

Impact Of Level and Quality of Family Support to Women During Second Trimester and The Maternal and Fetal Outcome

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Cite this paper as: Dr. Ujwala R. Mane, Dr. Jyoti A. Salunkhe, Dr. Vaishali R. Mohite, Vikas Jadhav, Dr. Manda Phuke, (2025) Impact Of Level and Quality of Family Support to Women During Second Trimester and The Maternal and Fetal Outcome. *Journal of Neonatal Surgery*, 14 (20s), 748-773.

ABSTRACT

Background: Pregnancy constitutes a time of significant life change requiring psychological adjustment to maintain health which is important for unborn child. Family support may be one of the determinants of life style habit and relevant health behavior for pregnancy outcome. In India, joint family system is practiced, now a day's due to education, urbanization and industrialization in the Indian society, the family institution continues to play a central role in the lives of people¹. Due to busy schedule and changing in working pattern most of women remain out of home for longer period. But in rural areas women are depend on mother in law and husband for decision². During pregnancy, women undergo various biological, chemical, physiological, and emotional changes which modify their quality of life and well-being, the Impact of perceived Social Support from Family and Empowerment on Maternal Wellbeing in the Postpartum Period³. So by doing the present research study it will be bridging the gap between family and pregnant women, this study will suggest communications needed to gain better maternal and fetal outcome. Due to family support early diagnosis and prevention of any complications can be ruled out.

Aim and Objectives: It was aimed to assess the impact of level and quality of family support during second trimester, to find an association between impact of level and quality of family support and maternal and fetal outcome and to find an association between sociodemographic variables and impact of level and quality of family support during second trimester.

Material and Methods: A survey research design with quantitative approach was adopted for this study. The study was conducted at four Primary Health Centres at Karad, Maharashtra, India i.e. Rethare, Vadgaon, Kale and Supane. Simple random sampling with consecutive sampling was used for selecting the 344 subjects from Rethare, Vadgaon, Kale and Supane areas of Karad Taluka. Data collected before completion of first three months of pregnancy, then during second trimester and after delivery. Data was analyzed by using descriptive and inferential statistics. Result: findings of study shows that significant association found between maternal outcome with presence of close relatives before delivery, family support received after delivery, ($p < 0.05$).

Results: related to fetal outcome and family support shows that there was no significant association found between fetal outcome with level of psychosocial support during second trimester ($p > 0.05$).

Keyword: *Pregnant Women, level of Family Support, Maternal and Fetal Outcome.*

1. INTRODUCTION

Maternal mortality is unacceptably high, about 295 000 women died during and following pregnancy and childbirth in 2017⁴. The vast majority of these deaths (94%) occurred in low-resource settings, and most could have been prevented⁵. Due to advanced technologies health care system is strong then also maternal and fetal outcome is not as per expectation.

In present study, psychosocial support, Maternal outcome include Gestational age of mother, Preterm delivery, weight gain during pregnancy, type of delivery, postpartum hemorrhage, Fetal outcome include birth weight of baby, preterm birth, complications during birth of baby including family support, which other researchers not included in their studies. Increasing family support can improve birth outcome and maternal well being can reduce complications in mother and increase birth weight.

Understanding whether increased low social support is associated with an increased risk of preterm birth could help health professionals to identify women with low support early in pregnancy and refer them to appropriate resources. If in pregnancy women are not getting family support their children tend to have low birth weight, fail to grow at a normal rate, and have higher rates of disease and early death⁶.

2. MATERIAL AND METHODS

To assess the influence of Psycho-social support on maternal and fetal health outcomes, a Qualitative and quantitative research approach employing a survey research design was utilized. The investigation was carried out in four Primary Health Centres (PHCs), randomly PHCs chosen from the eleven PHCs situated in the rural region of Karad Taluka. From these PHCs, 40 villages were selected, and a total of 344 pregnant women meeting the eligibility criteria were recruited through a consecutive sampling method. Eligible participants comprised primigravida and multigravida women, aged 18 to 30 years, who were residents of Karad Taluka, had registered their pregnancies within the first three weeks, and had given birth either at the selected PHCs or at Krishna Hospital, Karad. The data collection spanned the academic year 2022–2023.

A structured assessment tool was used to gather data on family support, maternal and fetal outcomes, and sociodemographic characteristics, including age, family type, place of residence, household income, educational level of parents, and the number of children.

Before data collection, ethical approval was obtained from the Institutional Ethics Committee, KIMSDU Ethical Ref. No. KIMSDU/IEC/01/2020 and permissions were secured from the respective PHC authorities. Each eligible woman was briefed in her local language about the purpose of the study, confidentiality safeguards, voluntary participation, and her right to withdraw at any time. Written informed consent was obtained, and each participant was assigned a unique identifier to ensure anonymity.

Data were collected using a pre-tested questionnaire following the outlined protocol. Inclusion criteria were strictly adhered to, focusing on women aged 18–30 years, both primigravida and multigravida, who had registered early and delivered in the specified healthcare facilities.

The data were statistically analyzed using both descriptive (mean, standard deviation) and inferential techniques. Family support levels were categorized based on the following scoring:

The Chi-square test was employed to examine the relationship between family support levels and selected sociodemographic variables.

SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

Research approach: Qualitative and Quantitative
(Mixed) research approach

Research Design: Survey Research Design

Study setting: The study was conducted in Selected PHC's of Karad Taluka Dist-Satara (Maharashtra)

Population: Mothers registered and delivered at selected four PHCs of Karad Taluka and Krishna Hospital Karad.

Sample size calculation: The sample size was calculated based on the study conducted by Abdollahpour et al⁷ The proportion of pregnancy complications observed in women with poor support from family was 81.8%, while the proportion of pregnancy complications in women with moderate or good support from family was 45.2%.

$$(p1q1+p2q2) (z1 -\alpha/2+z1 -\beta) ^2$$

$$n = \frac{(p_1 p_2)^2}{(p_1 - p_2)^2}$$

Where P1 = proportion of women having poor family support

$$q_1 = 100 - p_1$$

p2= proportion of women having moderate/ good family support

$$q_2 = 100 - p_2$$

z1 –α/2 level of significance (5%)

i.e. =1.96 z1 –p=power of the study (95%)

i.e. =1.64

Thus,

$$n = \frac{((81.8 \times 18.2) + (45.2 \times 54.8)) \times 13}{(81.8 - 45.2)^2} = 39$$

Considering 10% dropout rate a maximum of 43 (i.e.39+3) pregnant primi and multigravida women were enrolled.

The participants for present study

$$n = 344$$

Pilot study was done on 40 Primigravida women at Kole, Umbraj Masur and Sadashivgad PHCs.

SECTION - I

DISTRIBUTION OF PARTICIPANTS ACCORDING TO SOCIO-DEMOGRAPHIC VARIABLES

Table 1: A) Distribution of Pregnant women according to Socio-demographic Variables N = 344

Socio-demographic variables	Number	Percentage (%)
Age		
18– 21	88	25.6
22 – 25	155	45.1
26 – 30	101	29.4
Religion		
Hindu	273	79.4
Muslim	44	12.8
Christian	27	7.8
Education of pregnant women		
Post graduate	12	3.5
Graduate	64	18.6
Intermediate or diploma	94	27.3
High school certificate	111	32.3
Middle school certificate	41	11.9

Primary school certificate	18	5.2
Illiterate	4	1.2
Occupation of pregnant women		
Professional	13	3.8
Technicians and associate professionals	26	7.6
Clerks	10	2.9
Skilled workers and shop and market sales worker	12	3.5
Crafts and related trade workers	30	8.7
Plant and machine operators and assemblers	9	2.6
Elementary occupation	49	14.2
Unemployed	195	56.7

The above table **1: A)** reveals that, majority 155(45.1%) pregnant women from 22 to 25 years of age group, 101(29.4%) from 26 to 30 years of age and 88(25.6%) were from 18 to 21 years of age. Majority pregnant women 273(79.4%) were Hindu, 44(12.8%) were Muslim and 27(7.8%) from Christian. Among 344 pregnant women 111(32.3%) studied up to High school education, 94(27.3%) were studied up to diploma certificate where as 64(18.6%) studied up to graduation, 12 (3.5%) were studied post-graduation and 4 (1.2%) were not having formal education. Majority pregnant women 195(56.7%) were Unemployed, 49(14.2%) were having elementary occupation, 30 (8.7%) were having craft related workers and 13(3.8%) were professionals.

Table 1: B) Distribution of Pregnant women according to socio-demographic Variables N = 344

Socio-demographic variables	Number	Percentage (%)
Monthly family income in rupees		
≥199,862	23	6.7
99,931-199,861	83	24.1
74,755-99,930	78	22.7
49,962-74,755	64	18.6
29,973-49,961	73	21.2
10,002-29,972	17	4.9
≤10,001	6	1.7
Type of family		
Nuclear	172	50
Joint	172	50
Family size		
≤ 4 members	190	55.2
>4 members	154	44.8

Type of diet		
Vegetarian	68	19.8
Mixed	276	80.2
Marriage in relation		
Yes	58	17
No	286	83
If yes specify relation		
Marriage Maternal (mothers) relation	4	1.2
Fathers relation	54	15.7
No any relation	286	83.1
If Marriage in relation any complications for previous child		
Yes	04	07
No	54	93
Number of children in family		
No children	113	32.8
One child	73	21.2
More than two children	158	45.9
Sex of previous child		
Male	91	26.5
Female	116	33.7
No child	137	39.8

Above table **1: B**) shows that, majority of pregnant women having monthly income was 99,931-199,861 rupees, 78 (22.7%) income was 74,755-99,930 rupees and 64(18.6%) were having 49,962-74,755 rupees. While considering Type of family 172(50%) pregnant women from joint family and 172(50%) were from nuclear family. 190 (55.2%) pregnant women were having family members 4 or less than 4, whereas 154(44.8%) were having more than 4 members. According to type of diet 276(80.2%) pregnant women taking mixed type of diet and 68(19.8%) were consuming vegetarian diet. 286 (83%) pregnant women were married in relation where as 58(17%) were not having consanguineous marriage. Out of 58(17%) consanguineous married couples 4(07%) having complications for previous child. Majority 137(39.8%) pregnant women not having previous children, 116 (33.7%) having female child and 91 (26.5%) male child.

TABLE NO. 2: LEVEL OF FAMILY SUPPORT DURING SECOND TRIMESTER N=344

LEVEL OF FAMILY SUPPORT DURING <u>SECOND TRIMESTER</u>			
Level of family support	Score	Frequency	Percentage (%)
Physical support level			
Poor	≤8	94	27.33

Moderate	9to16	197	57.27
Good	17to20	53	15.41
Emotional support level			
Poor	≤6	89	25.87
Moderate	7to12	197	57.27
Good	13to16	58	16.86
Psychosocial support level			
Poor	≤6	99	28.78
Moderate	7to12	215	62.50
Good	13to16	30	8.72
Total support level			
Poor	≤17	54	15.70
Moderate	8to34	187	54.36
Good	35to52	103	29.94

Above table No. 2 shows that, 53(15.41%) women received good Physical support, whereas 197 (57.27 %) received moderate physical support and 94(27.33%) received poor physical support during second trimester. Regarding the emotional support 58(16.86%) pregnant women received good emotional support, 197 (57.7%) moderate support and 89 (25.87%) received poor emotional support during second trimester, according to Psychosocial support 30(8.72%) received good Psycho social support, 215(62.50%) moderate and 99(28.78%) received poor Psycho social support during second trimester.

**TABLE 2: A) ASSOCIATION BETWEEN MATERNAL OUT COME WITH LEVEL OF PHYSICAL SUPPORT
N=344**

LEVEL OF PHYSICAL SUPPORT DURING SECOND TRIMESTER						
Maternal outcome	Poor Support	Moderate support	Good support	Total	χ ² value	p-value
Total gestational weeks completed at time of delivery						
Below 36 weeks of gestation	23(25.84)	53(59.55)	13(14.60)	89(25.87)	3.48	0.48
37 to 40weeks of gestation	62(26.95)	134(58.26)	34(14.78)	230(66.86)		
Above 40 weeks of gestation	9(36)	10(40)	6(24)	25(7.26)		
Presence of associated Maternal complications/diseases during pregnancy						
Yes	31(27.19)	58(50.87)	25(21.92)	114(33.13)	5.92	0.05
No	63(27.39)	139(60.43)	28(12.17)	230(66.86)		
If yes specify Maternal complications						
PPH	3(50)	2(33.33)	1(16.66)	6(1.74)	11.32	0.184
Echlamsia	15(39.47)	17(44.73)	6(15.78)	38(11.04)		

Fever	0(0.00)	2(100)	0(0.00)	2(0.58)		
Other complications	15(22.05))	37(54.41)	16(23.52)	68(19.76)		
No any complications	61(26.52)	139(60.43)	30(13.04))	230(66.86)		
Presence of close relatives before delivery						
Yes	66(26.72)	142(57.48)	39(15.78)	247(71.80)	0.21	0.901
No	28(28.86)	55(56.70)	14(14.43)	97(28.19)		
If yes relation With attendee						
Mother	39(27.85)	80(57.14)	21(15)	140(40.69)	3.45	0.75
Husband	18(22.5)	46(57.5)	16(20)	80(23.25)		
Other relatives	9(33.33)	16(59.25)	2(7.40)	27(7.84)		
Mother in law	28(28.86)	55(56.70)	14(14.43)	97(28.19)		
Presence of associated maternal complications during delivery						
Yes	24(26.66)	48(53.33)	18(20)	90(26.16)	2.018	0.365
No	70(27.55)	149(58.66)	35(13.77)	254(73.83)		
If yes specify maternal complications during delivery						
PPH	0(0.00)	2(33.33)	4(66.66)	6(1.74)	16.482	0.036
Echlamsia	2(50)	2(50)	0(0.00)	4(1.16)		
Infection	1(10)	7(70)	2(20)	10(2.90)		
Others	21(30)	37(52.85)	12(17.14)	70(20.34)		
No any complications	70(27.55)	149(58.66)	35(13.77)	254(73.83)		
Type of Delivery						
Normal Vaginal Delivery	41(23.29)	110(62.5)	25(14.20)	176(51.16)	9.486	0.148
Episiotomy	33(35.86)	42(45.65)	17(18.47)	92(26.74)		
Caesarean mode of delivery	20(27.39)	42(57.73)	11(15.06)	73(21.22)		
Instrumental delivery (Forceps, Vacuum)	0(0.00)	3(100)	0(0.00)	3(0.87)		
Received family support during delivery						
Yes	76(27.43)	158(57.03)	43(15.52)	277(80.52)	0.032	0.984
No	18(26.86)	39(58.20)	10(14.92)	67(19.47)		
If yes relation With attendee						
Mother	41(25)	100(60.97)	23(14.02)	164(47.67)	5.06	0.751
Husband	23(33.33)	33(42.82)	13(18.84)	69(20.05)		
Other relatives	10(25)	23(57.5)	7(17.5)	40(11.62)		
Mother in law	2(50)	2(50)	0(0.00)	4(1.16)		

No relatives	18(26.86)	39(58.20)	10(14.92)	67(19.47)		
Family support received after delivery						
Yes	61(23.73)	159(61.86)	37(14.39)	257(74.70)	9.22	0.01
No	33(37.93)	38(43.67)	16(18.39)	87(25.29)		
If yes relation With attendee for baby care						
Mother	42(25)	105(62.5)	21(12.5)	168(48.83)	11.59	0.17
Husband	9(21.42)	27(64.28)	6(14.28)	42(12.20)		
Mother in law	8(21.62)	21(56.75)	8(21.62)	37(10.75)		
Other relatives	2(20)	6(60)	2(20)	10(2.91)		
No relatives	33(37.93)	38(43.67)	16(18.39)	87(25.29)		

Above table 2: A) shows that, there was significant association found between maternal outcome and complications during pregnancy and delivery, Type of Delivery, Family support received after delivery, relation with attendee with level of physical support during second trimester ($p < 0.05$). And there was no significant association found between total gestational weeks completed at time of delivery, specify maternal complications, presence of close relatives before delivery, relation with attendee, associated maternal complications during delivery, type of delivery, received family support during delivery, if yes relation with attendee and level of physical support during second trimester ($p > 0.05$).

TABLE 2: B) ASSOCIATION BETWEEN MATERNAL OUT COME WITH LEVEL OF EMOTIONAL SUPPORT N=344

EMOTIONAL SUPPORT DURING <u>SECOND TRIMESTER</u>						
Maternal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Total gestational weeks completed at time of delivery						
Below 36 weeks of gestation	18(20.22)	55(61.79)	16(17.97)	89(25.87)	2.99	0.558
37 to 40weeks of gestation	66(28.69)	126(54.78)	38(16.52)	230(66.86)		
Above 40 weeks of gestation	5(20)	16(64)	4(16)	25(7.26)		
Presence of associated Maternal complications/diseases during pregnancy						
Yes	27(23.68)	66(57.89)	21(18.42)	114(33.13)	0.573	0.751
No	62(26.95)	131(56.95)	37(16.08)	230(66.86)		
If yes specify Maternal complications						
PPH	2(33.33)	4(66.66)	0(0.00)	6(1.74)	5.726	0.678
Echlamsia	13(34.21)	20(52.63)	5(13.15)	38(11.04)		
Fever	0(0.00)	2(100)	0(0.00)	2(0.58)		
Others	15(22.05)	38(55.88)	15(22.05)	68(1.74)		
No any complication	59(25.65)	133(57.82)	38(16.52)	230(66.86)		

Presence of close relatives before delivery						
Yes	61(24.69)	145(58.70)	41(16.59)	247(71.80)	0.819	0.664
No	28(28.86)	52(53.60)	17(17.52)	97(28.19)		
If yes relation With attendee						
Mother	34(24.28)	86(61.42)	20(14.28)	140(30.23)	3.765	0.708
Husband	18(22.5)	45(56.25)	17(21.25)	80(23.25)		
Other relatives	9(33.33)	14(51.25)	4(14.81)	27(7.84)		
No any relatives	28(28.86)	52(53.60)	17(17.52)	97(28.19)		
Presence of associated maternal complications during delivery						
Yes	20(22.22)	53(58.88)	17(18.88)	90(26.16)	0.981	0.612
No	69(27.16)	144(56.69)	41(16.14)	254(73.83)		
If yes specify maternal complications during delivery						
PPH	0(0.00)	5(83.33)	1(16.66)	6(1.74)	8.204	0.414
Echlamsia	2(50)	1(25)	1(25)	4(1.16)		
Infection	0(0.00)	7(70)	3(30)	10(2.90)		
Others	18(25.71)	40(57.14)	12(17.14)	70(20.34)		
No any complications	69(27.16)	144(56.69)	41(16.14)	254(73.83)		
Type of Delivery						
Normal Vaginal Delivery	38(21.59)	112(63.63)	26(14.77)	176(51.16)	18.172	0.006
Episiotomy	35(38.04)	45(48.91)	12(13.04)	92(26.74)		
Caesarean mode of delivery	16(21.91)	37(50.68)	20(27.39)	73(21.22)		
Instrumental delivery (Forceps, Vacuum)	0(0.00)	3(100)	0(0.00)	3(0.87)		
Received family support during delivery						
Yes	67(24.18)	158(57.03)	52(18.77)	277(80.52)	4.656	0.097
No	22(32.83)	39(58.20)	6(8.95)	67(19.47)		
If yes relation With attendee						
Mother	41(25)	92(56.09)	31(18.90)	164(47.67)	9.261	0.321
Husband	19(27.53)	38(55.07)	12(17.39)	69(20.05)		
Other relatives	7(17.5)	24(60)	9(22.5)	40(11.62)		
Mother in law	0(0.00)	4(100)	0(0.00)	4(1.16)		
No relatives	22(32.83)	39(58.20)	6(8.95)	67(19.47)		
Family support received after delivery						

Yes	60(23.34)	149(57.97)	48(18.67)	257(74.70)	4.58	0.101
No	29(33.33)	48(55.17)	10(11.49)	87(25.29)		
If yes relation With attendee						
Mother	42(25)	102(60.71)	24(14.28)	168(48.83)	15.996	0.042
Husband	8(19.04)	24(57.14)	10(23.80)	42(12.20)		
Mother in law	8(21.62)	16(43.24)	13(35.13)	37(10.75)		
Other relatives	2(20)	7(70)	1(10)	10(2.90)		
No relatives	29(33.33)	48(55.17)	10(11.49)	87(25.29)		

Above table **2: B)** shows that, there was significant association found between maternal outcome like type of delivery, relation with attendee and emotional support during second trimester (p value is <0.05). There was no significant association found between Total gestational weeks completed at time of delivery, presence of associated Maternal complications, presence of relatives during delivery, relation With attendee maternal complications during delivery, Received family support during delivery, relation with attendee, family support received after delivery with emotional support during second trimester (p>0.05).

TABLE 2: C) ASSOCIATION BETWEEN MATERNAL OUT COME WITH LEVEL OF PSYCHOSOCIAL SUPPORTN=344

PSYCHOSOCIAL SUPPORTDURING <u>SECOND TRIMESTER</u>						
Maternal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Total gestational weeks completed at time of delivery						
Below 36 weeks of gestation	25(28.08)	56(62.92)	8(8.98)	89(25.87)	5.788	0.216
37 to 40weeks of gestation	70(30.43)	143(62.17)	17(7.39)	230(66.86)		
Above 40 weeks of gestation	4(16)	16(64)	5(20)	25(7.26)		
Presence of associated Maternal complications/diseases during pregnancy						
Yes	33(28.94)	72(63.15)	9(7.89)	114(33.13)	0.147	0.929
No	66(28.69)	143(62.17)	21(9.13)	230(66.86)		
If yes specify Maternal complications						
PPH	3(50)	3(50)	0(0.00)	6(1.74)	3.12	0.927
Echlamsia	11(28.94)	25(65.78)	2(5.26)	38(11.04)		
Fever	1(50)	1(50)	0()	2(0.58)		
Others	20(29.41)	41(60.29)	7(10.29)	68(19.76)		
No any complication	64(27.82)	145(63.04)	21(9.13)	230(66.86)		
Presence of close relatives before delivery						
Yes	67(26.07)	163(63.42)	27(10.50)	257(74.70)	6.442	0.04

No	32(36.78)	52(59.77)	3(3.44)	87(25.29)		
If yes relation With attendee						
Mother	45(26.78)	109(64.88)	14(8.33)	168(48.83)	10.83	0.212
Husband	10(23.80)	26(61.90)	6(14.28)	42(12.20)		
Mother in law	8(21.63)	23(62.16)	6(16.21)	37(10.75)		
Other relatives	4(40)	5(50)	1(10)	10(2.90)		
No relatives	32(36.78)	52(59.77)	3(3.44)	87(25.29)		
Presence of associated maternal complications during delivery						
Yes	24(26.66)	58(64.44)	8(8.88)	90(26.16)	0.267	0.875
No	75(29.52)	157(61.81)	22(8.66)	254(73.83)		
If yes specify maternal complications during delivery						
PPH	1(16.66)	5(83.33)	0(0.00)	6(1.74)	3.922	0.864
Echlamsia	1(25)	3(75)	0	4(1.16)		
Infection	4(40)	6(60)	0	10(2.90)		
Others	18(25.71)	44(62.85)	8(11.42)	70(20.34)		
No any complications	75(29.52)	157(61.81)	22(8.66)	254(73.83)		
Type of Delivery						
Normal Vaginal Delivery	49(27.84)	115(65.34)	12(6.81)	176(51.16)	6.341	0.386
Episiotomy	30(32.60)	50(54.34)	12(13.04)	92(26.74)		
Caesarean mode of delivery	20(27.39)	47(64.38)	6(8.21)	73(21.22)		
Instrumental delivery (Forceps, Vacuum)	0(0.00)	3(100)	0(0.00)	3(0.87)		
Received family support during delivery						
Yes	79(28.51)	173(62.45)	25(9.02)	277(80.52)	0.185	0.912
No	20(29.85)	42(62.88)	5(7.46)	67(19.47)		
If yes relation With attendee						
Mother	46(28.04)	103(62.80)	15(9.14)	164(47.67)	2.725	0.95
Husband	18(26.08)	43(62.31)	8(11.59)	69(20.05)		
Other relatives	14(35)	24(60)	2(5)	40(11.62)		
Mother in law	1(25)	3(75)	0(0.00)	4(1.16)		
No relatives	20(29.85)	42(62.88)	5(7.46)	67(19.47)		
Family support received after delivery						
Yes	67(26.07)	163(63.42)	27(10.50)	257(74.70)	6.442	0.04
No	32(36.78)	52(59.77)	3(3.44)	87(25.29)		

If yes relation With attendee						
Mother	45(26.78)	109(64.88)	14(8.33)	168(48.83)	10.83	0.212
Husband	10(23.80)	26(61.90)	6(14.28)	42(12.20)		
Mother in law	8(21.62)	23(62.16)	6(16.21)	37(10.75)		
Other relatives	4(40)	5(50)	1(10)	10(2.90)		
No relatives	32(36.78)	52(59.77)	3(3.44)	87(25.29)		

Above table 2: C) shows that, significant association found between maternal outcome with presence of close relatives before delivery, family support received after delivery, ($p < 0.05$) and there was no significant association found between total gestational weeks completed at time of delivery, presence of maternal complications during pregnancy, relation with attendee associated maternal complications during delivery, specify complications, type of delivery, received family support during delivery, relation with attendee and maternal outcome and psychosocial support at second trimester.

TABLE 2: D) ASSOCIATION OF MATERNAL OUTCOME WITH LEVEL OF TOTAL SUPPORT

N=344

TOTAL SUPPORT DURING <u>SECOND TRIMESTER</u>						
Maternal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Total gestational weeks completed at time of delivery						
Below 36 weeks of gestation	14(15.73)	46(51.68)	29(32.58)	89(25.87)	1.935	0.748
37 to 40weeks of gestation	38(16.52)	127(55.21)	65(28.26)	230(66.86)		
Above 40 weeks of gestation	2(8)	14(56)	9(36)	25(7.26)		
Presence of associated Maternal complications/diseases during pregnancy						
Yes	18(15.78)	56(49.12)	40(35.08)	114(33.13)	2.369	0.306
No	36(15.65)	131(56.95)	63(27.39)	230(66.86)		
If yes specify Maternal complications						
PPH	2(33.33)	3(50)	1(16.66)	6(1.74)	5.948	0.653
Echlamsia	8(21.05)	20(52.63)	10(26.31)	38(11.04)		
Fever	0(0.00)	2(100)	0(0.00)	2(0.58)		
Others	10(14.70)	33(48.52)	25(36.76)	68(19.76)		
No any complication	34(14.78)	129(56.08)	67(29.13)	230(66.86)		
Presence of close relatives before delivery						
Yes	39(15.78)	131(53.03)	77(31.17)	247(71.80)	0.731	0.694
No	15(15.46)	56(57.73)	26(26.80)	97(28.19)		
If yes relation With attendee						
Mother	23(16.42)	80(57.14)	37(26.42)	140(40.69)	6.726	0.347

Husband	12(15)	35(43.75)	33(41.25)	80(23.25)		
Other relatives	4(14.81)	16(59.25)	7(25.92)	27(7.84)		
Mother in law	15(15.46)	56(57.73)	26(26.80)	97(28.19)		
Presence of associated maternal complications during delivery						
Yes	12(13.33)	45(50)	33(36.66)	90(26.16)	2.701	0.259
No	42(16.53)	142(55.90)	70(27.55)	254(73.83)		
If yes specify maternal complications during delivery						
PPH	2(33.33)	3(50)	1(16.66)	6(1.74)	5.948	0.653
Echlamisia	8(21.05)	20(52.63)	10(26.31)	38(11.04)		
Fever	0(0.00)	2(100)	0(0.00)	2(0.58)		
Others	10(14.70)	33(48.52)	25(36.76)	68(19.76)		
No any complication	34(14.78)	129(56.08)	67(29.13)	230(66.86)		
Type of Delivery						
Normal Vaginal Delivery	20(11.36)	107(60.79)	49(27.84)	176(51.16)	14.073	0.029
Episiotomy	23(25)	41(44.56)	28(30.43)	92(26.74)		
Caesarean mode of delivery	11(15.06)	36(49.31)	26(35.61)	73(21.22)		
Instrumental delivery (Forceps, Vacuum)	0(0.00)	3(100)	0(0.00)	3(0.87)		
Received family support during delivery						
Yes	39(15.78)	131(53.03)	77(31.17)	247(71.80)	0.731	0.694
No	15(15.46)	56(57.73)	26(26.80)	97(28.19)		
If yes relation With attendee						
Mother	23(16.42)	80(57.14)	37(26.42)	140(40.69)	6.726	0.347
Husband	12(15)	35(18.75)	33(41.25)	80(23.25)		
Other relatives	4(14.81)	16(59.25)	7(25.92)	27(7.84)		
Mother in law	15(15.46)	56(57.73)	26(26.80)	97(28.19)		
Mother	23(16.42)	80(57.14)	37(26.42)	140(40.69)		
Family support received after delivery						
Yes	33(12.84)	144(56.03)	80(31.12)	257(74.70)	6.284	0.043
No	21(24.13)	43(49.42)	23(26.43)	87(25.29)		
If yes relation With attendee						
Mother	21(12.5)	102(60.71)	45(26.78)	168(48.83)	12.175	0.144
Husband	6(14.28)	19(45.23)	17(40.47)	42(12.20)		
Mother in law	4(10.81)	18(48.64)	15(40.54)	37(10.75)		

Other relatives	2(20)	5(50)	3(30)	10(2.90)		
No relatives	21(24.13)	43(49.42)	23(26.43)	87()		

Above table 2: D) shows that, there was significant association found between type of delivery and Family support received after delivery with total family support ($p < 0.05$) and there was no significant association found between total gestational weeks completed at time of delivery, Presence of close relatives before delivery, relation with attendee with total support during second trimester ($p > 0.05$).

TABLE 3: A) ASSOCIATION BETWEEN FETAL OUT COME WITH LEVEL OF PHYSICAL SUPPORTN=344

PHYSICAL SUPPORTDURING <u>SECOND TRIMESTER</u>						
Fetal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Healthy new born has born						
Yes	69(26.64)	154(59.46)	36(13.90)	259(75.29)	2.605	0.272
No	25(29.41)	43(50.59)	17(20)	85(24.71)		
Birth weight of baby at delivery						
Below 1.5kg	1(33.33)	2(66.67)	0(0)	3(0.87)	3.314	0.769
1.5-2 kg	30(27.03)	60(54.05)	21(18.92)	111(32.27)		
2-2.5 kg	10(31.25)	16(50)	6(18.75)	32(9.30)		
Above 2.5 kg	53(26.77)	119(60.10)	26(13.13)	198(57.56)		
Length of present Baby						
Below or equal to 48	22(33.85)	35(53.85)	8(12.31)	65(18.90)	9.536	0.049
49-50 cm	16(17.78)	53(58.89)	21(23.33)	90(26.16)		
Above 50 cm	56(29.63)	109(57.67)	24(12.70)	189(54.94)		
Any abnormality to present baby						
Yes	35(36.08)	43(44.33)	19(19.59)	97(28.20)	9.272	0.01
No	59(23.89)	154(62.35)	34(13.77)	247(71.80)		
Specify complications						
LBW	15(42.86)	15(42.86)	5(14.29)	35(10.17)	12.435	0.133
FD	8(34.78)	10(43.48)	5(21.74)	23(6.69)		
Birth asphyxia	2(20)	6(60)	2(20)	10(2.91)		
Other complications	10(34.48)	12(41.38)	7(24.14)	29(8.43)		
No any complications	59(23.89)	154(62.35)	34(13.77)	247(71.80)		
Sex of Present Baby						
Male	42(24.28)	101(58.38)	30(17.34)	173(50.29)	2.104	0.349
Female	52(30.41)	96(56.14)	23(13.45)	171(49.71)		

Received family support -baby care as feeding						
Yes	65(28.14)	137(59.31)	29(12.55)	231(67.15)	4.396	0.11
No	29(25.66)	60(53.10)	24(21.24)	113(32.85)		
Relation with attendee supporting baby care						
Mother	28(28)	54(54)	18(18)	100(29.07)	7.96	0.437
Husband	17(26.98)	39(61.90)	7(11.11)	63(18.31)		
Mother in law	13(33.33)	23(58.97)	3(7.69)	39(11.34)		
Others	7(24.14)	20(68.97)	2(6.90)	29(8.43)		
No relatives	29(25.66)	61(53.98)	23(20.35)	113(32.85)		

Above table 3: A) shows that, there was significant association found between length of present baby and any abnormality to present baby with level of physical support during second trimester ($p < 0.05$). There was no significant association found between healthy new born has born, birth weight of baby, complications to baby, sex of present baby, received family support baby care as feeding, relation with attendee supporting baby care with level of physical during second trimester ($P > 0.05$).

**TABLE 3: B) ASSOCIATION BETWEEN FETAL OUT COME WITH LEVEL OF EMOTIONAL SUPPORT
N=344**

EMOTIONAL SUPPORT DURING <u>SECOND TRIMESTER</u>						
Fetal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Healthy new born has born						
Yes	68(26.25)	153(59.07)	38(14.67)	259(75.29)	3.634	0.162
No	21(24.71)	44(51.76)	20(23.53)	85(24.71)		
Birth weight of baby at delivery						
Below 1.5kg	1(33.33)	0(0)	2(66.67)	3(0.87)	10.263	0.114
1.5-2 kg	27(24.32)	62(55.86)	22(19.82)	111(32.27)		
2-2.5 kg	6(18.75)	23(71.88)	3(9.38)	32(9.30)		
Above 2.5 kg	55(27.78)	112(56.57)	31(15.66)	198(57.56)		
Length of present Baby						
Below or equal to 48	18(27.69)	32(49.23)	15(23.08)	65(18.90)	17.423	0.002
49-50 cm	11(12.22)	58(64.44)	21(23.33)	90(26.16)		
Above 50 cm	60(31.75)	107(56.61)	22(11.64)	189(54.94)		
Any abnormality to present baby						
Yes	28(28.87)	50(51.55)	19(19.59)	97(28.20)	1.836	0.399
No	61(24.70)	147(59.51)	39(15.79)	247(71.80)		

Specify complications						
LBW	12(34.29)	14(40)	9(25.71)	35(10.17)	6.312	0.612
Fetal distress	6(26.09)	14(60.87)	3(13.04)	23(6.69)		
Birth asphyxia	2(20)	7(70)	1(10)	10(2.91)		
Other complications	8(27.59)	15(51.72)	6(20.69)	29(8.43)		
No any complications	61(24.70)	147(59.51)	39(15.79)	247(71.80)		
sex of present Baby						
Male	45(26.01)	96(55.49)	32(18.50)	173(50.29)	0.747	0.688
Female	44(25.73)	101(59.06)	26(15.20)	171(49.71)		
Received family support -baby care as feeding						
Yes	60(25.97)	131(56.71)	40(17.32)	231(67.15)	0.128	0.938
No	29(25.66)	66(58.41)	18(15.93)	113(32.85)		
Relation with attendee supporting baby care						
Mother	25(25)	55(55)	20(20)	100(29.07)	5.892	0.659
Husband	19(30.16)	34(53.97)	10(15.87)	63(18.31)		
Mother in law	8(20.51)	2358.97	8(20.51)	39(11.34)		
Others	8(27.59)	20(68.97)	1(3.45)	29(8.43)		
No relatives	29(25.66)	65(57.52)	19(16.81)	113(32.85)		

Above table **3: B)** shows that, there was significant association found between length of present baby with level of Emotional support during second trimester ($p < 0.05$). There was no significant association found between healthy new born has born, birth weight of baby, any abnormality to present baby, complications to present baby, sex of present baby, Received family support -baby care as feeding, Relation with attendee supporting baby care as feeding with level of emotional support during second trimester($p > 0.05$).

TABLE 3: C) ASSOCIATION BETWEEN FETAL OUT COME WITH LEVEL OF PSYCHOSOCIAL SUPPORT

N=344

PSYCHOSOCIAL SUPPORT DURING <u>SECOND TRIMESTER</u>						
Fetal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Healthy new born has born						
Yes	70(27.03)	163(62.93)	26(10.04)	259(75.29)	3.237	0.198
No	29(34.12)	52(61.18)	4(4.71)	85(24.71)		
Birth weight of baby at delivery						
Below 1.5kg	1(33.33)	2(66.67)	0(0)	3(0.87)	1.293	0.972

1.5-2 kg	31(27.93)	68(61.26)	12(10.81)	111(32.27)		
2-2.5 kg	9(28.13)	21(65.63)	2(6.25)	32(9.30)		
Above 2.5 kg	58(29.29)	124(62.63)	16(8.08)	198(57.56)		
Length of present Baby						
Below or equal to 48	22(33.85)	37(56.92)	6(9.23)	65(18.90)	3.929	0.416
49-50 cm	19(21.11)	62(68.89)	9(10)	90(26.16)		
Above 50 cm	58(30.69)	116(61.38)	15(7.94)	189(54.94)		
Any abnormality to present baby						
Yes	35(36.08)	54(55.67)	8(8.25)	97(28.20)	3.547	0.17
No	64(25.91)	161(65.18)	22(8.91)	247(71.80)		
Specify complications						
LBW	10(28.57)	22(62.86)	3(8.57)	35(10.17)	7.719	0.461
FD	9(39.13)	13(56.52)	1(4.35)	23(6.69)		
Birth assphyxia	4(40)	6(60)	0(0)	10(2.91)		
Other complications	12(41.38)	13(44.83)	4(13.79)	29(8.43)		
No any complications	64(25.91)	161(65.18)	22(8.91)	247(71.80)		
sex of present Baby						
Male	46(26.59)	112(64.74)	15(8.67)	173(50.29)	0.86	0.65
Female	53(30.99)	103(60.23)	15(8.77)	171(49.71)		
Received family support -baby care as feeding						
Yes	75(32.47)	135(58.44)	21(9.09)	231(67.15)	5.288	0.071
No	24	80	9	113(32.85)		
Relation with attendee supporting baby care						
Mother	37(37)	50(50)	13(13)	100(29.07)	13.345	0.101
Husband	17(26.98)	42(66.67)	4(6.35)	63(18.31)		
Mother in law	12(30.77)	24(61.54)	3(7.69)	39(11.34)		
Others	10(34.48)	18(62.07)	1(3.45)	29(8.43)		
No relatives	23(20.35)	81(71.68)	9(7.96)	113(32.85)		

Above table 3: C) shows that, there was no significant association found between fetal outcome with level of psychosocial support during second trimester ($p>0.05$).

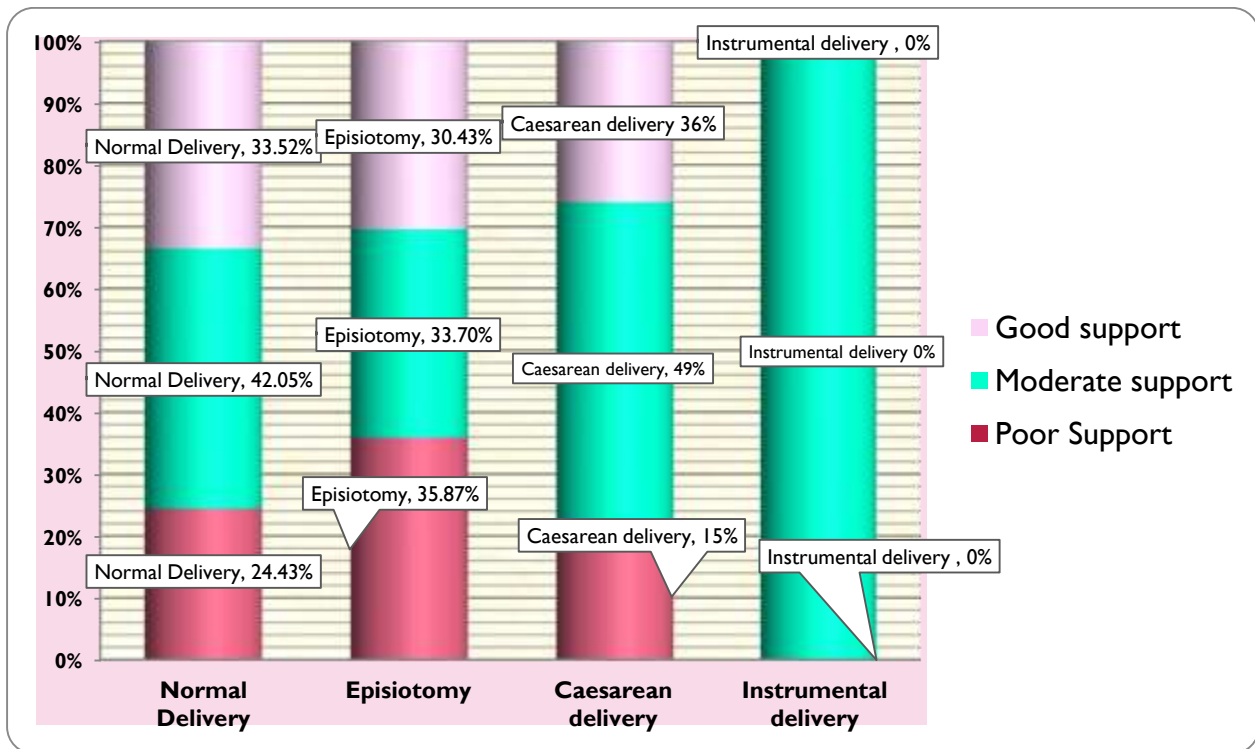
**TABLE 3: D) ASSOCIATION BETWEEN FETAL OUT COME WITH LEVEL OF TOTAL SUPPORT
N=344**

TOTAL SUPPORT DURING <u>SECOND TRIMESTER</u>						
Fetal outcome	Poor Support	Moderate support	Good support	Total	χ^2 value	p-value
Healthy new born has born						
Yes	36(13.90)	148(57.14)	75(28.96)	259(75.29)	3.991	0.136
No	18(21.18)	39(45.88)	28(32.94)	85(24.71)		
Birth weight of baby at delivery						
Below 1.5kg	1(33.33)	0(0)	2(66.67)	3(0.87)	9.452	0.15
1.5-2 kg	20(18.02)	51(45.95)	40(36.04)	111(32.27)		
2-2.5 kg	6(18.75)	18(56.25)	8(25)	32(9.30)		
Above 2.5 kg	2713.64	118(59.60)	53(26.77)	198(57.56)		
Length of present Baby						
Below or equal to 48	12(18.46)	38(58.46)	15(23.08)	65(18.90)	7.719	0.102
49-50 cm	12(13.33)	41(45.56)	37(41.11)	90(26.16)		
Above 50 cm	30(15.87)	108(57.14)	51(26.98)	189(54.94)		
Any abnormality to present baby						
Yes	22(22.68)	47(48.45)	28(28.87)	97(28.20)	5.115	0.077
No	32(12.96)	140(56.68)	75(30.36)	247(71.80)		
Specify complications						
LBW	9(25.71)	14(40)	12(34.29)	35(10.17)	8.285	0.406
FD	4(17.39)	14(60.87)	5(21.74)	23(6.69)		
Birth asphyxia	2(20)	6(60)	2(20)	10(2.91)		
Other complications	7(24.14)	13(44.83)	9(31.03)	29(8.43)		
No any complications	32(12.96)	140(56.68)	75(30.36)	247(71.80)		
sex of present Baby						
Male	25(14.45)	86(49.71)	62(35.84)	173(50.29)	5.77	0.05
Female	29(16.96)	101(59.06)	41(23.98)	171(49.71)		
Received family support -baby care as feeding						
Yes	39(16.88)	126(54.55)	66(28.57)	231(67.15)	1.075	0.584
No	15(13.27)	61(53.98)	37(32.74)	113(32.85)		
Relation with attendee supporting baby care						
Mother	18(18)	51(51)	31(31)	100(29.07)	4.756	0.783
Husband	12(19.05)	34(53.97)	17(26.98)	63(18.31)		

Mother in law	6(15.38)	22(56.41)	11(28.21)	39(11.34)		
Others	3(10.34)	20(68.97)	6(20.69)	29(8.43)		
No relatives	15(13.27)	60(53.10)	38(33.63)	113(32.85)		

Above table **3: D)** shows that, there was significant association found between sex of present baby with level of total support during second trimester ($p < 0.05$). There was no significant association found between healthy new born has born, birth weight of baby, length of present baby, any complications to baby, received family support baby care as feeding, relation with attendee supporting baby care with level of total support during second trimester ($P > 0.05$).

Graph 1 Distribution of Types of Delivery in Relation to Total Family Support During the Second Trimester



The graph illustrates a connection between the level of family support during the second trimester and the type of delivery. Normal deliveries were more frequent among women who had moderate (42.05%) or good (33.52%) family support, while only 24.43% of those with poor support experienced a normal delivery. A higher rate of episiotomy (35.87%) was observed in women with poor support, indicating that insufficient support may lead to more invasive birth interventions. Caesarean deliveries were most common among those with moderate support (49%), followed by good support (36%), and least among those with poor support (15%).

3. DISCUSSION

These findings are supported by a study conducted by Sedigheh Abdollahpour et al⁶ at Iran on 358 pregnant women social support among family by using instruments included Perceived Social Support - Family Scale (PSS-Fa). Eleven (1.3%) women had poor family support, 100 women (27.9%) had moderate family support and 247 women (69%) had good family support. significant relationship between mother's scores of family support and her age and education, mother's high school diploma and higher education had scores which were significantly higher than the others ($P < 0.05$)⁶. In the present study findings shows that significant association found between maternal outcome with presence of close relatives before delivery, family support received after delivery, with psychosocial support as ($p < 0.05$)

In study conducted by S. Kalyani, Dr.C.N.Ram Gopal, Rasagna Reddy⁸ included only primigravida women⁷. In present study primigravida and multi Gravida women enrolled, It is also important to include multi Gravida women in the study as they

would have to take care of their previous children and there are also chances that they would receive less psychosocial support when compared to support they received during their first pregnancy.

Cho, H., Lee, K., Choi, E. et al⁹ (2022) explored the relationship between social support and postnatal depression⁸. Among the study participants, 6% of the mothers had low social support, 53.95 of the mothers had moderate levels of social support and 40.1% of the mothers had high levels of social support. In present study 30(8.72%) received good Psycho social support, 215(62.50%) moderate and 99(28.78%) received poor Psycho social support during **second trimester**.

Longitudinal cohort Study conducted by White, L.K., Kornfield, S.L., Himes, M.M. et al¹⁰ during 2023, on 833 Perinatal women at University of Pennsylvania Hospital, performed a study to explore the role of social support during the pandemic period⁹. The results of their study show that a decrease in the availability of social support led to an increase in the symptoms of depression, anxiety and stress in postnatal mothers. Impaired mother-infant attachment was also observed as a result of lack or less availability of social support. In present study researcher found that, the need of social support not only in postnatal mothers but also **Second trimester** of pregnancy.

In study conducted by Mane, Ujwala R.; Salunkhe, Jyoti A¹¹ shown results related to first trimester Findings regarding level of family support show that 133 women (38.7%) received good total support, 164 (47.7%) received moderate support, and 47 (13.7%) received poor family support during the third trimester. Results regarding maternal outcomes show that there was a significant association found between type of delivery and family support received after delivery with maternal outcomes and total support during the third trimester ($P < 0.05$). in this article we shown findings during second trimester 53(15.41%) women received good Physical support, whereas 197 (57.27 %) received moderate physical support and 94(27.33%) received poor physical support during second trimester.

Pregnancy can be an emotional the longest nine months period of their lives, caring for a newborn baby can be exhausting so need close relatives to care for her and her baby. Helping these relationships to meet the physical and mental health need is important for the health of the woman and the newborn baby¹². Specifically, when women experience symptoms like morning sickness and physiological changes during the first trimester, family support becomes crucial for ensuring good outcomes¹³. In this research article we focused on second trimester also proved pregnant women need support during second trimester.

Acknowledgment

We extend our heartfelt gratitude to Honorable Dr. Suresh Bhosale, Chairman of Krishna Vishwa Vidyapeeth (Deemed to be University), formerly known as KIMSDU, for the unwavering encouragement and visionary leadership. I am deeply grateful to Dr. D. K. Agarwal, Director of Innovation, Incubation, and Entrepreneurship at Krishna Vishwa Vidyapeeth, for his valuable support and guidance throughout this journey. We also express our sincere thanks to Dr. Mahadeo B. Shinde, Professor and Vice Principal, Krishna Vishwa Vidyapeeth, Krishna Institute of Nursing Sciences, Karad, for his constant motivation and insightful advice. Heartfelt appreciation is extended to all the participants of this study, whose cooperation made this research possible. Lastly, with profound devotion, I offer my humble gratitude to Lord Shree Gajanan Mauli, whose divine grace and blessings have been my strength and inspiration.

Financial support and sponsorship- Nil

Conflicts of Interest The authors declare that they have no potential conflict of interest.

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