



PREVALENCE OF ABORTION AMONG MULTIGRAVIDA WOMEN

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ABSTRACT *Background:* Abortion is a global health problem affected early half of all women. Several causes of spontaneous abortion have been identified like, uterine defects, immunological problems, hormonal imbalances, infections and fetal abnormalities this all are the change seen occur in the women. *Objective:* The study objective was prevalence of abortion among multigravida women in Karad, Taluka. *Research methodology:* The quantitative approach community bases cross-sectional study design, enrolled 492 multigravida women by using simple random sampling technique (Lottery method). Analysis was done by using SPSS version 26.00 and to find prevalence out of 492 multigravida women. *Result:* The finding of this study suggested that; in socio-demographic variables there was significant in between age of multigravida women, occupation, habit, type of family, number of children was statistical significant ('P' value 0.05). According to Gravida and Parity of multigravida women was significant 0.01. Out of 492 multigravida women in that; total 101 (20.5%) having abortion in them, 88 (18.06) multigravida woman having one abortion, 12(2.43) women having two abortions and only 1(0.20) women having four abortion. *Conclusion:* All of such kind of factors harm to women health and she prone to chance of abortion. In fact, strategies should be implemented through by using mass media, counseling, educating to the women and family members and given the training related risk of abortion and how to take precaution and also evolved health care providers.

KEYWORDS : Multigravida women, Prevalence, abortion, Gravida, Parity.**INTRODUCTION**

Abortion is a global health problem affected early half of all women. Several causes of spontaneous abortion have been identified like, uterine defects, immunological problems, hormonal imbalances, infections and fetal abnormalities this all are the change seen occur in the women. Physiological mechanisms have not been thoroughly evaluated, but several factors are associated high risk of spontaneous abortion like adverse obstetric history, previous pelvic inflammatory disease, advanced maternal age, specific occupations or exposure at work, and smoking habits.

According WHO 2020 census, around 73 million induced abortions take place worldwide each year. Six out of 10 (61%) of all unintended pregnancies, and 3 out of 10 (29%) of all pregnancies end in induced abortion.¹ Abortion is simple health care intervention that can be effectively managed by using medication or a surgical procedure but majority of multigravida women cause of abortion. A study in 2018 estimated that 15.6 million².

Abortions took place in India in 2015. The reasons why women have abortions are diverse and vary across the world.^{3, 4} Risk factors for spontaneous abortion more seen in Age > 35⁵ History of spontaneous abortion Causes; Use of certain drugs (e. g. cocaine, alcohol, high doses of caffeine) A poorly controlled chronic disorder (e. g. diabetes, hypertension, overt thyroid disorders) in the multigravida women. Subclinical thyroid disorders and minor trauma have not been shown to cause spontaneous abortions.

Need Of The Study

Abortion is a more prevalent condition in women, but in multigravida women more suffering for this condition because of maternal health, lack of support, an inability to afford a child because more children. Multi-responsibilities task, Domestic violence, and wishing to complete education or advance a career. Anemia, previous pregnancy complication, lack of knowledge about spacing in between two children, age factors, several chronic diseases can precipitated spontaneous abortion, extended family responsibilities, Advanced maternal age with previous early pregnancy loss are the most common risk factors.⁶ For example, the incidence at 45 years of maternal age is 80%.⁷ Other risk factors include alcohol consumption, smoking, and mishry powder use. In present study these etiological factors more seen in multigravida women than Primigravida in selected area. Researcher interested to find out prevalence of abortion among multigravida women.

Aim Of The Study

The aim of study was, Prevalence of abortion among multigravida women in Karad, Taluka.

Research Methodology

After ethical institutional committee approval research study was

started from April 2021 to April 2022. The present study a quantitative approach community based cross sectional study design was used. enrolled 492 multigravida women in the study by using simple random sampling up to complete sample size. Inclusion criteria multigravida women age groups of 19 to 50 suffering with acute and chronic illness, exclusive criteria those are suffering with mental illnesses and below 19 year women. Independent Variable our outcome variable of interest was to identify the etiological factors among multigravida women through face to face interview method. Dependent variable structured interview schedule included etiological factors related standardized valid tool / questionnaire. Data was analyzed in respect to the objectives of the study by using descriptive statistics. The plan of data analysis and interpretation was developed under the excellent direction and guidance of statistician, the data were entered into Excel sheet; data clean up and cross checked was done and it was analyzed by using SPSS version 26.0 software.

RESULT

Total multigravida women involved in the study was 492. There was distribution in the three tables according to study aim. In that; distribution of multigravida women according to frequency percentage and find the significant in between socio-demographic variables and Abortion, distribution of multigravida women according to Gravida and parity and significant with abortion.

Table1: Distribution Of Multigravida Women According To Frequency, Percentage And Significance Of Abortion With Socio-demographic Variables. (n = 492)

Variables	Frequency (%)	Chi-Square (χ^2 Value)	'P' value
Age of Multigravida women		105.235	0.036
18-25	40 (8)		
>25-35	342 (69.5)		
>35-45	102(20.6)		
>45-55	8(1.6)		
Education		12.860	0.379
Illiterate	13 (2.6)		
Primary	100 (20.3)		
Secondary	206 (41.9)		
Higher secondary	139 (28.3)		
Graduate	34(6.9)		
Occupation		27.233	0.01
Skilled worker	2 (0.4)		
Self employed	26 (5.3)		
Housewife	432 (87.8)		
Service	32 (6.5)		
Habit		10.366	0.016

Use mishry powder	96 (19.5)		
Not using mishry powder	396 (80.5)		
Diet		1.490	0.685
Vegetarian	39 (7.9)		
Non-vegetarian	453 (92.1)		
Type of family		34.873	0.001
Joint	305 (62)		
Extended	77 (15.7)		
Nuclear	110 (22.4)		
No. of Children		162.335	0.01
1 child	43 (8.7)		
2 child	362 (73.6)		
3 child	68 (13.8)		
more than 3 children	19 (3.9)		
Monthly income		88.880	0.257
1000-4999	65 (13.3)		
5000-9999	120 (24.4)		
10000-19999	168(34.1)		
20000-29999	81(16.5)		
30000-39999	44 (8.9)		
40000-50000	14 (2.8)		

Above table shows that; frequency, percentage and significance of abortion among multigravida women with socio-demographic variables. In present study randomly taken 492 multigravida women, in them majority of age group was >25-35; 342(69.5%) women having abortion than other age groups. Chi-square value of age of multigravida women with abortion was 105.235 and 'P' value was 0.036 therefore the age of multigravida women was significant. Majority of multigravida women taken secondary level education was 206 (41.9%), chi-square value was 12.860 and 'P' value was 0.379, therefore the education of multigravida women was no significant. In the occupation 432 (87.8) multigravida is housewife. Chi-square was 27.233 and 'P' value was 0.001, therefore the occupation of multigravida women was significant. 396 (80.5%) women are not taking mishry powder. Chi-square was 10.366 and 'P' value was 0.016, therefore the habit of multigravida women was significant. Majority women are eating non- vegetarian was 453 (92.1). Chi- square was 1.490 and 'P' value was 0.685, therefore the habit of multigravida women was no significant. More multigravida women living with joint family were as 305 (62%). Chi-square was 34.873 and 'P' value was 0.01. Majority of number of children group was two children having multigravida women were as 362 (73.6%). Chi- square was 162.335 and 'P' value was 0.01, therefore the types of family and Number of children of multigravida women was significant. Majority of 10000-19999 monthly income taken family of multigravida women was 168(34.1%). Chi- square was 88.880 and 'P' value was 0.257, therefore the monthly income of multigravida women was no significant.

Table2: Distribution Of Multigravida Women Abortion According To Gravida. (n= 492)

Gravida	Abortion according Gravida				Chi- Square (χ ² Value)	P value
	0	1	2	4		
2	317	42	0	0	219.896 ^c	0.01
3	62	35	3	0		
4	11	9	5	0		
5	1	2	4	1		

Above table shows that; distribution of multigravida women abortion cases according to gravida. Out of 492 in that, Gravida2in them, 42 women having one abortion. Gravida3 in them, 35 women having one abortion and 3 women having two abortions. Gravida4 in them, 9 women having one abortion and only 5 women having two abortions. Gravida5 in that, 2 women having one abortion and 4 women having two abortion, only one women having four abortions. Chi-square value was 219.896 and 'P' value was 0.01, there is significant between gravida and abortion.

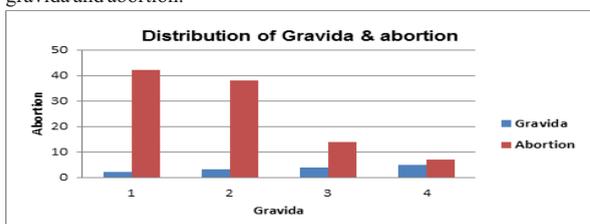


Figure:1 Distribution of gravida and abortion of multigravida women.

Table3: Distribution Of Multigravida Women Abortion According To Parity. (n= 492)

Parity	Abortion according Parity				Chi-square (χ ² Value)	P value
	0	1	2	4		
1	9	42	3	1	165.884 ^a	0.01
2	316	39	5	0		
3	54	5	4	0		
4	11	2	0	0		
5	0	0	0	0		

Above table shows that; distribution of multigravida women abortion cases according to Parity. Out of 492 in that, Parity1 in them, 42 women having one abortion, 3 women having two abortions and one woman having four abortions. Parity2 in them, 39 women having one abortion and 5 women having two abortions. Parity3 in them, 5 women having one abortion and only 4 women having two abortions. Parity 4 in them, only 2 women having one abortion and Parity5 in them, no one having abortion. Chi-square value was 165.884 and 'P' value was 0.01, there is significant between parity and abortion.

Table4: Distribution According To Gravida & Parity Of Women Abortions (n= 492)

Gravida	Parity	Mothers	Number of abortions			
			1	2	4	
2	parity	1	51	42	0	0
		2	308	0	0	0
3	parity	1	3	0	3	0
		2	43	35	0	0
		3	54	0	0	0
		4	9	4	5	0
		3	5	0	0	0
		4	11	0	0	0
5	parity	1	1	0	0	1
		3	4	0	4	0
		4	2	2	0	0
		5	1	0	0	0
Total		492	88 (18.06)	12 (2.43)	1 (0.20)	

Above table shows that; out of 492 multigravida women in that; total 101 (20.5%) having abortion in them, 88 (18.06) multigravida woman having one abortion, 12(2.43) women having two abortions and only 1(0.20) women having four abortion.

DISCUSSION

Spontaneous abortion is one of the most common complications of pregnancy.⁸ In general; expulsion of an embryo or fetus before it reaches a stable stage of life is called abortion.⁹ In more than half of the cases, the causes of abortion have been genetic disorders and chromosomal abnormalities.^{10,11} other factors affecting abortion are as follows: uterine abnormalities, menstrual disorders.^{12,13} infectious diseases and untreated diseases of the mother.^{14,15} the age of the mother during pregnancy, previous history of abortion, use of contraceptive drugs.^{16,17} age at the first menstruation.¹⁸ environmental conditions and mother's lifestyle such as smoking.^{19,20} and use of caffeine.^{13,16} being exposed to cigarette smoke.^{17,18} and low socioeconomic and employment status.²³ These all affect on women health it's lead to cause of the abortion. Many studies done among abortion prevalence and risk factors, but in present study aim prevalence of abortion among multigravida women. In that; researcher enrolled only multigravida women in selected area, despite tables according to socio-demographic variables, Gravida and Parity of multigravida women. The finding of this study suggested that; in socio-demographic variables there was significant in between Age of multigravida, occupation, habit, type of family, number of children, which is statistical significant ('P' value 0.05). According to Gravida and Parity of the multigravida women was significant 0.01. Out of 492 multigravida women in that; total 101 (20.5%) having abortion in them, 88 (18.06) multigravida woman having one abortion, 12(2.43) women having two abortions and only 1(0.20) women having four abortion.

CONCLUSION

According to study results; 492 in that 101 multigravida women having abortion. Major causes of risk of spontaneous abortion because of socio demographic variables that are; occupation, type of family, Number of children, and women illness factors also affected. All of such kind of factors harm to women health and she prone to chance of abortion. In fact, strategies should be implemented through by using

mass media, counseling, educating to the women and family members and given the training related risk of abortion and how to take precaution and also evolved health care providers.

Ethical Approval

The ethics committee of the Krishna institute of medical sciences deemed to be university, Karad on 1 December 2020, Approved this study (KIMSDU/IEC/01/2020). After that during data collection the written informed consent was obtained from each participant.

Acknowledgement

I most sincerely convey my deep sense of gratitude to my guide/ organization for her/ their proper guidance and academic support during this study. This study was supported by the ministry of health and medical education.

REFERENCES

1. Bearak J, Popinchalk A, Ganatra B, Moller A-B, Tunçalp Ö, Beavin C et al. 'Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019' *Lancet Glob Health*. 2020 Sep; 8(9):e1152–e1161.
2. Singh, Susheela; Shekhar, Chander et al. 'The incidence of abortion and unintended pregnancy in India', *The Lancet Global Health*; We estimate that 15.6 million abortions (14.1 million–17.3 million) occurred in India in 2015–January 2018; 6 (1):e111–e120.
3. The limitations of U.S. statistics on abortion". *Issues in Brief*. The Guttmacher Institute; Archived from the original, New York; 2012.
4. Bankole A, Singh S, Haas T, "Reasons Why Women Have Induced Abortions: Evidence from 27 Countries". *International Family Planning Perspectives*; 1998, 24 (3): 117–27, 152.
5. Antonette T. Dulay , MD, Main Line Health System; Spontaneous Abortion (Miscarriage):MSD Manual professional version; oct 2020.
6. American College of Obstetricians and Gynecologists' Committee on Practice Bulletins—Gynecology. ACOG Practice Bulletin No. 200: Early Pregnancy Loss. *Obstet Gynecol*. 2018 Nov; 132(5):e197–e207.
7. Practice Committee of the American Society for Reproductive Medicine. Evaluation and treatment of recurrent pregnancy loss: a committee opinion. *Fertil Steril*. 2012 Nov; 98(5):1103–11.
8. A. Garcia-Enguidanos, M. E. Calle, J. Valero, S. Luna, and V. Domínguez-Rojas, "Risk factors in miscarriage: a review," *European Journal of Obstetrics & Gynecology and Reproductive Biology*, vol. 102, 111–119, 2002.
9. G. M. Stirrat, "Recurrent miscarriage I: definition and epidemiology," *The Lancet*, vol. 336, no. 8716, pp. 673–675, 1990.
10. D. Vaiman, "Genetic regulation of recurrent spontaneous abortion in humans," *Biomedical Journal*, vol. 38, no. 1, article 133777, pp. 11–24, 2015.
11. K. Kleinhaus, M. Perrin, Y. Friedlander, O. Paltiel, D. Malaspina, and S. Harlap, "Paternal age and spontaneous abortion," *Obstetrics & Gynecology*, vol. 108, no. 2, pp. 369–377, 2006.
12. P. C. Arck, M. Rücke, M. Rose et al., "Early risk factors for miscarriage: a prospective cohort study in pregnant women," *Reproductive Biomedicine Online*, vol. 17, no. 1, pp. 101–113, 2008.
13. T. Li, M. Makris, M. Tomsu, E. Tuckerman, and S. Laird, "Recurrent miscarriage: aetiology, management and prognosis," *Human Reproduction Update*, vol. 8, no. 5, pp. 463–481, 2002.
14. A. Garcia-Enguidanos, M. E. Calle, J. Valero, S. Luna, and V. Domínguez-Rojas, "Risk factors in miscarriage: a review," *European Journal of Obstetrics & Gynecology and Reproductive Biology*, vol. 102, no. 2, article S0301211501006133, pp. 111–119, 2002.
15. C. P. Griebel, J. Halvorsen, T. B. Golemon, and A. A. Day, "Management of spontaneous abortion," *American Family Physician*, vol. 72, no. 7, pp. 1243–1250, 2005.
16. V. Dominguez-Rojas, J. R. de Juanes-Pardo, P. Astasio-Arbiza, P. Ortega-Molina, and E. Gordillo-Florencio, "Spontaneous abortion in a hospital population: are tobacco and coffee intake risk factors?" *European Journal of Epidemiology*, vol. 10, no. 6, pp. 665–668, 1994.
17. E. de La Rochebrochard and P. Thonneau, "Paternal age and maternal age are risk factors for miscarriage; results of a multicentre European study," *Human Reproduction*, vol. 17, no. 6, pp. 1649–1656, 2002.
18. K. Liestol, "Menarcheal age and spontaneous abortion: a causal connection?" *American Journal of Epidemiology*, vol. 111, no. 6, pp. 753–758, 1980.
19. A. Nielsen, C. Gerd Hannibal, B. Eriksen Lindekilde et al., "Maternal smoking predicts the risk of spontaneous abortion," *Acta Obstetrica et Gynecologica Scandinavica*, vol. 85, no. 9, pp. 1057–1065, 2006.
20. F. Arffin, F. H. Al-Bayaty, and J. Hassan, "Environmental tobacco smoke and stress as risk factors for miscarriage and preterm births," *Archives of Gynecology and Obstetrics*, vol. 286, no. 5, pp. 1187–1191, 2012.
21. J. D. Meeker, S. A. Missmer, D. W. Cramer, and R. Hauser, "Maternal exposure to second-hand tobacco smoke and pregnancy outcome among couples undergoing assisted reproduction," *Human Reproduction*, vol. 22, no. 2, pp. 337–345, 2007.
22. J. D. Meeker, S. A. Missmer, A. F. Vitonis, D. W. Cramer, and R. Hauser, "Risk of spontaneous abortion in women with childhood exposure to parental cigarette smoke," *American Journal of Epidemiology*, vol. 166, no. 5, pp. 571–575, 2007.
23. C. Arambepola, L. C. Rajapaksa, D. Attygalle, and L. Moonasinghe, "Relationship of family formation characteristics with unsafe abortion: is it confounded by women's socio-economic status?" a case-control study from Sri Lanka, *Reproductive Health*, vol. 13, no. 1, p. 75, 2016.