



“ASSESSING THE ACCEPTANCE OF FAMILY PLANNING METHODS AMONG GRAND MULTIPARAS: SOCIOECONOMIC INFLUENCES AND CONTRACEPTIVE CHOICES IN INDIAN WOMEN”

Obstetrics & Gynaecology

Dr. Sandra Marie Joe*

Senior Resident, Dept. Of Obstetrics And Gynecology, Goa Medical College, Goa, India.
*Correspondence Author

Dr. Deepa Karmali

Associate Professor, Dept. Of Obstetrics And Gynecology, Goa Medical College, Goa, India.

ABSTRACT

Background: Grand multigravidas are a common group of Indian female population who are not adequately educated about the risks and possible outcomes involved with their pregnancy and the modes of contraception available. Various socioeconomic factors surrounding their living are still held responsible for the poor acceptance of family planning methods even in this era of advancements. **Objectives:** This study is aimed to assess the acceptance of various family planning methods chosen by grand multiparas and the various socio-economic factors related to it. **Materials And Methods:** A hospital based cross sectional study was conducted at Goa Medical college in the department of Obstetrics and gynecology, for a period of 4 months. All grand multigravidas who attended the center for obstetric care and family planning methods were included. Data was collected from hospital records and records of antenatal visits. **Results:** Permanent female sterilization was chosen as a method of contraception by 22.5% of the study population. Majority (48.1%) however did not choose any contraceptive methods. Various probable reasons as gathered from the couple included desire to bear male child in future, apprehension about intrauterine contraceptive devices and strong disagreement from spouse and family for permanent sterilization methods. **Conclusion:** Grand multiparity is common in women from lower socioeconomic class. The existing governmental policies on antenatal counselling on contraception needs to be emphasized and exercised more seriously. Couple should be counselled regarding the possible complicated outcomes in multigravida and primary importance to be directed towards improving the health of the mother.

KEYWORDS

Grand multipara, socioeconomic factors, contraception, female sterilization, Family planning

INTRODUCTION

Over years varying definitions of grand multipara has been explained in literature with four to at least eight previous deliveries after the period of viability(1).FIGO(The International Federation of Obstetrics and Gynecology) defined grand multipara as women who have delivered fifth to ninth fetuses while women who delivered more than 10 were called Great grand multipara. The incidence of grand multipara has reduced significantly compared to previous years. Grand mutigravid pregnancies are considered high risk pregnancies due to complications that may develop such as gestational diabetes mellitus, pregnancy induced hypertension, anemia, placental abruption, malpresentation, malposition, preterm labor, cephalopelvic disproportion, dysfunctional labor, uterine rupture, fetal macrosomia, intrauterine fetal demise, operative vaginal delivery, postpartum hemorrhage, risk of maternal and neonatal mortality. Lower socioeconomic status, poor educational qualification, poor knowledge and acceptance of contraceptive measures, religious beliefs, and poor access to healthcare facility in remote village areas have been accepted as few reasons behind the problem. This study is intended to assess the maternal and neonatal outcomes of pregnancies in grand multipara and to analyze the awareness of the contraceptive usage and find out the probable causes and suggest improvements in improving the quality of living in the women.

Objectives

This study is aimed to assess the acceptancy of various family planning methods chosen by grand multiparas, various socio-economic factors related to it and reasons for denial if any.

MATERIALSANDMETHODS

A cross-sectional study was conducted at Goa Medical college in the department of obstetrics and gynecology for a period of 4 months (Sept 2022 -January 2023) after participant's consent. In this study we included multigravida with 4 or more living children admitted for delivery. Couples with 4 living children who approached to OPD for family planning options such as intrauterine devices, interval sterilization were also included.

Women with 3 or less living children were not included in the study. Women with serious medical illness and those unwilling for giving consent were also excluded from the study.

Among antenatal women included in the study, antenatal records were analyzed and detailed socioeconomic, cultural background was assessed. Women were counselled about the contraception options at

the time of admission and reviewed the same after delivery. The acceptance towards various methods of contraception and the reasons proposed by the couples were recorded. Informed consent was obtained from all participants who met the inclusion criteria. Data was analyzed using Microsoft excel sheet and SPSS software.

RESULTS

The total number of deliveries during the study period was 1278. 27 grand multigravidas were enrolled in the study and therefore a prevalence of 2.11% was obtained. Majority of the grand multipara belonged to the age group of 26-30years (40.7%).Majority of the grand multipara were unbooked (55.6%)

Table 1: Age distribution of cases

Age group (in years)	Number of cases (n=27)	Percentage
<20	0	0
21-25	0	0
26-30	11	40.7%
31-35	9	33.3%
36-40	6	22.2%
41-45	1	3.7%
>46	0	0

Majority of the women include in the study were Hindus(51.8%)

Socioeconomic class according to Modified Kuppuswamy socioeconomic scale (2020) that includes the education of head of family, occupation of head of family and monthly family income was calculated. Majority of the women (96.2%) attending our health facility belonged to upper lower class and 3.7% belonged to lower middle class.

Table 2: Modified Kuppuswami scale factors

Level of education of the couple	Husband (n=27)	Wife(n=27)
Profession/Honours	0	0
Graduate	0	0
Intermediate/Diploma	0	0
High School	0	0
Middle School	8(29.6%)	7(25.9%)
Primary School	15(55.5%)	13(48.1%)
Illiterate	4(14.8%)	7(25.9%)
Occupation of the couple	Husband (n=27)	Wife (n=27)

Legislation/senior official/manager	0	0
Professional	0	0
Technician and Associate professional	0	0
Clerk	0	0
Skilled worker and shop and market sales worker	1(3.7%)	0
Skilled agricultural and fishery worker	1(3.7%)	0
Craft and related trade worker	4(14.8%)	0
Plant and machine operator	11(40.7%)	0
Elementary occupation	10(37.0%)	0
Unemployed	0	27(100%)
Monthly family income (in rupees)	Number of cases(n=27)	Percentage
>1,99,862	0	0
99,931-1,99,861	0	0
74,756-99,930	0	0
49,962-74,755	0	0
29,973-49,961	1	3.7%
10,002-29,972	26	96.2%
<10,001	0	0

Table 3: Socioeconomic class

Socioeconomic class	Number of cases(n=27)	Percentage
Upper class	0	0
Upper middle class	0	0
Lower middle class	1	3.7%
Upper lower class	26	96.2%
Lower class	0	0

Willingness for contraception was enquired to the couples and majority 51.8% were willing for contraception while 48.1% were unwilling.

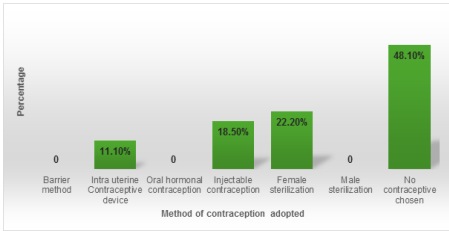


Figure 1: Methods of contraception chosen by the couple

Though majority (51.8%) had chosen for contraception, permanent female sterilization was opted by 22.2%. Injectable hormonal contraception was chosen by 18.5% and intrauterine contraceptive devices were chosen by 11.1%. Other contraceptive options like barrier method and oral hormonal contraceptives were not chosen by any.

Table 4: Reasons For Denial Of Contraception

Reasons justified by the couple	Number of cases(n=13)	Percentage
Religious reasons	4	30.7%
Unwillingness of the partner	2	15.3%
Personal reasons such as prolonged hospital stay causing difficulty in existing childcare	1	7.6%
Financial reasons	1	7.6%
Desirous of more children	0	0
Desirous of male children	5	38.46%
Apprehension about IUCD	3	23.0%
Medical reasons of the mother	0	0
Morbidity of the newborn	0	0

A notable 38.46% of women cited a desire for male children as the primary reason for rejecting permanent contraception methods. Religious reasons accounted for 30.7% of refusals. Additionally, 23% of women expressed apprehension regarding intrauterine contraceptive devices (IUCDs), such as Copper T, often due to concerns about potential side effects like bleeding, abdominal pain, or discomfort during intercourse.

DISCUSSION

This study was conducted over a four-month period in the Obstetrics and Gynaecology Department at Goa Medical College, a tertiary care centre located centrally within the state. Although Goa is a relatively small state, it has a growing immigrant population, particularly from northern states like Jharkhand, Uttar Pradesh, Odisha, West Bengal, and Bihar, primarily attracted by labour opportunities. Being a government facility offering free services to all pregnant women, the hospital receives a significant proportion of its patients from labour classes, especially those nearing term.

During the study period, there were 1,278 deliveries, which included both caesarean sections and vaginal deliveries. The prevalence of grand multigravidas was 2.11%, which is lower than previous studies by Indrani Roy et al. (10.2%)(2) and Alsammani et al. (5.3%)(3). This decrease could potentially be attributed to a wider adoption of permanent sterilization techniques, as well as the increasing availability of medical termination of pregnancy (MTP) services, which are both accessible and affordable.

Most women in the study were aged between 26 and 30 years (40.7%), a higher percentage compared to other studies(3). Women aged 31-40 accounted for 55.5% of cases, consistent with findings from other studies(3-5). Many of the women in this study group had married and conceived early, a practice common in more remote parts of the country.

Sociodemographic factors, including the education and occupation of the couples, were analysed. A significant proportion of the women (48.1%) and their husbands (55.5%) had only received primary education, much lower than the educational levels found in studies conducted in Saudi Arabia by Taha et al. (where maternal and paternal education levels were above secondary school in 95.8% and 99.5% of cases, respectively)(4). Many of the parturients in this study were immigrants from rural areas where educational opportunities were limited, with early marriage and the need to start earning early as common contributing factors.

Most of the husbands (40.7%) worked in factories and mechanical industries, with another 37.0% employed in elementary occupations. Goa's growing industrial and construction sectors have attracted many migrant workers and their families. All the women in this study were unemployed, focusing on caring for their families.

In terms of socioeconomic status, most of the women (96.2%) belonged to the upper-lower class, consistent with findings from other studies. Following counselling about available contraceptive methods, 51.8% of grand multiparas expressed a willingness to adopt contraception. However, acceptance of permanent methods like female sterilization was low, with only 22.2% consenting to puerperal ligation. Reasons for denial of contraception included religious beliefs (30.7%) and a preference for male children (38.46%). Acceptance of PPIUCD was also low (23.0%), possibly due to concerns about side effects such as bleeding, abdominal pain, discomfort during intercourse, and fears about harm to the body.

Efforts were made to counsel couples on the advantages, side effects, and reversibility of various contraception methods. However, a lack of education, social stigmas, and apprehensions among rural women were significant barriers to higher acceptance rates. Similar trends were noted in a study by Solanke et al(6), which found low intention to use modern contraceptives among grand multiparas in Nigeria, largely due to widespread poverty, cultural factors such as polygyny and son preference, child marriage, gender based violence and child labor that influence childbearing practices and undermine women's reproductive health.

Contraceptive options, especially permanent sterilization was denied by 38.46% of women in desire of male children. Religious reasons were justified in 30.7% for denial of contraception. Women who deferred permanent methods were apprehensive of PPIUCD such as copper T and this contributed 23%.

CONCLUSION

Grand multiparity is significantly higher in women from lower socioeconomic class. Improving the educational and occupational resources by the government and ensuring reach to health care facility throughout the pregnancy can improve the outcomes in a significant

manner. Education and correction of the stigma associated with use of contraceptives can improve the acceptability of the couple and thereby reduce the morbidity and mortality of the mother and the baby.

Limitations

The study was conducted for a short duration. The number of subjects reported in this study were lesser due to other reasons that are not included in the study.

Conflicts Of Interest

The authors declare that there was no conflicts of interest regarding publication of this paper.

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