

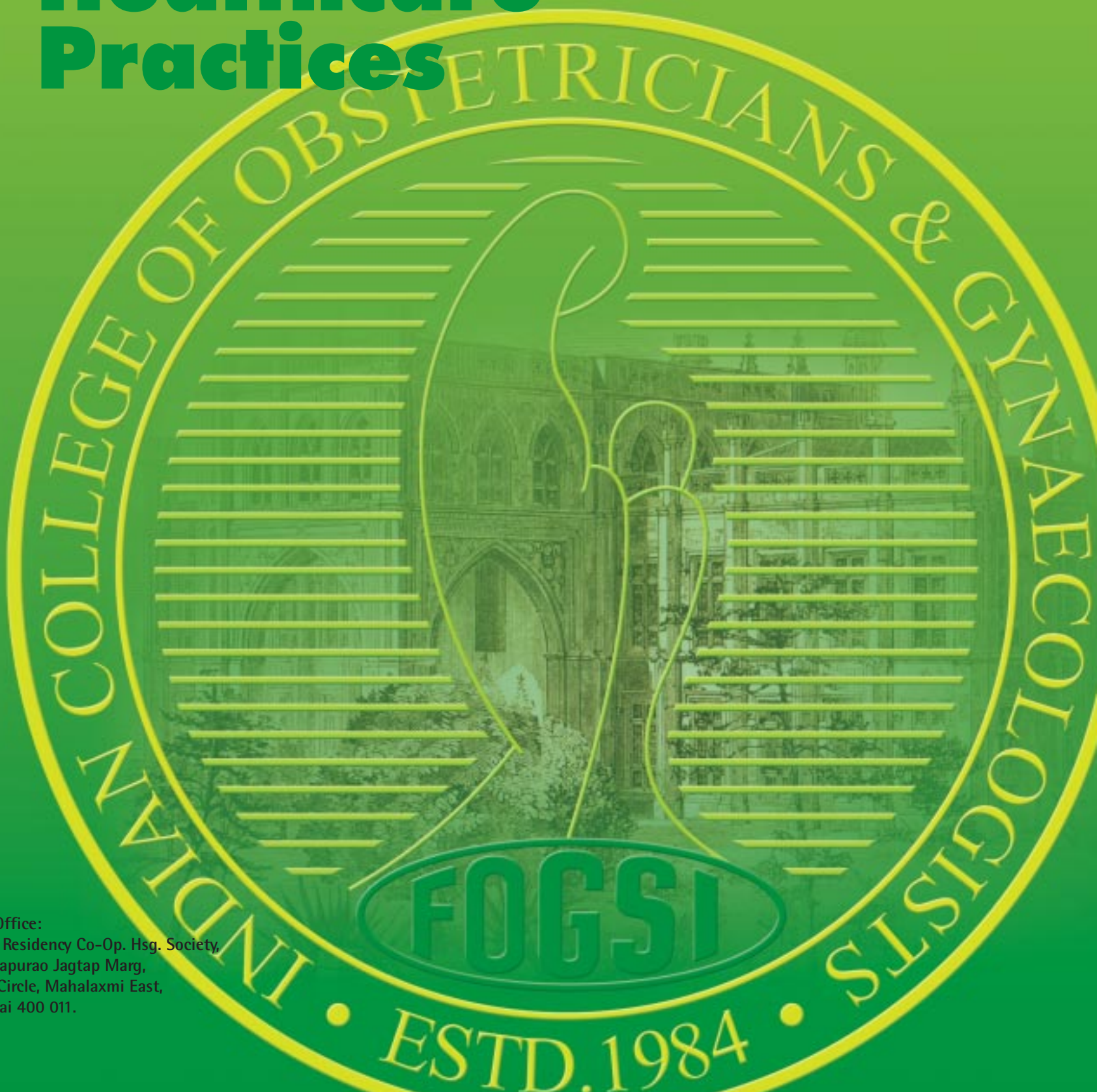


Newsletter of The Indian College of Obstetricians & Gynaecologists

ICOG *campus*

**Advancing Standards
of Education and
Healthcare
Practices**

ICOG Office:
Model Residency Co-Op. Hsg. Society,
605, Bapurao Jagtap Marg,
Jacob Circle, Mahalaxmi East,
Mumbai 400 011.





Secretary General's Message



Dr. P. K. Shah
Secretary General, FOGSI

Dear FOGSIANS,

I take this opportunity to wish you all and your families a happy, healthy, bright, prosperous, fruitful, meaningful New Year.

The quality of the ICOG Campus has been improving since the time of its inception. Congratulations to the editors and office bearers of ICOG. I feel this is the best way our College can showcase the activities carried out. Please go through every page of this ICOG Campus and let us know your response. It is my wish that in future the frequency of publishing ICOG Campus will increase. Happy reading!



Dr. P. K. Shah
Secretary General, FOGSI

Importance of Research



Dr. Mahendra Parikh
Past Chairman, ICOG

Every academic body, in any field of science – physics, chemistry, engineering, botany etc – must encourage and promote research. Good research gets translated in our daily life and improves our quality of life. Medicine also is a science and can't be an exception. Research in clinical medicine is extremely important since it quickly enters our day-to-day and alters and even improves it benefiting our patients. No clinical research can be done without the involvement of clinicians.

ICOG is an academic wing of FOGSI and its Fellows and Members are clinicians. Most of them are neck deep in their private practice. There are many who are holding academic positions in medical colleges and have three-fold duty of treating the sick, teaching the students and conducting meaningful research. In reality the last duty is an utterly neglected area. At present there are 300 medical colleges in India. How much research is being done in medical colleges? The answer is pathetic and depressing. Seventy per cent of research articles published in medical journal in India comes from just 3% of the medical colleges. What are our academicians in other medical colleges doing? This is not the thrust of the present write-up but the question deserves an answer is needs deep thinking.

Coming to FOGSI-ICOG, 3000 of obstetricians and gynecologists are holding important academic positions in medical colleges. It is widely perceived belief that only the academicians in medical colleges can do research. ICOG should come out of this blind alley of thinking. I firmly believe that every clinician who treats patients can do good research whether or not he holds an academic position. Many non-teaching obstetricians and gynecologists have been publishing their research in the best journals in the world since decades. Most of the research

papers in Artificial Reproductive Technology (ART) in India are coming out of ART clinics and not medical colleges. In fact the numbers of medical colleges offering ART services are less than the fingers on one hand. ICOG has about 750 Fellows & Members. Most of them are clinicians. ICOG needs to send to them a strong message that they all capable of and should do good research.

Being the academic wing of FOGSI, ICOG must promote research at all levels, not restricted only to its fellows and but to members of FOGSI irrespective of their holding or not holding any academic position. Merely asking them to do research will produce no results. ICOG identify the road blocks preventing their research and help them overcome them.

Mind-block is their first road-block. A non-teachin clinician feels that he just can't do any research even though he might have done it as a postgraduate student and as a registrar. Why this mind-block? It is merely due to lack of confidence. ICOG should undertake training in Modern Research Methodology as its prime academic activity.

Second obstacle to research is lack of time. This is more of an excuse than a genuine problem. Yes private practitioners are too busy treating patients. Yet they can find time if they want to giving some priority to research. Many very busy practitioners are finding time to do research. It is said that if you want a job to be done entrust it to the busiest person around and he will find time.

Third obstacle is funds. Many research studies don't require huge money. Observational studies need no fortune and can easily be done within the means of a busy practioner. Most importantly funds for good research projects are easily available from many agencies. ICOG-FOGSI can guide and help members access them.

Space doesn't permit going beyond making mention of some of the important additional aspects. In the first place we must follow the fundamental principle of 'catching them young'. Youth is the future of FOGSI. PG Thesis is meant to train future clinicians in the science of doing research. This essential aspect is long forgotten and PG Thesis is fallen to an abysmal depth in many universities – it can't deteriorate any further. Can we at least give a thought to the possibility of salvaging it? Can we begin by instituting a prize for the Best PG Thesis of the year? When I talk about this I am confronted by colleagues with many potential problems. My response is instead of thinking of problems let us start thinking of solutions and the problems will disappear.

Secondly, why ICOG-FOGSI can't create a substantial research fund of its own the interest of which can be granted for research projects by private practioners. FOGSI is capable of generating crores.

Thirdly, we need an Ethics Committee (EC) of our own. Hopefully it will soon come into existence. But it is of utmost important that it is not designed merely togive approval to our members' proposals but is geared to improve the quality of research by our members. Most ECs in medical colleges function as mere formality. A good EC needs good amount of funds and dedicated space to run it. FOGSI can afford both. Only two ECs in India can get WHO approval. Let us design an conduct our EC with WHO criteria from day one.

A fourth requirement is to form a Scientific Committee for Guiding and Approving Research Proposals of our members. Just like the EC this committee also should be loaded with external experts.

Lastly, PICSEP (Program for Inculcating the Culture of Scientific Enquiry and Pursuit) Project has sensitized FOGSI members and good awareness about Modern Research Methodology and Biostatistics over the last 5 years. This is already showing results and it is time to do much more.

Chairman's Message – An Eye on Rural India



Dr. Duru Shah
Chairman ICOG
chairman.icog@gmail.com

In 2006 during my Presidential year at FOGSI when our vibrant Union Health Secretary Mr. Hota asked me "Do you have a standardization of health care facilities amongst your members? Just like hotels have, which vary from 1 star to 5 star which lets you anticipate the kind of services and facilities which would be offered at that hotel?" I thought about it and I said "No, we don't" He asked me that question in responses to the suggestion I gave him on how our FOGSI members could reduce maternal mortality and morbidity. On behalf of all of you, I offered subsidized services of all willing FOGSI members to all "below the poverty line" (BPL) women for maternity services. This led to the sudden realization that FOGSI has no published norms for offering reproductive health services which are standardized for different levels of nursing homes or private health facilities.

That's when FOGSI was challenged and I was asked as President of FOGSI if we could accredit our private health facilities. I immediately said "Yes" but later wondered as to how could we accredit our facilities when we had no accreditation criteria which we could apply to standardize our health facilities?

FOGSI rose to the challenge and we proposed to do it in 2 phases: Firstly to develop the criteria and then once they were approved by the Ministry of Health, we could use the criteriae to accredit the Nursing Homes of our members. I was asked "In how much time can you do it?" Having no idea of what it involved I said "6-8 weeks! All around the table suppressed a smile at my ignorance as to what that meant, But one positive act followed as this project was related to standardization, we carried out the project through ICOG. WHO offered approximately Rs. 40 lakhs to IOCG to set up the Accreditation Criteriae for private health facilities?

ICOG worked very hard, which involved going to 9 states, and 15 cities, conducting meetings with various stake holders such as Government officials, Medical Colleges, Heads of Departments, FOGSI members, both urban and rural based. A lot of travel was involved and I must give credit to Dr. Sanjay Gupte and Dr. Hema Divakar for having supported this initiative as technical experts and sharing my work load with me.

We promised the Ministry that we would complete the document in one year, after realizing the work it involved. And true to our word the Document was ready in February 2008 with work having been initiated in March 2007, by this time my Presidential year was over. It had taken about 9 months to get the proposal ready, raise funds through WHO, identify the Technical Consultant who would implement the program etc. Dr. Pankaj Desai came in as President and he gave his full cooperation to us to carry on with the work.

During this period, the Ministry of Health was also interested in utilizing the services of FOGSI members to upgrade the skills of their Skill Birth Attendants (Nurses) from the public sector. So they requested us to prepare a syllabus, training modules, and the requirements of the private facilities which would offer such training. Many meetings were held at Delhi and a simultaneous Document was prepared for the same which also includes the financial support which would be given to these Institutions by the Ministry of Health towards such training.

The final Draft of the Document was submitted to the Ministry of Health in February 2008, and they had 2 more meetings with us verbally approved it in September 2008. Since then the documents have been in print!

In essence, the Documents gives a detailed amount of what each level of PHF would consist of, what equipment it would need, what services it would offer and what cost would be charged for each operation or service, to the BPL patient. Based on these criteriae, the PHF would be accredited by an inspection team from ICOG, as Level I, II or III. We bargained with the Government for privileges to such accredited facilities. If the PHF was willing to let go its full charges for treating a BPL patient, then that PHF would be entitled to a few privileges. I think we got a good deal from the Government, they agreed upon the following:-

1. To allow the accredited facilities to display the "NRHM" (National Rural Health Mission) Board, giving it the PHF more credibility.
2. To allow these accredited facilities to automatically be accredited for "Tubectomy and "MTP" services. This would be of great value to our members who have had great difficulty in getting these certifications.
3. All the incentives which are applicable to patients going to Government hospitals would be applicable to patients going to these accredited facilities eg. The Janani Surekhsha Yojna, etc.

At present, we are ready to go into the Second Phase of our project ie to start the accreditation process of the health facilities our members.

The Drafts of the detailed Documents are hosted on the ICOG website on www.icogonline.org for members to have a look at if interested.

I think this will truly be a great public private partnership, with the Government of India and private health facilities of FOGSI members. It will be a win-win situation for all the BPL women, who would be happy to deliver in the unaffordable hospitals of expert obstetricians; the FOGSI members who would have a steady flow of patients because the patients would get the best of care for a small price, the Health Ministry because It would be able to take the load off from the public institutions and would still be able to reduce the maternal morbidity and mortality rates in the country.

I do hope you all read this and send me your views, which I will truly appreciate. I wish you all a very happy new year, and look forward to seeing you all at Gauwhati!

I invite you all to attend the ICOG Convocation and cheer our newly inducted members and Fellows in their elegant robes!

Yours,



Duru Shah
Chairman, ICOG

To become a **new Member or Fellow** of ICOG ...please log on to www.icogonline.org for details.
Your feedback will also be appreciated by e mail chairman.icog@gmail.com



Evaluation Method for Credit Points in ICOG

Objective

1. To encourage participation in academic activities.
2. To help create awareness about health related issues in the community.
3. To encourage participation in community welfare programmes.
4. To train for administrative responsibility.
5. To recognize achievement in sports, social upliftment.
6. To encourage members for award of Fellowship. Those with CME involvement / credit points would be a preferred over others for Fellowship of ICOG.

Instructions

1. Kindly circle the valid points and fill the proforma provided below.
2. Please provide proof of all items duly endorsed by appropriate authority.
3. The deadline for submitting the forms for credit points is 15th December.
4. The candidates who receive credit points for the documentation provided should not repeat the same documentation's in their attempt. The data of only previous one year will be considered. (1st January to 31st December).

Proforma

Name: _____ Age: _____

Address: _____

Qualifications: _____ Present Position: _____

CREDIT POINT EVALUATION FORM

Attendance (per day)	Local	State / Zone	National	International
Organizational Position	1	2	3	4
President	3	4	5	10
Vice President	2	3	4	5
Treasurer	1	2	3	5
Jt. Secretary / Secretary	2	3	5	5
Speaker in a Conference				
CME/Workshop	2	3	4	5
(Maximum)	4	6	8	10
Guest Lecture	3	6	9	12
Oration	5	10	15	20
(Maximum)	10	20	30	40
Chairperson				
Of Organizing committee	2	3	4	5
Of Scientific Session	1	2	3	4
(Maximum)	4	6	8	10
(Not applicable to members of such sub / committees)				
Awards				
Scientific Sessions	3	6	9	12
Research Work	5	10	15	20
Publications	2	3	5	10
(Maximum)	4	6	10	20
Research Grants	5	10	15	20
Travelling Fellowship (academic)	-	-	10	15
Correspondence Course attempt	2			
Overall performance Judges evaluation	20 marks total			

ICOG Secretary Speaks...



Dr. Hema Divakar
Hon. Secretary, ICOG
secretaryicog@gmail.com

Dear Friends,

In keeping with the timelines of various activities of ICOG, I realise the importance of executing ideas rather than just articulating. This issue offers more information on how the ICOG is helping our members to keep with the current trends in practice with focus on advancing education and healthcare practices.

ICOG CMEs are meant to update delegates on Evidence Based Practices and improve their clinical skills. Through these CMEs, ICOG would also like to collect Indian Data (which would help us in formulating guidelines) and initiate studies. Two hours called ICOG STUDY HOURS devoted to ICOG session on "Evidence Based Practice- Indian Context" ICOG is pleased to offer a fund of Rs 25,000 for the societies who apply.

The four themes this year are

- Contraception
- Gestational Diabetes Mellitus
- Menopause
- PCOS

A core group has been selected for each topic. 2 members of the Core group who are members of ICOG. Two of the theme core group ICOG members will be sent in as the faculty. Local faculty who are keen to be ICOG members and applied for the same will be encouraged to participate in the CME as faculty. Data on Knowledge /Attitude /Practices will be collected from all delegates on the said themes.

Each ICOG Study Hour Session will have a fixed format as below.

There will be 2 such sessions

1. Lecture – to introduce the subject, and why we feel it is important to discuss.
 2. Introduction to the form and filling up of form
 3. Discussion
 4. Highlighting future study plans
- For eg. – ICOG STUDY HOURS

Evidence Based Medicine – Knowledge, Attitudes and Practices on GDM

Lecture – Screening for GDM	20 minutes
Introduction to the form and filling it up	20 minutes
Discussion	10 minutes
Study on "One Step test"	10 minutes

This will help us know the trends in various parts of the country.

Interested delegates will be invited to participate in the related studies as a part of "FOGSI- ICOG Clinical Research Team" The rest of the ICOG CME could be as per the Local society's decision.

Our valued members, who are a part of one of the largest professional bodies, will now be able to earn CME Credit points. This statement is usually included in the promotional materials and on the activity. So the delegates are to look for the credit designation statement on promotional and activity materials while the organizers should have sent the CME Scientific programme to ICOG office. The concerned committee will allot the points as per standard criteria where one academic hour is equivalent to one credit point and online correspondence course equal to one credit point Advantages – 100 credit points in three years – Member upgraded to Fellow by waiving requirement of publication. **"ICOG YUVA FOGSI QUIZ on CONTRACEPTION"** for which a sponsorship of Rs.10, 000 will be given for conducting a quiz in all the four zonal YUVA FOGSI conferences. We continue to provide encouragement to "YUVA" since this forms an important section of our members. All participants in the quiz (both written and finals) will be invited and sponsored to participate in the ICOG Ethi Skills Course. We are trying to link the winners for "Pan India" connectivity by sponsoring their participation in the YUVA congress in other zones.

Visiting Professorship A similar concept for when Dr. Priti Bala Sahay from Ranchi will be hosted by Vinita Das and team from Lucknow Society.

GCPR Very soon you would find a website which will tempt you for frequent visits and we hope to have the set of next four recommendations for Good Clinical Practice which are under preparation by 4 of our members.

- Subjects- Management of Eclampsia
Caesarean Section
Induction of Labour
Management of HIV Infection in Pregnancy

Once again we remind our readers that the date for application for membership has been extended until 31st December 2009. The next time on, the Membership will be by emerging successful in the MICOG examination.

We hope you would enjoy reading this issue of CAMPUS, and continue to give us your valued feedback and appreciation.

With best wishes

Dr. Hema Divakar
Hon Sec ICOG

The editors welcome comments, questions, article ideas and proposals from our members. Your suggestions can be sent to us as a "letter to Editors". Please send all enquiries and submissions to icogcampusnews@gmail.com

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Dr. Duru Shah
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Taking Emergency Obstetric and Newborn Care to Rural India

A Program of the Federation of Obstetric and Gynaecological Societies of India and Government of India Maternal Mortality in India



Dr. Sadhana Desai
RCH Convenor, FOGSI

The maternal mortality ratio (MMR) in India has remained unacceptably high at approximately 500 deaths per 100,000 maternal deaths per year. For every maternal death, there are 20 women who suffer morbidity. One of the main reasons for these numbers is the lack of high-quality emergency obstetric and newborn care (EmONC) in rural areas. Currently most medical colleges in India prepare specialist physicians as the only providers of EmONC services, catering largely to urban populations. Rural populations, however, are typically served by general medical officers, who tend to have limited skills in managing maternal and newborn complications.

With funding from the Government of India (GOI) and The John D. and Catherine T. MacArthur Foundation as well as Averting Maternal Death and Disability (AMDD) and with technical assistance from JHPIEGO, the Federation of Obstetric and Gynaecological Societies of India (FOGSI) is working to address this need through scale-up of EmONC training for government medical officers in rural areas. This five-year program in partnership with GOI will meet the human resource need for approximately one-third of the 2,000 first referral units (FRUs) that the GOI plans to make operational in 20 states country's high rates of maternal mortality and morbidity.

Designing a Solution

In July 2004, the MacArthur Foundation awarded a two-year grant to FOGSI to demonstrate that task shifting for the provision of EmONC—from specialists to general medical officers in rural India—was effective, feasible and safe. MacArthur funds were used to establish three high-quality EmONC training centres, as well as build the capacity of FOGSI and its collaborating partners to conduct competency-based training in EmONC for general practitioners with technical assistance from JHPIEGO. Two more EmOC centres have been developed from the funds received from AMDD. The 16-week FOGSI EmONC Certification Course developed through this joint effort involved:

- Six weeks of group-based learning at a training center
- 10 weeks of self-directed clinical practicum at a designated training district hospital (practicum sites)
- Assessments conducted throughout the course to ensure consistent progress, competency and, finally, proficiency



- Two visits by trainers to ensure transfer of learning to participants' worksites
- On-site mentoring, supervision and evaluation using a performance improvement methodology (further described under Ensuring Quality, below)
- Certification of participant competency done at participant worksites by the Indian College of Obstetricians and Gynaecologists (ICOG), and licensing for limited authority to practice issued by the State Ministry of Health.

From the outset, the program operated on the principles of cultivating a strong partnership among FOGSI, Jhpiego and other partners, ensuring transfer of skills and technologies from Jhpiego to FOGSI, and developing FOGSI's ability to undertake large-scale public health programs.

Taking the Solution to Scale

Based on the success of the public-private partnership modeled through the FOGSI-Jhpiego EmONC Program, the GOI awarded FOGSI a direct grant to expand its efforts through 2011. This is perhaps the first such grant ever awarded by the GOI to a professional association to accomplish a major public health goal. Through the new, five-year award—and with ongoing technical assistance from Jhpiego, made possible through another MacArthur Foundation grant—FOGSI is spearheading the rapid scale-up of the EmONC Certification Course to further expand access to high-quality EmONC services in rural India. AMDD has also awarded grant for monitoring and evaluation of EmONC programme.

FOGSI- GOI EmONC program goals for 2011 are far-reaching, including the development of no less than:

- Four fully functional EmONC "nodal centers" that are routinely preparing EmONC trainers—These training-of-trainers centers, based at premier public medical school, will also provide ongoing strengthening, support and certification (through ICOG) of training centers and district practicum sites.
- 20 fully functional EmONC training centers based in leading public medical schools in the 20 states with the highest MMR—These centers will expand capacity

to train competent rural EmONC providers by conducting two 16-week courses for a total of 25 participants per year; developing at least five EmONC district practicum sites per training center (for more than 100 total); and maintaining a database of information about training event and service-related and quality data.

- 120 district practicum sites providing closely supervised clinical practica for EmONC skills for trainees—These hospital-based sites will conduct practica for at least eight EmONC candidates per year (two per quarter) and maintain high-quality EmONC service.
- 2,000 fully functional first referral units providing comprehensive 24/7 EmONC services (100 per training center) and documenting coverage and challenges—EmONC services will be provided by staff who have completed training at a training center and practicum at a district site to become competent in EmONC skills.

Progress to date:

Now in Year 4, the program is clearly on fast track and has met its 2011 goals (Exhibit 1). The training system is close to reaching half of the desired capacity, and all 26 centers are offering the certification course now. Total 440 providers are trained. The supervisory system is currently undergoing expansion to "catch up" with the training system, which will also help ensure that the remaining medical officers are certified without delay.

FOGSI has set up 6 nodal centres for master trainers training (2 more nodal centres than target of 4 centres) Currently, there are 26 tertiary EmOC centres in 16 states of India (6 more centres than the target of 20 centres) and 120 district practicum sites.

Toward meeting United Nations indicators for EmONC:

An assessment of impact was conducted six months after trainees returned to their worksites after EmONC training. Data were collected from six FRUs with general medical officers trained through the program and from three FRUs without trained medical officers. The two groups of FRUs were compared in terms of specific United Nations EmONC indicators. The UN indicator on coverage of births is that of at least 15% of total births in catchment area should occur at the FRU. The percentage of birth conducted at FRUs that have trained EmONC provider is 16.4%, compared to 1.7% in areas where the FRUs does not have a trained EmONC provider. Moreover, FRUs with trained medical officers are fully managing 55% of the expected obstetric complications from the catchment

area, compared to 0% from areas where the FRU has no EmONC provider. This includes provision of cesarean section services. These results confirm that women will use these services if they perceive them as being of high quality and safe and that in just six months FRUs with trained providers can provide care for more than half of all complications that arise in child birth.

Ensuring quality:

Task-shifting of the highly complex skills involved in EmONC, from the specialist obstetricians who have traditionally provided these services to general practitioners, raises questions and concerns about safety and quality. Thus, ensuring quality is a major emphasis in the FOGSI - GOI EmONC program—at every level of the system, from the development of human capacity in EmONC (through the training of trainers to the training of providers) to the delivery of EmONC services. To fulfill this need, Jhpiego is assisting FOGSI in the implementation of its Standards-Based Management and Recognition (SBM-R) methodology. SBM-R is the systematic utilization of performance standards as the basis for quality assurance and improvement, as well as for rewarding of compliance with standards through recognition mechanisms (e.g., accreditation, certification, paid attendance at FOGSI national meetings, and preference in selection for postgraduate training). Using this approach, individual providers and trainers can monitor their own individual

performance and the overall quality of services provided, determine gaps between actual performance and standards to be met, and bring about change to address these gaps and improve services. An occasional external assessment then serves to reinforce the performance improvement process and determine the appropriateness of recognition/reward.

Exhibit 2 shows an example of the application of the SBM-R methodology at a first referral unit in Surat, Gujarat. Assessment, a critical component of SBM-R, involves evaluating providers/facilities with regard to the performance standards to be met. In this case, there are about 250 such standards assessed -in antenatal care (ANC), labor and delivery (L&D), postabortion care (PAC), facility infrastructure, and availability of drugs and supplies (D&S). The baseline assessment is an internal self-assessment conducted by the trainee immediately after returning to the worksite. The trainee then implements changes to address gaps identified between actual and desired performance, and conducts repeated self-assessments periodically, usually every one to two months, continuing to implement change as needed. The external assessment is done, on behalf of ICOG, by an external supervisor, who also conducts a comprehensive knowledge and skills evaluation and provides on-site

Every three years, FIGO honours women gynecologists and obstetricians predominantly from the developing world who have contributed significantly to the improvement of health care for women.

Dr. Sadhana Desai has been awarded a distinguished award from FIGO this year - "Recognition of Women ObGyns"

mentoring. This is usually done over two visits within three to six months after the trainee returns to the worksite. Such external support is viewed by trainees as critical in solving problems on site, boosting change efforts and resolving any concerns that have arisen since training. Generally, an external supervisor will recommend official recognition of a site when it achieves 85% of all standards.

Meeting the challenges:

Although the FOGSI-GOI EmONC program demonstrates - somewhat remarkably - that a professional association can take on major public health issues, there have been many challenges to overcome along the way (Exhibit 3).

Conclusion

The partnership catalyzed by the FOGSI and GOI, State Ministries of Health, public medical schools, FOGSI member associations, AMDD, UNICEF and JHPIEGO is poised to have a significant impact on the MMR in India. This partnership model has also demonstrated that the burden of public health interventions can be effectively shared with professional associations and in fact be spearheaded by those that are truly committed.

Exhibit 1. Progress Made in Developing EmONC Human Resources

	Total in preparation	Total needed by 2011
Nodal Centres	6	4
Training Centres	26	20
District Hospital Practicum sites	120	120
General Medical officers trained	440	2000

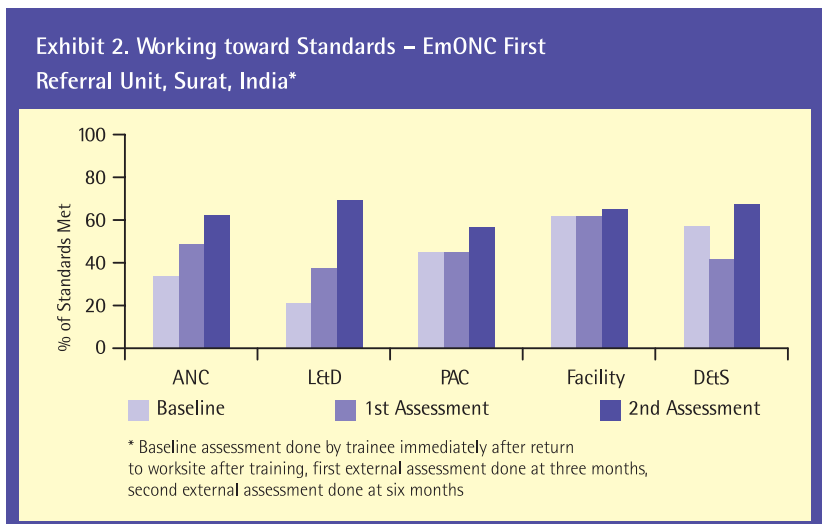


Exhibit 3. Program Implementation Challenges Faced by FOGSI and how to Overcome

CHALLENGES	SOLUTIONS
FOGSI's membership largely made up of individual Practitioners who have limited public health thinking	Through technical assistance from Jhpiego And others, FOGSI now assuming larger Public health goals
FOGSI has limited capability in project management	Some project management functions outsourced to local firm
Busy public sector trainers and participants unable to attend long training courses	Portions of course converted to modified Computer-assisted learning (ModCal) to save time
State Government not used to working with professional associations State Govt. not able to keep pace with progress of programme had less no. of candidates are getting trained & less functioning FRUs are available	Advocacy; sound example set by first state (Gujarat) to partner with FOGSI
ICOG has limited capacity to perform supervision and certification visits	ICOG has delegated these responsibilities to Nodal center and other supervisors who have been trained by Jhpiego for this role

FOGSI-EmOC

Letters to Editor



Dated :19/8/09

Dear Dr. Duru Shah,

Congratulation for this wonderful work with of bringing out the folder of "Clinical Practice Recommendation" and thanks for sending a new certificate of membership. It's very nice.

Thanking you,

Sincerely,

Dr. Pratap Kumar

Professor & Head

Dept. of Obsterics & Gynaecology

Kasturba Hospital, Manipal



Dated :18/8/09

Dear Dr Duru Shah,

I have received ICOG folder of the "Clinical Practice Recommendations and a brand new Certificate of Fellowship of ICOG. Both of these have a classical Duru Shah Touch.

Thank you very much for all the trouble taken to prepare all Recommendations which will definitely improve maternal health of Indian women. For future chapters I would like

to be associated .I have worked as Ex Associate Professor OB/GYN Medical College Gwalior and now I am running my 50 bedded hospital with Endoscopic center.

Dr. Ratna Kaul

Dr. Kaul Hospital & Reasearch Centre, Gwalior



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All ICOG Membership / Fellowship Forms with eligibility criteria and submission dates can be downloaded from the website and will be accepted till December 15th 2009

Announcements

YUVA QUIZ

The Topic of the YUVA Quiz is on Contraception.

Please check www.icogonline.org for details.

All PG's who will attempt the quiz will be invited to participate in the Ethiskills Course.

1. Eligibility Criteria -

- Post graduate students will be eligible for final round, all others can participate.
- Final selected students will have to get a letter from HOD to confirm their PG status.

2. Link to Online Quiz through the ICOG website.

3. Scoring happens automatically through the software (being developed).

4. Winners will be through online marking, a copy of which goes to the backup team. Winners will be personally invited and finals will be held on Satellite School, in Feb/ March 2010.

FOGSI - ICOG - DR. C. L. JHAVERI ENDOWMENT SYMPOSIUM

On "Genital Cancer: Current Evidence"

At the 53rd AICOG at Guwahati, on 20th January 2010

Chairpersons: Dr. Duru Shah, Chairman, ICOG

Dr. Rishma Dhillon Pai, 1st Vice President, FOGSI

Dr. P. K.Shah, Secretary General, FOGSI

Dr. Hema Divakar, Hon.Secretary, ICOG

Subjects

Laparoscopic Management of Female Genital Cancer

Conservative Management

Fertility in Cancer Survivors

Managing Symptoms of Premature Menopause in Cancer Survivors

Preventing Cancer in the Rural Sector

Speakers

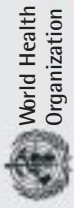
Dr. Parul Kotdawala, Ahmedabad

Dr. K. C. Mitra, Siliguri

Dr. Mandakini Parihar, Mumbai

Dr. Indrani Ganguli, New Delhi

Dr. Manjula Rohatgi, Nagpur



Care Pathways for Postpartum Haemorrhage and Retained Placenta

Observe factors related to bleeding and determine cause

Uterine atony:
uterus soft and relaxed

- Treat for uterine atony**
- Uterine massage
 - Uterotonic drugs
 - Oxytocin
 - Ergometrine
 - Prostaglandins
 - Misoprostal
 - Prestaglanbin F2 alpha

- If bleeding continues**
- Nonsurgical uterine compression
 - bimanual uterine compression
 - Balloon or condom tamponade
 - Tranexamic acid

- If bleeding continues**
- Compression sutures
 - Artery ligation (uterine, hypogastric)
 - Uterine artery embolization

- If bleeding continues**
- Hysterectomy
 - If intraabdominal bleeding occurs after hysterectomy, consider abdominal packing

Placenta not delivered

- Treat for whole retained placenta**
- Oxytocin
 - Controlled cord traction
 - Intraumbilical vein injection (if no bleeding)

- If whole placenta still retained**
- Manual removal with prophylactic antibiotics

Placenta delivered incomplete

- Treat for retained placenta fragments**
- Oxytocin
 - Manual exploration to remove fragments
 - Gentle curettage or aspiration

- If bleeding continues**
- Manage as uterine atony

Lower genital tract trauma
Excessive bleeding or shock contracted uterus

- Treat for lower genital tract trauma**
- Repair of tears
 - Evacuation and repair of haematoma

- If bleeding continues**
- Tranexamic acid

Uterine rupture or dehiscence:
excessive bleeding or shock

- Treat for uterine rupture or dehiscence**
- Laparotomy for primary repair of uterus
 - Hysterectomy if repair fails

- If bleeding continues**
- Tranexamic acid

Uterine inversion:
uterine fundus not felt abdominally or visible in vagina

- Treat for uterine inversion**
- Immediate manual replacement
 - Hydrostatic correction
 - Manual reverse inversion (use general anaesthesia or wait for effect of any uterotonic to wear off)

- If treatment not successful**
- Laparotomy to correct inversion
- If Laparotomy correction not successful**
- Hysterectomy

Clotting disorder:
bleeding in the absence of above conditions

- Treat for clotting disorder**
- Treat as necessary with blood products

Make Initial assessment and start basic treatment

- Call for help
- Assess airway, breathing, and circulation (ABC)
- Provide supplementary oxygen
- Obtain an intravenous line
- Start fluid replacement with intravenous crystalloid fluid
- Monitor blood pressure, pulse and respiration
- Catheterize bladder and monitor urinary output
- Assess need for blood transfusion
- Order laboratory tests:
 - Complete blood count
 - Coagulation screen
 - Blood grouping and cross

Temporizing and transfer interventions

Be ready at all times to transfer to a higher level facility if the patient is not responding to the treatment or a treatment cannot be administered at your facility.

- Start intravenous oxytocin infusion and consider
- Uterine massage
 - bimanual uterine compressions
 - external aortic compression, and
 - balloon or condom tamponade
- Transfer with ongoing intravenous uterotonic infusion. Accompanying attendant should rub the woman's abdomen continuously and if necessary apply mechanical compression.

Drugs and dosages

Oxytocin – treatment of choice

- 20–40 IU in 1 litre of intravenous fluid at 60 drops per minute, and 10 IU intramuscularly
- Continue Oxytocin infusion (20 IU in 1 litre of intravenous fluid at 40 drops per minute) until haemorrhage stops.

Ergometrine – if oxytocin is unavailable or bleeding continues despite oxytocin

- 0.2 mg intramuscularly or intravenously (slowly) or Syntometrine 1ml
 - After 15 minute, repeat ergometrine 0.2 mg intramuscularly
- If required, administer 0.2 mg intramuscularly or intravenously (slowly) every 4 hours
- Do not exceed 1 mg (or five 0.2 mg doses)

Prostaglandins – if oxytocin or ergometrine are unavailable or bleeding continues despite oxytocin and ergometrine

- Misoprostol :
- 200–800 mg sublingually
 - Do not exceed 800 mg
- Prostaglandin F2 alpha:
- 0.25 mg intramuscularly
 - Repeat as needed every 15 minutes
 - 0.25 mg intramuscularly
 - Do not exceed 2 mg (or eight 0.25 mg doses)

Tranexamic acid

- 1g intravenously (taking 1 minute to administer)
- If bleeding continues, repeat 1g after 30 minutes



Abnormal Bleeding Pattern With Hormonal Contraceptives ... An Update



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Abnormal bleeding pattern with contraceptive use is a quite common but rarely dangerous side effect encountered in clinical practice. However it forms a major cause of discontinuation of the contraceptive method resulting in high rates of unplanned pregnancy. It is therefore important to understand the expected pattern, the underlying mechanism and possible solutions to the challenge and thus reduce the discontinuation rates.

The underlying Mechanism

The exact mechanisms of the abnormal bleeding patterns with different contraceptive use is yet to be known but the suggested evidence based causes^{1,8} are listed below:-

- Breakdown of the superficial blood vessels within the endometrium thus reducing the vascular stability
- Local changes in the endometrium in response to the steroids such as suppression of proliferation and inhibition of migration of endothelial cells again leading to vascular instability
- Altered endometrial angiogenesis as evidenced by a change in the endometrial microvascular appearance, through Vascular endothelial growth factor(VEGF) mainly.
- Progesterone suppresses the spiral arteriole development (constriction of which is essential to maintain endometrial hemostasis) resulting in prolonged bleeding from other vessels
- With progesterone implants, the initial release of higher quantities of progesterone leads to frequent bleeding abnormalities which tend to settle over time as steady levels are reached in the blood.

The Expected Pattern

A knowledge about the expected bleeding patterns with the various methods of contraception would enable the gynecologist to counsel her patients prior to the use and thus encourage continued use. Also, it would enable one to identify an abnormality beyond the expected which would warrant further investigations.

The pattern differs with each method.²

Cyclical Oral Combined Contraceptives

The age old method of administering combined oral contraceptives is the cyclic method in which a 21 day of pill intake is followed by a 7 day pill free period. 20 out of 100 users of combined COCs in this way can have irregular bleeding pattern (3-5 episodes of bleeding with intervals of less than 14 days) in the first three months of use, irrespective of the route whether oral/ patch/ring. The cycle control improves with continuous use over few cycles as the exogenous hormones gain a more effective ovarian suppression.

Extended Regimen of Combined Oral Contraceptives

The extended regimen of COCs consists of administration of the pill for longer periods such as 49/84/90/168 days^{3,4}; the rationale behind such regimen being relieving

today's women from monthly bleeding and the associated symptoms of dysmenorrhea and menorrhagia. Numerous clinical trials have shown that continuous OC regimens include amenorrhoea in 80 to 100 women out of 100 women by 10 to 12 months of use⁵. In a study done by Freedolf⁶ et al, the median number of days of scheduled (withdrawal) and unscheduled (breakthrough) bleeding and /or spotting with a 91-day extended regimen oral contraceptive, Seasonique (using low dose Ethinyl estradiol in the typical hormone free interval) reported was similar to that observed with the other OCs in a 28-day conventional cycle.

Progesterone only Pill

10 out of 100 women would experience a frequent bleeding (5 or more bleeding episodes in a cycle while on pills) which might not settle with time as they cause partial suppression of the ovarian activity. Approximately 10-15 out of 100 women become amenorrhoeic and 30-40 out of 100 women have irregular bleeding.⁷

Progesterone -only Injectable

Abnormal bleeding pattern with injectable depot formulations of progesterone are quite common. The abnormalities may be in form of spotting, heavy cycles or prolonged bleeding (one or more bleeding episodes lasting for 14 days or more) with initial and continued use; up to 35 out of 100 women become amenorrhoeic by three months which increases to 70% by one year of use.

Progesterone -only implants (Norplant, Implanon and Nuplant)

With all these currently available devices releasing low doses of progesterone, disruption of bleeding pattern is almost inevitable.⁸ The most frequent abnormalities encountered are irregular bleeding (50%), prolonged bleeding (30%) and amenorrhoea(40%) in the first year of use. The incidence of abnormalities reduce with years of use; prolonged bleeding reduces to 10%and irregular bleeding to 30%. Amenorrhoea is very uncommon after 5 yrs of use. Implanon (releasing etonorgestrel) has shown to induce more amenorrhoea and less frequent bleeding than Norplant (releasing levonorgestrel).⁸

Levonorgestrel Intrauterine system (LNG-IUS)

This device is likely to commonly cause irregular bleeding in the initial months of insertion; Over one year of use menstrual blood loss is reduced by 90% and more than 60% of women tend to be amenorrhoeic.

LNG Subdermal implant

Similar to most hormonal contraception, LNG implants also produce menstrual changes; however the changes do not appear to deviate from normal pattern as much as from DMPA. David H et al⁹ in his study of comparison menstrual changes between LNG subdermal implant and DMPA showed that proportion of women reporting normal menstrual pattern were twice as high with the former and the mean number of bleeding/spotting days remained constant with LNG Implant vs a decrease with DMPA use.

LNG Emergency Contraceptive pills (LNG-ECP)

The effect of LNG-ECP on menstrual pattern depends on when in the cycle the pills are taken. The cycle is significantly shortened if the pill intake is in the first 3 weeks of the cycle; intermenstrual bleeding is uncommon¹⁰

Pathological causes

- Pregnancy-intrauterine and extrauterine due to inappropriate usage, malabsorption , drug interaction or failure of the method itself
- Sexually transmitted infection esp. chlamydia
- Cervical pathology like polyp, erosion, ectopion etc
- Endometrial hyperplasia or cancer

Management

Initial assessment and evaluation

A thorough knowledge about the pattern of expected bleeding patterns with each method will help the prescribing physician to counsel the new user appropriately. This will reduce the unnecessary anxiety and hence the number of complaints. However, management should be individualized depending on the concerns and assessment.

In any woman presenting with an abnormal bleeding pattern while on contraceptive, a thorough history is imperative; the important points to be covered are

- Method of contraception being used
- Dosage and the appropriate usage
- Menstrual pattern prior to the contraceptive use
- History of medications (which might interact and reduce the efficacy)
- History of illness such as diarrhea, vomiting (which may affect adequate absorption)
- Associated symptoms of pain, postcoital bleeding, dyspareunia (which may indicate an underlying pathology)
- Sexual history to rule out a sexually transmitted infection
- Possibility of a pregnancy

If the history does not suggest anything significant, assurance and re counseling about the expected pattern is sufficient in the initial months of usage. A 3 months time is chosen arbitrarily by most clinicians although not strongly evidence based.²

Further evaluation is needed if

- History suggests any pointers such as a possibility of pregnancy, expulsion of intrauterine device etc
- Abnormal bleeding pattern persists over 3 months
- New abnormality in the bleeding pattern appears after 3 months of use.
- Associated symptoms like pain, vaginal discharge, dyspareunia, post coital bleeding which may point to an underlying pathology.
- History suggestive of a risk of endometrial cancer such as heavy bleeding, intermenstrual bleeding, age over 40 yrs, PCO, obesity, diabetes, hypertension.

Further Examination and investigations may include:

- A speculum and bimanual examination to rule out cervical pathology such as polyp, erosion, inflammation and check the threads of Intrauterine device.
- Pregnancy test
- High and low vaginal swabs for evidence of chlamydia
- Pelvic sonography for obvious uterine and adnexal pathology including ectopic
- Hysteroscopy and endometrial biopsy for endometrial pathology such as hyperplasia /cancer.

Modification of the dose and type of contraceptive is considered if

- Patient is very concerned
- Abnormal bleeding pattern persists beyond 3 months
- Bleeding pattern abnormalities fall outside the range of that expected
- Underlying pathology is excluded

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Combined oral contraceptives (conventional and extended regimens)

Higher dose of estrogen. Ethinyl estradiol (EE)at the dose of 30-35µg achieves better cycle control than 20µg EE. A change in progesterone content is not beneficial. Insufficient evidence to consider a biphasic/ triphasic pill for improvement in bleeding pattern[11]No evidence that continuous regimen is advantageous over the cyclic one[12]Addition of 10µg of EE monotherapy during the 'hormone free interval' in a 91 day extended regimen might improve the spotting and breakthrough bleeding pattern

Progesterone-only pills

Assurance about the expected pattern and time frame is most effective.No evidence that changing the POP or increasing the daily dose results in better cycle control



Progesterone-only Implants, Injectables or Intrauterine system

Cochrane trials [13]suggest that addition of a COC (35µg EE plus LNG/NET) either cyclical or continuous might help in the first three months. Mefenemic acid (500mg) twice daily for 5 days in women on DMPA reduces the duration of the bleeding interval. Mefipristone given as a 50mg single dose on day 14 and every 2 weeks for six cycles have reported to significantly reduce the breakthrough bleeding in DMPA users[14]. Adequate information and counseling forms the most important management of bleeding abnormalities in LNG-IUS users; no evidence of pharmacological treatment being as effective.

Humour



By - Dr. Mann Rajpurohit
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Anaemia in Pregnancy – ICOG-CME



Dr. Samir S. Shah
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Anaemia is the decrease in the haemoglobin or red cells for the age and the sex of the person. The WHO defines anaemia for a male below haemoglobin of 13g % and for females 12g % in non pregnant, pre-menopausal women. WHO has accepted 11g % as normal haemoglobin level in pregnancy and therefore haemoglobin level below this should be considered anaemia of pregnancy.

Anaemia is present in very high proportion of women in India. One third of women in the age group 15-49 years may be undernourished and more than 56 % being anaemic in terms of iron deficiency. Maternal malnutrition is likely to increase the risk of maternal mortality (Brabin et al 2001) and the maternal mortality ratio continues to be high in India (Bajpai et al 2004). About 4-16% of maternal mortality is due to anaemia in pregnancy. Anaemia increases maternal morbidity and fetal and neonatal mortality and morbidity significantly. The prevalence of excessively high child malnutrition in India is found to have been associated with maternal malnutrition (Osmani and Bhargava 1998).

Anaemia in pregnancy is present in very high percentage of women. WHO data suggests that the prevalence of anaemia in pregnancy in south east Asia is 56% and in India it may be between 40-80%.

Physiologic Anaemia in Pregnancy:

Expansion of plasma volume is the cause of anaemia of pregnancy. Expanding plasma volume reduces the haematocrit, haemoglobin concentration and the circulating red cell count but does not reduce the absolute amount of haemoglobin or red cell number in the circulation. This physiologic change may serve the purpose of reducing maternal blood viscosity and thereby facilitating improved placental perfusion and better oxygen delivery to the fetus.

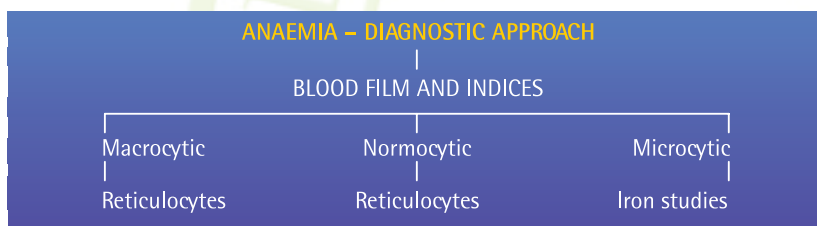
The plasma volume starts to increase by the sixth week of gestation and continues to increase till about 24 weeks. At its peak plasma volume is about 40% higher among pregnant women than in non pregnant women. The reduction in haemoglobin and haematocrit begins by about the seventh week and stabilizes by 16th to 22nd week. It has been suggested that in the first trimester haemoglobin of less than 11g % and less than 10g % in the second and third trimester are lower limits below which one should investigate for the other causes of anaemia (Millman et al). Physiologic anaemia of pregnancy is normochromic and normocytic. Maternal plasma volume decreases during the final week of pregnancy with increase in haemoglobin and the haematocrit and generally returns to its baseline pre-pregnancy level within 1 to 3 weeks after delivery.

Acquired Causes of Anaemia in Pregnancy:

Clinical Presentation:

The women with pregnancy may not have any complaints due to the chronicity of the anaemia. The usual manifestations are fatigue, shortness of breath, leg pains, lack of appetite, irritability, pica, and inability to eat spicy foods. The patient may have symptoms of any systemic illness like arthritis, skin rash, swelling of face, legs, weight loss.

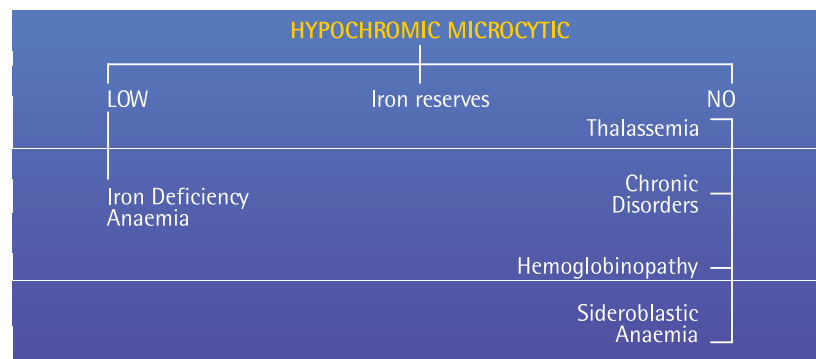
Like in any situation the evaluation of anaemia is based on the understanding of the



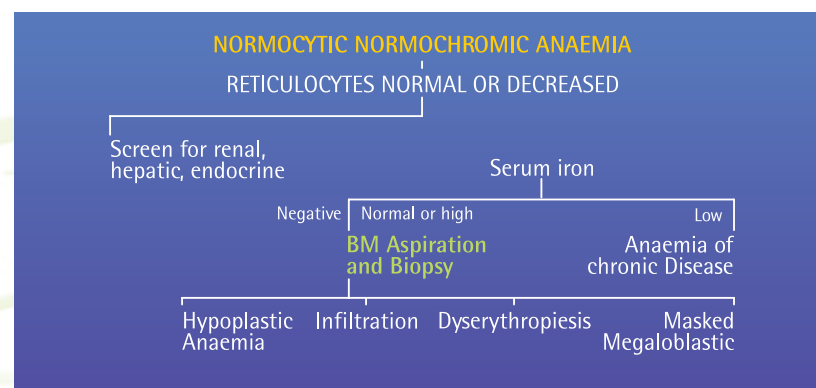
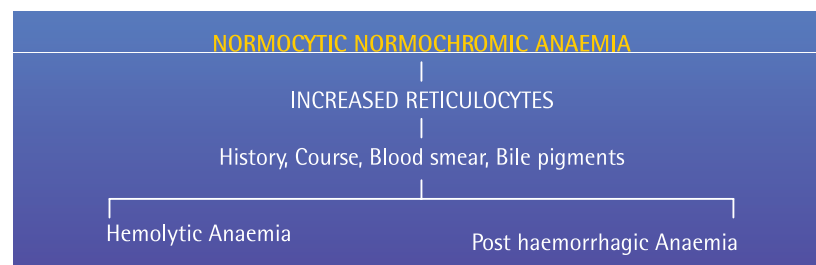
Complete Blood Count (CBC) and the Reticulocyte count and the peripheral smear examination. The CBC gives the most useful information about the red cell indices like MCV, MCH and MCHC which may help in guiding towards the right investigations and the diagnosis. The anaemia is most easily defined based the Mean Corpuscular Volume – MCV as microcytic, normocytic and macrocytic. This with the estimation of the Reticulocytes and the peripheral smear examination will give a clue to the majority of the causes of anaemia.

Following are the algorithms:

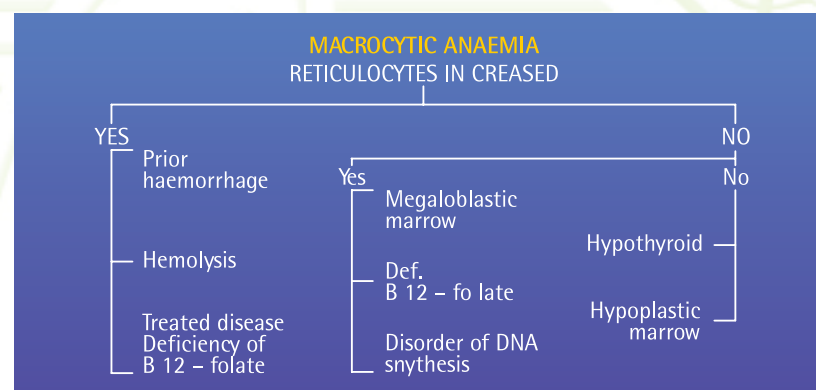
MICROCYTIC Anaemia MCV < 75 fl:



NORMOCYTIC Anaemia MCV 75-95 fl:



MACROCYTIC Anaemia MCV > 95 fl:



Iron Deficiency during Pregnancy

Iron deficiency is common in pregnancy is in fact the most common cause of anaemia in pregnancy. The prevalence depends on the socio-economic status of the patient and also on the obstetric reasons like parity.

In a Cochrane review, it was observed that 20% of fertile women have iron reserves of less than 500 mg, which is minimum required during pregnancy; 40% have iron stores of 100-500 mg and 40% have undetectable iron stores (Millman et al)

The demand for absorbed iron increases from 0.8 mg/day in early pregnancy to 7.5 mg/day in late pregnancy.

The fetus is an effective parasite and the haemoglobin concentration of infants born to the mothers with severe iron deficiency has normal haemoglobin. Their iron stores are unrelated to the maternal iron status.

There is evidence that iron deficiency may increase the risks of premature delivery, low birth weight and infant death. A Venezuelan study did show that iron deficiency increased the odds for premature delivery but this was not borne out in a Cochrane database review of 20 trials. There are also studies, which have shown that the maternal iron status has no effect on the fetal iron supply. O'Brien et al have suggested that maternal iron deficiency in early pregnancy was associated with poor fetal weight but not later in the pregnancy.

The usual criteria for diagnosing iron deficiency are valid in pregnancy as well. The mother with iron deficiency anaemia will have microcytic hypochromic anaemia, low serum iron, raised Iron Binding Capacity, reduced transferrin saturation and serum Ferritin.

Management of Iron Deficiency in Pregnancy: A pregnant woman requires 2-4.8 mg of iron every day for which she has to consume 20-48 mg of dietary iron. Dietary supplements of 78 mg of elemental iron daily during pregnancy increased the haemoglobin. This may be extremely difficult in India due to the dietary patterns and mainly vegetarian diet. Also majority of women are iron deficient before the pregnancy and therefore for our country it may be prudent to replace iron for all pregnant women with the dietary supplements. Oral iron supplementation is easy, cheap and effective. Most iron salts are effective but ferrous sulphate is the least expensive and well absorbed. The U. S. Institute of Medicine recommends that iron supplementation be provided to women with Ferritin of less than 20 ng/dl.

The common adverse effect of oral iron is constipation and dyspepsia, which generally improve over few days. The only reason to use parenteral iron is when it is very difficult to tolerate oral iron. There is a choice of using iron dextran versus iron sucrose for intravenous route. The latter has far fewer side effects especially when used in small frequent doses. The intramuscular route also can be used but it is painful, can cause staining at the site of injection and also may cause abscess.

Sifakis et al have used erythropoietin with Parenteral iron and found that 73% of women had improvement in haemoglobin of less than 3g % in 4 weeks. The erythropoietin injections are costly and rapid rise in haematocrit may increase blood pressure and therefore careful monitoring may be needed.

Failure to respond to iron therapy must prompt further investigation and may suggest incorrect diagnosis, coexisting disease, malabsorption, noncompliance or blood loss (ACOG guidelines; Anaemia in Pregnancy).

Deficiency of Folate and B12:

Macrocytic anaemia of pregnancy is often megaloblastic and in most cases results from folate deficiency. This happens mostly in the third trimester or shortly after delivery. Folic acid has been shown to lower, not eliminate the risk for neural tube defects, and possibly birth defects after started prior to conception. The US Public Health Service recommends 0.4 mg of folic acid ion addition dietary supplements for women of childbearing age and 0.6 mg once pregnant.

The folate requirement increases during pregnancy inadequate to meet the increased need. The prevalence of folate deficiency varies from 1 to 50%. Pregnant women often have no symptoms and are found to have haemoglobin of 6-9 g% during the third trimester or postpartum.

Megaloblastic anaemia I pregnancy presents with macrocytic anaemia and the peripheral smear showing oval macrocytes and hypersegmented neutrophils. The patient may have pancytopenia and also markedly elevated serum LDH. Most of the timed bone marrow examination is not necessary as diagnosis can be established on the basis of the peripheral smear and the assessment of serum folate and B12.

Infants born to mothers with megaloblastic anaemia have no anaemia and no biochemical evidence of folate deficiency. However, this advantage is unable to prevent the infant if the mother is B12 deficient and the sole source of nutrition is mother's milk. Megaloblastic anaemia with irreversible neurologic deficit has been reported in breast fed infants of vegetarian mothers with B12 deficiency.

Haemolytic Anaemias:

Inherited or acquired hemolytic anaemia can be exacerbated during pregnancy. These women may start with lower haemoglobin and therefore will require closer monitoring. They will also require higher dose of folic acid through out and post pregnancy.

In cases of autoimmune hemolytic anaemia, the degree of haemolysis is generally more severe in the mother than in the fetus. The mother may require steroids or immunoglobulins.

In our country one of the most important issue is of thalassaemia syndromes and sickle cell disease. The mothers who are carriers have the potential of having a child with a major disease if the spouse is a carrier and is not screened. Therefore it becomes of paramount importance to be vigilant about the ethnicity of the mother i.e. whether she is from the race with high prevalence of these conditions and also to evaluate the CBC for the hint of thalassaemia and sickle cell anaemia. The thalassaemia carrier generally tolerates the pregnancy well. She needs monitoring of CBC, folate replacement and screening of the spouse. Thalassaemia intermedia women run haemoglobin between 6-8g %. They will need transfusions intermittently to maintain haemoglobin. There may be

a role for erythropoietin in these patients. The sickle cell anaemia carriers have usually uneventful pregnancy. The women with disease may have worsening of painful crises, chest syndromes. These women will need a transfusion programme to maintain haemoglobin of 10g %. Women with large spleens may have a problem of hypersplenism.

A rare entity has been described in which idiopathic hemolytic anaemia occurs during pregnancy, resolves after pregnancy and recurs in subsequent pregnancies. The pathogenesis of this anemia is not known. This condition usually starts during third trimester and resolves within 2 months post delivery. The condition can cause severe anemia requiring repeated transfusions. Steroids and IVIG may help. Neonates born to these mothers also may have haemolysis for 1-2 months and severe jaundice, which may need exchange transfusion.

Microangiopathic Hemolytic Anemia in Pregnancy:

Three major microangiopathies have been described with pregnancy

- HELLP syndrome - H = haemolysis EL = elevated liver enzymes LP = low platelets.
- TTP - Thrombotic Thrombocytopenic Purpura
- HUS postpartum - Hemolytic Uraemic Syndrome

The subset of patients with severe pre-eclampsia/eclampsia with features of haemolysis with fragmented RBCs, low platelets and elevated liver enzymes form the HELLP syndrome. It occurs in 20% of women with severe pre-eclampsia. The presentation is usually between 24-39 weeks. The anemia may not be prominent feature initially. The laboratory tests show elevated ALT and AST and LDH. There will be anemia with reticulocytosis and thrombocytopenia. The peripheral smear shows fragmented red cells called schistocytes. The one consistent abnormality is reduced serum haptoglobin. The treatment is to deliver the fetus at the earliest. The coagulation usually remains unaffected.

TTP generally occurs before 24 weeks of pregnancy. The neurology is the most prominent involvement. The HUS typically occurs postpartum with kidney being most affected. The laboratory results show hemolytic anemia, schistocytes, severe thrombocytopenia, raised LDH. The overall mortality was 44% in a case review. This was reduced to 0% if the plasma therapy was instituted.

Maternal Anaemia Associated with Infections:

Infections with intestinal parasites may produce or exacerbate maternal anemia. Nurdia et al reported that 70% of 442 pregnancies in Indonesia had parasitic infestation with Trichuriasis or Ascariasis. The use of anthelmintics may be useful after the first trimester with the iron supplements.

Malaria can cause maternal and fetal anemia. Maternal malaria was associated with fetal anemia, low birth weight and infant mortality (Steketee et al). Malaria should be treated promptly in pregnancy and there may be an argument to give malarial prophylaxis to the mothers in the endemic zone.

Postpartum Anaemia:

This type of anaemia is more common among low socio-economic class of women. Prenatal anaemia, maternal obesity, multiple births all predicted for the postpartum anemia. Peripartum haemorrhage is also an important factor for this anaemia. Peripartum haemolysis probably secondary to the antibiotics has also been described (Garraty et al). Several studies have studied the efficacy of erythropoietin in this setting. Many studies show efficacy in terms of higher haemoglobin and Reticulocyte response. However randomized, placebo controlled studies are needed to really define the role for erythropoietin.

Summary:

Maternal anemia is a common problem in our country. All pregnant women should be screened for anemia. Iron deficiency remains the most common cause of the maternal anemia. Iron supplementation must be instituted for all such mothers with vitamins to decrease the anemia at the time of delivery. Iron deficiency anemia increases the risk of low birth weight, pre term delivery. Women with anemia other than iron deficiency should be further evaluated. Failure to respond to iron replacement may suggest an incorrect diagnosis and need evaluation. Severe anemia with haemoglobin of less than 6g % has been associated with abnormal fetal oxygenation, fetal cerebral vasodilatation, and fetal death and therefore will need maternal transfusion.

Suggested Reading:

- Wintrobe's Clinical Haematology; 11th Edition
- Anaemia in Pregnancy; American College of Obstetrics and Gynaecology; July 2008
- Dr. Samar K. Basu; Anemia in Pregnancy
- Pregnancy and Sickle Cell Disease; Haem Onc Clin of N Am (2005)
- Sunny Jose; Indian Journal of Gender Studies; 2008





Questions for CME Credit Points

(More than one answer may be correct)

Mail your answers to ICOG office at secretary.icog@gmail.com

MCQ for CME: Anemia in Pregnancy

1. The prevalence of anemia in pregnancy in India is:

- a) Less than 10%
- b) 10-20%
- c) about 30%
- d) 40-80%

2. The plasma volume increases in pregnancy to the extent of:

- a) 40%
- b) 60%
- c) 100%
- d) 1%

3. Microcytic anemia is defined as an MCV of:

- a) <75 fl
- b) 75-95 fl
- c) >95 fl

4. The minimum amount of iron reserves in pregnancy should be:

- a) 100 mg
- b) 200mg
- c) 500 mg
- d) 1000 mg

5. Iron deficiency anemia can result in the following complications except:

- a) Pre term labor
- b) IUFD
- c) Abruptio placenta
- d) CCF

6. Dietary supplements of elemental iron daily during pregnancy which increase the hemoglobin should be:

- a) 10-20 mg
- b) 30 mg
- c) 40-50mg
- d) 60-80 mg

7. Regarding megaloblastic anemia in pregnancy all are true except:

- a) This happens mostly in the third trimester or shortly after delivery
- b) Folic acid has been shown to completely eliminate the risk for neural tube defects
- c) Presents with macrocytic anemia, the peripheral smear showing oval macrocytes and hypersegmented neutrophils, and also markedly elevated serum LDH.
- d) Megaloblastic anemia with irreversible neurologic deficit has been reported in breast fed infants of vegetarian mothers with B12 deficiency.

8. Regarding thalassemia in pregnancy following is false:

- a) The mothers who are carriers have the potential of having a child with a major disease if the spouse is a carrier and is not screened.
- b) The thalassemia carrier generally tolerates the pregnancy poorly.
- c) There may be a role for erythropoietin in these patients.
- d) They need transfusions intermittently to maintain hemoglobin.

9. Regarding HELLP syndrome all are true except:

- a) The presentation is usually in the second half of pregnancy
- b) The lab tests show elevated ALT, AST and LDH.
- c) The peripheral smear shows schistocytes.
- d) The one consistent abnormality is elevated serum haptoglobin.
- e) The treatment is to deliver the fetus at the earliest.

10. Regarding postpartum anemia all are true except:

- a) Is more common among low socio-economic class of women.
- b) Multiple births is a predictor for postpartum anemia.
- c) Peripartum hemorrhage is also an important factor for this anemia.
- d) Peripartum hemolysis probably secondary to the antibiotics has also been described.
- e) Erythropoietin therapy has no role in its management.

Instructions for accumulating Credit Points

Please submit your answers to secretary.icog@gmail.com.

You will be able to determine your percentage mark by referring to the test answers, which will be printed in the following issue of the newsletter. The closing date for submitting your answers for this issue is 10th October 2009. Please note that the maximum number of credits you can claim for this is two. The College will not keep a record of individual performances.

Issue 1 CME MCQ ON HRT Answers:

- 1. c
- 2. b and c
- 3. a
- 4. a,b,c
- 5. c
- 6. b
- 7. b
- 8. c
- 9. d
- 10. a

Errata

The previous issue carried that the maximum number of credits you can claim for the CME was five, which should have been two.

ICOG CMEs



The ICOG Dr. C. S. DAWN CME at Bellary was held on 24th & 25th October 2009 at Vijaynagar Institute of Medical Sciences, Karnataka organized by the Bellary Obst & Gyn Society and Dept of Obst & Gyn VIMS Bellary. Over 200 delegates attended the CME. It included two ICOG Study hours on GDM, HPV Vaccine.



The ICOG CME at Nanded was held on 20th September 2009, organized by Dr. Uday Thanawala and Dr. Kartik Bhagat under the aegis of the Nanded Obst & Gyn Society. Over 60 delegates attended the CME. It included ICOG Study hours on GDM and also had discussions on other topics such as anaemia, thyroid disorders, PIH and prematurity and Cancer Cervix vaccine.

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Current Opinion

PCOS and Syndrome X



International faculty

**Dr. Rina Agarwal - UK
Dr. Riccardo Azziz - USA
Dr. Enrico Carmina - USA
Dr. Anuja Dokkras - USA
Dr. Bart Fauser - Netherlands
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- Sri Lanka**

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Topics to be discussed

- ✧ How does polycystic ovary differ from the normal ovary?
- ✧ Metabolic syndrome and its management in PCOS
- ✧ Causes, types of obesity and its management in PCOS
- ✧ Sleep, apnea and PCOS – The insulin resistance connection
- ✧ Lifestyle treatment of PCOS
- ✧ Familial cardiovascular risk and genes in PCOS
- ✧ Pathogenesis and management of androgen excess in PCOS
- ✧ Special situations in PCOS
 - Adolescence
 - Infertility in PCOS
 - Preventing OHSS
 - Repeated pregnancy losses
- ✧ Endometrial hyperplasia and DUB
- ✧ Role of L-arginine in PCOS

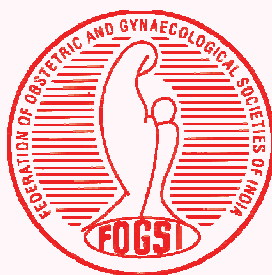
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