
**“PREVALENCE OF POSTPARTUM
DEPRESSION AMONG WOMEN IN URBAN
AREA OF NORTH KARNATAKA”**

**Submitted by
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Dissertation

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LIST OF ABBREVIATIONS USED

Sl. No	Abbreviations	Full form
1	PPD	Postpartum Depression
2	PND	Postnatal Depression
3	EPDS	Edinburgh Postnatal Depression Scale
4	MS	Microsoft
5	UHC	Urban Health Centre
6	SD	Standard Deviation
7	WHO	World Health Organization
8	LSCS	Lower Segment Cesarian Section
9	ICD	International Classification of Disease
10	BDI	Beck Depression Inventory
11	GHQ	General health questionnaire
12	PHC	Primary Health Centre
13	IYCF	Infant and Young Child Feeding
14	DSM	Diagnostic and Statistical Manual of Mental Disorders
15	IQ	Interquartile Range
16	CI	Confidence interval
17	OR	Odd's Ratio
18	LBW	Low Birth Weight

19	ANC	Antenatal Care
20	PHQ	Patient health Questionnaire
21	CES-D	Center for Epidemiological Studies Depressive Symptomatology Scale
22	PUC	Pre-University Course
23	CF	Correction Factor
24	IFA	Iron Folic Acid
25	T.T	Tetanus Toxoid
26	LMP	Last Menstrual Period
27	EBF	Exclusive breast feeding
28	Kg	Kilogram

ABSTRACT

TITLE- PREVALENCE OF POSTPARTUM DEPRESSION AMONG WOMEN IN URBAN AREA OF NORTH KARNATAKA

INTRODUCTION

Postpartum Depression (PPD) or Postnatal Depression (PND) is defined as “a non-psychotic depressive episode of mild to moderate severity beginning in or extending into the first postnatal year” Postpartum period (from delivery of placenta to 6 weeks after delivery) is a period during which dramatic hormonal changes occur which can lead to depression among women. PPD is a very important medical issue and a common problem of women and can have a significant impact on the emotional and cognitive development of the baby for a longer period. Estimated prevalence of PPD ranges between 13 and 19% in western studies. Studies done in India have noted the prevalence of postnatal depression ranging between 11 - 26.3%.

Not many studies have been carried out on prevalence of PPD in this part of Karnataka. Keeping this in mind, the present study was carried out to assess the prevalence of postpartum depression among women in urban area of north Karnataka

METHODOLOGY

A community based cross-sectional study was conducted among all registered Postnatal women less than 6 weeks from the day of delivery in Urban field practice areas of Rukmini Nagar UHC and Ashok Nagar UHC in Belagavi district of Karnataka state for a period of one year from 1st January to December 31st, 2021. Systematic random sampling was used for selection of the households for data collection. EPDS was used to screen for depression. Data collected was coded and entered in MS Excel sheet. Chi-square test and Multiple logistic regression were used to find the association between the predictor variables and the outcome variables.

RESULTS

The mean age group of the participants is 26.51 (SD \pm 3.89). In the present study, 4.55% women were aged between 18-20 years, 30.04% of women were aged between 21-24 years, 33.20% of the women were aged from 25 to 29 years, 32.21% of the women were aged from 30 to 34 years. 11.07% of the women had Edinburg postnatal depression scale score of \geq 10.

Association of Edinburg postnatal depression scale was found to be statistically significant ($p < 0.05$) with age, educational status, socio economic status, pregnancy planning, history of previous miscarriage / abortion, warning signs during pregnancy, gestational age at delivery, sex preference, difficulty in breast feeding, place of residence during pregnancy, habits, domestic violence, availability of husband during delivery and family support after delivery.

CONCLUSION

The current cross-sectional study, which was performed using EPDS, observed 11.07% prevalence of postpartum depression among the postpartum women.

The prevalence of postpartum depression was statistically significant with various factors like age, educational status, socio economic status, unplanned pregnancy, history of previous miscarriage / abortion, warning signs during pregnancy, gestational age at delivery, sex preference, difficulty in breast feeding, place of residence during pregnancy, habits, domestic violence, availability of husband during delivery and family support after delivery.

KEYWORDS: Postpartum depression, EPDS, Prevalence

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INTRODUCTION:

Postpartum depression is an important public health concern. ⁽¹⁾ Postpartum Depression (PPD) or Postnatal Depression (PND) is defined as “a non-psychotic depressive episode of mild to moderate severity beginning in or extending into the first postnatal year”

Postpartum period (from delivery of placenta to 6 weeks after delivery) is a period during which dramatic hormonal changes occur which can lead to depression among women. ⁽²⁾

Postpartum depression occurs in pregnancy and/or within the one year after delivery.

Symptoms include depressed mood, loss of interest / pleasure, fatigue, feelings of guilt, decreased appetite, psychomotor agitation / retardation, insomnia, and suicidal ideation occurring in various combinations. ⁽³⁾

PPD can lead to poor marital and familial relationships and adverse effects on the mental health of partners. Children of mothers with PPD tend to have less effective sharing and sociability with strangers, more instances of behavioral problems and malnutrition. Over a long run they are prone for significantly affected cognitive and emotional development. ⁽⁴⁾

During postpartum period, nearly 85% of women experience some type of mood disturbance. In most women, symptoms are transient and mild, referred to as postpartum blues; when mood disturbance is more disabling and persistent it is called postpartum depression. ⁽⁵⁾

World Health Organization (WHO) report enumerated several risk factors associated with the development of PPD. These are classified according to association as follows:

1. Strong to moderate association- depression or anxiety during pregnancy, lack of social support (either perceived or received), stressful recent life events and previous history of depression.
2. Moderate- high levels of childcare stress, neuroticism, low self-esteem, difficult infant temperament
3. Small- obstetric and pregnancy complications, cognitive attributions, quality of relationship with partner, socioeconomic status.

The factors like ethnicity, maternal age, level of education, parity, and gender had no association. The occurrence of depression during pregnancy is a powerful factor in predicting PPD. ⁽⁶⁾

The identified risk factors for PPD are

Socioeconomic risk factors- low income, lack of education, unemployment

Social risk factors - emotional and financial support and empathy relations, sexual and domestic violence during pregnancy,

Lifestyle-related -food intake patterns, lack of sleep, exercise, and physical activities.

Obstetrical risk factors - nulliparity, LSCS, breast feeding issues, parenting stress, etc.

Biological risk factors- young age, glucose metabolism disorders, high oxytocin, rapid decline of reproductive hormones low serotonin and tryptophan, and corticosteroids after delivery.

Others - low self-esteem, history of depression, negative attitude towards pregnancy and marital maladjustment. ⁽⁷⁾

Postpartum affective illnesses are classically classified into three types -the postpartum blues (baby blues and maternity blues), postpartum depression and postpartum psychosis each of which differs in its prevalence, clinical presentation, and management. ⁽⁵⁾

	Prevalence	Onset	Duration	Treatment
Blues	50-80% ⁽⁸⁾	First week	Hours to days	No treatment required other than reassurance
Postpartum depression	10-15%	Within 12 months (Mostly after 6 weeks)	Weeks to Months	Requires treatment
Postpartum Psychosis	0.1-0.2%	Within 2 weeks	Weeks to months	Requires hospitalization

Early detection and monitoring of depression in child bearing women at any health care access point (obstetrics, primary care and psychiatry) is required, given the risks of untreated depression for the mother and child. A recent review of screening for postpartum depression concluded that, as compared to usual care, the use of a screening tool may assist in the process of improving depression outcomes. ⁽⁹⁾

PPD is a very important medical issue and a common problem of women and can have a significant impact on the emotional and cognitive development of the baby for a longer period. Estimated prevalence of PPD ranges between 13 and 19% in western studies. Studies done in India have noted the prevalence of postnatal depression ranging between 11 - 26.3%. ⁽¹⁰⁾

Not many studies have been carried out on prevalence of PPD in this part of Karnataka. Keeping this in mind, the present study was carried out to assess the prevalence of postpartum depression among women in urban area of north Karnataka.

OBJECTIVES

1. To assess the prevalence of depression among postpartum women residing in urban areas
2. To know the factors associated with postpartum depression.

REVIEW OF LITERATURE

A study was conducted in 2018 by Prajna Sharma et al., on “Prevalence and risk factors of postpartum depression in women-A cross sectional study” for 284 women in urban slums of Dharwad. The study had showed that 11.27% women had depression (assessed using Edinburg postnatal depression screening (EPDS) scale). It also showed that mothers aged between 36- 40 years, belonged to nuclear family, high risk pregnancy, post-term delivery and cesarean section had higher risk of developing postpartum depression. Women who had planned pregnancy had lesser risk of PPD. They also concluded that importance must be given to both physical health and mental health of a postpartum women for a healthy mother and child. ⁽²⁾

A study was conducted in large military hospital between 2007-2008 by Daniel Saldanha et al., for studying the incidence and factors contributing to postpartum depression, where the diagnosis was made as per international classification of disease (ICD 10). The participants were screened using the beck depression inventory (BDI), Presumptive stressful life event scale, General health questionnaire (GHQ-12) and Edinburgh Postnatal Depression Scale (EPDS). Among 186 women (out of 200 registered for the study) forty had scores above 13 on EPDS and met ICD 10 diagnostic criteria were grouped as depressive. Incidence of PPD in this study was 21.51%. Hence the study concluded that primary health care givers should be sensitized regarding PPD and antenatal screening for risk factors and early intervention of PPD is required. ⁽⁶⁾

A study was conducted in 2016 by Kruthika k et al., on “An epidemiological study of postnatal depression among women availing maternal health services in rural

areas of Belagavi, Karnataka, India” among 300 women attending immunization clinics in PHC with postpartum period less than 3 months using EPDS. A score of more than 13 was taken as depressive positive. The prevalence of postpartum depression in this study was 13.6% and they concluded that factors such as maternal age, education, socioeconomic status, sex of newborn, unplanned pregnancy and mode of delivery were associated with the prevalence of PPD. ⁽¹⁰⁾

In 2019, Saurav Basu et al conducted a cross sectional study on “Postpartum depression burden and associated factors in mothers of infants at an urban primary health center in Delhi, India” using EPDS to screen for depression. Among 210 women screened using EPDS (score of >10 taken as positive), 61(29%) were detected with postpartum depression. Women with poor social support had higher risk of having PPD($p<0.001$). The study concluded that regular and mandatory screening for PPD at primary health facilities is essential for the early detection and management of the neglected burden of postpartum depression. ⁽¹¹⁾

In 2015, Dinesh P et al., conducted “A comparative study of prevalence of postnatal depression among subjects with normal and cesarean deliveries” in Chittoor. They included women who underwent normal and cesarean deliveries with hundred subjects in each of the intervention groups and assessed postpartum depression by EPDS score. Postnatal depression prevalence was higher (30%) in cesarean group than in normal delivery group (15%). They concluded that there is higher risk of postpartum depression could occur in women undergone caesarean section when compared to normal deliveries. They also emphasized the need to concentrate on the patients with caesarean sections by providing good counselling, better medication, family support and positive environment in each stage during and after pregnancy. ⁽¹²⁾

A study was conducted in 2017 by Paridha Jha, Margareta Larsson and et al., on “Fear of childbirth and depressive symptoms among postnatal women: A cross-sectional survey from Chhattisgarh, India” among those who delivered through normal vaginal delivery and cesarean. Data was gathered through one-to-one interviews using EPDS and Wijma Delivery Experience Questionnaire version-B. According to this study, the prevalence of fear of birth was 13.1% and prevalence of depressive symptoms was 17.1%. There was a strong association between fear of birth and depressive symptoms (p value <0.05). The study concluded that improvement in pain management during childbirth, proper counselling and good personal support for women is required for better mental health outcomes in postnatal period. ⁽¹³⁾

A study was conducted by Trupti Amipara et al., in Gujarat in 2017 on “A study on postpartum depression and its association with Infant feeding practices and infant Nutritional status among mothers attending the Anganwadi centers of Valsad district, Gujarat, India”. In this study 116 postpartum mothers were assessed depression using EPDS, Infant’s nutritional status and breastfeeding practices were assessed using WHO Growth Charts and IYCF guidelines. The prevalence of PPD in the study was 6.8% and it has been associated with poor nutritional status of the children. Hence the study highlighted the need of screening for PPD in community. ⁽¹⁴⁾

Siddharudha Shivalli et al., conducted a cross sectional study on “Postnatal Depression among Rural Women in South India: Do Socio-Demographic, Obstetric and Pregnancy Outcome Have a Role to Play?” between June to November 2012 in 106 Postnatal women in Mandya. the study was done to assess the prevalence and risk factors of postnatal depression (PND) among rural postnatal women. The prevalence of PND in the study among rural postnatal women was 31.4%. Birth of female child,

low socio-economic status and pregnancy related complications or known medical illness were the high-risk factors found to be associated with PND. The study also suggested that PND screening must be an integral part in care of a postnatal women, feasibility trial of such screening should be evaluated and grass root level workers should be trained accordingly. ⁽¹⁵⁾

A community-based case-control study was conducted in Vellore in 2003 by S Anoop et al on “Maternal depression and low maternal intelligence as risk factors for malnutrition in children: a community-based case-control study from South India”. In this study 72 malnourished children and similar controls were selected and their mothers were screened for depression using DSM3R criteria. The study is done to assess whether maternal depression (current and postpartum) and low IQ in mother are risk factors associated with malnutrition in children. The study showed that major depression (OR 3.2, 95% CI 1.1 to 9.5), PPD (OR 5.0, 95% CI 1.0 to 24.0), present and low maternal IQ (OR 3.8, 95% CI 1.3 to 11.1) were briefly associated with malnutrition among children. Low birth weight (OR 2.9, 95% CI 1.2 to 6.8) was significantly associated with malnutrition among infants. The study concluded that there is evidence for an association between postpartum depression/ current depression, low maternal intelligence and LBW with malnutrition in children aged complications 6–12 months. ⁽¹⁶⁾

A cross-sectional study was conducted in 2002 by Vikram Patel et al on “Gender, Poverty, and Postnatal Depression: A Study of Mothers in Goa, India”. In this study 270 postnatal mothers were assessed the risk factors related to the occurrence and outcome of depression. In this study, PPD was observed in 23% of the mothers during 6–8 weeks after delivery; 78% of them had substantial psychological

morbidity clinically during the pregnancy. Poor marital relationships and low socio-economic status were principal risk factors for the event of depression and its chronicity. The study also showed that sex of the baby was a determinant of postnatal depression. Mothers with PPD were more disabled and were more likely to use health services than nondepressed mothers. The study concluded that government policies to integrate PPD as a disorder of public health significance and to reduce the preference for male child must be an important component of routine antenatal care. ⁽¹⁷⁾

Farhin Zaidi et al., did a cross sectional study in 2014, among 263 pregnant women coming to the ANC clinic of HAH Centenary Hospital New Delhi, to find prevalence of postpartum depression and if there is any association with antenatal depression by using EPDS. A score of ≥ 10 on EPDS was taken as positive. The study showed that prevalence of PND was 12.75% (19 out 149 postnatal women had score of ≥ 10 on EPDS). Among 19 depressed postnatal women, 42.1% (8) of them found to have depression since the time of their pregnancy and among 130 non-depressed postnatal women 19.3% (25) were found to have depression. There was a significant association between antenatal depression and PND (p-value= 0.025).

The study concluded that depression during antenatal period, significantly predisposes the postnatal mothers to develop PND and an early screening during perinatal period is necessary to reveal the unknown cases of depression, to prevent the mothers from PND. ⁽¹⁸⁾

Kathryn et al conducted a longitudinal study on “Mode of delivery and postpartum depression: the role of patient preferences” at the University of California.

The study was conducted from 2008 to 2012. In this study 160 participants of gestation age between 24 – 26 weeks had been assessed about their preference for vaginal delivery and was correlated with the mode of delivery they had undergone and then they were screened for postpartum depression using PHQ 9 scores. The study showed that there was significant relationship between the effects of mode of delivery and preference towards vaginal delivery and the corresponding score on PHQ-9 during postpartum ($P = 0.047$). Women who had a stronger vaginal delivery preference, but undergone cesarean had a higher PHQ-9 scores ($P= 0.027$) but not among women who undergone vaginal delivery ($P= 0.761$). The association between delivery mode and vaginal delivery preference score was not significant at 6-8 months after child birth. The study also stated that women who had a strong antepartum preference for vaginal delivery but delivered by cesarean section might be at increased risk for developing PPD. ⁽¹⁹⁾

A Prospective Cohort study was conducted by Deepthi Naik in 2018 at JIPMER on “Depression and its risk factors in women with a potentially life-threatening complication”. In this study 895 women with potentially life-threatening complications within seven days of delivery were selected and assessed the incidence of PPD and risk factors associated. Women who undergone mental health assessments using the PHQ-9 and EPDS scale, Counseling was given for those with positive scores and were followed-up at 3 months after delivery. The study showed that postpartum depression was observed in 21% of study population. Women who were uneducated (OR - 2.66 95% CI: 1.10- 6.40) and mothers who had stillbirth (OR 2.48, 95%CI: 1.57-3.93) were found to be related with Postpartum depression after adjusting for other factors. Most women who were screened positive recovered just with counseling, and only 3 women required pharmacological treatment at the end of

3 months. The study also concluded that 1 in 5 women with potentially life-threatening complications in perinatal period developed depression at postpartum. And therefore, early screening, especially in low resource setting could be useful for early recognition and treatment which can reduce the long-term morbidity associated with PPD. ⁽²⁰⁾

A longitudinal study was conducted in Mexico City by Lara et al in 2014 among 210 women to identify point and period prevalence and incidence of perinatal depression in Mexican women using the PHQ-9 and DSM-IV during the 3rd trimester of pregnancy, at 6 weeks and at 6 months after delivery. Prevalence of depression before delivery was 9.0% at third trimester and prevalence of PPD were 13.8% and 13.3% at 6 weeks and 6 months respectively. Incidence of PPD at 6 weeks and 6 months were 10% and 8.2% respectively. Prevalence of antenatal depressive symptoms was 16.6% and 17.1% at 6 weeks and 20.0% at 6 months postpartum. Incidence of postpartum depression (PPD) was 11.4% at 6 weeks and 9.0% at 6 months. At six months postpartum, women with depression were of young age (OR=2.45, p=0.02), had lesser education (OR=5.61, p=0.00), did not have a job (OR=3.48, p=0.00) and had lower socio-economic status (OR=4.00, p=0.00) when compared with women without depression. The study concluded that importance in emphasizing good mental health care for expectant and postpartum mothers were poorly recognized in most Latin American countries to reduce disability in mothers and infants. ⁽²¹⁾

A study was conducted by Guo et al., in Ghana and Côte d'Ivoire between March 2010 and December 2011, among cohort mothers and children to find the relationship between maternal depression and febrile illness in their offspring. 654

mother/child dyads in Ghana and Côte d'Ivoire were included in a prospective birth cohort during 2010-2011 and they were followed up for 2 years. Mothers were screened for depression during antepartum, and at 3 and 12 months postpartum using the Patient Health Questionnaire depression module. The prevalence of antepartum depression among mothers from Côte d'Ivoire and Ghana were 28.3% and 26.3% respectively. The prevalence of depression at three and twelve months postpartum in Côte d'Ivoire were 11.8% and 16.1% and in Ghana 8.9% and 7.2% respectively. The crude hazard ratio of febrile illness in children of depressed mothers compared with those in children of nondepressed mothers was (95% confidence interval: 1.20, 2.07) and adjusted hazard ratio was 1.32 (95% confidence interval: 1.01, 1.74). Perinatal depression was highly prevalent and was associated with febrile illness in the children. ⁽²²⁾

A study was conducted in 2019 by Savitha Prabhu et al., to find the prevalence and risk factors of postnatal depression in South Asian region and found that out of 324 studies, the pooled prevalence rate of depression during postpartum was 26% and 28 studies concluded that health care professionals should be screened for possible risk factors and depressive symptoms during perinatal period, where early interventions can be initiated if required in a timely manner. ⁽¹⁾

A study was conducted by A. Muthukumar, J. P. Oviya and et al., on "Clinical review on prevalence and risk factors of depression among postpartum mothers in Manchester of Tamil Nadu" using articles published from 2016-2020 based on anxiety during postpartum period in the PubMed. They recommended that health care professionals should regularly screen mothers during postpartum visits using questions such as patient health questionnaire (15 scale), Edinburgh postnatal

depression scale and personality belief questionnaire (scale) and concluded that communication with the family members and social support will help postpartum mothers to overcome their illness. ⁽²³⁾

A qualitative study done by Sandra Mary Travasso et al in 2011 to know the relationship between work, stress relief strategies, caring for family, spousal support, and mental health amongst 48 low-income working mothers residing in urban slums across Bangalore. The study found that participants who had an abusive and/or alcoholic husband, intimate partner violence, raising children with special support, and inadequate support for child care seems to be more susceptible to become depressed and suicide attempts. Factors like family support, friends and colleagues and work fulfilment were associated with lesser depression. ⁽²⁴⁾

Ilona. S. Yim et al did a systematic review of research published from 2000-2013 on biological and psychosocial factors associated with postpartum depression through. According to the study, biological factors associated with PPD were hypothalamic-pituitary-adrenal dysregulation, inflammatory processes, and genetic susceptibility. The psychosocial factors with strong association with PPD were some forms of chronic pain, severe life events, anxiety and ambivalence, intimate partner or family violence, and usage of substance abuse. The protective factors against PPD were partner support, social support satisfaction and postpartum relationship satisfaction. ⁽²⁵⁾

Margarette Cooke et al did a study to explore the association between postpartum distress and maternal role attainment and breast-feeding problems. The study was conducted among a group of mothers who delivered in 3 urban public hospitals in Sydney in 1999. The MRA sub-scale was used to measure the degree to

which breast feeding is linked to maternal identity. EPDS was used to diagnose PPD. This study found that women with greater MRA score were less probable to stop breast feeding (though they had breast feeding issues) than women with lesser MRA score. They also concluded that participants with high MRA score and not breast feeding were more liable for PPD than participants who had low MRA or high MRA and continued to breast feed.⁽²⁶⁾

Avita Rose Johnson et al conducted a study on depression among postnatal women attending a rural maternity hospital in Ramnagara, Karnataka during 2012-13. According to the study the prevalence of postnatal depression was 45.5% and factors like low self-esteem, staying in mothers' home, staying away from husband, mood swings during antenatal period and perceiving life as stressful were more associated with Postnatal depression. The study concluded that Postnatal depression was more prevalent in rural areas of Karnataka and there was a need to implement screening for women during antenatal and postnatal period as a routine care.⁽⁴⁾

A prospective study was done by N Shrestha et al during 2003-2005 to determine incidence and prevalence of postpartum depression in rural community of Ballabgarh. The study was done by interviewing 200 pregnant women in 3rd trimester and later at 6 weeks postpartum using BDI, ICD10, EPDS scores. The study found that the incidence of PPD was 4.4% and prevalence was 12% in that population.⁽²⁷⁾

Elizabeth J. Corwin et al studied the relation between maternal anemia and postpartum depression. The study was conducted in Pennsylvania in 2003. New mothers were visited at home on day 7, 14 and 28 after an uncomplicated labor and delivery and Hemoglobin (Hb) concentration was measured.

The Center for Epidemiological Studies Depressive Symptomatology Scale (CES-D) on day 28 was used to diagnose PPD. The study found that there was a negative correlation between Hb concentration on day 7 postpartum and depressive symptoms on day 28. The study concluded that women with postpartum anemia may be at increased risk of developing PPD. ⁽²⁸⁾

MATERIALS AND METHODS

Source of Data: All registered Postnatal women less than 6 weeks from the day of delivery in Urban field practice areas of Rukmini Nagar UHC and Ashok Nagar UHC in Belagavi district of Karnataka state, India

Study Area: Urban field practice areas under Rukmini Nagar UHC and Ashok Nagar UHC in Belagavi district of Karnataka state, India.

Study Period: One year from 1st January to December 31st, 2021 (twelve months).

Method of collection of data

Study design: A Community-based Cross-Sectional Study

Sample size calculation:

Sample size - calculated by using the formula

$$n = 4pq/d^2$$

where n = sample size

p - prevalence, taken as 26% (based on an original article done in Manipal Academy of Higher Education, Manipal)

$$q = 100 - p = 74$$

d = Absolute error (15% of Prevalence)

$$n = 4 * 26 * 74 / (3.9)^2 = 505.89 = 506$$

Sampling method: Systematic random sampling was used for selection of the households for data collection. Sampling interval was calculated from number of households selected from that area with total number of households in the same area.

Pilot Study: The questionnaire was validated and pilot study was performed in urban area of Belagavi (Ashok Nagar) and all necessary changes were made. Pilot study results have not been included for data analysis in the present study.

Ethical approval: The clearance has been obtained from Institutional Ethical Committee, J. N. Medical College, KAHER, Belagavi. The ethical clearance letter has been attached to the present study

From the study participants, written informed consent was obtained. The consent forms had simple words and was in local language.

Inclusion Criteria:

1. All postnatal women less than 6 weeks from the date of delivery from 2 UHC's willing to participate in this study
2. Aged between 18-35 years

Exclusion Criteria:

1. Mothers with any current chronic diseases.
2. Mothers who had childbirth within the last 2 weeks were excluded from the study since they could be suffering from postpartum blues.
3. Preexisting depressive disorder.

Study Tools:

Edinburgh Postnatal Depression Scale (EPDS) is a systematic method of screening patients at risk for postpartum depression.

The EPDS score is correlated with clinical judgment. Proper clinical history and examination should be done to confirm the diagnosis. The scale assesses how the mother has felt during last week. The tool can be repeated after 2 weeks in doubtful cases. The scale will not identify mothers with anxiety neuroses, personality disorders or phobias. ⁽²⁹⁾

Participants with EDPS score 10 or more than 10 were referred to Department of Psychiatry, KLE Hospital, Belagavi for further evaluation and treatment.

Statistical analysis

Obtained data was coded and entered in Microsoft Excel Worksheet. The data was analyzed using statistical software SPSS version 20.0. This data was analyzed using percentages. The data which followed normal distribution was expressed in terms of mean \pm standard deviation (SD). The association between EPDS score and various risk factors was determined using either Chi-square or Fisher's exact test. At 95% confidence interval (CI) probability value ('p' value) of less than or equal to 0.05 was statistically significant.

Study Variables:

Age: Age was recorded to the nearest completed years.

Religion: The study participant's religion was grouped under "Hindus", "Muslims" and Christians.

Education:

Illiterate: person who is not capable to read and write.

Read and write: person who can read and write without education.

Primary: person with completion of one to five years of schooling.

Secondary: person with completion of six to ten years of schooling.

PUC: person who has completed PUC.

Degree: those who obtained any degree

Occupation:

Housewife: Main role in taking care of her family, managing household affairs, while her husband or partner goes out to work.

Labourer: A person doing unskilled manual work for wages.

Business: Running a shop or any business and owning it partially or completely.

Private employee: Employed at a non-governmental entity in any capacity.

Government employee: Employed at a governmental entity in any capacity.

Type of family:

Nuclear family: A married couple and their children living together while the children are still regarded as dependents.

Joint family: Two or more married couples and their children living together in the same household, where all the men are related by blood.

Three-generation family: Representatives of three generations related to each other by direct descent living together.

Socio-economic status:

Per capita income of the family (in rupees / month) was collected and socio-economic status was classified using modified B.G. Prasad's classification.

$$\text{Monthly Per Capita Income} = \frac{\text{Total monthly income of family}}{\text{Total number of family members}}$$

Modification was done using the Correction Factor.

Correction Factor (CF) was obtained as below, the study period was from 1st January to 31st December 2021 and hence, the mean Consumer Price index for that period was taken.

Average Consumer price index for the year 2020 (by 2001 base) = 330.

$$\text{CF} = \frac{\text{Value of consumer index average (2020)} \times 4.93 \times 4.63}{100}$$
$$= 330 \times 4.93 \times 4.63$$

Socio economic class	Prasad's classification 1961 (per capita income in rupees / month)	Modified Prasad's classification 2020 (per capita income in rupees / month) [38]
I	100 and above	7533 and above
II	50-99	3766-7532
III	30-49	2260-3765
IV	15-29	1130-2259
V	<15	1129 and below

Planned Pregnancy: A pregnancy in which a woman and her partner had discussed and agreed beforehand to conceive.

Parity: Is the number of times the fetus crossed the period of viability not including the present pregnancy, which is 28 weeks in India.

Adequate antenatal check-up: Mother who have taken IFA, Calcium supplements, Inj T.T, Regular ANC visit

Abortion: Deliberate termination of a human pregnancy, performed during or within 24 weeks of gestation.

Miscarriage: Spontaneous or unplanned expulsion of a fetus before it can survive independently.

Gestational age at birth

Preterm: A baby born before the 37th completed week (less than 259 days) of pregnancy, counting from the first day of LMP.

Term: A baby born between 37 completed weeks to 42 weeks (259 to 294 days) of pregnancy, counting from the first day of LMP

Post-term: A baby born at or beyond 42 completed weeks (more than 294 days) of pregnancy, counting from the first day of LMP.

Birth weight:

Low birth weight: Birthweight less than 2.499 kg.

Normal weight: Birth weight more than or equal to 2.5 kg.

Exclusive breast feeding- Mothers who feed her baby only breast milk.

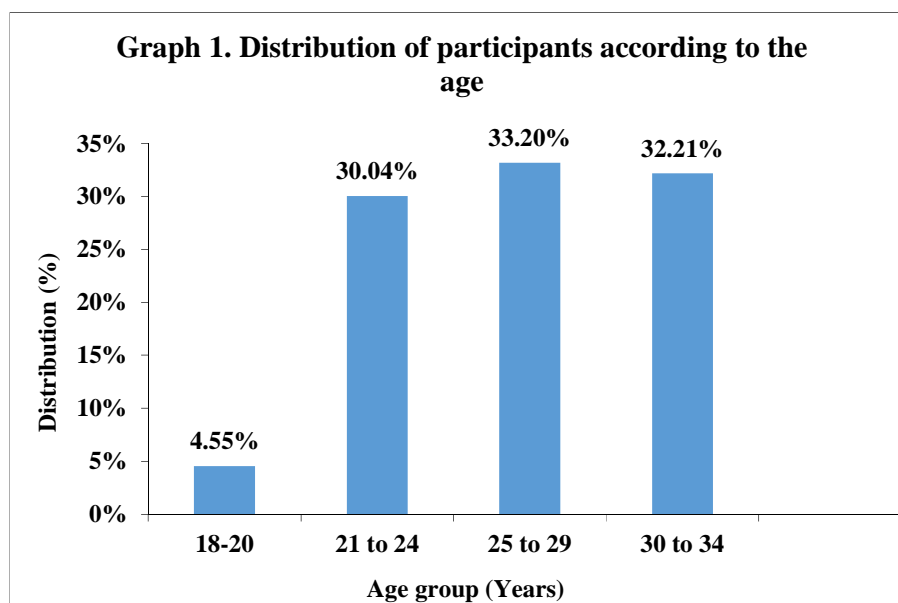
Domestic violence:

Details about the relationship with husband and in-laws was assessed by asking, “Are there any problems with your husband/in-laws, siblings, or parents? And “Has anyone ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?”.

RESULTS

Table 1. Distribution of participants according to the age

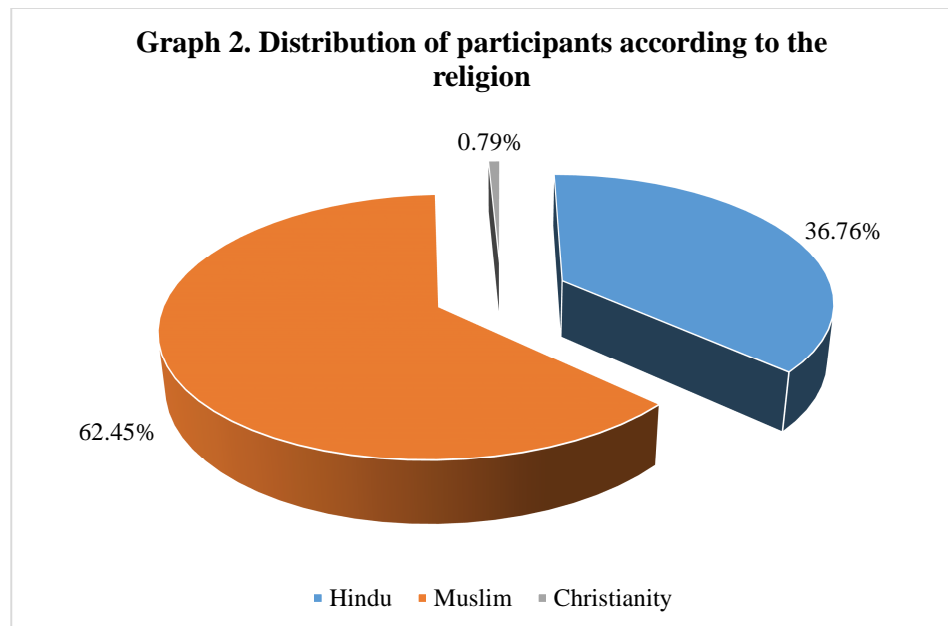
Age group (Years)	Distribution (n=506)	
	Number	Percentage
18-20	23	4.55
21 to 24	152	30.04
25 to 29	168	33.20
30 to 34	163	32.21
Total	506	100.00



In the present study, 4.55% participants were aged between 18-20 years, 30.04% of participants were aged between 21-24 years, 33.20% of the participants were aged from 25 to 29 years, 32.21% of the participants were aged between 30 - 34 years. The mean age group of the participants was 26.51 (SD \pm 3.89).

Table 2. Distribution of participants according to the religion

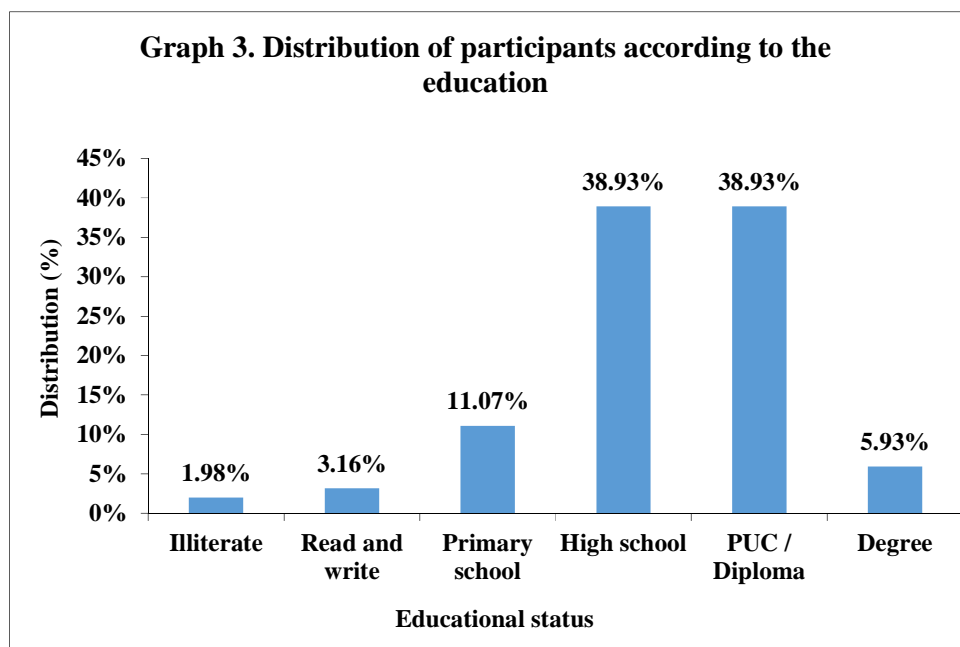
Religion	Distribution (n=506)	
	Number	Percentage
Hindu	186	36.76
Muslim	316	62.45
Christianity	4	0.79
Total	506	100.00



In this study, 62.45% of the women belonged to Muslim religion, 36.76% were Hindu and 0.79% were Christians.

Table 3. Distribution of participants according to the education

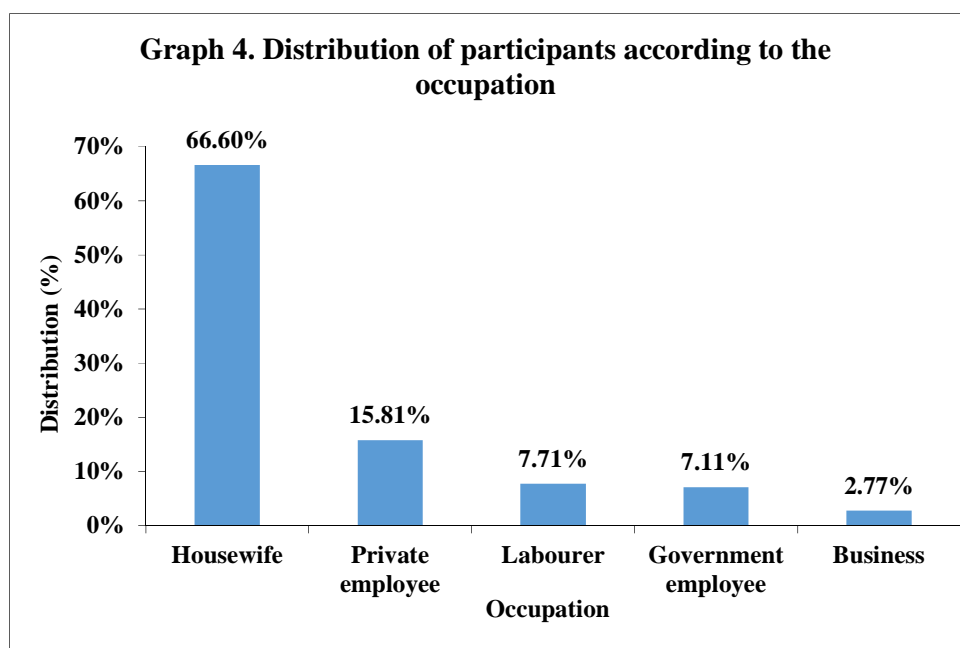
Educational status	Distribution (n=506)	
	Number	Percentage
Illiterate	10	1.98
Read and write	16	3.16
Primary School	56	11.07
High School	197	38.93
PUC / Diploma	197	38.93
Degree	30	5.93
Total	506	100.00



In this study, majority of the participants studied high school and PUC / Diploma (38.93%), 11.07% studied Primary school, 5.93% completed Degree, 3.16% of the participants can read and write and 1.98% of participants were Illiterate.

Table 4. Distribution of participants according to the occupation

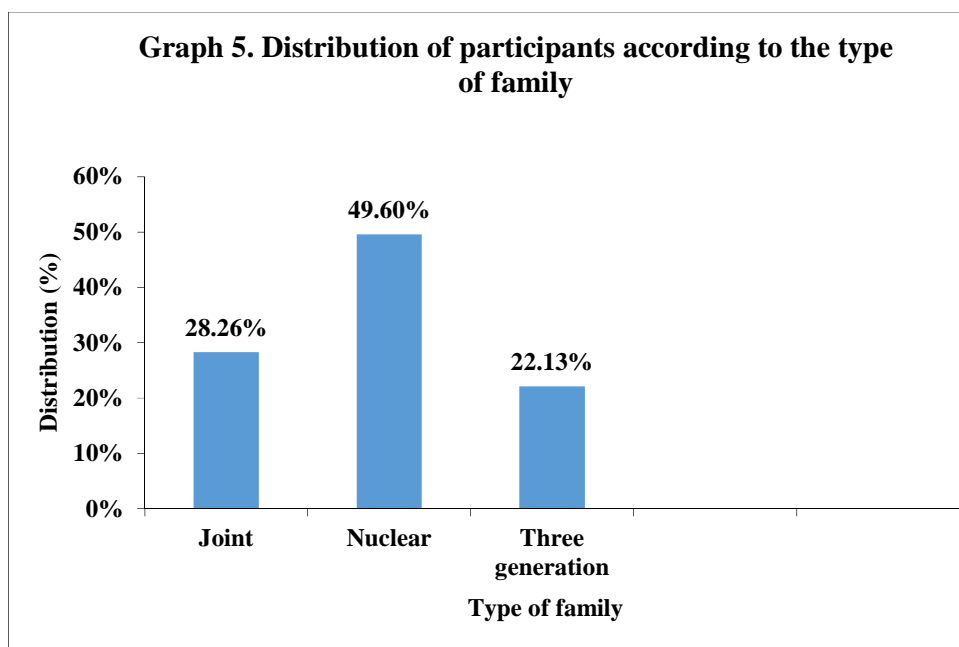
Occupation	Distribution (n=506)	
	Number	Percentage
House wife	337	66.60
Private employee	80	15.81
Labourer	39	7.71
Government employee	36	7.11
Business	14	2.77
Total	506	100.00



In this study, 66.60% of the participants were housewives, 15.81% of the participants were private employee, 7.71% of the participants were labourer, 7.11% of the participants were government employee and 2.77% were carrying out business.

Table 5. Distribution of participants according to the type of family

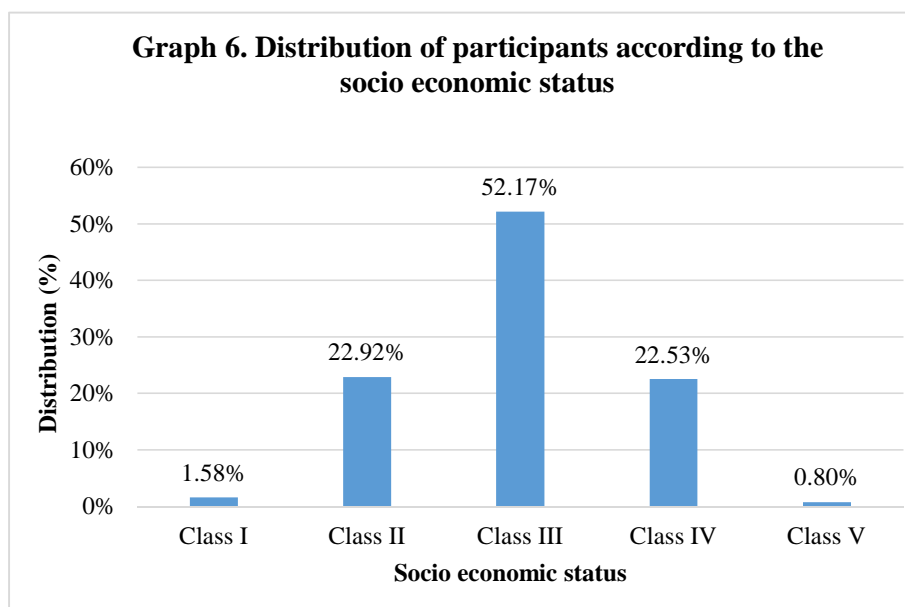
Type of family	Distribution (n=506)	
	Number	Percentage
Joint	143	28.26
Nuclear	251	49.60
Three generation	112	22.13
Total	506	100.00



In this study, 49.60% of the participants belonged to nuclear family, 22.13% belonged to three generation family and 28.26% of the participants belonged to joint family

Table 6. Distribution of participants according to the socio-economic status

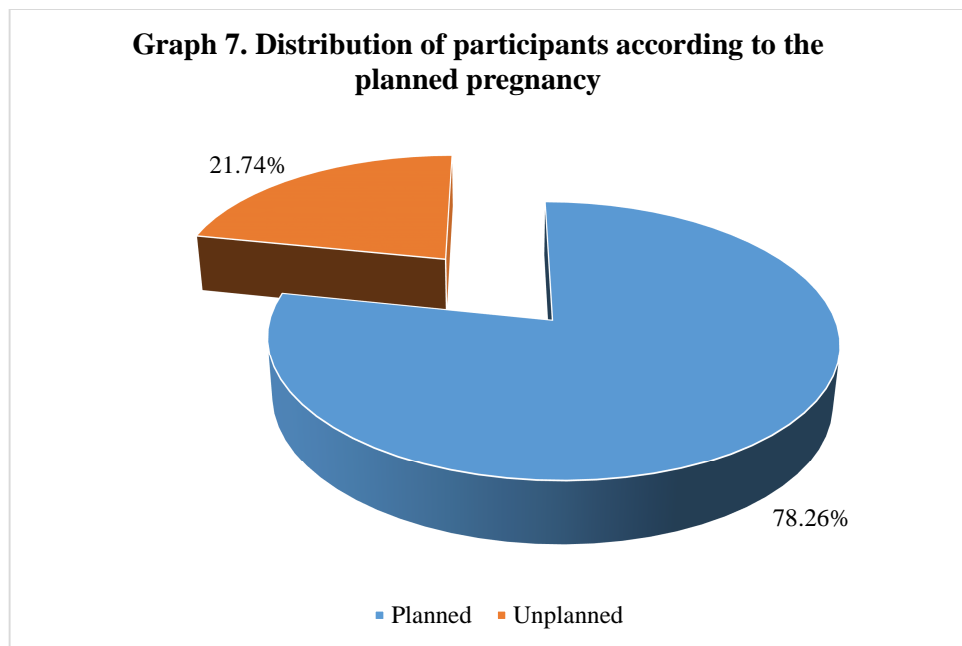
Socio economic status	Distribution (n=506)	
	Number	Percentage
Class I	8	1.58
Class II	116	22.92
Class III	264	52.17
Class IV	114	22.53
Class V	4	0.80
Total	506	100.00



In this study, according to modified B. G. Prasad classification, majority of the participants belonged to class III (52.17%), 22.92% of the participants belonged to class II, 22.53% of the participants belonged to class IV, 1.58% belonged to class I and only 0.80% belonged to class V.

Table 7. Distribution of participants according to the planned pregnancy

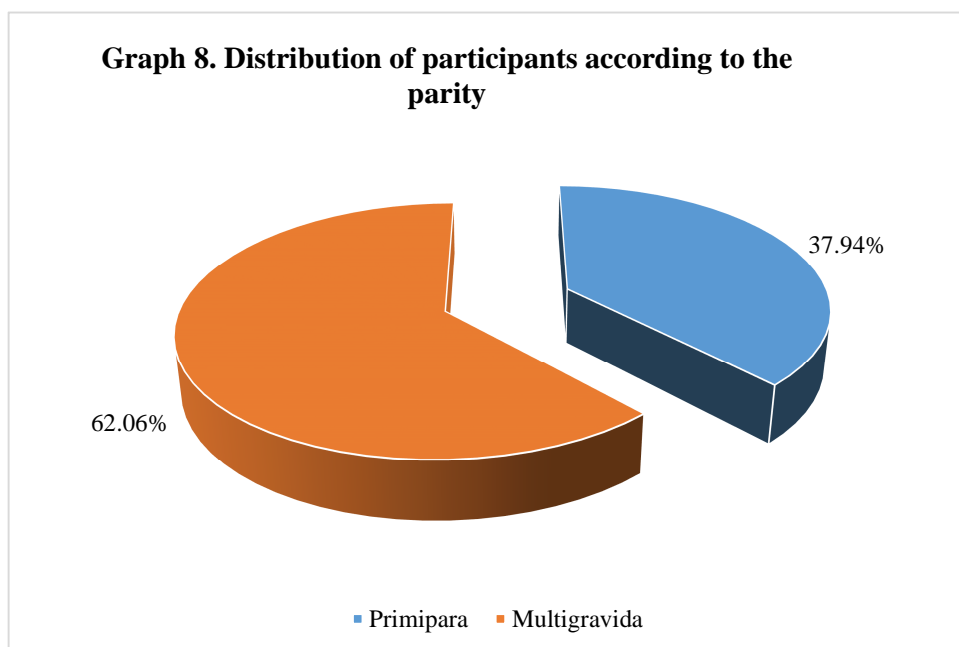
Planned pregnancy	Distribution (n=506)	
	Number	Percentage
Planned	396	78.26
Unplanned	110	21.74
Total	506	100.00



In this study, 78.26% of the women had planned pregnancy and 21.74 % had unplanned pregnancy.

Table 8. Distribution of participants according to the parity.

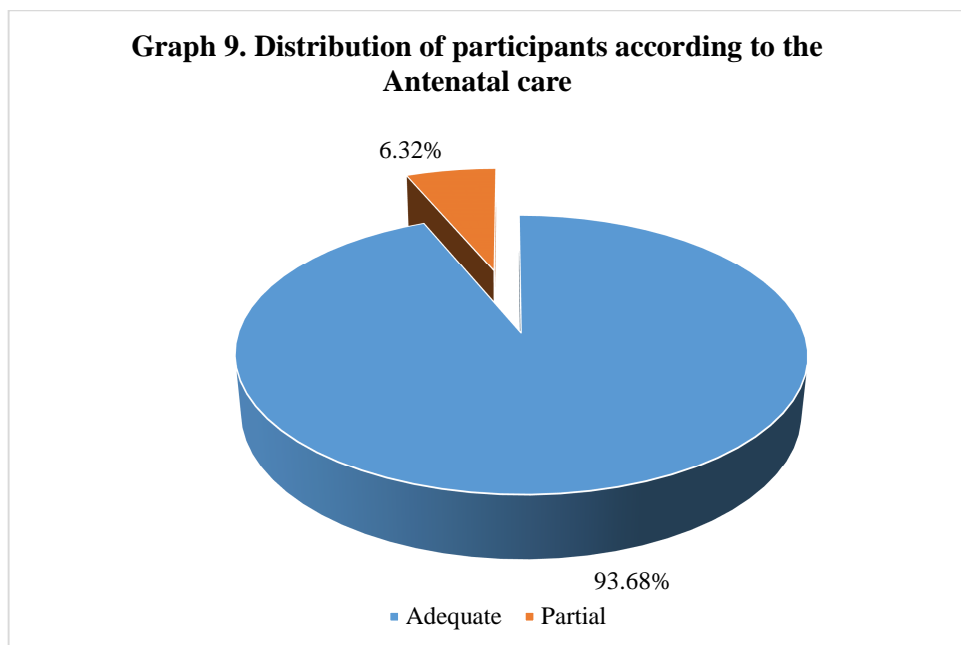
Parity	Distribution (n=506)	
	Number	Percentage
Primipara	192	37.94
Multipara	314	62.06
Total	506	100.00



In the present study, 62.06% of the women were multipara and 37.94% women belonged to primipara.

Table 9. Distribution of participants according to the Antenatal check-up.

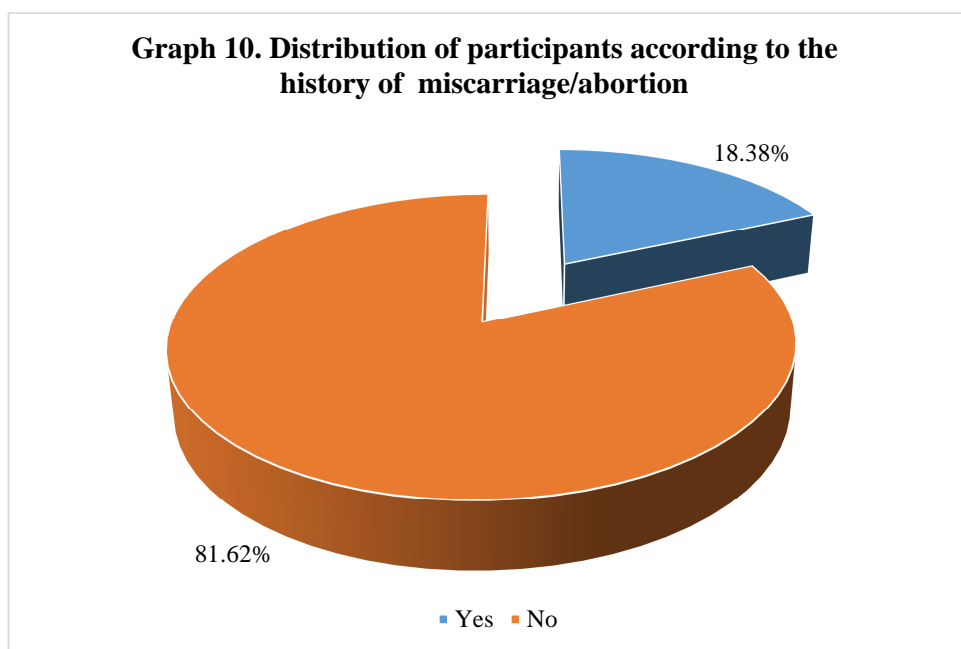
Antenatal are	Distribution (n=506)	
	Number	Percentage
Adequate	474	93.68
Partial	32	6.32
Total	506	100.00



In the present study, 93.68% of the participants had received adequate Antenatal care and 6.32% of the women had received partial Antenatal check-up.

Table 10. Distribution of participants according to the history of miscarriage/abortion

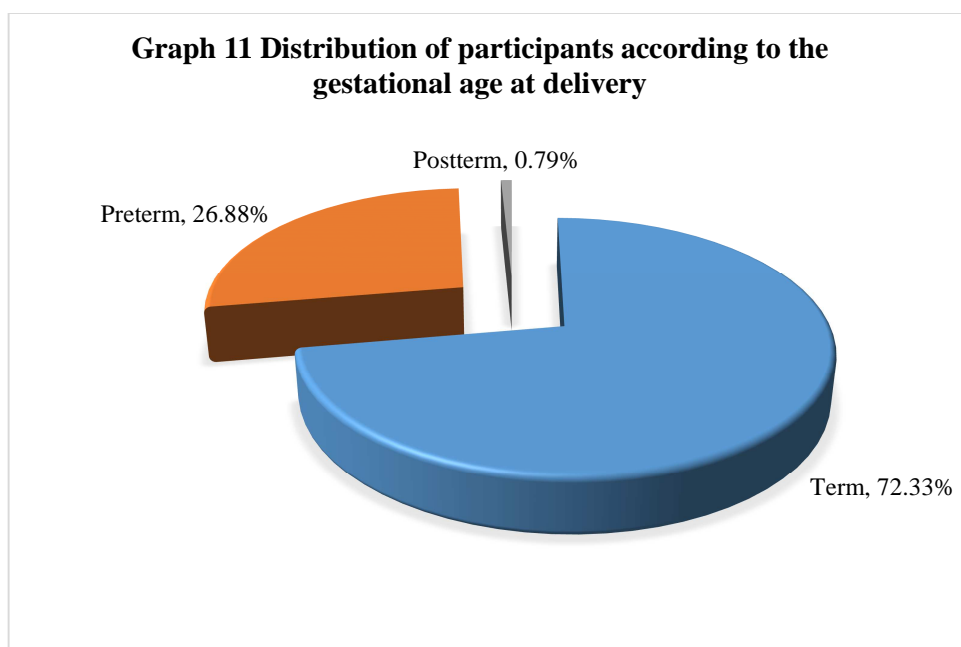
History of miscarriage/abortion	Distribution (n=506)	
	Number	Percentage
Yes	93	18.38
No	413	81.62
Total	506	100.00



In this study, 18.38% of the participants had history of miscarriage / abortion whereas 81.62% of the participants had no history of miscarriage/ abortion.

Table 11. Distribution of participants according to gestational age at delivery

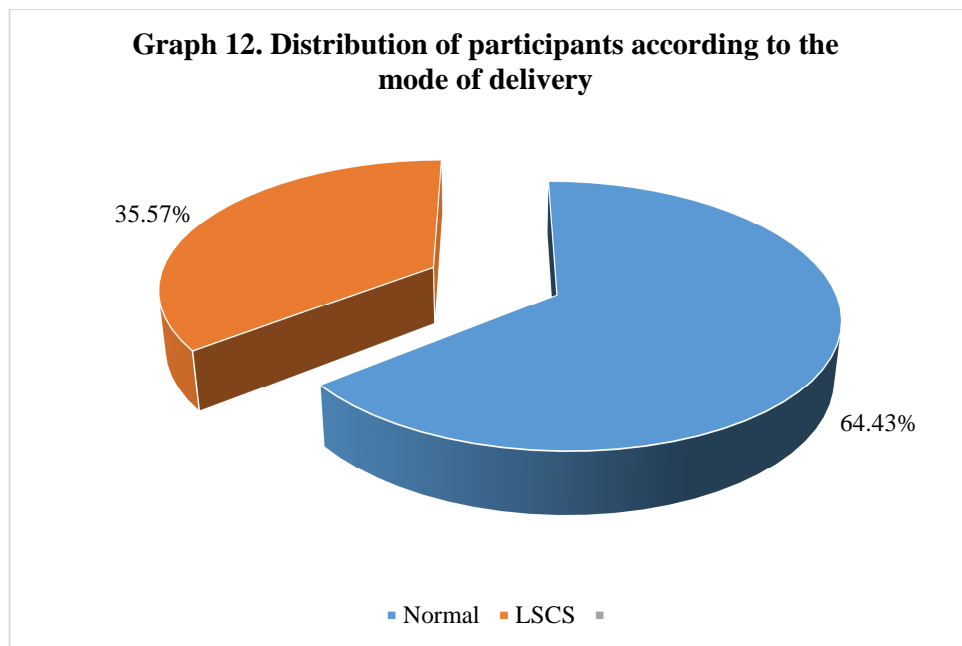
Gestational age at delivery	Distribution (n=506)	
	Number	Percentage
Term	366	72.33
Preterm	136	26.88
Post-term	4	0.79
Total	506	100.00



In this study, majority of the participants had term delivery (72.33%), 26.88% of the participants had preterm delivery and 0.79% had post term delivery.

Table 12. Distribution of participants according to the mode of delivery

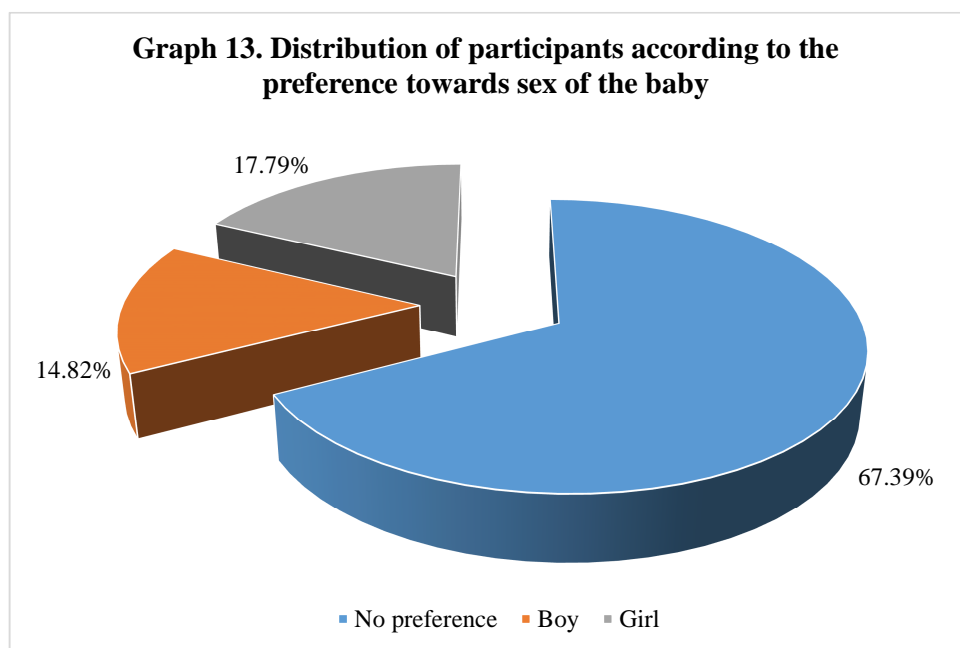
Mode of delivery	Distribution (n=506)	
	Number	Percentage
Normal	326	64.43
LSCS	180	35.57
Total	506	100.00



In this study, 64.43% had normal vaginal delivery and 35.57% of the women underwent LSCS.

Table 13. Distribution of participants according to the preference towards sex of the baby

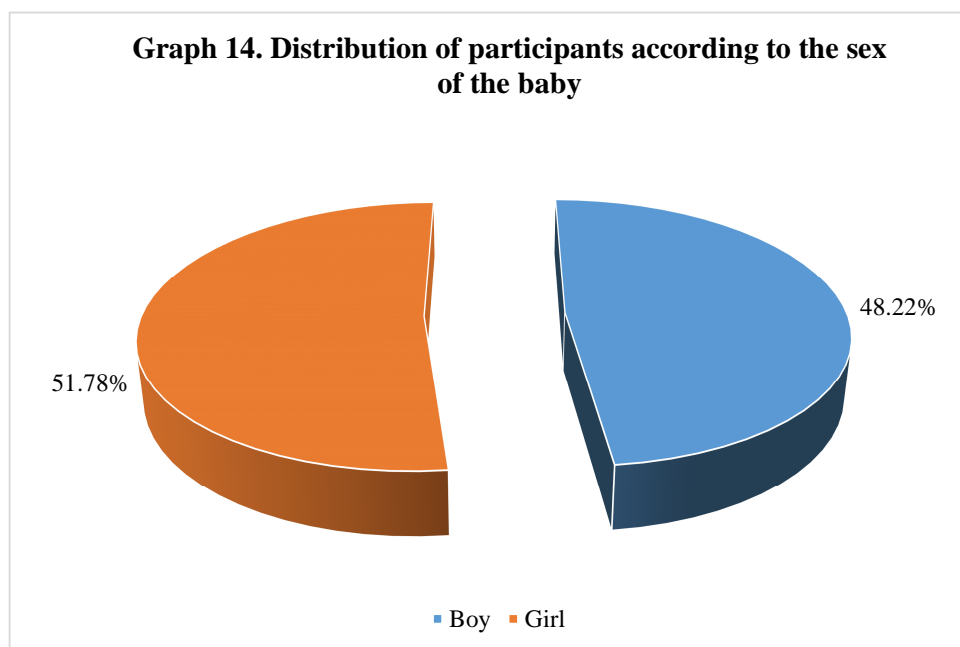
Preference	Distribution (n=506)	
	Number	Percentage
No preference	341	67.39
Boy	75	14.82
Girl	90	17.79
Total	506	100.00



In this study, 67.39% of the women had no preference towards the sex of the baby, 17.79% of the women preferred girls and 14.82% of the women preferred boys.

Table 14. Distribution of participants according to the sex of the baby

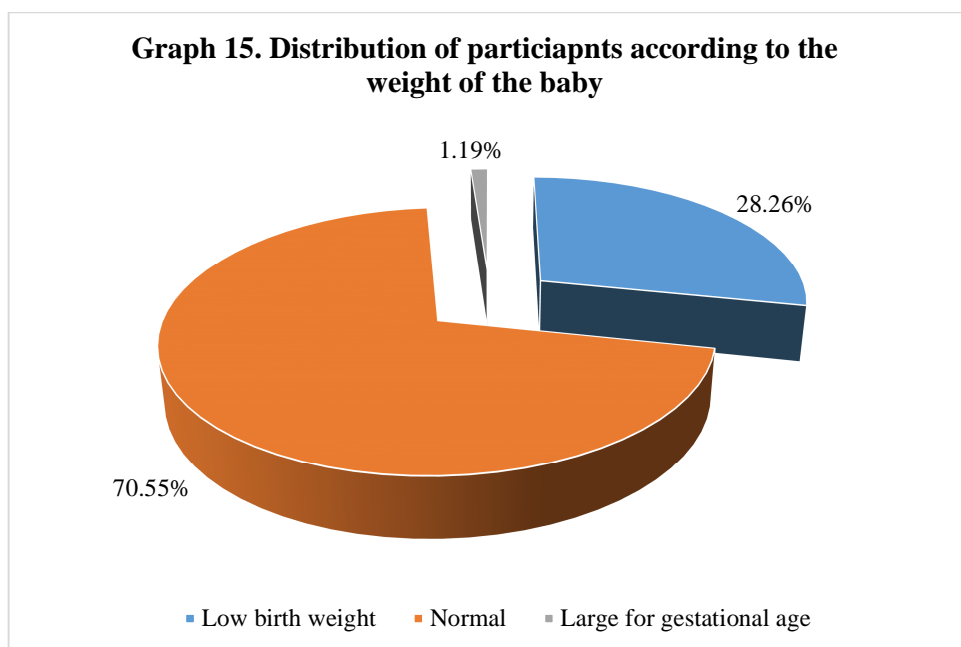
Sex of the baby	Distribution (n=506)	
	Number	Percentage
Boy	244	48.22
Girl	262	51.78
Total	506	100.00



In the present study, 51.78% of the women delivered girls and 48.22% delivered boys. The boy to girl ratio was 1:1.07.

Table 15. Distribution of participants according to the weight of the baby

Weight of the baby	Distribution (n=506)	
	Number	Percentage
Low birth weight	143	28.26
Normal	357	70.55
Large for gestational age	6	1.19
Total	506	100.00



In this study, majority of the participants had babies with normal birth weight (70.55%), 28.26% had babies with low birth weight and only 1.19% of babies were large for gestational age.

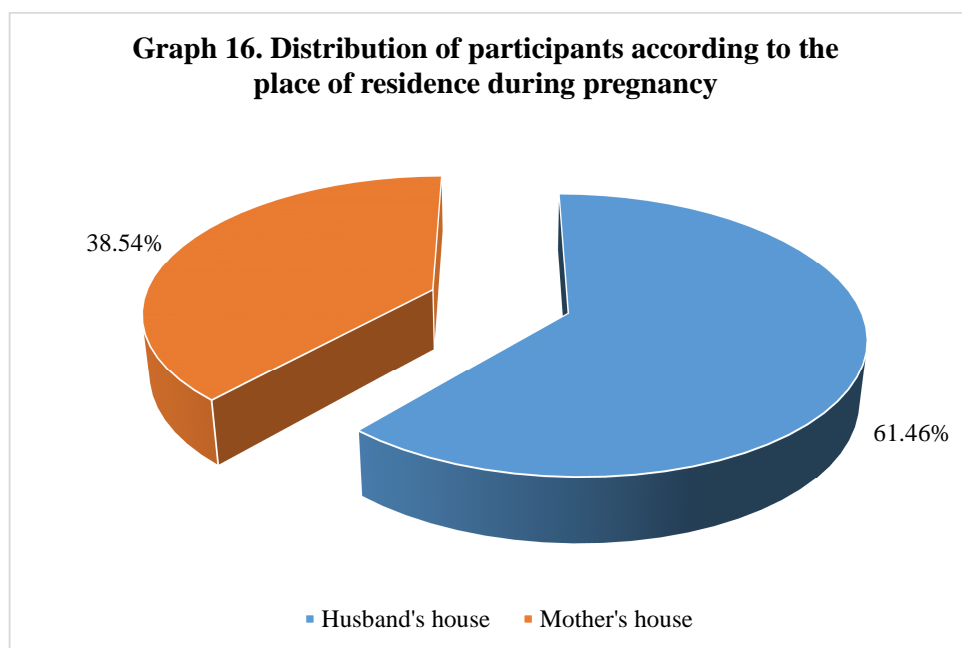
Table 16. Distribution of participants according to breast feeding

Parameters		Distribution (n=506)	
		Number	Percentage
Initiation of breast feeding	Within 30 minutes	215	42.49
	30 minutes to 4 hours	252	49.80
	4 to 24 hours	35	6.92
	>24 hours	4	0.79
Exclusive Breastfeeding	Yes	378	74.70
	No	128	25.30
Difficulty faced during breast feeding	Yes	154	30.43
	No	352	69.57

In this study, initiation of breast feeding was done within 30 minutes to 4 hours by 49.80% of the women. In the present study, exclusive breast feeding was done by 74.70% of the participants and 25.30% of the participants did not practice exclusive breast feeding. In this study, 30.43% of the participants faced difficulty during breast feeding and 69.57% of the participants had no difficulty during breastfeeding.

Table 17. Distribution of participants according to the place of residence during pregnancy

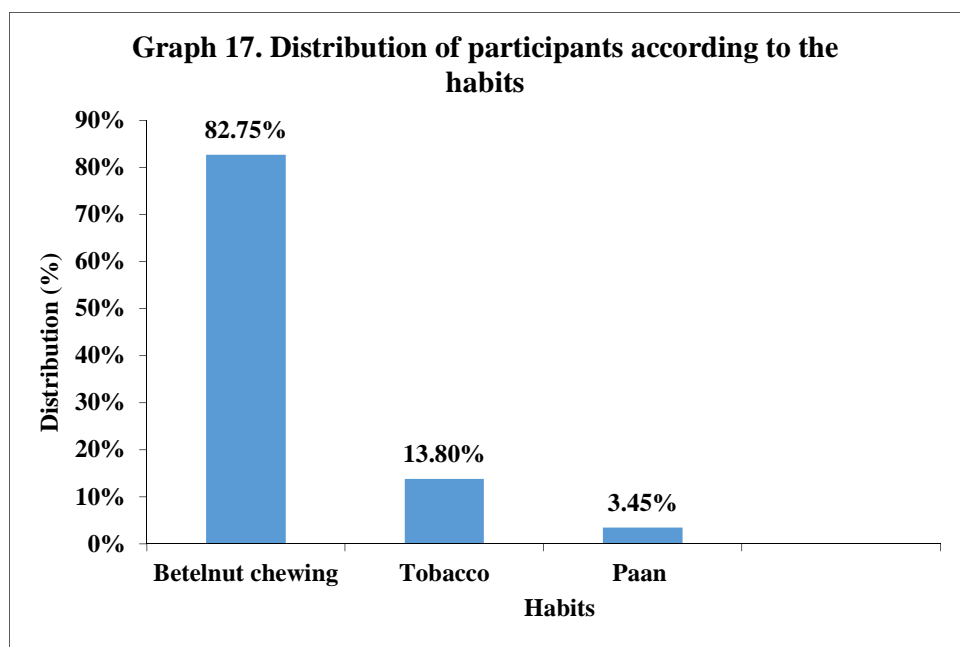
Place of residence during pregnancy	Distribution (n=506)	
	Number	Percentage
Husband's house	311	61.46
Mother's house	195	38.54
Total	506	100.00



In this study, 61.46% of the participants resided at husband’s house during pregnancy and only 38.54% of the participants resided at mother’s house during pregnancy.

Table 18. Distribution of participants according to the habits

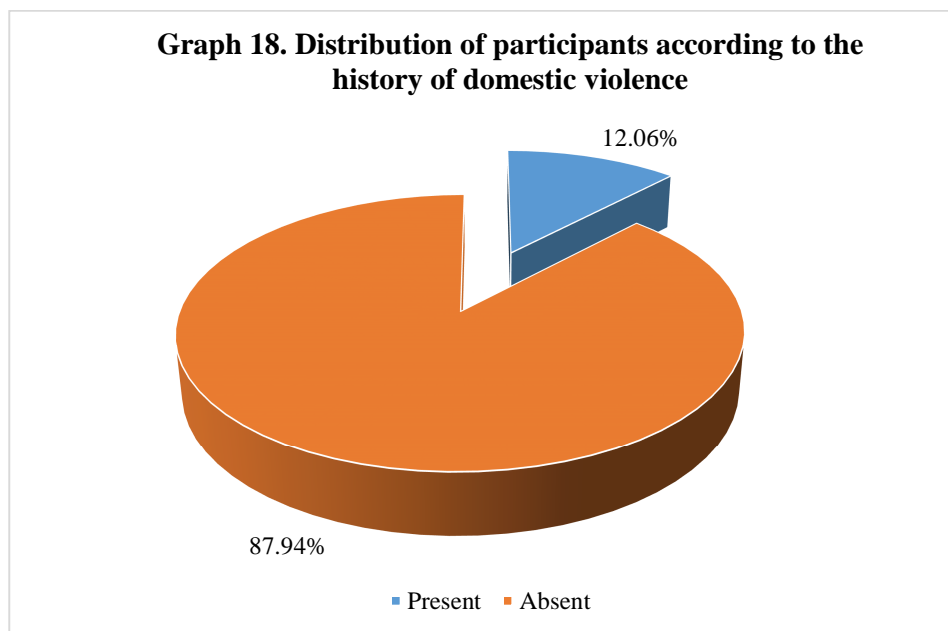
				Habits	Distribution (n=58)	
Habits	Distribution (n=506)		Number		Percentage	
		Number	Percentage			
				Betelnut chewing	48	82.75
Yes	58	11.46		Tobacco	8	13.8
No	448	88.54		Paan	2	3.45
Total	506	100		Total	58	100



In this study, 11.46% of the participants had a habit whereas 88.54% did not have any habits. Among the participants with habits 82.75% had a habit of chewing betelnut, 13.80% had a habit of using tobacco and 3.45% used Paan.

Table 19. Distribution of participants according to the history of domestic violence

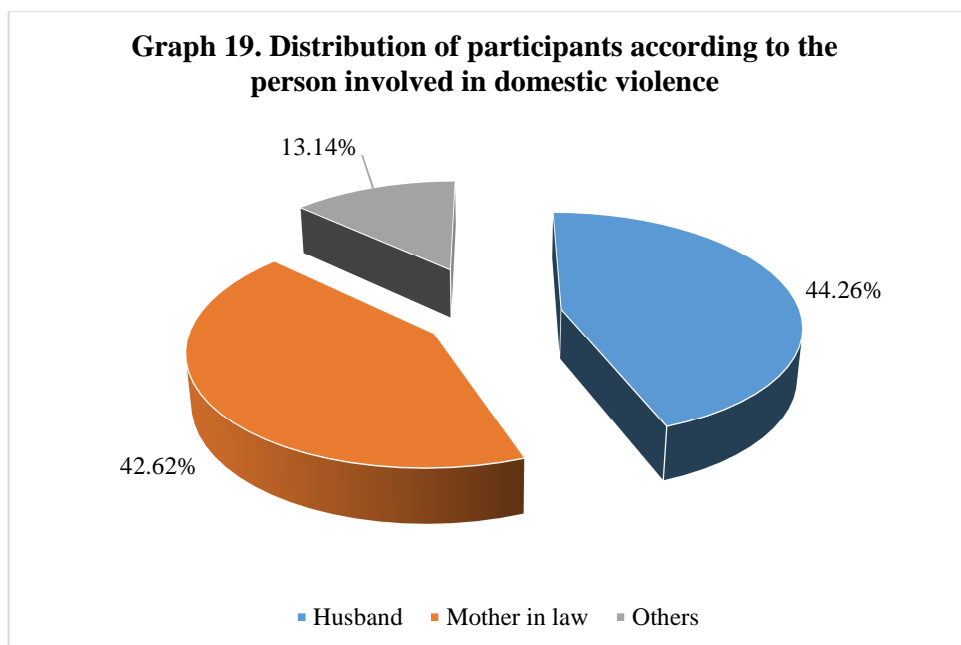
History of domestic violence	Distribution (n=506)	
	Number	Percentage
Present	61	12.06
Absent	445	87.94
Total	506	100.00



In this study, 12.06% of the participants reported history of domestic violence and 87.94% of the participants had no history of domestic violence.

Table 20. Distribution of participants according to the person involved in domestic violence

Domestic violence	Distribution (n=61)	
	Number	Percentage
Husband	27	44.26
Mother-in-law	26	42.62
Others	8	13.14
Total	61	100.00



In the present study, among 61 participants who had history domestic violence, 44.26% of domestic violence was caused by husband, 42.62% was caused by mother in law and 13.14% was caused by others.

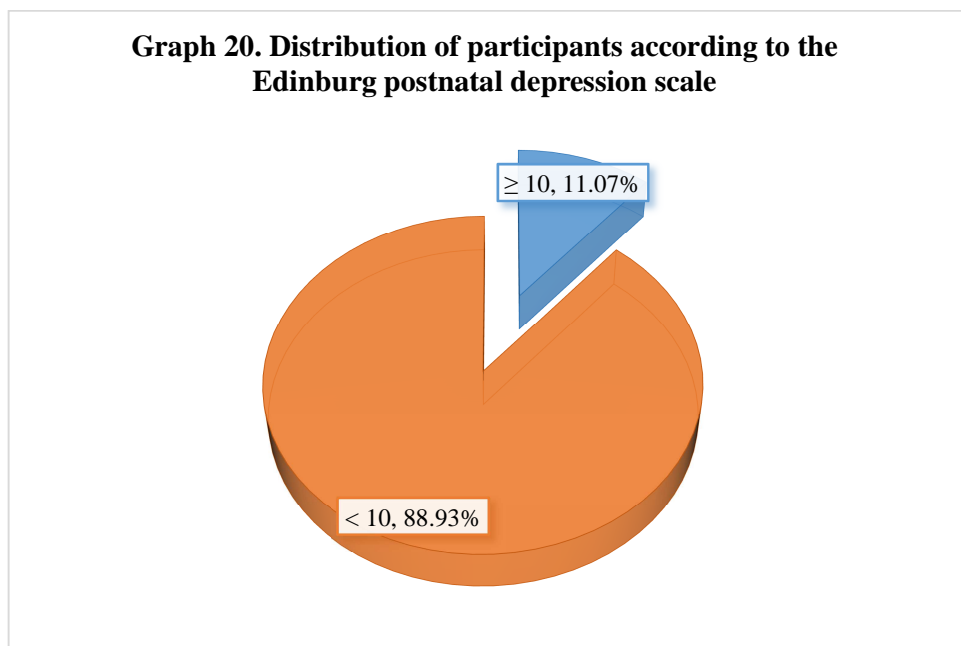
Table 21. Distribution of participants according to the presence of husband during delivery and the family support after delivery.

Parameters		Distribution (n=506)	
		Number	Percentage
Presence of Husband	Yes	425	83.99
	No	81	16.01
Family support after delivery	Yes	451	89.13
	No	55	10.87

In the present study, 83.99% of the participant's husband were present during delivery whereas 16.01% of participant's husband were not present with them during delivery. In this study, 89.13% of the participants reported family support after delivery and only 10.87% of the participants had no family support after delivery .

Table 22. Distribution of participants according to the Edinburg postnatal depression scale (EPDS)

Edinburg postnatal depression scale	Distribution (n=505)	
	Number	Percentage
≥ 10	56	11.07
<10	450	88.93
Total	506	100.00



In the present study, 11.07% of the women had Edinburg postnatal depression scale score of ≥ 10 .

Table 23. Association between sociodemographic characteristics and Edinburg postnatal depression scale

Variable	Subgroup	Edinburg postnatal depression scale				Total (n=506)		x^2	p
		<10 (n=450)		≥ 10 (n=56)		No.	%		
		No.	%	No.	%				
Age group (Years)	18 to 20	21	4.67	2	3.57	23	4.55	21.95	< 0.001
	21 to 24	121	26.89	31	55.36	152	30.04		
	25 to 29	161	35.78	7	12.50	168	33.20		
	30 to 35	147	32.67	16	28.57	163	32.21		
Religion	Hindu	166	36.89	20	35.71	186	36.76	-	0.928
	Muslim	280	62.22	36	64.29	316	62.45		
	Christianity	4	0.89	0	0.00	4	0.79		
Educational status	Illiterate	8	1.78	2	3.57	10	1.98	-	0.002
	Read and write	16	3.56	0	0.00	16	3.16		
	Primary School	55	12.22	1	1.79	56	11.07		
	High School	182	40.44	15	26.79	197	38.93		
	10 to 12/ Diploma	163	36.22	34	60.71	197	38.93		
	Graduate and/or above	26	5.78	4	7.14	30	5.93		
Occupational status	House wife	294	65.33	43	76.79	337	66.60	-	0.056
	Business	12	2.67	2	3.57	14	2.77		
	Labourer	38	8.44	1	1.79	39	7.71		
	Government employee	30	6.67	6	10.71	36	7.11		
	Private employee	76	16.89	4	7.14	80	15.81		
Type of family	Joint	131	29.11	12	21.43	143	28.26	-	0.329
	Nuclear	223	49.56	28	50.00	251	49.60		
	Three generation	96	21.33	16	28.57	112	22.13		
Socio economic status	Class I	4	0.89	4	7.14	8	1.58	-	0.041
	Class II	106	23.56	10	17.86	116	22.92		
	Class III	236	52.44	28	50.00	264	52.17		
	Class IV	100	22.22	14	25.00	114	22.53		
	Class V	4	0.89	0	0.00	4	0.79		

The association between socio demographic characteristics is as shown in table 23, more number of the participants in the depressed group were aged between 21 to 24 years (55.36%) , Muslim by religion(64.29%), studied 10 to 12/ Diploma (60.71%), housewife (76.79%) from nuclear family (50%), belonged to Class III socio-economic status (50%). Significant association was noted between age, educational status and socioeconomic status with Edinburg postnatal depression scale score ($p<0.050$).

Table 24. Association between planning of pregnancy and Edinburg postnatal depression scale

Planning of pregnancy	Edinburg postnatal depression scale				Total		x ²	p
	<10 (n=450)		≥ 10 (n=56)		(n=506)			
	No.	%	No.	%	No.	%		
Planned	381	84.66	15	26.78	396	78.26	98.070	<0.001
Unplanned	69	15.34	41	73.22	110	21.74		

In the present study, a greater number of the participants in depression positive group conceived without planning for the pregnancy (73.22%) and noted that statistically significant association was found between planning of pregnancy with Edinburg postnatal depression scale score ($p<0.050$).

Table 25. Association between maternal history of miscarriage/ abortion and Edinburg postnatal depression scale

Maternal history	Findings	Edinburg postnatal depression scale				Total (n=506)		x^2	p
		<10 (n=450)		≥ 10 (n=56)		No.	%		
		No.	%	No.	%				
Previous miscarriage/ abortion	Yes	71	15.77	22	39.28	93	18.38	18.346	<0.001
	No	379	84.23	34	60.72	413	81.62		

In this study, 39.28% of the participants among the depression positive had previous history of miscarriage/ abortion and noted that statistically significant association was found between maternal history of previous miscarriage/abortion with Edinburg postnatal depression scale score ($p < 0.050$).

Table 26. Association between Parity and Edinburg postnatal depression scale

Parity	Findings	Edinburg postnatal depression scale				Total (n=506)		x^2	p
		<10 (n=450)		≥ 10 (n=56)		No.	%		
		No.	%	No.	%				
Parity	Primipara	170	37.78	22	39.29	192	37.94	0.048	0.884
	Multipara	280	62.22	34	60.71	314	62.06		

In the present study, greater number of the participants (60.71%) in the depression positive group were multiparous and no significant association was noted between Edinburg postnatal depression scale score with parity and birth spacing ($p < 0.050$).

Table 27. Association between maternal characteristics and Edinburg postnatal depression scale

Maternal characteristics	Findings	Edinburg postnatal depression scale				Total		χ^2	p
		<10 (n=450)		≥ 10 (n=56)		(n=506)			
		No.	%	No.	%	No.	%		
Antenatal check-up	Adequate	424	94.22	50	89.29	474	93.68	-	0.238
	Partial	26	5.78	6	10.71	32	6.32		
Warning signs	Yes	46	10.22	30	53.57	76	15.02	73.321	<0.001
	No	404	89.78	26	46.43	430	84.98		

In this study, 10.71% of the participants from depression positive group had partial antenatal check-up and no statistically significant association was noted between Edinburg postnatal depression scale score with ANC (p=0.238). Further, Edinburg postnatal depression scale score was significantly associated with warning signs (p<0.001).

Table 28. Association between pregnancy outcome and Edinburg postnatal depression scale

Pregnancy outcome	Findings	Edinburg postnatal depression scale				Total (n=506)		χ^2	p
		<10 (n=450)		≥ 10 (n=56)		No.	%		
		No.	%	No.	%				
Gestational age at delivery	Term	330	73.33	36	64.29	366	72.33	-	0.041
	Preterm	118	26.22	18	32.14	136	26.88		
	Post-term	2	0.44	2	3.57	4	0.79		
Mode of delivery	Normal	287	63.78	39	69.64	326	60.87	-	0.513
	LSCS	163	36.22	17	30.36	180	35.57		

In the present study 32.14% of the participants from the depression positive group had preterm delivery and the Edinburg postnatal depression scale scores was significantly associated with gestational age at delivery ($p < 0.050$).

Table 29. Association between preference towards sex of the baby and Edinburg postnatal depression scale

	Findings	Edinburg postnatal depression scale				Total (n=506)		x^2	p
		<10 (n=450)		≥ 10 (n=56)		No.	%		
		No.	%	No.	%				
Preference towards sex of the baby	No preference	316	70.22	25	44.64	341	67.39	-	< 0.001
	Boy	66	14.67	9	16.07	75	14.82		
	Girl	68	15.11	22	39.29	90	17.79		
Sex of the baby	Boy	221	49.11	23	41.07	244	48.22	1.289	0.261
	Girl	229	50.89	33	58.93	262	51.78		

In this study, a greater number of the participants (44.64%) in depression positive group had no preference towards the sex of the baby followed by participants who preferred to have girl baby (39.29%) and noted that statistically significant association was found between Edinburg postnatal depression scale score with preference towards the sex of the baby ($p < 0.001$).

Further, 58.93% of the participants among the depression positive group had female baby and Edinburg postnatal depression scale score was not associated with sex of the baby ($p > 0.050$).

Table 30. Association between breast feeding and Edinburg postnatal depression scale

Breast feeding	Findings	Edinburg postnatal depression scale				Total		χ^2	p
		<10 (n=450)		≥ 10 (n=56)		(n=506)			
		No.	%	No.	%	No.	%		
Initiation of breast feeding	Within 30 minutes	188	41.78	27	48.21	215	42.49	0.853	0.415
	30 minutes to 4 hours	230	51.11	22	39.29	252	49.80		
	4 to 24 hours	30	6.67	5	8.93	35	6.92		
	>24 hours	2	0.44	2	3.57	4	0.79		
Exclusive breast feeding	Yes	339	75.33	39	69.64	378	74.70	0.578	0.446
	No	111	24.67	17	30.36	128	25.30		
Difficulty in breast feeding	Yes	127	28.22	27	48.21	154	30.43	9.402	0.003
	No	323	71.78	29	51.79	352	69.57		

In this study, 48.21 % of the participants among the depressive positive group had difficulty in breast feeding and statistical association was noted between Edinburg postnatal depression scale scores with difficulty in breast feeding.

Table 31. Association between other parameters and Edinburg postnatal depression scale

Other parameters	Findings	Edinburg postnatal depression scale				Total (n=506)		χ^2	p
		<10 (n=450)		≥ 10 (n=56)		No.	%		
		No.	%	No.	%				
Place of residence during pregnancy	Husband's house	258	57.33	53	94.64	311	61.46	29.26	<0.001
	Mother's house	192	42.67	3	5.36	195	38.54		
Habits	Tobacco	4	0.89	4	7.14	8	1.58	52.14	<0.001
	Paan	2	0.44	0	0.00	2	0.40		
	Beetle-nut chewing	30	6.67	18	32.14	48	9.49		
	No habits	414	92.00	34	60.71	448	88.54		
Domestic violence	Yes	24	5.33	37	66.07	61	12.06	173.29	<0.001
	No	426	94.67	19	33.93	445	87.94		
Availability of husband during delivery	Yes	400	88.89	25	44.64	425	83.99	72.51	<0.001
	No	50	11.11	31	55.36	81	16.01		
Family support after delivery	Yes	412	91.56	39	69.64	451	89.13	24.68	<0.001
	No	38	8.44	17	30.36	55	10.87		

In the present study, majority (94.64%) of the participants among the depression positive group were residing in husbands house during pregnancy, had a history of domestic violence (66.07%), 55.36% of participants husband were not present with them during delivery. Edinburg postnatal depression scale scores were significantly associated with place of residence during pregnancy, habits, domestic violence, availability of husband during delivery and family support after delivery ($p < 0.001$).

DISCUSSION

Table 1. Distribution of participants according to the age

In the present study 4.55% women were aged between 18-20 years, 30.04% of women were aged between 21-24 years, 33.20% of the women were aged from 25 to 29 years, 32.21% of the women were aged from 30 to 34 years. The mean age group of the participants was 26.51 (SD \pm 3.89).

A similar study done by Sharma P et al in 2018 in Dharwad revealed that, majority (45.8%) belonged to age between 21-25 years, 32.17% were aged between 26-30 years, 11.60% were aged less than 20 years. ⁽²⁾ Similarly, a study conducted in Belagavi by Kruthika et al in 2014 concluded that 64.8% of the participants were aged between 20-24 years and only 19.9% of the participants were aged between 25-29 years. ⁽¹⁰⁾

Table 2. Distribution of participants according to the religion

In this study 62.45% of the women belonged to Muslim religion, 36.76% were Hindu and 0.79% were Christians.

A similar study conducted by Nigam A et al in 2016 in Lucknow showed that majority (77%) of them were Hindu by religion and 23% were Muslim and there no were Christian participants. ⁽⁵⁾

Table 3. Distribution of participants according to the education

In this study majority of the participants studied high school and PUC / Diploma (38.93%),11.07% studied Primary school, 5.93% completed Degree, 3.16 % of the participants could read and write and 1.98% of participants were Illiterate.

A similar study conducted by Avita Rose Johnson et al in 2013 in Ramnagara, Karnataka revealed that 6.5% were Illiterate, 18.6% studied up to Secondary/ High school, 26.2% completed 10th standard, 33.3% studied till PUC and 15.4% completed degree. ⁽⁴⁾

Table 4. Distribution of participants according to the occupation

In this study, 66.60% of the participants were housewives, 15.81% of the participants were private employee, 7.71% of the participants were labourer, 7.11% of the participants were government employee and 2.77% were carrying out business.

A similar study done in Golkapuri, Delhi by Basu et al, in 2019 stated that majority (93.3%) were Housewife and only 6.7% of participants were working. ⁽¹¹⁾

Table 5. Distribution of participants according to the type of family

In this study, 49.60% of the participants belonged to nuclear family, 22.13% belonged to three generation family and 28.26% of the participants belonged to joint family

A similar study done in Dharwad by Sharma P et al in 2018 stated that 35.6% belonged to nuclear family, 28.5% belonged to joint family, 35.9% belonged to three generation family. ⁽²⁾

Table 6. Distribution of participants according to the socio-economic status

In this study, according to modified B. G. Prasad classification, majority of the participants belonged to class III (52.17%), 22.92% of the participants belonged to class II, 22.53% of the participants belonged to class IV, 1.58% belonged to class I and only 0.80% belonged to class V.

A similar study by Dinesh P et al in 2015 in Chittoor, revealed that 33.5% of the participants belonged to Class I, 14% belonged to Class II, 17% belonged to Class III, 16% belonged to Class IV and 19.5% belonged to Class V according to modified B.G. Prasad Classification. ⁽¹²⁾

Table 7. Distribution of participants according to the planned pregnancy

In this study, 78.26% of the women had planned pregnancy and 21.74 % had unplanned pregnancy.

A study done in HAH Centenary Hospital, New Delhi by Farheen Zaidi et al in 2015 stated that 77.1% of the participants had planned their pregnancy and 22.9% had unplanned pregnancy. ⁽¹⁸⁾

Table 8. Distribution of participants according to the parity.

In the present study 62.06% of the women were multipara and 37.94% women belonged to primipara.

A similar study done in Mandya district by Sidharudha Shivalli et al in 2012 revealed that 67.6% of the participants were primipara and 32.4% were multipara. ⁽¹⁵⁾

Table 9. Distribution of participants according to the Antenatal check-up

In the present study, 93.68% of the participants had received adequate Antenatal check-up and 6.32% of the women had received partial Antenatal check-up.

A similar study done in Dhaka in 2018 by K.N. Sharmin et al stated that 65% of the participants had regular antenatal check-up and 35% of the participants did not have regular antenatal check-up. ⁽³⁰⁾

Table 10. Distribution of participants according to the history of miscarriage/abortion

In this study, 18.38% of the participants had history of miscarriage / abortion whereas 81.62% of the participants had no history of miscarriage/ abortion.

A similar study done in Belagavi by Kruthika et al in 2015 stated that 90.3% had no history of abortion and only 9.7% had history of abortion. ⁽¹⁰⁾

Table 11. Distribution of participants according to gestational age at delivery

In this study, majority of the participants had term delivery (72.33%), 26.88% of the participants had preterm delivery and 0.79% had post term delivery.

A similar study conducted by Rashidul et al in Dhaka city in 2017 stated that 84.2% had term delivery and 15.8% had preterm delivery. ⁽³¹⁾

Table 12. Distribution of participants according to the mode of delivery

In this study, 64.43% had normal vaginal delivery and 35.57% of the women underwent LSCS.

A similar study done by Shiraam et al in 2008 in Kanchipuram stated that 70.41% of the participants had normal vaginal delivery and 29.59% required LSCS. (32)

Table 13. Distribution of participants according to the preference towards sex of the baby

In this study, 67.39% of the women had no preference towards the sex of the baby, 17.79% of the women preferred girls and 14.82% of the women preferred boys.

A similar study done in Maharashtra in 2008 by Saldanha et al stated that 48.15% of the participants had sex preference towards the baby and 51.85% of the participants did not have any preference towards sex. (6)

Table 14. Distribution of participants according to the sex of the baby

In the present study, 51.78% of the women delivered girls and 48.22% delivered boys. The boy to girl ratio was 1:1.07.

A similar study done by Shiraam et al in 2008 in Kanchipuram revealed that 49.86% boys were delivered and 50.14% of girls were delivered by the participants. Similarly, a study done by Farheen Zaidi et al in Delhi stated that 42.28% boys and 57.72% girls were born to the participants. (18)

Table 15. Distribution of participants according to the weight of the baby

In this study, majority of the participants had babies with normal birth weight (70.55%) , 28.26% had babies with low birth weight and only 1.19% of babies were large for gestational age.

A similar study done in 2010 by Jain A et al in Delhi revealed that 82.48% of the babies weighed more than 2.5kg and 17.5% of the babies weighed less than 2.5kg. (33)

Table 16. Distribution of participants according to the Initiation of breast feeding, exclusive breast feeding (EBF) and difficulty faced during breast feeding.

In this study, initiation of breast feeding was done within 30 minutes to 240 minutes by 49.80% of the women. Exclusive breast feeding was done by 74.70% of the participants and 25.30% of the participants did not practice exclusive breast feeding. 30.43% of the participants faced difficulty during breast feeding and 69.57% of the participants had no difficulty during breastfeeding.

A similar study done in Dhaka by K.N. Sharmin et al in 2018 stated that 29.5% of the participants-initiated breast feeding to the baby within 1 hour, 68.5% initiated within 24 hours and 2.0% initiated after 24 hours. They also stated that 94.77% of the participants have exclusive breastfeeding and only 5.23% of the participants did not practice exclusive breastfeeding. (30)

Another study done in Goa in 2002 by Vikram Patel et al stated that 36 % of the mothers faced difficulty during breastfeeding. (17)

Table 17. Distribution of participants according to the place of residence during pregnancy

In this study, 61.46% of the participants resided at husband's house during pregnancy and only 38.54% of the participants resided at mother's house during pregnancy.

A similar done in Ramnagara, Karnataka in 2012 by Avita Rose Johnson et al stated that 18.7% of the participants resided in mother's place during birth and 81.3% resided in husband's place. ⁽⁴⁾

Table 18. Distribution of participants according to the habits

In this study, 11.46% of the participants had a habit whereas 88.54% did not have any habits. Among the participants with habits, 82.75% had a habit of chewing betelnut, 13.80% had a habit of using tobacco and 3.45% used Paan.

Table 19. Distribution of participants according to the history of domestic violence

In this study, 12.06% of the participants reported history of domestic violence and 87.94% of the participants had no history of domestic violence.

A similar study done in 2019 by Fowzia Tasnim et al in Rajshahi city, Bangladesh stated that 58.6% of the women experienced any form of domestic violence, 17.7% experienced sexual form of domestic violence. ⁽³⁴⁾

Table 20. Distribution of participants according to the person involved in domestic violence

In the present study, among 61 participants who had history of domestic violence, 44.26% of domestic violence was caused by husband, 42.62% was caused by mother-in-law and 13.14% was caused by others.

A similar study done in 2000 by W.C. Leung et al in Hong Kong stated that 27.9% of the participants were perpetrated by husband and 26.7% of them were perpetrated by mother-in-law. ⁽³⁵⁾

Table 21. Distribution of participants according to the presence of husband during delivery and family support after delivery

In the present study, 83.99% of the participant's husband were present during delivery whereas 16.01% of participant's husband were not present with them during delivery. In this study, 89.13% of the participants reported family support and only 10.87% of the participants had no family support after delivery.

A similar study done in 2007 by Saldanha et al in large military hospital concluded that availability of husband during delivery time and other help available at the time of delivery were statistically significant with Depression positive group. ⁽⁶⁾

Table 22. Distribution of participants according to the Edinburg postnatal depression scale (EPDS)

In the present study, 11.07% of the women had Edinburg postnatal depression scale score of ≥ 10 .

A similar study done by Shriram et al in 2008 in Kanchipuram concluded that prevalence of postpartum depression was 11% among the study participants. ⁽³²⁾

A similar study done by Rathod et al in Madhya Pradesh in 2013 concluded that prevalence of postpartum depression was 10% using PHQ9 scale. ⁽³⁶⁾

Another study done in Delhi in 2010 by Jain A et al stated that 6.83% of the participants were screened positive for EPDS. ⁽³³⁾

Table 23 to 31. Association of various variables with Edinburg postnatal depression scale by chi square test.

In the present study, association of Edinburg postnatal depression scale was found to be statistically significant with age, educational status, socio economic status, pregnancy planning, history of previous miscarriage / abortion, warning signs during pregnancy, gestational age at delivery, sex preference, difficulty in breast feeding, place of residence during pregnancy, habits, domestic violence, availability of husband during delivery, family support after delivery.

A similar study done by Saldanha et al in large military hospital in 2007 concluded that risk factors i.e., education, domestic violence, marital disharmony, time of delivery, breastfeeding, availability of the husband at the time of delivery, gender of the new born, type of help available at delivery time were statistically significant and were considered as potential risk factors. ⁽⁶⁾

A similar study done in Mandya Karnataka by Siddharudha et al concluded that significant association was found between socio-demographic factors like family type, socio-economic status, occupation, complications in pregnancy and gender of the baby and EPDS. ⁽¹⁵⁾

A study done in Ramnagara by Avita Rose Johnson et al Stated that association of place of residence during pregnancy was statistically significant with EPDS. ⁽⁴⁾

A study done by Amipara et al in 2017 in Valsad concluded that association of educational status, age of marriage, desired sex of the baby, In-laws desired for sex of the baby, relation with husband and In-laws showed statistically significant result with EPDS. ⁽³⁷⁾

CONCLUSION

The current cross-sectional study, which was performed using EPDS, observed 11.07% prevalence of postpartum depression among the postpartum women residing in Rukmini Nagar and Ashok Nagar, Urban field practice areas of Jawaharlal Nehru Medical College.

The prevalence of postpartum depression was significant with various factors like age, education, socio economic status, unplanned pregnancy, history of previous miscarriage / abortion, warning signs during pregnancy, gestational age at delivery, sex preference towards baby, difficulty in breast feeding, place of residence during pregnancy, habits, domestic violence, availability of husband during delivery, family support after delivery.

LIMITATIONS

In our study we assessed the prevalence of depression among postpartum mothers who were within 6 weeks after delivery. This can be increased up to one year of postnatal period to help more mothers.

As some data was entered based on the mother's memory it could have been under-reported or over-reported the information which could have occurred due to recall bias.

Though this was a multicentric study conducted in two slum areas of Belagavi, majority of the participants were Muslim by religion. The result produced from this study might not be applicable to all the population.

RECOMMENDATIONS

1. Early detection of mental health diseases especially problems that can affect the wellbeing of a new born and a mother is needed for a stronger community and it can be done with relative ease.
2. Local surveillance systems for early detection of peripartum diseases can be done by training grassroot level staff with easy-to-use tools like EPDS and identifying risk factors of the disease.
3. In the age with easy computerized electronic health records, depression screening instruments can be interfaced or integrated to optimize diagnosis, treatment, and follow-up.
4. Measures to increase the women empowerment groups in the community which can provide emotional and mental strength to women should be increased, these groups help in easing the propagation of information, especially those that encourage improvement of the mother and child's health and well-being.
5. Comprehensive care with integration of mobile health tools can go a long way towards improving overall health of the community by providing grassroot workers ready to use information at any given time and to the primary care physicians a tool towards virtual referral instead of waiting for long and difficult in person consultation.
6. Screening of antenatal mothers can be done when the mother visits the antenatal clinic or when the mothers come for immunization, the health workers can be trained to administer the screening tools when they visit the house for their routine visits.

STRENGTHS

The Strengths of the study are:

1. This study was Community based study with large sample size.
2. The EPDS used in the present study is a well- validated and customarily used for screening depression during postpartum period.
3. The various factors which might potentially affect the mental status were considered and evaluated.

SUMMARY

The present study which is a community based cross sectional study was carried out to assess the prevalence of postpartum depression among women in urban area of north Karnataka using EPDS.

The study was conducted among all registered Postnatal women less than 6 weeks from the day of delivery in Urban field practice areas of Rukmini Nagar UHC and Ashok Nagar UHC in Belagavi district of Karnataka state. A total of 506 study participants were included in this study for a period of one year from 1st January to December 31st 2021.

The mean age group of the participants was 26.51 (SD \pm 3.89). In the present study 4.55% women were aged between 18-20 years, 30.04% of women were aged between 21-24 years, 33.20% of the women were aged between 25 - 29 years, 32.21% of the women were aged from 30 to 34 years. In this study 62.45% of the women belonged to Muslim religion, 36.76% were Hindu and 0.79% were Christians, majority of the participants studied high school and PUC / Diploma (38.93%), 11.07% studied Primary school, 5.93% completed Degree, 3.16 % of the participants can read and write and 1.98% of participants were Illiterate. Based on occupation, 66.60% of the participants were housewives, 15.81% of the participants were private employee, 7.71% of the participants were labourer, 7.11% of the participants were government employee and 2.77% were carrying out business. In this study 49.60% of the participants belonged to nuclear family, 22.13% belonged to three generation family and 28.26% of the participants belonged to joint family.

In this study, according to modified B. G. Prasad classification, majority of the participants belonged to class III (52.17%), 22.92% of the participants belonged to class II, 22.53% of the participants belonged to class IV , 1.58% belonged to class I and only 0.80% belonged to class V. In this study, 78.26% of the women had planned pregnancy and 21.74 % had unplanned pregnancy. In the present study 62.06% of the women were multipara and 37.94% women belonged to primipara. In the present study,93.68% of the participants had received adequate Antenatal check-up and 6.32% of the women had received partial Antenatal check-up.

In this study, 18.38% of the participants had history of miscarriage / abortion whereas 81.62% of the participants had no history of miscarriage/ abortion. In this study, majority of the participants had term delivery (72.33%), 26.88% of the participants had preterm delivery and 0.79% had post term delivery.

In this study, 64.43% had normal vaginal delivery and 35.57% of the women underwent LSCS. In this study 67.39% of the women had no preference towards the sex of the baby, 17.79% of the women preferred girls and 14.82% of the women preferred boys. In the present study, 51.78% of the women delivered girls and 48.22% delivered boys. The boy to girl ratio was 1:1.07.

In this study, majority of the participants had babies with normal birth weight (70.55%), 28.26% had babies with low birth weight and only 1.19% of babies were large for gestational age. In this study initiation of breast feeding was done within 30 minutes to 240 minutes by 49.80% of the women. Exclusive breast feeding was done by 74.70% of the participants and 25.30% of the participants did not practice exclusive breast feeding. 30.43% of the participants faced difficulty during breast feeding and 69.57% of the participants had no difficulty during breastfeeding.

In this study, 61.46% of the participants resided at husband's house during pregnancy and only 38.54% of the participants resided at mothers house during pregnancy. In this study 12.06% of the participants reported history of domestic violence and 87.94% of the participants had no history of domestic violence.

In the present study, among 61 participants who had history of domestic violence, 44.26% of domestic violence was caused by husband, 42.62% was caused by mother in law and 13.14% were caused by others.

In the present study, 83.99% of the participant's husband were present during delivery whereas 16.01% of participant's husband were not present with them during delivery. In this study, 89.13% of the participants reported having family support and only 10.87% of the participants had no family support after delivery.

In the present study, association of Edinburg postnatal depression scale was found to be statistically significant with age, educational status, socio economic status, pregnancy planning, history of previous miscarriage / abortion, warning signs during pregnancy, gestational age at delivery, sex preference towards baby, difficulty in breast feeding, place of residence during pregnancy, habits, domestic violence, availability of husband during delivery, family support after delivery.

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ANNEXURES

ANNEXURE – I INFORMED CONSENT

“PREVALENCE OF POSTPARTUM DEPRESSION AMONG WOMEN IN URBAN AREA OF NORTH KARNATAKA”

Principle investigator: _____ **Guide:** _____

PG Student, Department of Community Medicine,
J. N. Medical College, KAHER, Belagavi- 590010.

Introduction:

Postpartum depression is an important public health concern, taking place during pregnancy and postnatal period in which great change and transition take place in women. Despite the launch of India’s national mental health programme in 1982, maternal mental health is still not a prominent component of the programme. Dedicated maternal mental health services are largely deficient in health-care facilities and health workers lack mental health training. In most cases postpartum depression is preventable and is largely treatable. Early identification can lead to early treatment. However, published literature from India is scant on this aspect.

Objective / Purpose of the study:

You are being invited to participate in the study in assessing the postpartum depression among women residing in urban area and to know the factors associated with postpartum depression.

Procedures:

In this study you will have to answer a few predesigned questions about your socio- demography details and about your antenatal period, birth experience and postnatal period. The entire procedure may take 20-30 minutes. If you agree to participate, the required information will be collected.

Possible benefits:

During this study, if you are found to be suffering from postpartum depression you will be counseled and referred to KLE Prabhakar Kore Hospital for further management. No risk is involved in this study.

Incentives:

You will not be eligible for any kind of monetary benefits or free services by virtue of your participation in the study at Rukmini Nagar UHC and Ashok Nagar UHC in Belagavi or at Dr. PBK Hospital and MRC, Belagavi.

Possible risks:

There are no risks involved in this study.

Cost of participation:

You will not bear any costs attached to your participation.

Legal rights:

By signing this consent form, you are not waiving off any of your legal rights.

Privacy and Confidentiality:

The results of the study may be published for scientific purposes. However your personal identity will not be revealed. All information collected will be coded so that no one other than investigator will know your identity.

Withdrawal from the study:

Participation in this study is voluntary. If you don't wish to participate in this study, you will not lose benefits to which you are entitled. You can withdraw from the study anytime, if you wish to do so.

Authorization to present / publish the results:

The investigator may use the information gathered from this study for presentation in conferences or publication in scientific journals. However your personal identity will not be revealed.

Questions:

If you have any questions about rights as a research participant you can contact **Dr. Harsha Hegde, Chaiperrson**, JNMC, IEC & Scientist D, ICMR, National Institute of Traditional Medicine, Belagavi-9480422500 and **Dr. (Mrs.) N.S Mahantashetti**, Principal, JNMC, KAHER, Belagavi-590010 on Phone no: 0831-2471350.

CONSENT STATEMENT

“I have been explained all the contents of this consent form in my local language and have understood and clarified all my queries about the study to the best of my knowledge. Furthermore, I recognize that I have the complete right to withdraw this consent at any point during the study. I understand that the information given by me will be confidential and will be used for research purpose only, further I am aware that the result of this research will be presented/published without disclosing any personal identification of the participants.

I hereby give my voluntary consent for participation in the study. I do sign the informed consent form in front of an eyewitness whom I recognize.”

Name and Signature/left thumb impression of the participant:

Name and Signature/left thumb impression of the witness:

Name and Signature of the interviewer:

Date:

Place:

ANNEXURE-II

**“PREVALENCE OF POSTPARTUM DEPRESSION AMONG WOMEN IN
URBAN AREA OF NORTH KARNATAKA”**

QUESTIONNAIRE

PART-1 SOCIO-DEMOGRAPHIC ASPECTS

S. No: _____ Name: _____ Age: _____ years

Address: _____

1. Religion:	1. Hindu
	2. Muslim
	3. Christian
2. Education:	1. Illiterate
	2. Read and write
	3. Standard 1-4
	4. Standard 5-8
	5. 10-12/ Diploma
	6. Degree/ PG
3. Occupation:	1. Housewife
	2. Business
	3. Labourer
	4. Government employee
	5. Private Employee
4. Marital Status:	1. Separated / divorced
	2. Married
5. Type of Family:	1. Joint
	2. Nuclear
	3. Broken family
	4. Problem family
	5. Three Generation family
	6. Others

6. 1. Monthly income of the family.
2. Total number of family members:
3. Monthly per capita income:
7. Socio-economic status – Modified B.G. Prasad classification
 - a. Class I
 - b. Class II
 - c. Class III
 - d. Class IV
 - e. Class V

PART II-OBSTETRIC HISTORY

A) ANTENATAL HISTORY:

8. Was the pregnancy
 1. Planned
 2. Unplanned
9. Parity of the participants
 1. Primigravida.
 2. Multigravida
10. Have you undergone adequate Antenatal checkup?
 1. Adequate
 2. Partial
11. Any history of miscarriage or abortion?
 1. Yes
 2. No

B) INTRANATAL CHARACTERISTICS

12. Gestational Age at Delivery
 1. Term
 2. Preterm
 3. Post term
13. Place of Delivery
 1. Home
 2. Hospital.
 3. PHC
14. Mode of Delivery
 1. Normal.
 2. LSCS.
 3. Instrumental

C) POST DELIVERY CHARACTERISTICS

15. Any preference you had towards the sex of the baby?
 1. Male
 2. Female
 3. Nil
16. Sex of the baby
 1. Male
 2. Female
17. Birthweight of the baby
 1. Low birth weight baby
 2. Normal
 3. Big
18. When did you initiate breast feeding?
 1. within 30 mins after delivery
 2. 30mins-4 hours after delivery
 3. 4hrs-24hrs after delivery
 4. >24hrs after delivery

19. Are you practicing Exclusive Breast feeding? 1. Yes 2. No
20. Did you have any trouble while breastfeeding / Lactation failure/ Insufficient milk production?
1. Yes 2. No
21. Where did you reside during pregnancy? 1. Husband's House
2. Mother's House
22. Are you following any of these habits? 1) Yes 2) No
If Yes, 1. Tobacco 2. Paan 3. Beetlenut Chewing 4. Other's (please specify) ____

PART V-PSCYCHOLOGICAL FACTORS:

23. Any history of Domestic violence? 1. YES 2. NO
24. If yes, 1. Husband 2. Mother In-law 3. Others
25. Availability of husband at delivery time? 1. YES 2. NO
26. Do you have family support after delivery? 1. YES 2. NO

PART VI-EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS)

Question	Options	Score
27. I have been able to laugh and see the funny side of things	<ul style="list-style-type: none"> • As much as I always could • Not quite so much now • Definitely not so much now • Not at all 	<ul style="list-style-type: none"> • 0 • 1 • 2 • 3
28. I have looked forward with enjoyment to things	<ul style="list-style-type: none"> • As much as I ever did • Rather less than I used to • Definitely less than I used to • Hardly at all 	<ul style="list-style-type: none"> • 0 • 1 • 2 • 3
29. I have blamed myself unnecessarily when things went wrong	<ul style="list-style-type: none"> • Yes, most of the time • Yes, some of the time • Not very often • No, Never 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0

30. I have been anxious or worried for no good reason	<ul style="list-style-type: none"> • No not all • Hardly ever • Yes, Sometimes • Yes, very often 	<ul style="list-style-type: none"> • 0 • 1 • 2 • 3
31. I have felt scared or panicky for no very good reason	<ul style="list-style-type: none"> • Yes, quite a lot • Yes, sometimes • No, not much • No, not at all 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0
32. Things have been getting on top of me	<ul style="list-style-type: none"> • Yes, most of the time I haven't been able to cope at all • Yes, sometimes I haven't been coping as well as usual • No, most of the time I have coped quite well • No, I have been coping as well as ever 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0
33. I have been so unhappy that I have had difficulty sleeping	<ul style="list-style-type: none"> • Yes, most of the time • Yes, sometimes • Not very often • No, not at all 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0
34. I have felt sad or miserable	<ul style="list-style-type: none"> • Yes, most of the time • Yes, quite often • Not very often • No, not at all 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0
35. I have been so unhappy that I have been crying	<ul style="list-style-type: none"> • Yes, most of the time • Yes, quite often • Only occasionally • No, never 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0
36. The thoughts of harming myself has occurred to me	<ul style="list-style-type: none"> • Yes, quite often • Sometimes • Hardly ever • Never 	<ul style="list-style-type: none"> • 3 • 2 • 1 • 0

ANNEXURE-III- KEY TO MASTER CHART

Age: _____ years

Religion:	1. Hindu	1
	2. Muslim	2
	3. Christian	3
Education:	1. Illiterate	1
	2. Read and write	2
	3. Standard 1-4	3
	4. Standard 5-8	4
	5. 10-12/ Diploma	5
	6. Degree/ PG	6
Occupation:	1. Housewife	1
	2. Business	2
	3. Labourer	3
	4. Government employee	4
	5. Private Employee	5
Marital Status:	1. Widowed/Separated	1
	2. Married	2
Type of Family:	1. Joint	1
	2. Nuclear	2
	3. Three Generation family	3
Socio-economic status	1. Class -I	1
	2. Class- II	2
	3. Class- III	3
	4. Class- IV	4
	5. Class- V	5
Was the pregnancy	1. Planned	1
	2. Unplanned	2
Parity	1. Primipara	1
	2. Multipara	2
Adequate Antenatal check-up	1. Adequate	1
	2. Partial	0
History of miscarriage or abortion	1. Yes	1
	2. No	0
Gestational Age at Delivery	1. Term	1
	2. Preterm	2
	3. Post term	3
Place of Delivery	1. Home	1
	2. Institution	2
Mode of delivery	1. Normal	1
	2. LSCS	2
Preference towards the sex of the baby	1. Male	1
	2. Female	2
	3. Nil	0

Sex of the baby	1. Male	1
	2. Female	2
Birth weight of the baby	1. Low birth weight	1
	2. Normal	2
	3. Large for gestational age	3
Initiation of breastfeeding	1. within 30 mins after delivery	1
	2. 30mins-4 hours after delivery	2
	3. 4hrs-24hrs after delivery	3
	4. >24hrs after delivery	4
Practicing Exclusive Breast feeding	1. Yes	1
	2. No	0
Any trouble while breastfeeding	1. Yes	1
	2. No	0
Place of residence during pregnancy	1. Husband's house	1
	2. Mother's house	2
History of habits	1. No	0
	2. Yes	1
If yes	1. Tobacco	1
	2. Paan	2
	3. Betelnut Chewing	3
History of Domestic violence	1. No	0
	2. Yes	1
If yes,	3. Husband	2
	4. Mother-in law	3
Availability of husband during delivery	1. Yes	1
	2. No	0
Family support after delivery	1. Yes	1
	2. No	0
EPDS- Score	1. Less than 10	0
	2. 10 or more	1

ANNEXURE-IV- MASTER CHART

SL NO.	Age	Age group	Religion	Education occupation	Marital Status	Type of family	SES	Planned/Unplanned	Parity	Adequacy(Registered 1st trimester,ANC more than 4, Ij, TT, Fes, Calcium	Previous miscarriage, abortion	Gestational age at delivery	Place of delivery	Mode of delivery	Preference towards sex of the baby	Sex of the baby	Weight of the baby	Initiate Breastfeeding	Exclusive breast feeding	Trouble in breastfeeding	Domestic violence-new	Reside before during delivery	Stay Postnatal	Domestic violence	Availability of husband during delivery	Family support after delivery	EDINBURGH POSTNATAL DEPRESSION'S	Depression	Depression		
1	25	25 to 29	2	3	3	1	2	3	2	1	1	0	2	1	2	1	2	3	1	0	1	1	3	1	0	0	9	<10	0		
2	28	25 to 29	1	6	4	1	2	5	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	0	1	0	7	<10	0		
3	25	25 to 29	2	2	2	2	2	4	1	1	1	1	1	0	1	2	1	1	1	0	0	1	1	0	1	1	7	<10	0		
4	21	21 to 24	2	5	1	2	1	2	1	1	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
5	25	25 to 29	2	6	2	2	2	4	1	2	1	0	2	2	0	2	1	1	1	0	0	2	2	0	1	1	5	<10	0		
6	26	25 to 29	2	2	3	2	2	3	1	1	1	0	2	2	1	0	1	1	1	1	0	1	2	2	1	0	1	5	<10	0	
7	19	18-20	1	1	2	2	2	3	2	1	1	0	1	1	1	1	1	2	1	1	0	0	1	2	0	1	1	7	<10	0	
8	25	25 to 29	1	4	1	2	2	3	1	1	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	3	<10	0	
9	26	25 to 29	2	5	1	2	1	2	1	1	1	0	1	0	1	2	2	2	1	0	0	1	2	0	1	1	6	<10	0		
10	21	21 to 24	2	5	1	2	1	2	1	2	1	0	1	2	1	1	1	2	2	1	0	0	1	1	0	1	1	3	<10	0	
11	25	25 to 29	2	5	1	2	3	3	1	2	1	0	1	2	1	0	2	2	2	1	1	0	1	1	0	1	1	4	<10	0	
12	28	25 to 29	2	1	1	2	3	3	1	2	1	0	1	2	1	0	1	2	2	0	0	0	2	2	0	1	1	2	<10	0	
13	28	25 to 29	2	5	1	2	1	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	2	2	0	1	1	6	<10	0	
14	29	25 to 29	2	5	1	2	3	3	1	2	1	1	1	2	1	0	1	2	2	1	0	0	1	2	0	0	1	6	<10	0	
15	26	25 to 29	2	5	1	2	1	2	1	1	1	1	1	2	1	1	2	2	2	1	0	0	1	2	0	0	1	5	<10	0	
16	25	25 to 29	2	5	1	2	2	2	1	2	1	0	1	2	1	0	2	2	3	0	0	0	1	2	0	1	0	5	<10	0	
17	22	21 to 24	2	5	1	2	3	3	1	2	1	0	1	2	1	0	1	1	2	1	0	0	2	2	0	1	1	5	<10	0	
18	30	30 to 34	2	2	1	2	1	4	2	2	1	0	1	2	1	1	1	2	2	1	0	1	1	1	0	1	1	8	<10	0	
19	28	25 to 29	2	5	1	2	3	4	1	2	1	1	1	2	1	1	1	2	1	0	0	2	1	1	1	0	0	9	<10	0	
20	22	21 to 24	1	6	4	2	2	1	1	1	0	1	2	1	0	1	2	2	1	0	0	0	1	2	0	1	1	7	<10	0	
21	28	25 to 29	2	3	1	2	1	3	2	2	1	0	1	2	2	2	2	2	1	1	0	0	1	1	0	1	1	6	<10	0	
22	25	25 to 29	2	5	1	2	3	2	1	1	1	0	1	2	1	0	2	1	2	1	0	0	1	2	0	1	1	5	<10	0	
23	28	25 to 29	2	5	1	2	3	2	1	1	1	1	1	2	2	2	2	2	2	1	0	0	1	1	0	1	1	8	<10	0	
24	25	25 to 29	1	5	1	2	2	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
25	31	30 to 34	1	6	4	2	2	1	3	1	1	0	2	2	2	1	1	4	0	0	0	1	2	0	1	1	10	10 or more	1		
26	28	25 to 29	2	5	1	2	3	3	2	2	1	0	1	2	1	0	1	2	2	1	0	0	1	1	0	1	1	7	<10	0	
27	32	30 to 34	2	1	3	2	3	5	2	2	1	0	1	2	1	0	1	2	1	1	0	2	1	1	1	1	1	9	<10	0	
28	25	25 to 29	1	4	1	2	3	3	1	1	1	0	1	2	1	2	2	2	1	1	0	0	1	2	0	1	1	5	<10	0	
29	18	18-20	2	5	1	2	3	3	1	1	1	0	1	2	2	1	2	1	3	0	1	0	1	2	0	1	1	3	<10	0	
30	29	25 to 29	2	4	1	2	3	3	1	2	1	0	1	2	1	1	1	2	1	1	0	0	2	2	0	1	1	3	<10	0	
31	23	21 to 24	2	4	1	2	3	3	1	1	1	0	1	2	2	0	2	1	3	1	0	0	1	2	0	1	1	5	<10	0	
32	21	21 to 24	2	4	1	2	3	3	2	1	1	0	1	2	1	0	2	2	2	1	0	0	1	2	0	1	1	6	<10	0	
33	23	21 to 24	1	2	3	2	2	2	2	1	1	0	2	1	1	0	1	1	1	1	1	0	1	1	0	1	1	5	<10	0	
34	34	30 to 34	1	4	5	2	3	3	2	1	1	0	1	1	2	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
35	26	25 to 29	1	6	1	2	3	4	2	1	1	0	1	2	1	2	2	1	4	0	1	0	1	2	0	1	1	7	<10	0	
36	23	21 to 24	2	5	1	2	1	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	3	<10	0	
37	28	25 to 29	1	6	5	2	2	4	3	1	1	1	2	2	1	2	2	2	2	1	0	0	1	2	0	1	0	6	<10	0	
38	30	30 to 34	2	5	1	2	2	3	1	2	1	0	1	2	2	0	1	2	1	1	0	0	1	2	0	0	1	4	<10	0	
39	30	30 to 34	2	4	1	2	1	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	8	<10	0	
40	23	21 to 24	2	1	3	2	3	4	2	2	1	0	2	2	2	0	2	2	2	1	0	0	1	2	0	0	1	8	<10	0	
41	22	21 to 24	1	4	1	2	1	4	1	1	1	0	1	2	1	0	1	2	1	1	1	1	0	1	2	0	1	1	5	<10	0
42	21	21 to 24	1	6	1	2	3	3	1	2	1	1	2	2	2	2	3	2	1	0	0	1	2	0	1	1	13	10 or more	1		
43	27	25 to 29	2	4	1	2	1	2	1	1	1	0	1	1	1	0	2	2	2	1	1	0	2	2	0	1	1	4	<10	0	
44	30	30 to 34	1	5	1	2	3	3	2	2	1	0	1	2	2	0	1	2	3	1	0	0	1	2	0	1	1	8	<10	0	
45	26	25 to 29	2	5	1	2	1	3	1	2	1	1	1	2	1	0	1	2	2	1	0	0	2	2	0	1	0	5	<10	0	
46	28	25 to 29	2	5	1	2	2	2	1	2	1	0	1	2	1	0	1	1	2	1	1	0	1	2	0	1	1	8	<10	0	
47	21	21 to 24	2	6	1	2	3	3	2	1	1	0	1	2	2	0	1	1	1	0	0	1	1	0	0	1	1	8	<10	0	
48	28	25 to 29	1	4	1	2	1	3	1	1	1	0	2	2	1	0	2	2	2	1	0	0	2	2	0	1	1	5	<10	0	
49	32	30 to 34	1	6	1	2	3	4	2	2	1	0	1	2	2	0	1	2	0	0	0	0	1	2	0	1	1	3	<10	0	
50	24	21 to 24	1	4	1	2	1	3	1	2	1	1	2	2	1	0	1	2	1	1	1	0	0	2	1	0	1	4	<10	0	
51	26	25 to 29	2	4	1	2	1	2	1	1	1	0	2	2	1	0	1	2	1	1	0	0	2	2	0	1	1	2	<10	0	
52	30	30 to 34	1	4	1	2	2	3	1	2	1	0	1	2	2	0	2	2	2	1	0	0	1	2	0	1	1	1	<10	0	
53	24	21 to 24	1	4	3	2	1	3	1	2	1	0	1	2	1	0	2	2	1	0	1	0	1	2	0	0	1	5	<10	0	
54	30	30 to 34	2	4	3	2	1	4	1	2	1	0	1	2	2	1	1	2	2	1	0	2	2	2	1	1	1	7	<10	0	
55	22	21 to 24	1	4	1	2	2	3	1	1	1	0	2	2	1	0	1	1	2	0	1	0	2	2	0	1	1	2	<10	0	
56	28	25 to 29	2	4	1	2	1	4	1	2	1	0	2	2	2	1	2	2	1	1	0	0	1	2	0	1	1	7	<10	0	
57	30	30 to 34	1	5	4	2	2	2	1	1	0	1	2	1	2	1	2	1	1	1	0	0	1	2	0	0	1	6	<10	0	
58	24	21 to 24	2	4	1	2	2	4	1	2	1	0	1	2	1	0	2	2	2	1	0	0	1	2	0	1	1	9	<10	0	
59	30	30 to 34	1	5	4	2	2	2	1	2	0	1	2	2	0	1	2	1	0	1	0	1	1	2	0	1	1	6	<10	0	
60	27	25 to 29	2	4	1	2	3	4	1	2	1	0	1	2	1	1	2	1	2	0	1	0	1	2	0	1	1	6	<10	0	
61																															

75	32	30 to 34	1	4	1	2	2	4	1	2	0	0	2	2	1	0	2	1	3	0	1	0	1	2	0	1	1	4	<10	0
76	32	30 to 34	2	3	1	2	1	4	1	2	1	0	1	2	2	1	1	2	1	0	1	0	2	2	0	0	1	5	<10	0
77	25	25 to 29	1	5	5	2	2	2	1	1	1	0	1	2	1	0	2	2	1	1	0	0	2	2	0	1	1	7	<10	0
78	33	30 to 34	1	3	1	2	2	3	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	0	1	4	<10	0
79	32	30 to 34	2	2	1	2	2	3	1	2	1	0	1	2	2	1	2	2	1	0	2	1	2	1	1	1	9	<10	0	
80	20	18-20	2	3	1	2	2	4	1	1	1	0	2	2	1	0	2	1	2	0	1	0	2	2	0	1	1	6	<10	0
81	21	21 to 24	1	3	1	2	2	3	1	1	1	0	2	2	2	0	1	2	2	0	1	0	1	2	0	1	1	5	<10	0
82	25	25 to 29	2	6	5	2	2	2	1	2	1	0	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	3	<10	0
83	27	25 to 29	1	5	5	2	1	3	1	2	1	1	2	2	2	0	1	2	1	0	1	0	2	2	0	1	1	5	<10	0
84	30	30 to 34	1	5	5	2	2	3	1	1	1	0	1	2	1	0	2	2	3	1	0	0	1	1	0	1	0	6	<10	0
85	33	30 to 34	2	4	1	2	1	3	1	2	0	1	2	2	1	2	1	3	0	1	2	2	2	1	0	1	12	10 or more	1	
86	31	30 to 34	1	4	1	2	2	3	1	2	1	0	1	2	2	0	1	2	1	1	1	0	1	2	0	1	1	4	<10	0
87	21	21 to 24	2	4	1	2	1	3	1	1	1	0	2	2	1	0	2	1	3	0	1	0	2	2	0	0	1	7	<10	0
88	23	21 to 24	1	3	1	2	2	4	1	1	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0
89	27	25 to 29	2	5	5	2	2	3	1	2	1	0	1	2	2	0	1	2	2	1	0	0	1	2	0	1	1	5	<10	0
90	27	25 to 29	1	6	5	2	2	2	1	1	1	0	1	2	1	0	1	2	1	1	0	0	2	2	0	1	1	2	<10	0
91	26	25 to 29	1	5	1	2	2	4	1	2	1	0	1	2	2	0	2	2	2	1	0	0	1	2	0	1	1	5	<10	0
92	21	21 to 24	2	4	1	2	1	4	1	1	1	0	2	2	1	0	1	1	2	0	1	0	1	2	0	1	1	9	<10	0
93	22	21 to 24	2	4	1	2	2	3	1	1	1	1	1	2	1	1	2	2	2	0	1	2	1	1	1	0	1	13	10 or more	1
94	32	30 to 34	2	4	1	2	2	3	1	2	1	1	1	2	1	0	1	2	2	1	0	0	2	2	0	1	1	7	<10	0
95	29	25 to 29	1	4	1	2	2	3	1	2	1	0	1	2	2	0	2	2	1	0	1	0	2	2	0	1	1	6	<10	0
96	31	30 to 34	1	5	5	2	1	3	1	2	1	1	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	5	<10	0
97	32	30 to 34	1	4	1	2	2	3	1	2	1	1	2	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0
98	19	18-20	1	3	1	2	2	4	1	1	1	0	1	2	1	0	1	2	1	1	0	0	2	2	0	0	1	5	<10	0
99	21	21 to 24	2	4	1	2	2	3	1	1	1	0	1	2	2	0	2	2	2	0	1	0	2	2	0	1	0	7	<10	0
100	21	21 to 24	1	4	1	2	1	4	1	1	1	0	1	2	1	1	2	2	2	0	1	0	1	2	0	1	1	4	<10	0
101	23	21 to 24	2	4	1	2	2	3	1	1	1	1	1	2	2	0	2	2	1	1	0	0	2	2	0	1	1	3	<10	0
102	30	30 to 34	1	5	5	2	2	3	1	2	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0
103	32	30 to 34	2	4	1	2	2	3	1	2	1	1	2	2	1	0	1	2	2	0	1	0	2	2	0	1	1	6	<10	0
104	25	25 to 29	2	4	1	2	2	3	1	2	1	0	1	2	1	0	1	1	2	1	0	0	1	2	0	1	1	4	<10	0
105	27	25 to 29	1	5	5	2	2	2	1	1	1	1	1	2	2	0	2	1	1	1	0	0	2	2	0	1	1	5	<10	0
106	20	18-20	2	3	1	2	1	4	1	2	1	0	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	4	<10	0
107	30	30 to 34	1	4	1	2	2	3	1	2	1	0	2	2	2	0	2	1	2	0	1	0	1	2	0	1	1	5	<10	0
108	23	21 to 24	1	4	1	2	2	4	1	1	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	1	0	4	<10	0
109	33	30 to 34	2	4	1	2	2	3	1	2	1	0	1	2	2	0	2	1	2	1	0	0	2	2	0	0	1	7	<10	0
110	29	25 to 29	2	4	1	2	1	3	1	2	1	1	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	4	<10	0
111	27	25 to 29	1	5	5	2	2	3	1	2	1	0	1	2	1	0	2	2	2	1	1	0	1	2	0	0	1	5	<10	0
112	27	25 to 29	2	4	1	2	1	2	1	1	1	0	2	2	1	0	1	1	2	1	1	0	2	2	0	1	1	7	<10	0
113	26	25 to 29	1	4	1	2	2	3	1	1	0	1	1	2	1	0	1	2	1	1	0	0	1	2	0	1	0	3	<10	0
114	26	25 to 29	2	3	1	2	1	3	1	2	1	0	1	2	1	2	1	1	0	1	0	2	2	0	1	1	5	<10	0	
115	24	21 to 24	1	4	1	2	1	4	1	1	1	0	1	2	1	0	1	2	1	1	0	0	1	2	0	1	1	3	<10	0
116	21	21 to 24	2	3	1	2	2	3	1	1	1	0	2	2	2	0	2	1	2	0	0	0	2	2	0	0	1	6	<10	0
117	25	25 to 29	1	4	4	2	2	3	1	2	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	1	1	4	<10	0
118	24	21 to 24	2	3	1	2	1	3	1	1	1	1	1	2	1	1	1	2	3	0	1	0	2	2	0	0	1	5	<10	0
119	30	30 to 34	1	5	5	2	1	2	1	1	1	1	1	2	1	0	2	2	1	1	1	3	1	2	1	1	1	10	10 or more	1
120	32	30 to 34	2	4	1	2	2	4	1	2	1	0	1	2	2	0	2	2	2	1	0	0	1	2	0	1	1	6	<10	0
121	30	30 to 34	1	5	5	2	2	3	1	2	1	1	1	2	2	0	1	1	2	1	0	0	2	2	0	1	1	5	<10	0
122	28	25 to 29	1	4	3	2	1	3	1	2	1	0	2	2	2	0	1	1	3	0	1	0	2	2	0	1	1	5	<10	0
123	30	30 to 34	2	4	1	2	1	3	1	2	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	4	<10	0
124	29	25 to 29	1	5	5	2	2	3	1	2	1	0	1	2	2	0	1	1	2	1	0	0	1	2	0	1	1	3	<10	0
125	23	21 to 24	2	3	1	2	1	3	1	1	1	0	1	2	1	0	2	2	2	1	1	0	2	2	0	1	1	4	<10	0
126	26	25 to 29	1	6	5	2	2	3	1	2	0	0	1	2	1	1	1	2	1	1	0	0	1	2	0	1	1	4	<10	0
127	28	25 to 29	2	4	1	2	1	4	1	2	1	0	1	2	2	0	2	2	1	1	0	0	1	2	0	1	1	2	<10	0
128	32	30 to 34	1	4	1	2	1	3	1	2	1	1	2	2	1	0	2	2	2	1	1	0	2	2	0	0	1	6	<10	0
129	33	30 to 34	2	5	3	2	2	3	1	2	1	0	1	2	1	0	1	2	1	1	0	0	1	2	0	1	1	4	<10	0
130	31	30 to 34	2	4	1	2	1	4	1	2	1	0	1	2	1	0	1	2	1	1	0	0	1	1	0	1	1	5	<10	0
131	21	21 to 24	2	3	1	2	2	3	1	1	1	0	2	2	1	0	1	2	1	1	0	0	2	2	0	1	1	3	<10	0
132	34	30 to 34	2	4	1	2	1	2	1	2	1	0	1	2	1	1	2	2	1	1	0	0	1	2	0	1	0	4	<10	0
133	30	30 to 34	2	4	3	2	1	3	1	2	1	0	2	2	1	0	2	2	1	1	0	0	2	2	0	1	1	5	<10	0
134	29	25 to 29	1	5	5	2	1	2	1	2	1	0	1	2	1	2	2	1	1	0	0	0	2	2	0	1	1	4	<10	0
135	27	25 to 29	2	4	3	2	2	3	3	1	1	0	2	1	0	2	2	1	1	1	0	0	1	2	0	1	1	4	<10	0
136	31	30 to 34	1	2	1	2	1	3	1																					

164	33	30 to 34	2	4	1	2	2	2	1	2	1	0	1	2	2	0	2	1	1	1	0	0	2	2	0	1	1	4	<10	0	
165	23	21 to 24	2	4	1	2	2	3	1	1	1	0	2	2	1	0	1	1	1	1	0	1	0	2	2	0	1	1	9	<10	0
166	30	30 to 34	1	5	4	2	2	2	3	1	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0	
167	29	25 to 29	2	4	1	2	2	4	1	2	1	0	1	2	2	0	2	1	1	1	0	0	2	2	0	1	1	3	<10	0	
168	28	25 to 29	1	4	3	2	2	3	1	2	1	0	2	2	1	0	2	2	2	1	0	0	2	2	0	1	1	6	<10	0	
169	21	21 to 24	1	4	1	2	2	2	1	1	1	0	1	2	2	0	2	2	2	1	0	0	1	2	0	1	1	5	<10	0	
170	26	25 to 29	1	4	1	2	1	3	1	1	1	0	1	2	2	1	1	1	2	0	1	0	2	2	0	1	1	2	<10	0	
171	25	25 to 29	1	4	5	2	2	3	1	1	1	0	2	2	1	0	1	1	2	1	0	0	2	2	0	1	1	5	<10	0	
172	25	25 to 29	2	3	1	2	3	2	1	2	1	0	1	2	1	0	2	2	1	1	1	0	2	2	1	0	1	3	<10	0	
173	33	30 to 34	2	4	3	2	3	3	1	2	1	1	1	2	1	0	2	2	2	1	0	0	1	2	0	1	1	3	<10	0	
174	31	30 to 34	2	4	1	2	2	3	1	2	1	0	2	2	2	0	2	1	2	1	0	0	1	2	0	1	1	6	<10	0	
175	30	30 to 34	1	4	3	2	2	4	1	2	1	0	1	2	1	0	1	2	1	1	0	0	1	2	0	1	1	3	<10	0	
176	24	21 to 24	2	4	1	2	2	4	1	2	1	0	2	2	1	1	2	2	2	0	1	0	2	2	0	1	1	4	<10	0	
177	28	25 to 29	2	5	4	2	3	2	1	1	1	0	1	2	1	0	2	2	3	1	0	0	1	2	0	1	1	4	<10	0	
178	30	30 to 34	2	4	1	2	2	3	1	2	1	0	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	6	<10	0	
179	30	30 to 34	1	5	4	2	1	2	1	1	1	0	2	2	1	1	2	1	2	1	0	0	2	2	0	1	0	4	<10	0	
180	20	18-20	2	2	2	1	3	4	1	1	1	0	2	2	1	0	1	1	2	0	1	0	2	2	0	1	1	4	<10	0	
181	31	30 to 34	1	4	1	2	2	3	1	2	1	0	1	2	2	0	1	1	2	1	0	0	2	2	0	1	1	6	<10	0	
182	30	30 to 34	2	4	1	2	3	4	1	2	0	0	2	2	2	0	1	1	1	1	0	0	1	2	0	1	1	8	<10	0	
183	30	30 to 34	2	5	5	2	2	3	1	2	1	0	1	2	1	0	1	2	2	1	0	0	2	2	0	1	1	3	<10	0	
184	18	18-20	2	3	1	2	3	2	2	2	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	4	<10	0	
185	23	21 to 24	2	3	1	2	2	3	1	1	1	0	2	2	1	0	2	2	2	1	0	0	1	2	0	1	1	4	<10	0	
186	30	30 to 34	2	4	1	2	2	3	1	2	1	0	2	2	1	0	2	1	1	0	1	0	2	2	0	1	1	3	<10	0	
187	31	30 to 34	1	4	1	2	3	3	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	1	<10	0	
188	28	25 to 29	1	5	4	2	2	3	1	1	1	0	2	2	1	0	1	1	2	0	0	0	2	2	0	0	1	5	<10	0	
189	24	21 to 24	2	4	1	2	3	4	1	1	1	0	1	2	1	0	2	1	2	1	0	0	2	2	0	1	1	5	<10	0	
190	32	30 to 34	1	4	1	2	3	3	1	2	1	0	1	1	2	2	0	1	2	2	0	1	3	1	2	1	0	1	3	<10	0
191	25	25 to 29	2	4	3	2	3	4	1	1	0	0	2	2	2	0	2	1	2	1	0	0	2	2	0	1	1	6	<10	0	
192	30	30 to 34	2	4	2	2	3	3	1	2	1	0	1	2	2	0	2	2	2	0	1	0	1	2	0	1	1	3	<10	0	
193	31	30 to 34	3	5	5	2	3	3	1	2	1	0	2	2	1	0	1	2	2	1	0	0	2	2	0	1	1	4	<10	0	
194	23	21 to 24	2	4	1	2	2	3	1	1	1	0	2	2	2	1	2	1	2	1	0	0	1	2	0	1	1	6	<10	0	
195	23	21 to 24	2	4	2	2	2	3	1	1	1	0	1	2	2	0	1	2	2	1	0	0	1	2	0	1	1	3	<10	0	
196	32	30 to 34	1	5	5	2	3	4	1	2	1	0	2	2	2	0	2	1	2	1	0	0	1	2	0	1	1	5	<10	0	
197	30	30 to 34	2	4	1	2	3	2	1	2	1	1	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	3	<10	0	
198	27	25 to 29	2	4	1	2	2	3	1	2	0	1	1	2	1	0	2	2	2	0	1	0	1	2	0	1	1	3	<10	0	
199	30	30 to 34	3	5	5	2	2	3	1	2	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	0	1	4	<10	0	
200	30	30 to 34	2	4	1	2	3	2	1	2	1	0	2	2	2	0	2	1	2	1	0	0	1	2	0	1	1	4	<10	0	
201	21	21 to 24	2	5	1	2	3	3	1	2	1	0	1	2	1	0	2	2	2	1	0	0	1	2	0	0	1	4	<10	0	
202	24	21 to 24	2	5	5	2	3	4	1	2	1	0	1	2	1	2	2	1	1	1	0	0	1	2	0	0	1	6	<10	0	
203	24	21 to 24	1	5	4	2	3	4	1	1	1	0	1	2	1	2	2	2	1	0	0	1	2	0	1	1	3	<10	0		
204	24	21 to 24	2	5	4	2	3	3	1	2	1	0	1	2	1	2	2	1	2	1	0	0	1	2	0	1	1	3	<10	0	
205	27	25 to 29	2	5	5	2	2	3	1	2	1	0	1	2	1	2	2	2	2	0	1	0	1	2	0	1	1	2	<10	0	
206	30	30 to 34	1	5	5	2	2	2	1	2	1	0	1	2	2	2	2	2	3	1	0	0	1	2	0	1	1	5	<10	0	
207	21	21 to 24	2	4	1	2	3	2	1	1	1	0	1	2	2	2	2	2	1	1	0	0	1	2	0	1	1	1	<10	0	
208	25	25 to 29	2	5	4	2	3	2	1	2	1	0	1	2	1	2	2	1	2	1	0	0	1	2	0	1	1	5	<10	0	
209	21	21 to 24	2	4	1	2	2	4	1	1	1	0	1	2	1	2	2	2	3	1	0	0	1	2	0	1	0	4	<10	0	
210	25	25 to 29	2	5	4	2	3	2	1	2	1	0	1	2	1	2	2	2	2	1	0	0	1	1	0	1	1	4	<10	0	
211	28	25 to 29	2	5	1	2	3	2	1	2	1	0	2	2	2	2	2	2	1	0	0	0	1	2	0	1	1	5	<10	0	
212	24	21 to 24	2	5	4	2	2	3	1	2	1	0	1	2	1	2	1	1	3	1	0	0	1	2	0	1	1	2	<10	0	
213	23	21 to 24	2	5	1	2	3	3	2	2	1	0	1	2	1	2	1	2	2	1	0	1	1	2	1	0	1	12	10 or more	1	
214	24	21 to 24	2	5	1	2	2	4	2	2	1	0	1	2	2	2	2	1	1	1	0	1	1	2	1	0	1	13	10 or more	1	
215	31	30 to 34	1	5	1	2	2	2	2	2	1	1	1	2	2	2	2	2	1	1	1	0	1	2	0	1	0	13	10 or more	1	
216	21	21 to 24	2	5	1	2	2	3	2	1	1	0	1	2	1	0	1	2	2	1	1	2	1	2	1	0	1	14	10 or more	1	
217	24	21 to 24	1	5	5	2	2	4	2	2	1	0	1	2	2	0	2	1	1	1	0	0	1	2	0	1	0	11	10 or more	1	
218	28	25 to 29	1	5	1	2	1	4	2	2	1	0	1	2	1	0	2	2	1	1	0	2	1	2	1	0	1	15	10 or more	1	
219	21	21 to 24	1	5	1	2	2	2	2	1	0	0	1	2	1	2	2	1	2	1	0	1	1	2	1	1	0	11	10 or more	1	
220	24	21 to 24	1	5	1	2	1	3	2	1	1	0	1	2	1	0	2	1	1	0	1	1	1	2	1	0	1	12	10 or more	1	
221	32	30 to 34	1	5	4	2	3	4	2	2	1	1	2	2	2	0	1	2	2	1	0	0	1	2	0	1	1	13	10 or more	1	
222	24	21 to 24	2	5	1	2	1	3	2	1	1	0	2	2	1	2	1	1	2	0	1	1	1	2	1	0	1	15	10 or more	1	
223	24	21 to 24	2	5	1	2	2	3	2	2	1	0	1	2	1	1	2	2	2	1	0	0	1	2	0	1	0	11	10 or more	1	
224	22	21 to 24	2	5	1	2	2	3	1	1	1	0	2	1	2	1	1	1	1	0	1	0	1	2	0	1	0	13	10 or more	1	
225																															

253	25	25 to 29	2	2	2	2	2	4	1	1	1	1	1	1	1	1	0	1	2	1	1	0	0	1	1	0	1	1	7	<10	0
254	21	21 to 24	2	5	1	2	1	2	1	1	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
255	25	25 to 29	2	6	2	2	2	4	1	2	1	0	2	2	2	0	2	1	1	0	0	0	2	2	0	1	1	5	<10	0	
256	26	25 to 29	2	2	3	2	2	3	1	1	1	0	2	2	1	0	1	1	1	1	0	1	2	2	1	0	1	5	<10	0	
257	19	18-20	1	1	2	2	2	3	2	1	1	0	1	1	1	1	2	1	1	0	0	1	2	0	1	1	7	<10	0		
258	25	25 to 29	1	4	1	2	2	3	1	1	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	3	<10	0	
259	26	25 to 29	2	5	1	2	1	2	1	1	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
260	21	21 to 24	2	5	1	2	1	2	1	2	1	0	1	2	1	1	1	2	2	1	0	0	1	1	0	1	1	3	<10	0	
261	25	25 to 29	2	5	1	2	3	3	1	2	1	0	1	2	1	0	2	2	2	1	1	0	1	1	0	1	1	4	<10	0	
262	28	25 to 29	2	1	1	2	3	3	1	2	1	0	1	2	1	0	1	2	2	0	0	0	2	2	0	1	1	2	<10	0	
263	28	25 to 29	2	5	1	2	1	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	2	2	0	1	1	6	<10	0	
264	29	25 to 29	2	5	1	2	3	3	1	2	1	1	1	2	1	0	1	2	2	1	0	0	1	2	0	0	1	6	<10	0	
265	26	25 to 29	2	5	1	2	1	2	1	1	1	1	2	1	1	2	2	2	1	0	0	1	2	0	0	1	5	<10	0		
266	25	25 to 29	2	5	1	2	2	2	1	2	1	0	1	2	1	0	2	2	3	0	0	0	1	2	0	1	0	5	<10	0	
267	22	21 to 24	2	5	1	2	3	3	1	2	1	0	1	2	1	0	1	1	2	1	0	0	2	2	0	1	1	5	<10	0	
268	30	30 to 34	2	2	1	2	1	4	2	2	1	0	1	2	1	1	1	2	2	1	0	1	1	1	1	0	1	8	<10	0	
269	28	25 to 29	2	5	1	2	3	4	1	2	1	1	1	2	1	1	1	2	1	0	0	2	1	1	1	1	0	9	<10	0	
270	22	21 to 24	1	6	4	2	2	1	1	1	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	7	<10	0	
271	28	25 to 29	2	3	1	2	1	3	2	2	1	0	1	2	2	2	2	2	1	1	0	0	1	1	0	1	1	6	<10	0	
272	25	25 to 29	2	5	1	2	3	2	1	1	1	0	1	2	1	0	2	1	2	1	0	0	1	2	0	1	1	5	<10	0	
273	28	25 to 29	2	5	1	2	3	2	1	1	1	1	2	2	2	2	2	2	1	0	0	1	1	0	1	1	8	<10	0		
274	25	25 to 29	1	5	1	2	2	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
275	31	30 to 34	1	6	4	2	2	1	3	1	1	0	2	2	2	2	1	1	4	0	0	0	1	2	0	1	1	10	10 or more	1	
276	28	25 to 29	2	5	1	2	3	3	2	2	1	0	1	2	1	0	1	2	2	1	0	0	1	1	0	1	1	7	<10	0	
277	32	30 to 34	2	1	3	2	3	5	2	2	1	0	1	2	1	0	1	2	1	1	0	2	1	1	1	1	1	9	<10	0	
278	25	25 to 29	1	4	1	2	3	3	1	1	1	0	1	2	1	2	2	2	1	1	0	0	1	2	0	1	1	5	<10	0	
279	18	18-20	2	5	1	2	3	3	1	1	1	0	1	2	2	1	2	1	3	0	1	0	1	2	0	1	1	3	<10	0	
280	29	25 to 29	2	4	1	2	3	3	1	2	1	0	1	2	1	1	1	2	1	1	0	0	2	2	0	1	1	3	<10	0	
281	23	21 to 24	2	4	1	2	3	3	1	1	1	0	1	2	2	0	2	1	3	1	0	0	1	2	0	1	1	5	<10	0	
282	21	21 to 24	2	4	1	2	3	3	2	1	1	0	1	2	1	0	2	2	2	1	0	0	1	2	0	1	1	6	<10	0	
283	24	21 to 24	1	2	3	2	2	2	2	1	1	0	2	1	1	0	1	1	1	1	1	0	1	1	0	1	1	5	<10	0	
284	34	30 to 34	1	4	5	2	3	3	2	1	1	0	1	1	2	0	1	2	2	1	0	0	1	2	0	1	1	6	<10	0	
285	26	25 to 29	1	6	1	2	3	4	2	1	1	0	1	2	1	2	2	1	4	0	1	0	1	2	0	1	1	7	<10	0	
286	23	21 to 24	2	5	1	2	1	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	3	<10	0	
287	28	25 to 29	1	6	5	2	2	4	3	1	1	1	2	2	1	2	2	2	2	1	0	0	1	2	0	1	0	6	<10	0	
288	30	30 to 34	2	5	1	2	2	3	1	2	1	0	1	2	2	0	1	2	1	1	0	0	1	2	0	0	1	4	<10	0	
289	30	30 to 34	2	4	1	2	1	2	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	1	1	8	<10	0	
290	23	21 to 24	2	1	3	2	3	4	2	2	1	0	2	2	2	0	2	2	2	1	0	0	1	2	0	0	1	8	<10	0	
291	22	21 to 24	1	4	1	2	1	4	1	1	1	0	1	2	1	0	1	2	1	1	1	0	1	2	0	1	1	5	<10	0	
292	21	21 to 24	1	6	1	2	3	3	1	2	1	1	2	2	2	2	2	3	2	1	0	0	1	2	0	1	1	13	10 or more	1	
293	27	25 to 29	2	4	1	2	1	2	1	1	1	0	1	1	1	0	2	2	2	1	1	0	2	2	0	1	1	4	<10	0	
294	30	30 to 34	1	5	1	2	3	3	2	2	1	0	1	2	2	0	1	2	3	1	0	0	1	2	0	1	1	8	<10	0	
295	26	25 to 29	2	5	1	2	1	3	1	2	1	1	1	2	1	0	1	2	2	1	0	0	2	2	0	1	0	5	<10	0	
296	28	25 to 29	2	5	1	2	2	2	1	2	1	0	1	2	1	0	1	1	2	1	1	0	1	2	0	1	1	8	<10	0	
297	21	21 to 24	2	6	1	2	3	3	2	1	1	0	1	2	2	0	1	1	1	0	0	0	1	1	0	1	1	8	<10	0	
298	28	25 to 29	1	4	1	2	1	3	1	1	1	0	2	2	1	0	2	2	2	1	0	0	2	2	0	1	1	5	<10	0	
299	32	30 to 34	1	6	1	2	3	4	2	2	1	0	1	2	2	0	2	1	2	0	0	0	1	2	0	1	1	3	<10	0	
300	24	21 to 24	1	4	1	2	1	3	1	2	1	1	2	2	1	0	1	2	1	1	0	0	2	1	0	1	1	4	<10	0	
301	26	25 to 29	2	4	1	2	1	2	1	1	1	0	2	2	1	0	1	2	1	1	0	0	2	2	0	1	1	2	<10	0	
302	21	21 to 24	2	4	1	2	2	3	1	1	1	0	1	2	2	0	2	2	2	0	1	0	2	2	0	1	0	7	<10	0	
303	21	21 to 24	1	4	1	2	1	4	1	1	1	0	1	2	1	1	2	2	2	0	1	0	1	2	0	1	1	4	<10	0	
304	23	21 to 24	2	4	1	2	2	3	1	1	1	1	2	2	0	2	2	1	1	0	0	2	2	0	1	1	3	<10	0		
305	30	30 to 34	1	5	5	2	2	3	1	2	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0	
306	32	30 to 34	2	4	1	2	2	3	1	2	1	1	2	2	1	0	1	2	2	0	1	0	2	2	0	1	1	6	<10	0	
307	25	25 to 29	2	4	1	2	2	3	1	2	1	0	1	2	1	0	1	1	2	1	0	0	1	2	0	1	1	4	<10	0	
308	27	25 to 29	1	5	5	2	2	2	1	1	1	1	2	2	0	2	1	1	1	0	0	2	2	0	1	1	5	<10	0		
309	19	18-20	2	3	1	2	1	4	1	2	1	0	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	4	<10	0	
310	30	30 to 34	1	4	1	2	2	3	1	2	1	0	2	2	2	0	2	1	2	0	1	0	1	2	0	1	1	5	<10	0	
311	23	21 to 24	1	4	1	2	2	4	1	1	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	1	0	4	<10	0	
312	33	30 to 34	2	4	1	2	2	3	1	2	1	0	1	2	2	0	2	1	2	1	0	0	2	2	0	0	1	7	<10	0	
313	29	25 to 29	2	4	1	2	1	3	1	2	1	1	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	4	<10	0	
314	27	25 to 29	1	5	5																										

325	28	25 to 29	1	4	3	2	1	3	1	2	1	0	2	2	2	0	1	1	3	0	1	0	2	2	0	1	1	5	<10	0	
326	30	30 to 34	2	4	1	2	1	3	1	2	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	4	<10	0	
327	29	25 to 29	1	5	5	2	2	3	1	2	1	0	1	2	2	0	1	1	2	1	0	0	1	2	0	1	1	3	<10	0	
328	23	21 to 24	2	3	1	2	1	3	1	1	1	0	1	2	1	0	2	2	2	1	1	0	2	2	0	1	1	4	<10	0	
329	26	25 to 29	1	6	5	2	2	3	1	2	0	0	1	2	1	1	1	2	1	1	0	0	1	2	0	1	1	4	<10	0	
330	28	25 to 29	2	4	1	2	1	4	1	2	1	0	1	2	2	0	2	2	1	1	0	0	1	2	0	1	1	2	<10	0	
331	32	30 to 34	1	4	1	2	1	3	1	2	1	1	2	2	1	0	2	2	2	1	1	0	2	2	0	0	1	6	<10	0	
332	33	30 to 34	2	5	3	2	2	3	1	2	1	0	1	2	1	0	1	2	1	1	0	0	1	2	0	1	1	4	<10	0	
333	31	30 to 34	2	4	1	2	1	4	1	2	1	0	1	2	1	0	1	2	1	1	0	0	1	1	0	1	1	5	<10	0	
334	21	21 to 24	2	3	1	2	2	3	1	1	1	0	2	2	1	0	2	2	1	1	0	0	2	2	0	1	1	3	<10	0	
335	34	30 to 34	2	4	1	2	1	2	1	2	1	0	1	2	1	1	2	2	1	1	0	0	1	2	0	1	0	4	<10	0	
336	30	30 to 34	2	4	3	2	1	3	1	2	1	0	2	2	1	0	2	2	1	1	0	0	2	2	0	1	1	5	<10	0	
337	29	25 to 29	1	5	5	2	1	2	1	2	1	0	1	2	1	0	2	2	2	1	1	0	0	2	2	0	1	1	4	<10	0
338	27	25 to 29	2	4	3	2	2	3	3	1	1	0	2	2	1	0	2	1	1	1	0	0	1	2	0	1	1	4	<10	0	
339	31	30 to 34	1	2	1	2	1	3	1	2	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	3	<10	0	
340	31	30 to 34	2	3	1	2	2	3	1	2	1	1	3	2	1	0	1	2	1	1	0	0	2	2	0	1	1	6	<10	0	
341	27	25 to 29	2	4	1	2	2	2	1	1	1	0	1	2	1	0	1	2	1	1	0	0	2	2	0	1	1	5	<10	0	
342	28	25 to 29	2	4	1	2	2	2	1	2	0	0	1	2	1	0	2	1	1	1	1	0	1	2	0	1	1	3	<10	0	
343	29	25 to 29	1	5	5	2	1	3	1	1	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	1	1	6	<10	0	
344	19	18-20	2	3	1	2	1	4	1	1	1	0	2	2	1	0	2	1	1	1	0	0	1	2	0	1	1	3	<10	0	
345	24	21 to 24	2	4	1	2	2	3	1	1	1	0	1	2	1	0	1	2	1	0	1	0	2	2	0	1	1	3	<10	0	
346	30	30 to 34	2	3	1	2	2	2	1	2	1	0	1	2	1	0	1	1	2	1	1	0	0	2	2	0	1	1	3	<10	0
347	22	21 to 24	1	3	1	2	1	4	1	1	1	1	1	2	1	0	2	2	1	1	0	0	1	2	0	0	0	2	<10	0	
348	26	25 to 29	2	4	3	2	1	4	1	2	0	0	2	2	2	0	2	1	1	0	1	0	1	2	0	1	1	4	<10	0	
349	24	21 to 24	1	3	1	2	2	3	1	1	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	1	1	6	<10	0	
350	28	25 to 29	1	5	5	2	2	2	1	2	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	1	<10	0	
351	32	30 to 34	2	5	3	2	2	3	1	2	1	0	1	2	1	0	2	1	2	1	1	0	2	2	0	1	1	5	<10	0	
352	30	30 to 34	1	6	5	2	2	2	1	2	1	1	1	2	1	0	1	2	1	1	0	0	1	2	0	1	1	2	<10	0	
353	30	30 to 34	2	4	1	2	3	2	1	2	1	0	2	2	2	0	2	1	2	1	0	0	1	2	0	1	1	4	<10	0	
354	21	21 to 24	2	5	1	2	3	3	1	2	1	0	1	2	1	2	2	2	2	1	0	0	1	2	0	0	1	4	<10	0	
355	24	21 to 24	2	5	5	2	3	4	1	2	1	0	1	2	1	2	2	1	1	1	0	0	1	2	0	0	1	6	<10	0	
356	24	21 to 24	1	5	4	2	3	4	1	1	1	0	1	2	1	2	2	2	2	1	0	0	1	2	0	1	1	3	<10	0	
357	24	21 to 24	2	5	4	2	3	3	1	2	1	0	1	2	1	2	2	1	2	1	0	0	1	2	0	1	1	3	<10	0	
358	27	25 to 29	2	5	5	2	2	3	1	2	1	0	1	2	1	2	2	2	2	0	1	0	1	2	0	1	1	2	<10	0	
359	30	30 to 34	1	5	5	2	2	2	1	2	1	0	1	2	2	2	2	2	3	1	0	0	1	2	0	1	1	5	<10	0	
360	21	21 to 24	2	4	1	2	3	2	1	1	1	0	1	2	2	2	2	2	1	1	0	0	1	2	0	1	1	1	<10	0	
361	25	25 to 29	2	5	4	2	3	2	1	2	1	0	1	2	1	2	2	1	2	1	0	0	1	2	0	1	1	5	<10	0	
362	21	21 to 24	2	4	1	2	2	4	1	1	1	0	1	2	1	2	2	2	3	1	0	0	1	2	0	1	0	4	<10	0	
363	25	25 to 29	2	5	4	2	3	2	1	2	1	0	1	2	1	2	2	2	2	1	0	0	1	1	0	1	1	4	<10	0	
364	28	25 to 29	2	5	1	2	3	2	1	2	1	0	2	2	2	2	2	2	1	0	0	0	1	2	0	1	1	5	<10	0	
365	24	21 to 24	2	5	4	2	2	3	1	2	1	0	1	2	1	2	1	1	3	1	0	0	1	2	0	1	1	2	<10	0	
366	23	21 to 24	2	5	1	2	3	3	2	2	1	0	1	2	1	2	1	2	2	1	0	1	1	2	1	0	1	12	10 or more	1	
367	24	21 to 24	2	5	1	2	2	4	2	2	1	0	1	2	2	2	2	1	1	1	0	1	1	2	1	0	1	13	10 or more	1	
368	31	30 to 34	1	5	1	2	2	2	2	2	1	1	1	2	2	2	2	2	1	1	1	0	1	2	0	1	0	13	10 or more	1	
369	21	21 to 24	2	5	1	2	2	3	2	1	1	0	1	2	1	0	1	2	2	1	1	2	1	2	1	0	1	14	10 or more	1	
370	24	21 to 24	1	5	5	2	2	4	2	2	1	0	1	2	2	0	2	1	1	1	0	0	1	2	0	1	0	11	10 or more	1	
371	28	25 to 29	1	5	1	2	1	4	2	2	1	0	1	2	1	0	2	2	2	1	1	0	2	1	2	1	0	15	10 or more	1	
372	21	21 to 24	1	5	1	2	2	2	2	1	0	0	1	2	1	2	2	1	2	1	0	1	1	2	1	1	0	11	10 or more	1	
373	24	21 to 24	1	5	1	2	1	3	2	1	1	0	1	2	1	0	2	1	1	0	1	1	1	2	1	0	1	12	10 or more	1	
374	32	30 to 34	1	5	4	2	3	4	2	2	1	1	2	2	2	0	1	2	2	1	0	0	1	2	0	1	1	13	10 or more	1	
375	24	21 to 24	2	5	1	2	1	3	2	1	1	0	2	2	1	2	1	1	2	0	1	1	1	2	1	0	1	15	10 or more	1	
376	24	21 to 24	2	5	1	2	2	3	2	2	1	0	1	2	1	1	2	2	2	1	0	0	1	2	0	1	0	11	10 or more	1	
377	22	21 to 24	2	5	1	2	2	3	1	1	1	0	2	2	1	2	1	1	1	0	1	0	1	2	0	1	0	13	10 or more	1	
378	24	21 to 24	2	5	1	2	3	4	1	2	1	1	1	2	1	2	1	2	1	1	0	1	1	2	1	0	1	13	10 or more	1	
379	18	18-20	2	5	1	2	3	1	3	1	1	0	3	2	1	0	1	2	2	0	1	2	1	2	1	1	1	11	10 or more	1	
380	21	21 to 24	2	5	1	2	3	3	2	2	1	1	1	2	1	2	2	2	2	1	0	1	1	2	1	0	1	13	10 or more	1	
381	30	30 to 34	2	1	1	2	2	3	2	2	0	1	1	2	1	2	1	2	1	1	0	2	1	2	1	1	0	18	10 or more	1	
382	30	30 to 34	2	4	1	2	1	4	2	2	1	1	1	2	2	0	2	2	1	1	1	2	1	2	1	0	1	13	10 or more	1	
383	24	21 to 24	2	4	1	2	3	4	2	2	1	0	2	2	1	0	2	3	2	1	1	0	1	2	0	0	1	13	10 or more	1	
384	27	25 to 29	2	5	1	2	2	3	2	2	1	1	1	2	1	0	1	2	1	1	0	1	1	2	1	1	0	19	10 or more	1	
385	31	30 to 34	2	4	1	2	3	2	2	2	1	0	1	2	1	0	2	2	3	1	1	2	1	2	1	0	0	14	10 or more		

397	24	21 to 24	2	5	1	2	2	2	2	2	1	0	1	2	1	0	1	1	1	1	1	0	0	1	2	0	1	1	5	<10	0
398	21	21 to 24	2	5	1	2	2	3	1	1	1	0	1	2	1	2	1	2	1	1	1	0	0	1	2	0	1	1	7	<10	0
399	24	21 to 24	2	5	1	2	1	2	2	2	0	0	1	2	1	2	1	2	2	1	1	0	1	2	0	1	1	3	<10	0	
400	30	30 to 34	2	5	1	2	2	3	2	2	0	0	2	2	1	2	2	2	2	0	0	0	1	2	0	1	1	4	<10	0	
401	30	30 to 34	2	5	5	2	1	3	2	2	0	0	2	2	1	2	2	2	3	1	0	0	1	2	0	1	1	4	<10	0	
402	30	30 to 34	2	5	1	2	3	3	2	2	1	0	2	2	1	0	2	1	2	0	1	0	1	2	0	1	1	4	<10	0	
403	24	21 to 24	1	4	1	2	1	3	1	2	1	1	2	2	1	0	1	2	1	1	0	0	2	1	0	1	1	4	<10	0	
404	26	25 to 29	2	4	1	2	1	2	1	1	1	0	2	2	1	0	1	2	1	1	0	0	2	2	0	1	1	2	<10	0	
405	30	30 to 34	1	4	1	2	2	3	1	2	1	0	1	2	2	0	2	2	2	1	0	0	1	2	0	1	1	1	<10	0	
406	24	21 to 24	1	4	3	2	1	3	1	2	1	0	1	2	1	0	2	2	1	0	1	0	1	2	0	0	1	5	<10	0	
407	30	30 to 34	2	4	3	2	1	4	1	2	1	0	1	2	2	1	1	2	2	1	0	2	2	2	1	1	1	7	<10	0	
408	22	21 to 24	1	4	1	2	2	3	1	1	1	0	2	2	1	0	1	1	2	0	1	0	2	2	0	1	1	2	<10	0	
409	28	25 to 29	2	4	1	2	1	4	1	2	1	0	2	2	1	2	2	1	1	0	0	1	2	0	1	1	7	<10	0		
410	30	30 to 34	1	5	4	2	2	2	1	1	1	0	1	2	1	2	1	2	1	1	0	0	1	2	0	0	1	6	<10	0	
411	24	21 to 24	2	4	1	2	2	4	1	2	1	0	1	2	1	0	2	2	2	1	0	0	1	2	0	1	1	9	<10	0	
412	30	30 to 34	1	5	4	2	2	2	1	2	0	1	2	2	2	0	1	2	1	0	1	0	1	2	0	1	1	6	<10	0	
413	27	25 to 29	2	4	1	2	3	4	1	2	1	0	1	2	1	1	2	1	2	0	1	0	1	2	0	1	1	6	<10	0	
414	30	30 to 34	2	4	1	2	1	3	1	2	1	1	2	2	1	0	2	2	2	1	0	0	1	2	0	1	1	7	<10	0	
415	23	21 to 24	1	4	2	2	2	3	1	1	1	0	2	2	1	0	1	2	1	0	1	0	1	2	0	0	1	12	10 or more	1	
416	30	30 to 34	2	5	1	2	1	4	1	2	1	1	1	2	2	1	2	2	2	1	0	0	2	2	0	1	1	5	<10	0	
417	23	21 to 24	1	6	5	2	2	3	1	1	1	0	1	2	1	0	1	2	1	1	0	0	1	1	0	1	1	4	<10	0	
418	25	25 to 29	2	5	5	2	2	3	1	1	0	1	2	1	0	2	2	1	0	1	0	2	2	0	0	1	1	7	<10	0	
419	30	30 to 34	1	3	1	2	2	3	1	2	1	0	2	2	2	0	1	2	1	1	0	0	2	2	0	1	0	5	<10	0	
420	26	25 to 29	2	5	5	2	1	2	1	2	0	0	1	2	2	1	1	2	1	1	0	2	1	2	1	1	1	8	<10	0	
421	33	30 to 34	1	5	5	2	2	3	1	2	1	0	1	2	2	0	2	2	2	0	1	0	2	2	0	1	1	3	<10	0	
422	28	25 to 29	2	4	1	2	1	3	1	2	1	0	2	2	2	0	1	2	0	0	0	2	2	0	1	1	0	8	<10	0	
423	21	21 to 24	2	4	1	2	1	4	2	1	1	0	1	2	1	0	2	2	1	1	0	0	1	2	0	1	1	8	<10	0	
424	20	18-20	2	4	1	2	1	4	1	2	1	1	1	2	2	1	1	2	2	1	0	0	2	2	0	1	1	9	<10	0	
425	31	30 to 34	2	5	1	2	1	3	1	2	1	0	1	2	2	1	2	2	1	0	1	0	1	2	0	1	1	3	<10	0	
426	26	25 to 29	1	4	5	2	1	4	1	1	1	0	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	3	<10	0	
427	25	25 to 29	1	6	5	2	2	2	1	1	1	0	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	5	<10	0	
428	32	30 to 34	1	4	1	2	2	4	1	2	0	0	2	2	1	0	2	1	3	0	1	0	1	2	0	1	1	4	<10	0	
429	32	30 to 34	2	3	1	2	1	4	1	2	1	0	1	2	2	1	1	2	1	0	1	0	2	2	0	0	1	5	<10	0	
430	25	25 to 29	1	5	5	2	2	2	1	1	1	0	1	2	1	0	2	2	1	1	0	0	2	2	0	1	1	7	<10	0	
431	33	30 to 34	1	3	1	2	2	3	1	2	1	0	1	2	1	0	1	2	2	1	0	0	1	2	0	0	1	4	<10	0	
432	32	30 to 34	2	2	1	2	2	3	1	2	1	0	1	2	2	2	1	2	2	1	0	2	1	2	1	1	1	9	<10	0	
433	20	18-20	2	3	1	2	2	4	1	1	1	0	2	2	1	0	2	1	2	0	1	0	2	2	0	1	1	6	<10	0	
434	21	21 to 24	1	3	1	2	2	3	1	1	1	0	2	2	2	0	1	2	2	0	1	0	1	2	0	1	1	5	<10	0	
435	25	25 to 29	2	6	5	2	2	2	1	2	1	0	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	3	<10	0	
436	27	25 to 29	1	5	5	2	1	3	1	2	1	1	2	2	2	0	1	2	1	0	1	0	2	2	0	1	1	5	<10	0	
437	30	30 to 34	1	5	5	2	2	3	1	1	1	0	1	2	1	0	2	2	3	1	0	0	1	1	0	1	0	6	<10	0	
438	33	30 to 34	2	4	1	2	1	3	1	2	0	1	2	2	2	1	2	1	3	0	1	2	2	2	1	0	1	12	10 or more	1	
439	31	30 to 34	1	4	1	2	2	3	1	2	1	0	1	2	2	0	1	2	1	1	1	0	1	2	0	1	1	4	<10	0	
440	21	21 to 24	2	4	1	2	1	3	1	1	1	0	2	2	1	0	2	1	3	0	1	0	2	2	0	0	1	7	<10	0	
441	21	21 to 24	1	3	1	2	2	4	1	1	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0	
442	27	25 to 29	2	5	5	2	2	3	1	2	1	0	1	2	2	0	1	2	2	1	0	0	1	2	0	1	1	5	<10	0	
443	27	25 to 29	1	6	5	2	2	2	1	1	1	0	1	2	1	0	1	2	1	1	0	0	2	2	0	1	1	2	<10	0	
444	26	25 to 29	1	5	1	2	2	4	1	2	1	0	1	2	2	0	2	2	2	1	0	0	1	2	0	1	1	5	<10	0	
445	21	21 to 24	2	4	1	2	1	4	1	1	1	0	2	2	1	0	1	1	2	0	1	0	1	2	0	1	1	9	<10	0	
446	22	21 to 24	2	4	1	2	2	3	1	1	1	1	1	2	1	1	2	2	2	0	1	2	1	1	1	0	1	13	10 or more	1	
447	32	30 to 34	2	4	1	2	2	3	1	2	1	1	1	2	1	0	1	2	2	1	0	0	2	2	0	1	1	7	<10	0	
448	29	25 to 29	1	4	1	2	2	3	1	2	1	0	1	2	2	0	2	2	1	0	1	0	2	2	0	1	1	6	<10	0	
449	31	30 to 34	1	5	5	2	1	3	1	2	1	1	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	5	<10	0	
450	32	30 to 34	1	4	1	2	2	3	1	2	1	1	2	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0	
451	20	18-20	1	3	1	2	2	4	1	1	1	0	1	2	1	0	1	2	1	1	0	0	2	2	0	0	1	5	<10	0	
452	21	21 to 24	2	4	1	2	2	3	1	1	1	0	1	2	2	0	2	2	2	0	1	0	2	2	0	1	0	7	<10	0	
453	21	21 to 24	1	3	1	2	2	4	1	1	1	0	2	2	1	0	1	2	1	1	0	0	2	2	0	1	1	4	<10	0	
454	31	30 to 34	2	3	1	2	2	3	1	2	1	0	1	2	2	0	2	2	1	1	1	0	2	2	0	1	0	5	<10	0	
455	23	21 to 24	1	4	3	2	1	3	1	1	1	0	2	2	1	0	1	1	2	1	0	0	2	2	0	1	1	5	<10	0	
456	29	25 to 29	2	5	5	2	2	2	1	2	1	1	1	2	2	1	1	2	2	0	1	0	1	2	0	1	1	3	<10	0	
457	34	30 to 34	1	4	1	2	2	4	1	2	1	0	1	2	2	1	2	1	1	1	1	0	1	2	0	1	1	6	<10	0	
458	26																														

469	30	30 to 34	1	5	4	2	2	2	3	1	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	5	<10	0	
470	29	25 to 29	2	4	1	2	2	4	1	2	1	0	1	2	2	0	2	1	1	1	0	0	2	2	0	1	1	3	<10	0	
471	28	25 to 29	1	4	3	2	2	3	1	2	1	0	2	2	1	0	2	2	2	1	0	0	2	2	0	1	1	6	<10	0	
472	21	21 to 24	1	4	1	2	2	2	1	1	1	0	1	2	2	0	2	2	2	2	1	0	0	1	2	0	1	1	5	<10	0
473	26	25 to 29	1	4	1	2	1	3	1	1	1	0	1	2	2	1	1	1	2	0	1	0	2	2	0	1	1	2	<10	0	
474	25	25 to 29	1	4	5	2	2	3	1	1	1	0	2	2	1	0	1	1	2	1	0	0	2	2	0	1	1	5	<10	0	
475	25	25 to 29	2	3	1	2	3	2	1	2	1	0	1	2	1	0	2	2	1	1	1	0	2	1	0	1	1	3	<10	0	
476	33	30 to 34	2	4	3	2	3	3	1	2	1	1	1	2	1	0	2	2	2	1	0	0	1	2	0	1	1	3	<10	0	
477	31	30 to 34	2	4	1	2	2	3	1	2	1	0	2	2	2	0	2	1	2	1	0	0	1	2	0	1	1	6	<10	0	
478	30	30 to 34	1	4	3	2	2	4	1	2	1	0	1	2	1	0	1	2	1	1	0	0	1	2	0	1	1	3	<10	0	
479	24	21 to 24	2	4	1	2	2	4	1	2	1	0	2	2	1	1	2	2	2	0	1	0	2	2	0	1	1	4	<10	0	
480	28	25 to 29	2	5	4	2	3	2	1	1	1	0	1	2	1	0	2	2	3	1	0	0	1	2	0	1	1	4	<10	0	
481	30	30 to 34	2	4	1	2	2	3	1	2	1	0	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	6	<10	0	
482	30	30 to 34	1	5	4	2	1	2	1	2	1	0	2	2	1	1	2	1	2	1	0	0	2	2	0	1	0	4	<10	0	
483	19	18-20	2	2	2	1	3	4	1	1	1	0	2	2	1	0	1	1	2	0	1	0	2	2	0	1	1	4	<10	0	
484	31	30 to 34	1	4	1	2	2	3	1	2	1	0	1	2	2	0	1	1	2	1	0	0	2	2	0	1	1	6	<10	0	
485	30	30 to 34	2	4	1	2	3	4	1	2	0	0	2	2	2	0	1	1	1	1	0	0	1	2	0	1	1	8	<10	0	
486	30	30 to 34	2	5	3	2	3	1	2	1	0	1	2	1	0	1	2	2	1	0	0	2	2	0	1	1	3	<10	0		
487	19	18-20	2	3	1	2	3	2	2	2	1	0	1	2	2	0	1	2	2	1	0	0	2	2	0	1	1	4	<10	0	
488	23	21 to 24	2	3	1	2	2	3	1	1	1	0	2	2	1	0	2	2	2	1	0	0	1	2	0	1	1	4	<10	0	
489	30	30 to 34	2	4	1	2	2	3	1	2	1	0	2	2	1	0	2	1	1	1	0	1	0	2	2	0	1	1	3	<10	0
490	31	30 to 34	1	4	1	2	3	3	1	2	1	0	1	2	1	0	1	2	2	1	1	0	1	2	0	1	1	1	<10	0	
491	28	25 to 29	1	5	4	2	2	3	1	1	1	0	2	2	1	0	1	1	2	0	0	0	2	2	0	0	1	5	<10	0	
492	24	21 to 24	2	4	1	2	3	4	1	1	1	0	1	2	1	0	2	1	2	1	0	0	2	2	0	1	1	5	<10	0	
493	32	30 to 34	1	2	1	2	3	3	1	2	1	1	1	2	2	0	1	2	2	0	1	3	1	2	1	0	1	3	<10	0	
494	25	25 to 29	2	4	3	2	3	4	1	1	0	0	2	2	2	0	2	1	2	1	0	0	2	2	0	1	1	6	<10	0	
495	30	30 to 34	2	4	2	2	3	3	1	2	1	0	1	2	2	0	2	2	2	0	1	0	1	2	0	1	1	3	<10	0	
496	31	30 to 34	3	5	5	2	3	3	1	2	1	0	2	2	1	0	1	2	2	1	0	0	2	2	0	1	1	4	<10	0	
497	23	21 to 24	2	4	1	2	2	3	1	1	1	0	2	2	2	1	2	1	2	1	0	0	1	2	0	1	1	6	<10	0	
498	23	21 to 24	2	4	2	2	2	3	1	1	1	0	1	2	2	0	1	2	2	1	0	0	1	2	0	1	1	3	<10	0	
499	32	30 to 34	1	5	5	2	3	4	1	2	1	0	2	2	2	0	2	1	2	1	0	0	1	2	0	1	1	5	<10	0	
500	30	30 to 34	2	4	1	2	3	2	1	2	1	1	1	2	2	0	2	2	2	1	0	0	2	2	0	1	1	3	<10	0	
501	27	25 to 29	2	4	1	2	2	3	1	2	0	1	1	2	1	0	2	2	2	0	1	0	1	2	0	1	1	3	<10	0	
502	30	30 to 34	3	5	5	2	2	3	1	2	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	0	1	4	<10	0	
503	18	18-20	2	3	1	2	1	4	1	2	1	0	1	2	2	0	1	2	1	0	1	0	2	2	0	1	1	4	<10	0	
504	30	30 to 34	1	4	1	2	2	3	1	2	1	0	2	2	2	0	2	1	2	0	1	0	1	2	0	1	1	5	<10	0	
505	23	21 to 24	1	4	1	2	2	4	1	1	1	0	1	2	1	0	2	2	2	1	0	0	2	2	0	1	0	4	<10	0	
506	25	25 to 29	2	3	3	1	2	3	2	1	1	0	2	1	2	1	2	2	3	1	0	0	1	3	1	0	0	4	<10	0	