4.6 | 24.8±3.7 | **0.001** |
| Education, high school or higher | 432(51.3) | 102(59.3) | 330(49.3) | **0.02** |
| Low Income category | 491(58.3) | 95(55.2) | 396(59.1) | 0.358 |
| Unemployed at present | 747(88.7) | 152(88.4) | 595(88.8) | 0.873 |
| Unplanned pregnancy | 247(29.3) | 27(15.7) | 220(32.8) | **0.000** |
| Postpartum state | 571(67.8) | 107(62.2) | 464(69.3) | 0.078 |
| Primiparous | 521(61.9) | 111(64.5) | 410(61.2) | 0.421 |
| Previous child loss | 38(4.5) | 7(4.1) | 31(4.6) | 0.754 |
| Past obstetric complications | 137(16.3) | 33(19.2) | 104(15.5) | 0.246 |
| Gestational complication in present pregnancy | 103(12.2) | 47(27.3) | 56(8.4) | **0.000** |
| High-risk pregnancy | 184(21.9) | 47(27.3) | 137(20.4) | **0.052** |
| Medical co-morbidities | 154(18.3) | 55(32.0) | 99(14.8) | **0.000** |
| Past history of psychiatric illness | 28(3.3) | 7(4.1) | 21(3.1) | 0.542 |
| **Mental health Parameters** |  |  |  |  |
| Peripartum depression  Possible depression (EPDS≥13)  Probable depression (EPDS≥14) | 383(45.5)  317(37.6) | 73(42.4)  56(32.6) | 310(46.3)  261(39.0) | 0.37  0.12 |
| Peripartum anxiety (EPDS-3A≥ 4) | 763(90.6) | 149(86.6) | 614(91.6) | **0.04** |
| COVID-19 related anxiety, median (range) | 15 (8-28) | 17 (10-28) | 15 (8-25) | **0.00** |
| N, number of subjects; %, percentage; SD, standard deviation | | | | |

Table 3: Comparison of knowledge, attitude and practice regarding COVID-19 disease among COVID-infected (Group 1) and non-infected (Group 2) subjects:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Questions** | **Overall (N=842) (%)** | **Group 1(N=172) (%)** | **Group 2(N=670) (%)** | **P** |
| **Knowledge** | | | | |
| How do you come to know about COVID-19?  Social media  Television  Newspaper  By person | 505(60.0)  565(67.1)  170(20.2)  533(63.3) | 127(73.8)  132(76.7)  37(21.5)  116(67.4) | 378(56.4)  433(64.6)  133(19.9)  417(62.2) | **0.000**  **0.003**  0.628  0.207 |
| Do you have awareness regarding the symptoms and mode of transmission? | 798(94.8) | 157(91.3) | 641(95.7) | **0.021** |
| Awareness regarding the preventive measures | 802(95.2) | 157(91.3) | 645(96.3) | **0.006** |
| **Attitude** | | | | |
| I feel that this could affect my pregnancy and baby | 517(61.4) | 135(78.5) | 382(57.0) | **0.000** |
| I feel nervous outside home | 675(80.2) | 136(79.1) | 539(80.4) | 0.686 |
| I feel that I should avoid hospital visit to prevent infection | 647(76.8) | 137(79.7) | 510(76.1) | 0.327 |
| I think breastfeeding can transmit the virus to my child | 459(54.5) | 111(64.5) | 348(51.9) | **0.003** |
| **Practice** | | | | |
| I wash my hands with soap or use sanitizers | 87(10.3) | 41(23.8) | 46(6.9) | **0.000** |
| I wear face mask | 153(18.2) | 30(17.4) | 123(18.4) | 0.781 |
| I maintain social distancing | 278(33.0) | 63(36.6) | 215(32.1) | 0.259 |
| N, number of subjects; %, percentage; SD, standard deviation | | | | |

Table 4: Factors predisposing to depression in pregnant and postpartum:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Univariate analysis** | | | **Multivariate analysis** | | |
| **Parameters** | No depression (EPDS<14)  N=525(62.4) | Probable Depression (EPDS≥14)  N=317(37.6) | P value | OR | 95% CI | P value |
| **Individual factors** | | | | | | |
| High maternal age | 9(52.9) | 8(47.1) | 0.418 |  |  |  |
| Low maternal age | 254(62.1) | 155(37.9) | 0.885 |  |  |  |
| Low maternal education | 253(61.7) | 157(38.3) | 0.707 |  |  |  |
| Monthly income  Low  Mid  High | 305(62.1)  192(63)  28(60.9) | 186(37.9)  113(37.0)  18(39.1) | 0.951 |  |  |  |
| Medical co-morbidities | 81(52.6) | 73(47.4) | **0.006** | 1.4 | 0.92-2.12 | 0.117 |
| Past history of psychiatric illness | 8(28.6) | 20(71.4) | **0.000** | **4.2** | **1.82-9.93** | **0.001** |
| Family history of psychiatric illness | 3(33.3) | 6(66.7) | 0.088 |  |  |  |
| **Family related factors** | | | | | | |
| Domestic violence | 20(38.5) | 32(61.5) | **0.000** | **2.4** | **1.16-5.10** | **0.019** |
| Addiction in husband | 252(60.7) | 163(39.3) | 0.336 |  |  |  |
| Lack of family support | 14(41.2) | 20(58.8) | **0.009** | 0.7 | 0.28-1.73 | 0.445 |
| Nuclear family | 214(58.6) | 151(41.4) | 0.051 |  |  |  |
| Overcrowding | 324(64.5) | 178(35.5) | 0.111 |  |  |  |
| Financial difficulties during COVID pandemic | 468(62.4) | 317(37.6) | 0.716 |  |  |  |
| **Pregnancy-related factors** | | | | | | |
| Unplanned/Unwanted pregnancy | 145(58.7) | 102(41.3) | 0.159 |  |  |  |
| Antenatal state | 153(56.5) | 118(43.5) | **0.015** | 0.8 | 0.59-1.15 | 0.821 |
| Outpatient | 25(48.1) | 27(51.9) | **0.028** | 1.3 | 0.73-2.57 | 0.325 |
| Past Obstetric complications | 68(49.6) | 69(50.4) | **0.001** | **1.5** | **1.01-2.27** | **0.042** |
| Gestational complication | 51(49.5) | 52(50.5) | **0.004** | 1.3 | 0.82-2.20 | 0.233 |
| Primiparous | 325(62.4) | 196(37.6) | 0.983 |  |  |  |
| Previous history of child loss | 15(39.5) | 23(60.5) | **0.003** | 1.7 | 0.84-3.72 | 0.130 |
| N, number of subjects; %, percentage; SD, standard deviation | | | | | | |

Table 5: Correlation between the EPDS score, EPDS anxiety sub-score and COVID-19 anxiety score:

|  |  |  |  |
| --- | --- | --- | --- |
| Scores | EPDS total score | EPDS anxiety sub-score | COVID-19 anxiety score |
| EPDS total score | 1 | 0.787(p=0.000) | 0.138(p=0.000) |
| EPDS anxiety sub-score | 0.787(p=0.000) | 1 | 0.053(p=0.126) |
| COVID-19 anxiety score | 0.138(p=0.000) | 0.053(p=0.126) | 1 |

Note: Values shown are the spearman correlation coefficients and p values

Figure 1: Flow chart of patient selection:

Total subjects(N=1024)

Excluded:

Severe disease(N=28)

Moderate disease with red flags (N=30)

Moderate disease with altered consciousness (N=10)

Eligible subjects (N=956)

Incomplete data (N= 71)

Unwilling to participate (N= 43)

Selected subjects (N=842)

COVID-19 non-infected (N= 670)

COVID-19 infected (N= 172)

Figure 2: Graph showing the changes of COVID-19 anxiety score and EPDS score over time:

1. Changes in COVID-19 anxiety score over time

![Chart, line chart

Description automatically generated]()

1. Changes in EPDS Score over time:

Chart, line chart

Description automatically generated