

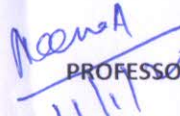
## Department wish list of Faculty Members

Department	Name of the faculty Qualification IMR Number	Current designation on and Date of promotion	Nature of employment  Regular/ Permanent/ Contract/out sourced	DETAILS OF SERVICE IN LAST 5 YEARS					Number of lectures taken/year  Topics covered
				1	2	3	4	5	
OBGY	DR MEENA ARMO	PROF & HEAD 10 <sup>th</sup> Oct 2015	Regular	GMC RTN (C.G)	GMC RTN (C.G)	GMC RTN (C.G)	GMC RTN (C.G)	CIMS BSP (C.G)	100-150/year
	MPMC 13947/1995								
	CGMC 2449/2009								
	PG MPMC - 899/1999								

### ANNEXURE- 1

Sr. No	Faculty Name	Publication in Vancouver Referencing Style.	Pubmed Indexed ✓yes/no	Scopes
1		Khunte V. Armo M et al, Hysterectomy : Still a 1 <sup>st</sup> choice for pelvic pathologies in Rural India IJRCOG, 2018 FEB: 7(2) p536-54)	Yes	
2				
3				
4				
5				

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- ✓ (2) Armo M et al. Awareness and practice of cervical cancer screening among women in Rajnandgaon district, rural India, Health Education is need of the hour (IJRCOG, 2019 April, 8(4): 1266-1270)
- ✓ (3) Armo M. Sainik S. Assessment of menopausal symptoms using modified menopausal rating scale among rural women of Rajnandgaon in Chhattisgarh, a central India region (JSAFOS, Vol 12 issue 4 July - August 2020)
- ✗ (4) ~~Cessi~~ Armo M. et al. Cervical cancer screening in a tertiary care Hospital in Rajnandgaon, Chhattisgarh : Barriers and challenges in rural scenario 21 Chikitsak - January 2022
- ✗ (5) Armo M. et al, Copper T(380A) and risk of uterine perforation in lactating women : rural scenario (IJRCOG, 2017 July, 6(7): 3026-3029)

MeenuA  
11/1/2022



Cervical Cancer screening in a Tertiary care Hospital in Rajnandgaon, Chhattisgarh:  
Barriers and Challenges in Rural scenario

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**ABSTRACT**

**Background:**

Cervical cancer is a potentially preventable cancer, although it is a major cause of morbidity and mortality in resource-poor settings. This study was therefore undertaken to assess the knowledge and practice among rural women regarding cervical cancer screening and its prevention, to find out barriers influence the utilization of screening tests and HPV vaccination. Attempt was also made to identify the risk factors for cervical cancer, to do cytological screening and to detect premalignant, malignant lesions in the study population.

**Methods:** It was a cross-sectional questionnaire-based study, conducted from January 2018 to December 2019 in the Department of Obstetrics and Gynecology at Government Medical College & Hospital Rajnandgaon, the only tertiary care center in the district which provides cervical cancer screening facility. A total of 897 women, aged 21-65 years were screened and assessed. Qualitative data were presented as frequencies and percentages by using SPSS version 21.

**Results:** Of the total, 6.8% (61) had heard about cervical cancer screening while only 0.6% (6) women gave history of uptake of some cytological screening in the past. None of them were ever heard of Pap test, HPV DNA test & HPV vaccination. However, 7% (35) out of 506 HPV DNA samples and 8.4% (33) out of 391 Pap samples came positive in the study group.

**Conclusions:** Effective health education is needed to cross the barrier of ignorance among health care givers and seekers. Strengthening of existing health system, qualitative research, clinical audits in facilities and monitoring are also mandatory.

**Keywords:** Cervical cancer screening, Cervical cancer, Knowledge

# Assessment of Menopausal Symptom Using Modified Menopause Rating Scale among Rural Women of Rajnandgaon in Chhattisgarh, a Central India Region

Meena Armo<sup>1</sup>, Siddhi Sainik<sup>2</sup>

## ABSTRACT

**Background:** Menopause is a natural process that results in atresia of almost all oocytes in ovaries, causing an increase in follicle-stimulating hormone and luteinizing hormone levels and a decrease in estrogen levels. Menopausal symptoms impact physical, psychological, vasomotor, and sexual health-related quality of life among women.

**Aim and objective:** The study was planned with the aim to assess the commonly reported menopausal symptoms among rural women of Central India, Rajnandgaon, Chhattisgarh, using the menopause rating scale (MRS).

**Materials and methods:** An observational cross-sectional study was carried out in the Department of Obstetrics and Gynecology, Atal Bihari Vajpayee Memorial Medical College Rajnandgaon, Chhattisgarh, for a period of 6 months. In all, 199 patients who had attained menopause were analyzed. Menopausal symptoms were assessed using modified MRS. Quantitative data were presented as frequencies and percentages by using SPSS version 21.

**Results:** Two hundred Questionnaires were distributed among the females who attended gynecology OPD and IPD and 199 gave consent to participate in the study; the response rate was 99.5%. The mean age at menopause was  $45.35 \pm 4.42$  years. In all, 100% of women reported having experience of more than five menopausal symptoms. The prevalence of symptoms in urogenital—sexual was 76.88%, somatic 75.62%, and psychological 73.33%.

**Conclusion:** Menopause-related symptoms are highly prevalent among middle-aged women in rural areas of Rajnandgaon, Chhattisgarh; this signifies the urgent need for community-based screening for such condition. Physical symptoms (joint and muscle problems) are the most commonly reported one. Healthcare providers have to be sensitized to special health needs of these rural middle-aged menopausal women.

**Keywords:** Menopausal problems, Menopausal symptoms, Menopause rating scale, Observational cross-sectional study, Rajnandgaon.

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## INTRODUCTION

The World Health Organization defines menopause as “The permanent cessation of menstruation as a result of the loss of ovarian activity.”<sup>1</sup> Menopause is a natural process that results in atresia of almost all oocytes in ovaries, causing an increase in follicle-stimulating hormone and luteinizing hormone levels and a decrease in estrogen levels. This decrease in estrogen levels leads to perimenopausal symptoms of hot flashes, insomnia, mood changes, generalize physical, and mental exhaustion as well as postmenopausal symptoms, such as vaginal atrophy, bladder problems, and osteoporosis.<sup>2</sup>

With increasing life expectancy and age at menopause remaining relatively unchanged, women spend little less than half of her life in the postmenopausal period.<sup>3</sup> However, majority of women are not aware of the changes brought by menopause because being old and being women, they face a burden of social inequalities and social discrimination from womb to tomb. In India, there is no current national health program running to serve postmenopausal women-specific health needs. Moreover, a very few studies have been conducted in rural areas to address this issue at deeper level; therefore, this study is an effort to assess the magnitude of suffering due to menopause by using modified menopause rating scale (MRS) among rural women of Rajnandgaon in Chhattisgarh, a Central India Region. Although Chhattisgarh is a fast-developing tribal state, however, 77% population still live

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**Source of support:** Nil

**Conflict of interest:** None

in village. It is also a one of the eight high-focus states for family planning with high TFR and high MMR.

## MATERIALS AND METHODS

This is an observational cross-sectional study conducted from April 2019 to October 2019 in the department of Obstetrics and Gynecology, BRLSABV Memorial Government Medical College Rajnandgaon, Chhattisgarh, India. A total of 200 women aged between 40 years and 65 years were enrolled for the study who

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Original Research Article

## Awareness and practices of cervical cancer screening among women in Rajnandgaon district, central India: health education is the need of the hour

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### ABSTRACT

**Background:** Cervical cancer is a leading cause of morbidity and mortality among rural women in India. Early screening has been shown to be the most effective measure to prevent the disease. However, lack of awareness, lack of infrastructure, social stigma and fear are barriers to cervical cancer screening. The study was undertaken to assess the knowledge and practice among rural women regarding cervical cancer and screening tests with the aim of helping health professionals to revise policies and practices.

**Methods:** It was a cross-sectional questionnaire-based study, conducted from January 2018 to September 2018 in the Department of Obstetrics and Gynecology at Government Medical College Rajnandgaon. A tertiary care hospital located in the southwest Chhattisgarh. A total of 506 women aged 21-65 years were included and assessed. Qualitative data were presented as frequencies and percentages by using SPSS version 21.

**Results:** Of the total 506 respondents, 15.41 % had heard of cervical cancer, while 8.1% about cervical cancer screening. Unfortunately, only 1.2% women were ever been screened by Pap test. Although importance of screening had been thoroughly explained to the respondents, despite the fact only 57.1% showed willingness to undergo cervical cancer screening in the future. However, 63.9% women having gynecological complains were significantly associated with better attitude towards future cervical cancer screening than women without having gynaecological complains.

**Conclusions:** Awareness and practice of the screening for cervical cancer was very poor in the rural population as well as in health care providers. Hence intensive health education is the need of the hour to change the scenario.

**Keywords:** Awareness, Cervical cancer, Practice, Screening tests

### INTRODUCTION

Worldwide cervical cancer is the fourth most common cancer with an estimated 569847 new cases and 311365 deaths in 2018 (Source: GLOBOCAN 2018). It is a major cause of morbidity and mortality in resource-poor settings where access to cervical cancer screening and vaccination is limited.<sup>1</sup> India accounts for almost one-fourth of cervical cancer incidence and deaths with an

estimated 96922 new cases and 60078 deaths in 2018 (Source: GLOBOCAN 2018). Various guidelines on screening and treatment of precursor lesions in all resource settings have been published by the World Health Organization (WHO, 2014), Ministry of Health and Family Welfare (MOHFW, 2016), the American Society of Clinical Oncology (ASCO, 2016) and the Federation of Obstetrics and Gynaecology Society of India (FOGSI GCPR 2018).<sup>2-5</sup> However, there is no

DOI: <http://dx.doi.org/10.18203/2320-1770.ijrcog20180168>

Original Research Article

## Hysterectomy: still a treatment of choice for pelvic pathologies in rural India

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### ABSTRACT

**Background:** Hysterectomy has always been a subject of controversy in India and increasing rate of unnecessary hysterectomies in young, premenopausal women is cause for concern regarding women's health and rights. The aim of this study is to review and analyse cases of hysterectomy in a rural population and to correlate with underlying factors behind seeking hysterectomy as a treatment of choice for pelvic pathologies.

**Methods:** This was an ambidirectional observational descriptive study in which 352 women were included who underwent hysterectomy between January 2016 to July 2017 in the Department of Obstetrics and Gynecology, Government Medical College Rajnandgaon and a tertiary care referral hospital of central Chhattisgarh, India.

**Results:** Majority were between 31-50 years of age group, grandmultipara, uneducated, insured by National health insurance scheme. 76.1% patients had attended medical college hospital to avail free services. 60.5% took prior treatment from unqualified/ unregistered/registered general practitioners. Erratic use /use of suboptimal dosage of hormones to stop abnormal uterine bleeding, nonspecific antibiotics to treat infection, incomplete treatment and poor compliance were possible reasons behind failure of previous treatments. Abnormal menstruation was the commonest presenting complaint observed in 75.2%. 72.4% patients refused to come for follow up and reasons were unavailability of transport facility, fear of losing job, loss of daily wages and financial constraints. Commonest indication for hysterectomy was symptomatic fibroid in 32.0%. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was the most common procedure done in 59.0%. The rate of hysterectomy came out to be 57.6% which is quite higher than that reported in other studies. Fever was the most common complication encountered in 0.80%.

**Conclusions:** Despite the remarkable improvement in conservative management and media coverage, hysterectomy still remains the most preferred modality of treatment with excellent satisfaction for pelvic pathologies in rural India.

**Keywords:** Hysterectomy, Pelvic pathologies, Rural India

### INTRODUCTION

The rate of hysterectomy in rural India seems to be on the rise. Uteruses are of no use once they have had children: a common belief amongst poor women living in villages. Untreated gynecological morbidity, barriers to treatment and lack of options available at a primary level may contribute further to unnecessary procedures in younger women. A study conducted in a western state of India

(Gujarat) pointed out that 7-8% of rural women and 5% of urban women had already undergone hysterectomy at an average age of 37 years, while newer study from a same state (Gujarat) states, that the only estimate of incidence in India is 20.7 per 1000 woman-years (95%) at a relatively low mean age of 36 years, which is at least four times higher than the highest global rates such as the United States (5.1 per 1000), Germany (3.6 per 1000) and Australia (3.1 per 1000) [rates in woman-years].<sup>1,2</sup>

## Copper T (380 A) and risk of uterine perforation in lactating women: rural scenario

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### ABSTRACT

**Background:** Copper T 380 A is commonly used as PPIUCD as well as Interval contraception in rural areas of Chhattisgarh. Studies have reported that interval insertion of intrauterine device in women during their lactation period is associated with high risk of uterine perforation as compared to postpartum insertion similar as our study.

**Methods:** 50 consecutive women were included, who came in family planning OPD of Chhattisgarh Institute of Medical Sciences (CIMS), a Government Medical College, with history of copper T insertion, during their lactation period, within one year of child birth. The copper T insertion was done by health workers at peripheral health centers with complains of pain lower abdomen, menstrual irregularities, missing thread, vaginal discharge, uterine perforation following Copper T 380 A insertion. Apart from patient's characteristics such as age and parity etc. the method of detection of the perforation and details of management were analyzed.

**Results:** There was one case of partial uterine perforation, one case of copper T lying in peritoneal cavity, two cases of expulsion and three cases had embedded copper T in the myometrium.

**Conclusions:** The risk of perforation due to copper T 380A insertion in lactating women is slightly high, thus timing of insertion, proper counseling and providers training, which are vital factors for intrauterine device use during lactation period, should be considered seriously so as to minimize the complications.

**Keywords:** Copper T 380A, Lactating women, Uterine perforation

### INTRODUCTION

Copper T 380A is one of most popular form of long-acting reversible contraception (LARC) after female sterilization used worldwide. In India only 2% women of reproductive age group use it, while In Chhattisgarh, use of IUCD observed in only 1.6% women.<sup>1, 2</sup> Copper T 380A is a highly effective IUCD, which was introduced for the first time in the National Family Welfare program by the Government of India in 2002. It can be used by all women regardless of breastfeeding status as it has no effect on quality and components of breast milk, in fact lactation facilitates pain free and easy insertion.<sup>3, 4</sup> Uterine perforation is an uncommon but serious complication

following IUCD insertion in lactating women. These women are likely to have a soft, hyper-involutated atrophic uterus due to breast feeding, which may predispose to uterine perforation. Thus, it is advisable to exercise special care during IUCD insertion in these women and also to ensure that the women are followed up at regular intervals.<sup>5</sup>

The purpose of this study is to identify and compare the incidence of uterine perforation and other adverse events associated with Copper T (380 A) intrauterine device in a lactating woman so that it would help health professionals to revise policies and practices to reduce the complications associated with it.

## Department wise list of Faculty Members

Department	Name of the faculty Qualification IMR Number	Current designation on and Date of promotion	Nature of employem ent  Regular/ Permanent/ Contract/out sourced	DETAILS OF SERVICE IN LAST 5 YEARS					Number of lectures taken/year  Topics covered
				1	2	3	4	5	
Obstetrics & Gynecology	Dr. Arpana Verma CGMC - 7676/2017	Assistant Professor	Regular						SR in AIIMS for 3 years. 10 Date of Joining (11-11-21)
	MBBS, MS, DNB, CIMP								

### ANNEXURE- 1

Sr. No	Faculty Name	Publication in Vancouver Referencing Style. (Case Report)	Pubmed Indexed yes/no	Scopes
1.		Agrawal S, Verma A, Rajbhar S, Thakur P, Kodumuri L, et al. (2020) Meconium Peritonitis: In utero Diagnosis of a Rare clinical entity and Postnatal outcome. Obstet Gynecol Cases Rev 7:180.	Yes Index coparcus	

Arpana  
11/1/22

2.

Verma A, Rajbhar S, Thakur P, Agrawal S,  
Pradhan S. favourable pregnancy outcome in  
a Granulomatous with polyangitis Patient with Renal  
insufficiency. J Med Cases. 2021 Jan;12(1):27-31

PROFESSOR AND HOD  
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BRLSABVMMCH, RJN



# Favorable Pregnancy Outcome in a Granulomatosis With Polyangiitis Patient With Renal Insufficiency

Arpana Verma<sup>a, b</sup>, Sarita Rajbhar<sup>a</sup>, Pushpawati Thakur<sup>a</sup>,  
Sarita Agrawal<sup>a</sup>, Sangeeta Pradhan<sup>a</sup>

## Abstract

To present a case of successful pregnancy outcome in a granulomatosis with polyangiitis (GPA) patient with renal insufficiency. GPA, formerly known as Wegener's granulomatosis, is a rare necrotizing systemic vasculitis, presenting with classical clinical triad of manifestations involving upper and lower airway and glomerulonephritis. An association of Antineutrophil cytoplasmic antibodies with GPA has been established and the antibodies are present in most patients with active disease. Pregnancy with GPA is burdened with the risk of possible maternal and fetal complications, further leading to higher morbidity and mortality rate. Due to sparsity of studies of GPA in pregnancy, management needs to be individualised. Diagnostic workup should include serological markers, radiological and histopathological examination. Cyclophosphamide combined with prednisolone is the standard induction regimen. A 22-year-old woman, multigravida at 35 weeks of gestation was referred to our department owing to 1-year diagnosis of GPA. During active phase, the disease manifested as pneumonia and acute kidney injury and perinuclear anti-neutrophil cytoplasmic antibodies (P-ANCAs) were positive. She received pulse therapy of injection cyclophosphamide and methylprednisolone as induction regimen, followed by tapering doses of oral prednisolone and azathioprine for maintenance therapy. The disease was in remission at the onset of pregnancy but had flare up at 34 - 35 weeks of gestation and she presented with renal dysfunction. Neither the disease nor the treatment adversely affected the pregnancy and she delivered a healthy baby at 37 weeks. The unpredictable disease course and complications at unexpected gestation appears to be a major variable to take into account when assessing the risk of pregnancy with GPA. Early diagnosis, monitoring and timely intervention resulted in favourable pregnancy outcome in our patient.

**Keywords:** Granulomatosis with polyangiitis; Wegener's granuloma-

tosis; Granulomatous vasculitis; Microscopic polyangiitis; Antineutrophil cytoplasmic antibodies

## Introduction

Granulomatosis with polyangiitis (GPA), previously known as Wegener's granulomatosis (WG) is a rare multisystem autoimmune disorder with wide spectrum of manifestations, characterized by necrotizing granulomatous vasculitis of the upper and lower respiratory tract, pauci-immune segmental necrotizing glomerulonephritis, and small vessel vasculitis [1].

The etiology of GPA remains unidentified, however presence of antineutrophil cytoplasmic antibodies (ANCA) has been established in most patients with active disease and the antibodies are thought to play a role in disease pathogenesis [2]. Treatment consists of immunosuppressive drugs, essentially cyclophosphamide (CYC) in combination with high-dose corticosteroids.

The peak incidence of the disease is in the fourth and fifth decades, and hence the association of GPA with pregnancy is rare [3]. Owing to this rarity, the management in pregnant women often poses a therapeutic challenge, therefore is individualized and the pregnancy outcome is variable.

We reported a case of successful pregnancy outcome in a patient with known GPA.

## Case Report

A 22-year-old woman, Gravida 2 Para 1 Living 1 with 35 weeks of gestation with previous one lower segment cesarean section (LSCS) was referred to our department as a case of 35 weeks pregnancy with GPA with nephritic syndrome in remission. Her past history revealed the disease course, which started 1 year back with painless skin lesions (vesicles and papules) over upper and lower limbs, with recurrent bilateral flank pain and occasional episodes of syncopal attack. Further she developed hemoptysis and breathlessness requiring critical care admission at private hospital in Lucknow, India. On evaluation then, revealed presence of hypertension, perinuclear ANCA (P-ANCA) positive, hemoglobin (5.4 g/dL) suggesting severe anemia, her renal func-

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doi: <https://doi.org/10.14740/jmc3610>

**Table 1.** Definitions for ANCA-Associated Vasculitis

ANCA-associated vasculitis (AAV)	Necrotizing vasculitis, with few or no immune deposits, predominantly affecting small vessels, associated with MPO-ANCA or PR3-ANCA. Not all patients have ANCA. Add a prefix indicating ANCA reactivity, e.g., PR3-ANCA, MPO-ANCA, ANCA-negative.
Granulomatosis with polyangiitis (Wegener's granulomatosis)	Necrotizing granulomatous inflammation usually involving the upper and lower respiratory tract, and necrotizing vasculitis affecting predominantly small to medium vessels. Necrotizing glomerulonephritis is common.
Eosinophilic granulomatosis with polyangiitis (Churg-Strauss syndrome)	Eosinophil-rich and necrotizing granulomatous inflammation often involving the respiratory tract, and necrotizing vasculitis predominantly affecting small to medium vessels, and associated with asthma and eosinophilia. ANCA is more frequent when glomerulonephritis is present.
Microscopic polyangiitis	Necrotizing vasculitis, with few or no immune deposits, predominantly affecting small vessels. Necrotizing arteritis involving small and medium arteries may be present. Necrotizing glomerulonephritis is very common. Pulmonary capillaritis often occurs. Granulomatous inflammation is absent.

ANCA: antineutrophil cytoplasmic antibodies; MPO: myeloperoxidase; PR3: proteinase 3.

tion test (RFT) was impaired, chest X-ray showed bilateral pneumonic consolidation, based on above findings, a diagnosis of ANCA-associated vasculitis (AAV) with pneumonia with severe anemia with acute kidney injury was made. The skin lesion was biopsied too, the histopathology however, had no features of vasculitis. The induction therapy commenced with intravenous pulse administration of CYC and methylprednisolone. In addition, she was also started on antihypertensive therapy with tablet amlodipine and losartan and received four units of packed cell transfusion. She responded well to the treatment and was discharged on tapering doses of oral prednisolone and maintenance therapy with oral azathioprine (AZA) and antihypertensives to continue. Besides this she also gave history of 6 months of antitubercular (ATT) therapy in view of pulmonary tuberculosis few months before conception. She conceived during remission phase and was continued on AZA and amlodipine. At around 30 - 32 weeks, patient herself stopped AZA and Amlodipine. Later at 35 weeks, she was referred to All India Institute of Medical Sciences (AIIMS) nephrology department in view of nephritic syndrome, and AZA was restarted, and she was further referred to our department. She was admitted in view of high-risk pregnancy. All her previous antenatal investigations in the current pregnancy were found to be normal including the anomaly scan. On admission, detailed clinical and laboratory evaluation was done. Her blood pressure was found to be normal. The laboratory evaluation revealed ANCA was negative, RFT values (blood urea nitrogen (BUN) 34 mg/dL, serum creatinine 2.57 mg/dL, urea 52 mg/dL, uric acid 8.3 mg/dL, urine albumin to creatinine ratio (ACR) 1,525.76, urine creatinine 21.19 mg/dL and urine microalbumin 323.52 mg/L. Fundoscopy revealed normal finding, ultrasound was suggestive of fetal growth restriction (FGR) and abnormal umbilical Doppler changes. The pregnancy was terminated at 37 weeks owing to worsening renal function (on serial RFT) with previous LSCS with FGR with delivery of an alive healthy female baby of birth weight 2.05 kg with Appearance, Pulse, Grimace, Activity, and Respiration (APGAR) score of 10 in 1 min and 5 min. She remained in remission in her post-partum period and was discharged on maintenance therapy with oral AZA in consultation with

nephrologist. At Present, both the mother and the baby are doing well.

## Discussion

The vasculitides are a diverse group of conditions with a wide scale of presentation. The AAV are three separate conditions: GPA, microscopic polyangiitis (MPA), and eosinophilic GPA (EGPA; previously known as Churg-Strauss syndrome) [1].

Definitions for the AAV were described at the Chapel Hill Consensus Conference (CHCC) in 1994 and were revised in 2012 (Table 1) [1]. The Chapel Hill group states that the CHCC is a nomenclature system and not a set of classification or diagnostic criteria [1].

GPA is now a well-recognized clinical entity in India. Prevalence among female population has been seen in the Indian scenario [4].

The diagnosis of GPA is made on the basis of American College of Rheumatology criteria and recently, a modified class which, in addition to the original four criteria (nasal or oral inflammation, an abnormal chest radiograph, urinary sediment and granulomatous inflammation on biopsy) also incorporates a positive serum enzyme immunoassay for antibodies to proteinase-3. Diagnosis can be made if at least two of these five criteria are present [4]. The typical clinical triad described in the literature comprises of upper airway involvement (sinusitis, otitis, nasal mucosa ulcers, bone deformities, and subglottic stenosis), lower respiratory tract involvement (cough, chest pain, hemoptysis), and glomerulonephritis [5].

The vasculitis study group describes the different stages of the disease based on clinical and pathologic criteria (Table 2) [1].

Typically, the course of the disease progresses from localized to generalized, and this progression may take from weeks to years. On the basis of above classification, we can consider our case to be in severe stage with renal involvement.

ANCA are a sensitive and specific marker for ANCA-associated systemic vasculitis. Using indirect immunofluorescence on ethanol-fixed neutrophils, two prime fluorescent

**Table 2.** Stages of Disease Based on Clinical and Pathologic Criteria

Stage	Features
Limited	Disease localized to the upper airways, no systemic symptoms, no threatened organ function, no renal involvement
Early generalized	Constitutional symptoms, no threatened organ function
Active generalized	Constitutional symptoms with threatened organ function
Severe	Severe renal involvement, life-threatening disease
Refractory	Progressive disease that is unresponsive to therapy

patterns can be identified: a diffuse cytoplasmic staining (C-ANCA), and a perinuclear/nuclear staining (P-ANCA) [6]. Although these patterns are not disease specific but preferential association has been seen between C-ANCA and GPA, whereas P-ANCA was associated more commonly with MPA, idiopathic necrotizing crescentic glomerulonephritis (iNCGN) and EGPA. ANCA levels are useful to monitor disease activity. A significant rise in titers, or the reappearance of ANCA, should warn the clinicians and lead to more intense patient monitoring.

India being a country with highest burden of tuberculosis, GPA used to masquerade as drug-resistant tuberculosis. It has been observed in previous publications that around 40% of patients were initially mistaken for tuberculosis and treated for the same [4]. This diagnostic error is reduced to 20% owing to better understanding about GPA and outspread availability of ANCA test [4]. Histological affirmation of granulomatous vasculitis still being the gold standard for diagnosis, a positive ANCA result often abolishes the need for invasive procedures like lung biopsy [4].

Cutaneous lesions are found in 50% of patients but may be the presenting symptoms in up to 10% of case [7]. Cutaneous vasculitis secondary to GPA can present as palpable purpura, papules, nodules, ulcers mimicking pyoderma gangrenosum, or necrotizing lesions leading to gangrene. There is no single lesion specifically associated with the disease [8]. Skin lesions are usually indicative of an active systemic disease. They can manifest on the face, upper extremities, and the extensor surfaces of the joints, but are typically located on the lower extremities. Oral and nasal ulcerations may also occur. Dermatologic manifestations may be treated with topical steroid. Surgery is only required in cases of severe tissue damage due to fibrosis or necrosis [9]. In our case, the disease started as multiple painless pin head sized skin lesions (vesicles and papules) over upper and lower limbs which later increased in size (approximately 5 × 5 cm), became ulcerated and healed on its own, forming scar.

Pulmonary involvement was seen in 49-84% of cases manifesting as cough, hemoptysis and dyspnea. Pulmonary nodules are the most common chest radiographic manifestation of GPA; occurring in 40-70% of cases. Cavitations occur in approximately 25%. Lung ground-glass attenuation and consolidation often occur in up to 50% of patients with active GPA, these are mostly the consequences of alveolar hemorrhage, although pulmonary edema secondary to renal involvement may also occur [10]. Lung consolidation is often observed in pneumonia, but GPA should be kept in mind in cases of consolidation that are persistent and resistant to treatment

[5]. Other less common pulmonary manifestations include atelectasis and reticular interstitial opacities. Pleural effusion is a rare finding and if present, is exudative in nature. Diffuse alveolar hemorrhage was noticed in a few cases.

In our case, during the active phase of disease, patient had few episodes of hemoptysis and breathing difficulties, chest X-ray showed multiple scattered radio-opaque shadows in bilateral lung fields suggestive of patchy pneumonic consolidation and homogenous opacities in bilateral lung fields suggestive of pulmonary edema. High-resolution computed tomography showed ground glass opacities in bilateral lung fields involving all segments with interlobular septal thickening suggestive of organizing pneumonia. she was admitted under intensive care unit, supportive management was given, received pulse therapy of injection methyl prednisolone 500 mg for 3 days and injection CYC 500 mg for two doses, given 2 weeks apart, to which the patient responded well and was discharged on oral AZA and prednisolone on tapering doses.

Anemia is a common complication of patients with ANCA-associated renal vasculitis. The causes can be multifactorial which include impaired renal function, malnutrition, iron deficiency, alveolar hemorrhage, the use of immunosuppressive drugs and frequent in-hospital phlebotomies [11]. Our patient gives history of multiple blood transfusions in the past and her current blood picture was suggestive of mild anemia (hemoglobin 8.5 g/dL), peripheral examination was suggestive of dimorphic anemia. She received one unit of packed cell transfusion in view of anticipated surgical blood loss.

Glomerulonephritis (GN) occurs in 70-85% of GPA patients during the disease course, but renal insufficiency (serum creatinine > 2.0 mg/dL) occurs in only 11-17% of patients at presentation [12]. On renal biopsy, the characteristic renal lesion seen in cases of GPA is segmental focal GN. Immune complexes are absent or infrequent, consistent with "pauci-immune GN" [12]. Our patient had history of acute kidney injury one year preceding the index pregnancy and received treatment for the same. She had been referred to our department in view of pregnancy with disease flare up, presenting as renal dysfunction. Her RFT was found to be impaired. Further testing showed worsening of renal parameters and the decision for LSCS was made.

Pregnancies occurring in active disease or pregnancies complicated by new-onset disease or recurrent disease have a documented unfavorable maternal and perinatal outcome. However, pregnancies occurring during remission also seem to be associated with increased risk of complications.

Disease activity can be assessed according to Birmingham Vasculitis Activity Score (BVAS), which scores nine organ

systems for new or worse vasculitic findings [13]. Remission is defined as BVAS < 1 for > 6 month on prednisolone  $\leq$  10 mg per day. Remission could be either "on drug" or "drug-free". Remission in GPA was a rarity until the introduction of regimens combining oral CYC with steroids. Although this combination increased the survival rates, yet the drug toxicity remained a vital challenge in management.

After successful remission induction, guidelines recommend removing the initial immunosuppressive agent and starting a maintenance regimen with either AZA or methotrexate (MTX) [1]. CYC is no longer recommended for maintenance of remission. Early cessation of therapy (< 1 year) is associated with an increased risk of relapse. It is advisable to continue the maintenance therapy for at least 18 - 24 months before being gradually withdrawn.

Rituximab (RTX), a chimeric cluster of differentiation 20 (CD20) monoclonal antibody has also been used for induction of remission in GPA. Other indications for its use include GPA refractory to CYC and unacceptable risk of gonadotoxicity with CYC in reproductive age group. RTX, in fact, has been shown to give excellent results in induction therapy of GPA [14].

GPA is well-known for frequent relapses. British Society of Rheumatology defines relapse as a disease that has been previously well controlled with or without drugs and has become active. Relapse is further classified as "minor" if there is increase of one or more new or worse minor items and no major BVAS items. Major relapse involves increase of one or more major BVAS item [15]. RTX has shown an adequate response in treatment of relapses.

## Conclusions

Pregnancy in patients with GPA requires preconceptional planning, careful clinical judgment, and vigorous treatment of active disease. The best time to plan conception is a minimum of six months after entering remission. A multidisciplinary approach is necessary for the diagnosis and therapeutic treatment of GPA. Multiple relapses also occur in some patients. Substantial organ damage due to disease complications and adverse effects of treatment is known to occur, leading to long-term sequelae.

## Acknowledgments

None to declare.

## Financial Disclosure

None to declare.

## Conflict of Interest

The authors declare that they have no conflict of interest.

## Informed Consent

Informed consent was obtained from the patient.

## Author Contributions

All the authors are involved in conceptualizing and designing the study. AV, SR, and SP contributed to the literature search, clinical studies, and manuscript preparation. AV, SR, PT, and SA edited and reviewed the manuscript. AV is the guarantor of the study.

## Data Availability

The authors declare that data supporting the findings of this study are available within the article.

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## CASE REPORT

# Meconium Peritonitis: In Utero Diagnosis of a Rare Clinical Entity and Postnatal Outcome

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## Abstract

**Objective:** To present an unusual case of meconium peritonitis diagnosed during prenatal period and its postnatal outcome.

**Background:** Meconium peritonitis (MP) is a rare cause of non-immune hydrops with reported incidence of 1:35,000 live births. MP is defined as an aseptic localized or generalized peritonitis caused due to intrauterine bowel perforation and extravasation of the meconium. Few causes which might result in perforation include Ileal atresia, intussusception, Hirschsprung's disease, cystic fibrosis, volvulus, colonic atresia, Meckel diverticulitis and vascular insufficiency. Successful outcome with conservative management has been seen in limited number of cases, however, surgery is imperative when signs and symptoms of intestinal obstruction are present. Favorable outcome have been seen when the condition was detected in utero rather than when the neonatal diagnosis is made.

**Case:** A 32 year, Multigravida was referred to our hospital at 33 weeks 2 days of gestation in view of isolated fetal ascites, diagnosed on antenatal scan at 32 weeks. Antenatal workup

done for immune and non-immune hydrops and was found to be negative. One week later, a repeat ultrasound was done which showed moderate fetal ascites with few areas of calcification in the bowel loops and prominent inferior vena cava, there was also associated polyhydramnios. The provisional diagnosis of MP was made. She was given injection dexamethasone for fetal lung maturation with a plan for delivery at 37 completed weeks, however spontaneous labour sets in and a preterm hydropic female baby was delivered at 35 weeks. She needed intubation and ventilator support. Post natal ultrasound showed gross ascites with a giant cyst compressing the inferior vena cava, and minimal bilateral pleural effusion. Hence an emergency laparotomy was performed. Intraoperative finding revealed giant meconium cyst bounded with fibrous tissue, on dissection showed terminal ileal perforation. Drainage of meconium cyst and Double-barrel ileostomy was performed. Postoperatively the respiratory symptoms improved. Overall improvement in the general condition of the baby was seen at one week follow up. Unfortunately the baby's condition started deteriorating by third week of life and she started developing signs and symptoms of septicemia. In spite of active management the baby could not be saved and succumb to sepsis on fourth week of life.



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## Department wise list of Faculty Members

Department	Name of the faculty Qualification IMR Number	Current designation on and Date of promotion	Nature of employment  Regular/ Permanent/ Contract/out sourced	DETAILS OF SERVICE IN LAST 5 YEARS					Number of lectures taken/year  Topics covered
				1	2	3	4	5	
1.	Dr. MITALI TUWANI	SENIOR RESIDENT	CONTRACT	CMS BSP	-	PT JUN	PT JUN	PT JUN	2
	CCMC-7520/2017								
	MBBS, MS OBS & GYNAE								

ANNEXURE- 1

Sr. No	Faculty Name	Publication in Vancouver Referencing Style.	Pubmed Indexed yes/no	Scopes
1.		Kishore R, Thakur N, Tuwani M. Evaluation of maternal & fetal outcome in pregnancies complicated by jaundice an observational study.	yes	

Mitali  
Dr. Mitali  
Tuwani  
P. T.O.

2.

Thakur N, Kishore R, Tuwani M  
Sooner than later; a little effort  
may avert postpartum hemorrhage  
in patients with acute hepatitis E

yes.

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Meena A  
11/1/2022

DEPT. OF OBSTETRICS AND GYNAECOLOGY

BRLSABVMMCH, RJN

Department wish Yes

Department	Name of the faculty	Qualification	IMR Number	Contract/Out sourced	Permanent/Contract
	<u>Dr. Mitali Tawari</u>	<u>M.B.B.S., M.D.</u>	<u>7432139</u>	<u>Contract</u>	<u>Contract</u>

ANNEXURE - I

Sr. No	Faculty Name	Publication in Vancouver Referencing Style	Indexed/Not Indexed	Peer Review
1	<u>Dr. Mitali Tawari</u>	<u>Evaluation of maternal-fetal outcomes in pregnancies complicated by gestational diabetes mellitus: a retrospective study</u>	<u>Yes</u>	<u>Yes</u>

BRIGABAMMCH, BIR  
 DEPT. OF OBSTETRICS AND GYNAECOLOGY  
 PROFESSOR AND HOD

Dr. Mitali Tawari, M.D., M.B.B.S.  
 more than 10 years of experience in  
 in obstetrics with special interest in  
 maternal-fetal medicine, gynaecology  
 and reproductive health.

Dr. Mitali Tawari  
 M.B.B.S., M.D.



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Original Research Article

## Evaluation of maternal and fetal outcome in pregnancies complicated by jaundice-an observational study

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### ABSTRACT

**Background:** The spectrum of jaundice in pregnancy varies from a benign condition with good maternal and fetal outcome to a severe form resulting in liver failure and maternal and fetal mortality. Jaundice may complicate 3-5% of pregnancies. Present study was aimed to analyze the cause, course and impact of jaundice during pregnancy so as to have better understanding and hence better fetomaternal outcome. The present study aimed to analyze the various causes of hepatic dysfunction in pregnancy, maternal and fetal outcome in pregnancies complicated by jaundice and various hematological and liver function variables for predicting maternal and fetal outcome.

**Methods:** The present study was an observational study conducted in the department of obstetrics and gynecology, Pt. JNM medical college and associated Dr. BRAM hospital, Raipur (CG) over period of 2 year from September 2018 to September 2020.

**Results:** Total 0.72% pregnancies were complicated by jaundice. HELLP syndrome was the commonest cause of jaundice in pregnancy (36.7%), followed by viral hepatitis (32.7%). Hepatitis E was the most common type of viral hepatitis (91.8%). Hemolytic jaundice presented with best maternal outcome (maternal mortality rate 8.6%). Worst maternal outcome was seen in AFLP (maternal mortality rate 100%). Best fetal outcome was seen in viral hepatitis (live birth rate 67.6%), whereas worst noted with AFLP (fetal death rate 66.6%). Higher total serum bilirubin, higher serum AST, anemia and deranged INR had significant correlation with maternal mortality.

**Conclusions:** HELLP syndrome and viral hepatitis are preventable causes of jaundice yet it contributed to significant proportion of maternal deaths in 26.5 and 18.5% cases respectively. AFLP is often under diagnosed and had a fulminant course in pregnancy causing maternal and fetal mortality.

**Keywords:** Jaundice, Pregnancy, Feto-maternal outcome

### INTRODUCTION

Hepatic dysfunction though complicates only 3-5% of pregnancies but it leads to perinatal mortality in 60% of cases and maternal mortality in 14% to 100% of cases depending upon the cause.<sup>1</sup>

Jaundice can be classified in pregnancy on the basis of jaundice in existing liver diseases, coincidental liver diseases and specific to pregnancy.<sup>2</sup>

#### *Pre-existing liver disease*

Cirrhosis, portal hypertension, autoimmune hepatitis, primary biliary cirrhosis, Wilson's disease, and chronic viral hepatitis A B and C.

#### *Liver diseases coincidental to pregnancy*

Budd Chiari syndrome, acute viral hepatitis A, B, C, and E, alcohol induced liver disease and pregnancy and gallstone causing liver diseases.

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Original Research Article

## Sooner than later: a little effort may avert postpartum haemorrhage in patients with acute hepatitis E

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### ABSTRACT

**Background:** The incidence of postpartum hemorrhage (PPH) in pregnancies with hepatitis E varies from 14-42%. Management of labor and PPH in these women with acute liver injury makes it a real obstetric challenge due to associated coagulopathies and contraindication for many drugs. Prophylactic insertion of condom balloon tamponade along with active management of the third stage of labour (AMTSL) prevent primary PPH in these women. Simultaneous use of injection tranexemic acid further gives reliable results. The present study was conducted to study the effectiveness of condom balloon tamponade in preventing PPH in pregnant women with acute hepatitis E in labor.

**Methods:** The present study was conducted in the Department of Obstetrics and Gynecology, Pt. Jawaharlal Nehru Medical (JNM) College and associated Dr. Bhim Rao Ambedkar Memorial (BRAM) Hospital, Raipur, Chhattisgarh over period of two year from September 2018 to September 2020.

**Results:** During the study period 32 women presented with hepatitis E in labor. Condom balloon tamponade was inserted prophylactically in all hepatitis E virus (HEV) positive cases immediately after delivery of placenta along with vaginal packing, irrespective of amount of bleeding. In spite of so many odds in the form of unscanned pregnancies, multiparity, multifetal gestation, abruption, intrauterine fetal death (IUFD), prolonged labor, deranged liver and coagulation profiles, anemia and thrombocytopenia, our study showed high effectiveness of prophylactic condom balloon tamponade by encountering only one case of PPH.

**Conclusions:** Prophylactic condom balloon tamponade insertion just after the removal of placenta is promising in averting PPH.

**Keywords:** Hepatitis E, Pregnancy, Postpartum hemorrhage, Condom balloon tamponade

### INTRODUCTION

In pre-eclampsia, there is increased uteroplacental resistance and reduced fetal perfusion due to inadequate invasion of spiral arterioles by trophoblast cells. This causes impaired fetal growth and fetal hypoxia. Pre-eclampsia contributes to 25% perinatal morbidity and mortality and optimal evaluation of fetus is necessary to ensure a good outcome.<sup>1</sup> Ultrasonography is done to evaluate fetal well-being by biophysical profile and recently Doppler ultrasound has emerged as a vital tool for

antenatal surveillance. As the fetoplacental unit develops, impedance in umbilical artery decreases with increased diastolic velocity. The normal umbilical artery waveform in last trimester shows low impedance and high diastolic flow with low pulsatility index (PI) and low resistive index (RI). In pregnancies complicated with pre-eclampsia and IUGR, umbilical blood flow reduces due to placental vascular resistance.

Hepatitis E virus (HEV) is an emerging infectious agent causing acute viral hepatitis worldwide.<sup>1</sup> Annually, there are an estimated 20 million HEV infections, 3.3 million

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## Role of uterine balloon tamponade to avert morbidity and mortality due to post-partum haemorrhage in pregnancy with hepatitis e virus infection: A case series

**Dr. Archana Roy, Nalini Mishra and Mitali Tuwani**

**DOI:** <https://doi.org/10.33545/gynae.2020.v4.i4e.655>

### Abstract

**Aim:** To assess the role of condom balloon tamponade in arresting the primary PPH in pregnant women with hepatitis.

**Material and methods:** This case series included pregnant women with hepatitis e admitted in department of obstetrics and gynecology of a medical college from January 2016 to April 2020. Demographic details, labour findings and fetomaternal outcome was noted and assessed.

**Results:** During study period 40 women presented with hepatitis e. 20 were included in study group and 20 in control group. Condom balloon tamponade prevented PPH in women with hepatitis e with a success rate of 100% (P value=0.01). It controlled PPH with DIC, severe anaemia and hepatic encephalopathy as depicted by OR<1. Balloon tamponade had averted invasive procedures like pelvic devascularisation, compression sutures and peripartum hysterectomy in these women.

**Conclusion:** Condom balloon tamponade has a definite role in averting PPH in hepatitis e pregnancy thus improving the maternal and fetal outcome.

**Keywords:** Condom balloon tamponade, caesarean delivery, hepatitis e, post-partum haemorrhage, uterine atony, uterotonics, vaginal delivery

### Introduction

As per the latest WHO estimates, around 20 million of people get Hepatitis E Virus (HEV) infection every year. Out of which 3.3 million become symptomatic and approximately 44000 die [1]. All viral hepatitis including HEV is caused by the corresponding hepatotropic viruses. HEV as well as Hepatitis A are transmitted by feco-oral route and cause acute hepatitis [2]. Due to lack of hand hygiene and clean drinking water supply, India is an endemic area for these viruses [3, 4, 5]. Although HEV can affect people of any age group but when occurs during pregnancy, the outcome can be devastating. In general population the disease runs a self-limiting course with low chances of developing fulminant hepatitis but in pregnant women acute liver failure can occur more frequently. When occurs in third trimester of pregnancy, the mortality rates are reported to be as high as 20-25% [1, 6]. High maternal mortality rate in pregnancy with HEV is owing to complications like hepatic coma, deranged coagulation profile, abruptio placentae and postpartum haemorrhage. Management of PPH in these women poses a challenge especially when many drugs of the first line intervention which is the medical treatment, are contraindicated in acute parenchymal liver disease and the third line intervention of surgical recourse is often not feasible in lieu of existing or potential coagulation abnormalities. That leaves second line interventions like uterine balloon tamponade (UBT) which can play a crucial role in cases not amenable to medical management. Though timely management by first line intervention of PPH remains the cornerstone of treatment [7-10], the use of UBT as prophylaxis or as treatment can go a long way in reducing the blood loss and prevent or treat PPH leading to curtailment of morbidity and mortality associated with it.

UBT involves insertion of a balloon into the uterine cavity followed by its inflation in order to achieve a tamponade effect and stop the bleeding. It is a safe and very effective intervention [11-17]. Out of many variants of available UBTs, the commercially available purpose designed UBT "Bakri balloon®" though it is not a cost-effective option for LMICs (lower middle-income countries). Amongst the low-cost option of UBT, condom balloon tamponade (C-UBT) device is the most widely used with comparable efficacy [18-29]

## Department wise list of Faculty Members

Department	Name of the faculty Qualification IMR Number	Current designation on and Date of promotion	Nature of employem ent  Regular/ Permanent/ Contract/out sourced	DETAILS OF SERVICE IN LAST 5 YEARS					Number of lectures taken/year  Topics covered
				1	2	3	4	5	
J.	Dr. Ratna Rangari MBBS, MS OBC & GYN CMC-5968/2015	SENIOR RESIDENT	contract	-	-	PT JUN	PT JUN	PT JUN	-

ANNEXURE- 1

Sr. No	Faculty Name	Publication in Vancouver Referencing Style.	Pubmed Indexed yes/no	Scopes
1.		Jaiswal J, Naik S, Rangari R, Sinha A. Awareness and acceptance of various contraceptive methods among postpartum women in a tertiary care centre	Yes	

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noting

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DEPT. OF OBSTETRICS AND GYNAECOLOGY

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Original Research Article

## Awareness and acceptance of various contraceptive methods among postpartum women in a tertiary care center

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### ABSTRACT

**Background:** This study was conducted to know awareness and acceptance of contraceptive methods among postpartum women in the tertiary care centre of Chhattisgarh.

**Methods:** A cross-sectional interview-based study was conducted on a sample of 440 post-partum women. The interview included socio demographic profile, awareness and acceptance of contraceptive methods in postpartum period and factors affecting its use.

**Results:** In our study, we observed that 95.9% were aware of some method of contraception. This knowledge increased with increasing education, socioeconomic class. 90.9 % accepted one of the contraceptive methods during their hospital stay. The most common contraceptive method chosen was IUCD (80.8%). Major source of information was health care worker (83.88%). The main reason for non-acceptance of contraception was fear of side effects.

**Conclusions:** High level of persistent motivation is required, so initiation of motivation regarding post-partum contraception should be done in antenatal visits and reinforcement in post-partum period should be done. Proper counseling regarding possibility of milder side effects and way of coping with them should be reinforced, continued motivation and reassurance will give positive attitude for acceptance of contraception. Reinforcement of awareness in society (family and friends/neighbor) this may give positive impact on awareness and acceptance. There is need of couple counseling for better acceptance. Emphasis is required for involvement of men/head of the family for it.

**Keywords:** Postpartum contraception, KAP, Awareness, Acceptance

### INTRODUCTION

The world population has reached 7 billion on 31st October 2011. According to censuses 2011, the population of India is 1.21 billion.<sup>1</sup> India is the second most populous country in the world after China.<sup>2</sup> It is estimated that India would become the most populous country by 2025. The causes of overpopulation are poor family planning practices, reduced mortality rates and availability of good medical services.

India was the first country in the world to formulate the national family planning program in the year 1952 with the objective of "reducing the birth rate of the extent necessary

to stabilize the population at a level consistent with the requirement of National economy".<sup>3</sup>

The progress achieved in this sphere is normally assessed from the result of Knowledge, attitude, and practice (KAP) survey. Although contraception usage has increased over a period of time, there exists a KAP gap, i.e., a gap between the KAP regarding contraception.<sup>4,5</sup>

Family Planning is defined by World Health Organization (WHO) as "a way of thinking and living that is adopted voluntarily upon the basis of Knowledge, attitude and responsible decisions by individuals and couples in order to promote health and welfare of family groups and thus

## Department wise list of Faculty Members

Department	Name of the faculty Qualification IMR Number	Current designation on and Date of promotion	Nature of employem ent  Regular/ Permanent/ <u>Contract/out</u> sourced	DETAILS OF SERVICE IN LAST 5 YEARS					Number of lectures taken/year  Topics covered
				1	2	3	4	5	
Obstet Gynec.	Dr Bhawna Chauhan  Reg No. 15798.  (MBBS D.G.O.)	S.R.	contract	-	-	-	Gme RJM	Gme RJM	12 topics

### ANNEXURE- 1

Sr. No	Faculty Name	Publication in Vancouver Referencing Style.	Pubmed Indexed yes/no	Scopes
		Nil		

Anexo A  
11/11/2022

PROFESSOR AND HOD

DEPT. OF OBSTETRICS AND GYNAECOLOGY

BRLSABVMMCH, RJN