

Issue: [Volume 4, Issue 3](#)

President's Letter

Dr Swapna Bhaskar (President, AFPI Karnataka)

Hello Readers!

Wishing you, family and friends a happy, safe and healthy new year 2021! Although covid seems to be playing hide and seek over the past few weeks, medical practice has been going on, accepting the new normals like “socially distanced non touch consults” teleconsultations , webinars etc.

We at AFPI Karnataka have also adapted to these and have started a series of webinars catering to the need of practicing family physicians. The first one on “management of COVID in general practice” was a huge success and we did cover many interesting and need of the hour topics in our journey through 2020. Another milestone achieved by us was the opening of the first of its kind “AFPI family practice centre” which aims at nurturing and supporting upcoming family

physicians through a collective and collaborative approach. The involvement of AFPI Karnataka members in mentoring students for “Fellowship of Family Medicine” conducted by St John’s Medical College has also been well appreciated by their faculty. Please read through the activities done by the organization in the past one year and give your valuable feedback on ways to improve and incorporate methods to further strengthen our fraternity. AFPI strives to keep the ethics and integrity of family practice intact and help in updating knowledge of its members and all general practitioners.

Hope this issue also gives you though provoking read. Kindly put forth your thoughts and suggestions if any to us. Happy reading!

Issue: [Volume 4, Issue 3](#)

Editorial

Akshay S Dinesh (Primary Care Physician)

The year that went by has been one of learning and growth for everyone, including us. As the strengths and weaknesses of our health systems have become more obvious to everyone, there are attempts at all levels to do more for better health of everyone.

Family physicians at all levels have been actively engaging with the public on various related topics. It is our pleasure to serve as a platform for amplifying their voices.

Online First

Going forward, in 2021, we will be following an online first model where every article gets published on the web as soon as they're accepted. We believe this will allow authors to quickly make an impact on issues that matter to them.

Additionally, starting with this issue, we are including multimedia content from AFPI members directly in the newsletter. As the

world has become increasingly digital, this emphasis on digital content will help keep us competent with the content creation and consumption patterns of 2020s.

Together

As vaccines for COVID-19 become available in 2021, there will be concerns related to safety and access. As advocates of our patients we should stand together with them and give them the right information to avoid another misinfodemic. We should also study all information related to these vaccines critically and ensure that the pharmaceutical companies have not let scientific integrity down in a rush to create vaccines. We hope that you contribute to the next issue of the newsletter articles, videos, and similar useful content towards this purpose.

Issue: [Volume 4, Issue 3](#)

AFPI Karnataka Activities - 2020

1. Conducted a webinar on “ Training of family physicians in Practice management during COVID” by invitation from the prestigious Rajiv Gandhi University Of Health Sciences at their campus on 27 th April. Four relevant topics were covered-
 - a. Role of GPs during COVID 19 pandemic and the related infodemic- By Dr Mohan Kubendra, teleconsultation and triaging of patients in a clinic- By Dr Roshni Jhanganguly, Clinic management and well being of GPs during COVID- By Dr Swapna Bhaskar and PPEs for GP and role of GP in community prevention of COVID – By Dr Sowmya Vivek. The webinar was attended by a good number of GPs practicing all over Karnataka who immensely benefitted from it . The coveted university members also gave a very positive feedback of the program.
2. Afpi Karnataka members Dr Swapna Bhaskar and Dr Sowmya Vivek were the panelist and speakers for a webinar conducted by Family Physicians Association of India- Bangalore Chapter on the topic – “ Clinic management and use of PPEs for Family Physicians” – May 10 , 2020.
3. Conducted the first webinar on “Management of COVID patients by family physicians “ on 13 th August 2020 via zoom platform. The webinar was a huge success with participation from all over India.
4. The first year of the AFPI- Karuna Trust family medicine fellowship program culminated with the successful certification of Dr Rajeshwari . She was awarded the certificate at the Karuna Trust Head office at Jayanagar Bangalore in the presence of Dr Sudarshan – the chairman of the trust. The current year has 5 aspirants who have joined the fellowship program .
5. The MOU between AFPI and St Johns’ Academy of Medical Sciences for “FFM- Fellowship in Family medicine” was signed in July 2020. There are 30 applicants for this year and the program has started successfully.
6. The first collaborative family practice clinic was started in the premises of “

Canara Diagnostic Center” in Bangalore. The clinic is named “AFPI Family Medicine Practice Centre” with the tag line – “ The Physician who is like your family” . Two physicians are currently in practice there and we plan to expand such clinics to other centers too . The inauguration of the clinic was done by the vice president of AFPI Dr Mohan Kubendra on August 29 th after a small pooja. Dr Gowri and Dr Suzi are currently the practitioners there catering to patients on all days.



7. RGUHS – meeting with RGUHS senate member Dr Jaikrishna was done in May and the proposal for expanding MD family medicine to other colleges under the university was accepted. The further steps are put on hold temporarily due to the COVID pandemic and we hope to pursue it as early as possible.
8. Due to the pandemic the hands on workshop on PVD has been indefinitely postponed and we plan to do it as early as possible.
9. October 17 2020- webinar on the topic “ palliative care for primary physicians during COVID crisis “ was done via zoom platform . Dr Archana Sampath, Dr Ashoojit, Dr Prathamesh Sawant and Dr Manoj spoke on the latest updates on palliative care, home management and end of life care.
10. Conducted the first of its kind webinar for the public on “child development” to commemorate the child rights and safety week. Dr Gowri Chintalapalli spoke on the subject and the webinar was moderated by Dr Jaya Bajaj. The program was aired live on AFPI Karnataka Facebook page and well appreciated by the participants.
11. FFM training program by St John’s academy has 30 registered candidates this year and AFPI members are actively participating in the conference call programs. The first one on “ common opthal problems in GP” was moderated by Dr Sowmya Vivek in September. The second one on “ common ENT problems

in GP” was moderated by Dr Swapna Bhaskar . the third one on “ common case scenarios in pediatrics” was also moderated by Dr Swapna Bhaskar.

12. A webinar on “ Co-morbidities in COVID and post COVID complications in family practice’ was conducted on 28 November. The session was moderated by Dr Syed Mubarak ; the speakers were Dr Sanjay A S and Dr Srividhya Raghavendra.

13. AFPI Karnataka in association with the Lions Club and AIKYA conducted a free health check and juvenile diabetes detection camp for the residents of the Sri Sai Sneha Samaste Foundation orphanage at Kanakapura road on 6 th December 2020. Dr Mohan Kubendra, Dr Gowri C and Dr Supreetha Mithun participated and gave talks on general well being and good habits to all the residents. AFPI plans to do more such camps after the warm reception and encouragement received by this.



14. A webinar on “Adult vaccination “was conducted on 15 the December through zoom. Dr Swapna Bhaskar spoke on the subject and the session was moderated by Dr Sowmya – head of academic wing AFPI Karnataka.

Issue: [Volume 4, Issue 3](#)

Lessons from Home-Based Care for a Patient with Acute Febrile Illness during the Pandemic

Dr Swathi S Balachandra (Primary Care Physician & Researcher, PCMH Restore Health)

Dr Akshay S Dinesh (Primary Care Physician)

The first author woke up to see a missed call from a friend and colleague one morning in September. A concerned home visit led to an eventful couple of weeks. Between uncertainty of diagnosis and challenges of home based management, in the backdrop of the pandemic, this article discusses some key lessons the authors learnt.

Presentation

27 year old female professional, when seen at her home on the first visit, was on the 4th day of continuous fever associated with chills. Along with generalized body pain and tiredness, she also complained of a pain in the right shoulder. In the wee hours of the day of visit, she had 2 episodes of vomiting (which is what prompted her to call the first author). She had been prescribed Ofloxacin tablets 2 days ago by a doctor in the nearby hospital.

She is affected by Type 1 Diabetes Mellitus from school years and uses continuous subcutaneous insulin infusion which she is comfortable with. She is also on Levothyroxine 50mcg for hypothyroidism.

She had had 2 episodes of UTI in the previous year treated with antibiotics on an out-patient basis, and yet another episode earlier this year treated with IV antibiotics.

On examination she looked stable, yet tired and dehydrated. Pulse rate was 110 bpm, BP - 120/70mmHg, RR - 18 cpm, temperature - 100 F. SPO2 was 98% (checked every day and remained stable) There were no rashes. Her blood sugar monitor read 210 mg/dL.

She had normal breath sounds on auscultation of the chest. Her abdomen was soft and non-tender.

Lifting the right shoulder gave her pain.

At this point, the differentials we made were - Dengue fever, Flu, UTI, Acute Cholecystitis, possibly complicated by diabetic ketoacidosis. We had to have COVID-19 in the list as well.

We let her continue the antibiotic and prescribed Pantoprazole 40mg + Domperidone 10mg OD, Ondansetron 4mg SOS and T. Paracetamol 650mg SOS for symptomatic management. Advised lots of fluids (the first author brought bottled tender coconut water); to eat food as much as possible (even if very little, and bland if it helps); and to do tepid sponging if fever was too high.

CBC, urine routine, Dengue NS1, IgG and IgM tests were asked for and she managed to get the sample drawn at home through a popular laboratory chain.

On the next day (day 5 of fever) she looked better. But she had had high fever spikes in the night (104 F). Although there wasn't any vomiting, appetite hadn't improved.

By noon, some of the test reports had come. Hb was 10.6g%, total WBC count - 14,870 cells/mm³ with 80% neutrophils. Platelet count was 2,64,000/mm³. Ketone bodies and sugar were present in the urine, but there were no pus cells. Blood sugars were in the 250+ range.

Dengue test results were pending.

We were unsure whether the etiology would be bacterial or viral.

There were concerns regarding the need for different antibiotics and the need for hospital admission due to the continuing high grade fever, blood sugar being high, as well as high WBC count.

We asked her to increase her insulin doses to get better sugar control and to keep herself well hydrated.

That evening the dengue report came in negative.

On day 6 the fever continued. She was better in the morning, but was finding the evenings worse with high fever, body aches, tiredness, and occasional vomiting.

On close examination, there was mild tenderness in the right hypochondriac region. With the right shoulder pain continuing, we had to keep acute cholecystitis high on the list of differentials.

Closing in on a week of fever, and with no clear diagnosis, we made phone calls to senior family physicians and an infectious diseases specialist at a teaching hospital. After the discussions, we asked for a USG abdomen and pelvis, LFT, Serum Creatinine, Serum Electrolytes, and a Chest X-ray. But it was a weekend and the tests couldn't be done at home.

On that Saturday night when high fever continued, in view of high total leukocyte count, we started her on Ceftriaxone and Metronidazole for possible acute cholecystitis.

On the morning of day 7 she was feeling better again. The tests were done and were all normal. The ultrasound scan was normal as well. And we were back to "What are we treating?". Our only solace was that her appetite was back and the temperature wasn't as high. We had ruled out the serious conditions.

There was a step ladder pattern to the fever and we revised our diagnosis to possible salmonella typhi or paratyphi infection. We thus stopped Metronidazole and continued Ceftriaxone. Meanwhile also sent for Typhidot IgM and Malaria antigen tests both of which turned out to be negative.

She had fever till day 10 and then became afebrile. We continued Ceftriaxone IV for 5 days and then switched over to Cefixime for 7 days, along with Azithromycin for 7 days. She was doing well at the end of the second week.

Discussion

Through the above diagnostic and therapeutic journey, the authors reflect on the following key elements that go into person centric primary care practice.

Dealing with uncertainties

More often than not in family practice we are unable to pin-point our diagnosis with absolute precision. It is easy to get caught up in a rush to get to the right diagnosis. This often puts a lot of pressure on both the doctor and the patient without much to gain. In such

circumstances one need to ask think about the necessity of an accurate diagnosis in decisions about management. If the management doesn't drastically change with a better diagnosis, it is alright to accept the uncertainty inherent in such situations and focus on alleviating other issues. Sometimes it might require one to over-treat than under-treat in situations where a serious medical condition cannot be ruled out.

At times like these, discussing with patient and their family to keep them informed and also to assure them of not missing a serious condition becomes important. For this patient, the authors tried to follow these principles at each point in the care pathway.

Shared decision making

There are numerous decisions to be made in such a situation many of which might have non-trivial consequences. Decisions like home-based care vs hospital-based care, starting IV antibiotics, investigations including testing for COVID-19.

It becomes important to involve the patient with adequate information to take contextually appropriate measures rather than a one size fits all approach.

Sharing responsibility and risks in this manner helps make patient care the team sport that it is. Not having to shoulder all of the responsibility helps the physician to avoid practising defensive medicine. In the same way, the patient builds a sense of

responsibility and trust that helps the therapeutic process.

Hospital admission vs home care

In the above scenario, due to the pandemic there was fear among both the physicians and the patient and family about the quality of care, cost of care, and the risks that comes with hospitalization.

But caring for a person at home, in the context of an uncertain diagnosis and presence of comorbidities, with management of intravenous medications, can be intensive - not just on the skills, but also emotionally.

Strategies that can help in such situations include:

1. Having a backup team for continuity of care. Here, the clinical and moral support of senior physicians and the willingness of infectious diseases specialist to admit if required gave confidence to the treating physicians.
2. Having periodic conversations about what is worrying for the patient and the physician. Being clear about possible scenarios and having a plan to deal with all of them.

Issue: [Volume 4, Issue 3](#)

Practice Experience

Supervised Smoking

Dr Swapna Bhaskar (President - AFPI Karnataka; HOD - Family medicine, St. Philomena's Hospital)

A 37 year old gentleman with no comorbidities came for asthenia, dyspnoea on exertion and chest heaviness since a few days. He is an athlete and can climb 10-12 flights of stairs without any discomfort, but is unable to do even 2 floors now.

He was tested positive for SARS covid 2 infection in August and repeat RT-PCR was negative.

On personal history – he says he has been smoking SOMETIMES since 8-9 years. “And how many per day?!” was my immediate query.

Smokes for one year and complete abstinence for the next year

Starts with 2-3 per day and keeps increasing slowly to one pack per day.

Takes a glass of orange or musambi juice which protects the lungs from the damage of

smoking!

And stops after one year to cleanse his lung!

His next due date to start is Feb. 9 th 2021, currently is abstinence year.

Has no addiction to smoking according to him, but cannot leave the habit because he LIKES it so much and has a lot of work related stress.

Now how did he come to the above smoking REGIMEN which can save from any damage related to smoking??

The prompt response – “I have discussed and taken advice from a SENIOR SMOKIST who has been smoking for more than 20 years now without any problems to his lungs! I am under his supervision.

Issue: [Volume 4, Issue 3](#)

Moments in Family Medicine

Dr Sowmya Vivek (Consultant Family Medicine Specialist, P. D. Hinduja Sindhi Hospital)

It was a busy day in OPD with an internal CME in hospital. After all the latest updates in surgical site infection and a brainstorming discussion, I came back to OPD to see a few more patients waiting eagerly and, moreover, patiently! My exhausted brain could not refuse reputed company's medical representatives pestering to promote a new cost effective molecule. Four men standing to promote their product while the marketing head looked exhausted. I told "Chief! You look tired. Why don't you sit down?"

On examination, as stated, he looked exhausted, dehydrated. BP was 116/80. He had tachycardia, with a relatively low volume pulse. I could not miss checking sugars first though it took me a couple of minutes to find out my OPD glucometer (as my assistant always disappears soon after my OPD, locking up all OPD gadgets without wasting a second!) I always keep a spare key. But noticing my plight MR said "Doc, don't worry, I am not diabetic. My HbA1C is 5.8 done 1 and ½ months back"

I got my glucometer as MR muttered above and alas! It read "HI" sugars for MR.

In disbelief, he asked his fellow representative to give their glucometer and HbA1C machine which revealed "HI" sugars and HbA1C of 14.3! I also looked at him in disbelief after that glucometer reading.

I had asked MR to raise his shirt sleeve to estimate BP. Now my eyes noticed an IV Line in his hand.

Asked him if he was on any medication and he showed me a prescription of Inj Solumedrol and Tab Wysolone in tapering doses prescribed by a reputed neurologist of a leading corporate hospital for demyelinating optic neuropathy. I asked MR if he was instructed to check his sugars to which he said "No".

I also cross checked his prescription but could not find any follow-up advice.

I suggested admission and evaluation but the anxious rep promised to come back. A small dose of intravenous insulin given with advice to admit in a hospital of his choice under a physician and told him he has DKA as a possibility which needs proper evaluation and management.

The evening and night my mind was disturbed thinking about these medical reps and their plights with no good feeling.

Next day I got a call at 8 am that MR had a lab HbA1C of 14.9 and wanted admission under me from the emergency department. When I saw him in the ICU as the first patient, I reassured him and told him that Inj Solumedrol could be a precipitating factor for DKA but I have to rule out other possibilities. Evaluation after stabilization showed the patient had an associated UTI which had added fuel to fire. All these were corrected and he went home happily but before they left

he came to me and said “Madam I had met all other physicians before coming to your OPD but you saved me.”

A sense of their gratitude boosted my energy to see a few more OPD patients and outside the window there was a caption on auto which said “Praise the lord”. I said to myself “Thank God! Did not miss it!”

Learning points from this case

1. We need to instruct patients on certain warning signs and symptoms when we start the patient on new therapies like Solumedrol, Methotrexate, Romiplostim, etc.
2. A simple check on basal values is a must before starting new therapies.
3. Cannot ignore medical reps also.

Issue: [Volume 4, Issue 3](#)

A Hero's Life

Gowri Vivek (13 year old d/o Dr Sowmya Vivek)

We might have clapped for our brave heroes or our front-line warriors. But how many of us really meant it?

How many people really think about them or about this service that they are doing for us which cannot be paid back? Who do you think is behind the 5.34 million recoveries (as of today-01-07-2020)? Who do you think these people are? even by knowing that this disease is dangerous to their life, they go out of their safe chambers just to do their duty. May it be the police or the housekeeping staff. All these people are our valiant heroes. My parents come into this category of FRONT LINE WARRIORS or the ones i was talking about all this while. This is one of the rare stories or more like a short narrative piece which you wouldn't really hear of. It is about two parents who are both dedicated to their profession- TREATING THE VICTIMS of any problem (in medicinal context)

“Our chief minister has announced that every private hospital cannot refuse a patient with

symptoms of the COVID-19 disease,” yelled my mother just as she entered the house!

I immediately understood the reason behind my mother's shout. It was her concern that this is just going to add more pressure to my mother and also get my family into more danger only because of her (only if she gets it). This panic had continued until the main person who gets all this agitation under control came home. My father. Somehow he convinced all of us to calm down (I do not know how he does that. It is like he has magic in his voice) after this, the day goes like how it used to be before this pandemic happened. Normal, no worries in anybody's voice and the same news over and over again played in the T.V and also, the same Arnab Goswami shouting at others(in the T.V).

This cycle pretty much repeated everyday. Now also...

One day I went up to my parents and asked them why they still work even though they know that it is dangerous. This was their

answer- "I wouldn't have worked if I wouldn't have gotten the gift of seeing many people's happiness"

If we get another assignment from our prime minister to clap or light candles for our heroes, I hope, after reading this small

writing, you will do the assignment in a whole-hearted way so that all our prayers go to our combatants. I hope you will also understand their importance in this world and give them respect.

Issue: [Volume 4, Issue 3](#)

Reflections on a Book: 'A Doctor's Experiment in Bihar' by Dr. Taru Jindal

Dr Vivek Kumar (Primary Care Physician, Basic Health Services)

A small introduction

It is a book about a doctor who had a purpose - to transform maternal and child healthcare in the unserved population of India. After completing her MS in Obstetrics and Gynaecology she decided to work in a district hospital in Bihar and bring transformation there, which she was able to bring after lots of struggle. She then returned to Mumbai and started as an Assistant Professor in a medical college but her restless desire to work in underserved populations propelled her towards Bihar again - now in a remotest area where no sign of good healthcare care was present. There she struggled much more because being a Gynaecologist she was new as a community healthcare provider. With all ups and downs she managed to provide better healthcare to the community. But after 2 yrs she was diagnosed with Langerhans cell Histiocytosis and had to leave Bihar as she cannot attend clinics anymore. She is currently under treatment for it.



A Doctor's Experiments in Bihar

The Story of an Inspiring Struggle to Transform Maternal and Child Healthcare



'[A] scintillating account of [Taru Jindal's] experience and of the highs and lows that come with the challenge of improving a mismanaged medical system. An inspiring book.'—KAVERY NAMBISAN

Dr Taru Jindal

Foreword by **Dr Prakash Amte**



Reflections

1. You can't achieve anything if you stay isolated. You have to work with whoever

- is around you and focus on getting results.
2. Rapport building with your team is necessary to achieve outcomes. It can be achieved by winning their trust, by building a strong personal connection, hanging around with them, knowing all of them by their names, acknowledging them.
 3. Every person has a divine spark with them. It is the circumstances which make people cruel, corrupt, negligent or cynical. If given an enabling environment, everyone would love to be good, do good. Any place, any person, no matter how condemned, could change into something fantastic. Whenever we attempt something with a pure heart and intentions, people will help us. We will be not alone in the quest for change. Circumstances cannot defeat the resilient spirit.
 4. To make things sustainable every individual in a team should take ownership towards making the change. Participation coming from within will last long.
 5. Understand each individual of your team, explore what their issues are, what saps their energies. It will help in gaining momentum by directing their energies towards change you want. Wherever we go, there will always be people who will come forward to aid transformation. We just need to sometimes provide the platform and harness their collective energies towards constructive action.
 6. Making hasty judgments without having looked at the problem in its entirety is regretted. Truth has many facets. Change makers must be open minded and flexible, explore deeply and consider all aspects before reaching conclusions and executing plans.
 7. When you truly want something, the whole universe conspires to make it happen.
 8. Shram-Daan was her one of initial initiative for change at District Hospital, Motihari.
 9. When words don't inspire, work suddenly does.
 10. When providing training, mould training according to the level of trainees in local context and their level of understanding.
 11. Always have appreciation and acknowledgement for a job well done.
 12. As a doctor, I can affect others directly and immediately just by being there with all my skills and all my heart. As doctors, we have lots of respect in people's mind, we have to lead by example.
 13. The way one dies does not matter, what matters is what one did while they lived.
 14. Patient is not just her illness, she is a person with a heart and a mind and in addressing just her sickness, I leave a whole lot untreated.
 15. Words have power. Measure the consequences of words before spoken,

when to speak, what to speak and most importantly how to speak.

16. When the administration took an interest, so much could be done, and so fast. Power if used well, could do wonders.
17. When the existing system changes, some people have to take the heat for it. One can stay and face it bravely if one finds the cause worthwhile, or else quit. If you get scared, they will scare you more. Fear is in the mind, conquer it.
18. Sometimes honest feedback given with due respect works where everything else fails.
19. Change can never be any one person's doing. It requires teamwork. It is not the system which works, it is people who do. It is not the system which fails, it is the people. So, to make the system work, we must focus on influencing people - through improvements of the work environment, emotional and technical support and through appropriate use of authority and rules. We must always attempt change.
20. Leaders welcome feedback, leaders value people, leaders let others lead too. Help in each other's journey.
21. If you want to enjoy in life, go to the best place possible, if you want to create in life, go to the worst place possible (where you are needed).
22. When you want change, people initially may reject. But actually they are not rejecting you, they are just acting in accordance with their beliefs.
23. If we want to stop the dominance of untrained medical practitioners in remote areas, we need to focus on empowering locals with the knowledge and skills required to take care of their own health.
24. Women are indeed the base of society's pyramid, it is from her that a child sprouts. These children grow up to make nations. A woman weak in her physical, emotional and intellectual health means weak children and ultimately a weak human resource.
25. When working in very remote areas, utilize every minute of the patient in your hospital (especially women), counsel her, equip her with all the information and knowledge you can. Because once she goes back, she may only return to a hospital set up with the next pregnancy.
26. If you know "WHY" you are there, why behind your actions, behind your dreams, you will last - no matter what the challenges. If you are not conscious of your own reasons for doing something, within a few years you will lose steam and tire out.
27. Whenever you start something, always remember the intervention must be simple, sustainable, scalable and replicable. Community programmes need to be planned with far-sightedness, with sustainability at the core of it. If we run

initiatives mainly based on people borrowed from outside states or cities, there would always be a threat of them leaving midway and jeopardizing the existence of the programme.

28. There is a huge difference between working with the mind and body of one patient versus working with the mind and body of a community. It asked for a different attitude, more patience and much more creativity.
29. Unless all stakeholders have been involved, consulted and inspired, change will not take off. If by force it does, it will come to a premature halt.
30. There is always a question about young generations and their priorities. That they are getting increasingly disillusioned about the idea of change, self absorbed and disconnected from the society they live in. But it is also true that their choices and dreams get shaped by the messages the adult society around them generates, through advertising and various other ways. It's our collective responsibility to guide our collective consciousness in healthier directions. With the right opportunities and some guidance, young people can become the best catalysts for change.

31. Learn to convert your own feeling of outrage into the critical realm of frontline actions. Learn to go beyond the typical inflammatory, knee-jerk reactions towards the ills of our society and the people who perpetuated it. Learn to let go of the finger pointing and work respectfully with the very ones who I believed had deflated the system's tyre.
32. We must contribute towards society when we are young because in later life we don't have that much energy and are in various tanglement of life. Her TED talk [*At what age should you start the life of contribution?*](#) has wonderful insight .
33. It is easy to light a flame, but harder to keep it glowing.
34. If life takes away one canvas, it gives you another to paint.
35. If you have done your part right then it doesn't matter what life throws at you, it will be easier to sail through it.



Issue: [Volume 4, Issue 3](#)

Case Presentation

PCOD and its varied management – case scenarios in general practice

We are happy to inform you that Spice route Karnataka participated in the monthly “Spice Route classroom” for young Physicians on 28th July 2020 at 9 pm. Around 100 participants joined the session on Microsoft teams which included many from across the globe. The session was moderated by Dr. Swapna Bhaskar, HOD- Family Medicine, St. Philomena's Hospital Bangalore. Dr. Deepthi, Gynecologist from Aster Hospital, Bangalore gave the expert opinion. Dr. Smitha Alice, third year Family Medicine Resident from St. Philomena's did the case presentation. Dr. Jyothika, secretary Spice route Karnataka coordinated the session. Chief Guest, Dr. Kinly from Bhutan gave the introduction and spoke about her journey as a family physician and the current status of family medicine in her country. The session was encouraged with the esteemed presence of senior members of AFPI - Dr. B. C Rao Dr. Mohan Kubendra, Dr Resmi etc and many spice route members from across the globe.

Excerpts from the session:

Two cases focusing mainly on PCOD- one in a young unmarried woman with menorrhagia and the other in a married woman with infertility- were discussed.

Case 1

19-year-old female has come to OPD with complaints of irregular cycles and heavy bleeding for many days since past 1 year. Her age of menarche was 15 years. She had her periods for 15-25 days at an interval of 2-3 months. Her LMP was 20 days back with ongoing flow till date, changing 4- 5 pads per day with passage of clots. No weight gain/ loss in the past few months. No pain abdomen, breathing difficulty, or pedal edema. She has no significant past history of any medical illness.

Family history: Sister has similar complaints.

Personal history: Stressed for degree exams, no exercise, non-vegetarian diet.

On examination she was obese with BMI of 32. There was significant pallor and acanthosis with no signs of hypothyroidism and no hirsutism.

Investigations:

- Hb- 7.4 g/dl
- Peripheral smear: low MCHC
- TSH-2.1
- S. Iron Profile - suggestive of iron deficiency anemia
- USG Abdomen and pelvis showing multiple follicles in both the ovaries, with ovarian volume > 10cc - suggestive of PCOD.

Discussion following this case mainly focused on further workup for this patient, treatment goals, when to refer to the specialist and counseling regarding prognosis.

Further investigations in this patient should include S.Prolactin to rule out hyperprolactinemia.

Others-

- Fasting FSH, LH (Ratio of these usually raised in PCOD due to increase in LH)
- Estrogen on Day 2 of cycles
- Fasting insulin levels
- DHEA
- SHBG

- total and free testosterone will aid in the diagnosis of PCOS, but are not mandatory.

FBS, PPBS, HbA1c and lipid profile will help to rule out metabolic syndrome.

A family history of similar complaints makes other causes of hyperandrogenism like congenital adrenal hyperplasia very unlikely in this patient. Moreover tests related to sex hormones is not advisable if the patient has clinical evidence of hyperandrogenism with abnormal facial hair, acne, central obesity etc. These expensive modalities would be needed only if other differential diagnoses are thought of.

The treatment goals for this patient are –

- a) Immediate – to stop her bleeding and correct anemia
- b) To regularize her cycles and prevent menorrhagia in future

Management of this patient should focus on lifestyle modification which includes weight loss as the priority. She should be given a detailed description on dos and don'ts in diet and a targeted weight loss strategy with periodic motivation to attain it.

The following drugs were discussed as options for her treatment –

1. Tranexemic acid is the drug of choice for the immediate stoppage of bleeding.

2. Progesterone only pills (POPs) - Since PCOS is mainly a hyperestrogenic stage, progesterone only pills (Medroxy progesterone) is the second choice depending on her endometrial thickness. POPs are advised in case of increased endometrial thickness on USG.
3. Combined Oral contraceptive pills (OCP)- can be given for 3 months as a last trial after ruling out the absolute and relative contraindications of OCP like migraine, major thromboembolic states, liver disorders. All treating physicians should be aware of the side effects of OCPs when patient comes for follow up including the dreaded cerebral venous thrombosis. Any headache or symptoms related to raised ICT should prompt an immediate MRI Brain or CT with venogram.
4. Metformin – is useful since she is obese and if fasting insulin is high. This should not replace the importance of weight loss since long term compliance may not be feasible.
5. Antiandrogens like spironolactone – can be started if patient has specific symptoms and signs and should not be used as first line treatment for PCOS.

Long term follow up - RCOG recommends monitoring women with PCOS for metabolic syndrome from the age of 30 regularly with investigations like fbs,ppbs,HbA1c, OGTT, lipid profile, BP monitoring.

Case 2

29-year-old female, married for 4 years, came with her husband to the OPD with complains of pain abdomen during first day of her menstrual cycles. She has been trying to conceive since marriage and extremely worried about not being able to. Her menstrual cycles were irregular. She attained her menarche at 13 years, cycles were 5-6/35-40 days. She gave the history of mild weight gain – about 2 -3 kg in past 6 months. No past history of any significant illness.

Personal history: Eats healthy, regular exercise.

Family history: Father-DM, Mother-Hypothyroid.

There is no history of contraception use so far and they have not taken any treatment for infertility. She wants to discuss her reports with you and take advise on further course of action.

Husband's semen analysis- normal

Her investigations:

- Hb-13.9
- TSH-1.8
- USG Abdomen and pelvis showing multiple follicles in both the ovaries, with ovarian volume > 10cc. Uterus- normal, no myomas seen-suggestive of PCOD
- LH/FSH ratio 3:1

Discussion of this case also dwelled on further workup for this patient, treatment goals, when to refer to the specialist and counseling regarding treatment of infertility. .

Further investigations for her will include prolactin levels, AMH to know her ovarian reserve, HSG to see whether her tubes are patent.

Serial ultrasounds – are useful in this patient to understand her ovulation pattern. USG on Day 2 of menstrual cycle will help to rule out corpus luteal cyst and to know about the endometrial thickness. Further scans- USG from Day 9(for those with shorter cycles) or Day 11(for those with longer cycles) will enlighten on occurrence of spontaneous ovulation or anovulation.

Vitamin D levels- this vitamin deficiency is known to be a causative factor for infertility and hence a fasting level check and correction of deficiency is mandatory for all patients with infertility.

Steps of management-

1. Lifestyle modification - is the mainstay in management of any patient with PCOD with stress on weight loss, healthy diet and regular exercise.
2. Counseling regarding stress free life and timed intercourse should be given by the GP.
3. Folic acid and Vitamin B12 supplements can be added.

4. Ovulation induction drugs like Clomiphene citrate, Letrozole or Tamoxifen can be given if she is not ovulating. Serial ultrasounds and measurement of endometrial thickness will aid in decision making. These drugs can be given up to 3-6 months by the treating GP.

5. Injection HCG 5000 units s/c can be given for follicular rupture once the follicle is 18-20 mm in size. It takes 36 hours for the follicle to rupture once the injection is given and hence timing the dose according to planned intercourse/ IUI is mandatory. When to refer to a specialist – failure to conceive in spite of 3-4 cycles of treatment should prompt the GP to refer to a specialist for further management after counseling the patient and family.

Polycystic ovary syndrome (PCOS) is one of the most common hormonal disorders among women of reproductive age, especially in those presenting with infertility. The exact prevalence of PCOS is not known as the syndrome is not defined precisely, but is highly variable ranging from 2.2% to 26% globally. There are very few studies conducted in India, but some done in South India and Maharashtra showed prevalence of PCOS (by Rotterdam's criteria) as 9.13% and 22.5% (10.7% by Androgen Excess Society criteria) respectively. PCOS was first reported by Stein and Leventhal in 1935, described as symptoms complex with amenorrhea, hirsutism, and enlarged ovaries with multiple

cysts. Polycystic means "many cysts," and PCOS often causes clusters of small, pearl-sized cysts in the ovaries. The cysts are fluid-filled and contain immature eggs. Women with PCOS produce slightly higher amounts of male hormones known as androgens, which contribute to some of the symptoms of the condition.

Clinical features:

Infertility - PCOS is the most common cause of female infertility. Conception may take longer than in other women, or women with PCOS may have fewer children than they had planned. In addition, the rate of miscarriage is also higher in affected women. This being the most common presentation in women anxious to conceive.

Infrequent, absent, and/or irregular menstrual periods- The menstrual irregularities in PCOS usually present after menarche being the most common presentation in adolescent age group.

Besides the above, Hirsutism -increased hair growth on the face, chest, back, thumbs, or toes – Scoring by Ferriman Gallwey score, acne, oily skin, or dandruff, weight gain or obesity, usually with extra weight around the waist, male-pattern baldness or thinning hair,

Skin tags(excess flaps of skin in the armpits or neck area), pelvic pain, anxiety or depression and acanthosis nigricans are seen.

Longterm consequences of PCOS: Metabolic syndrome, Coronary artery disease, Endometrial cancer, Breast cancer, Complications in pregnancy, Depression and anxiety.

The diagnosis of PCOD is constantly changing and currently the criteria requires atleast 2 of the following:

- irregular periods
- Symptoms and signs of hyperandrogenism.
- scans showing you have polycystic ovaries

Treatment of PCOS mainly focuses on lifestyle modification- diet , exercises and weight loss. The choice of drugs is customized based on the need of the patient and most of the drugs are discussed above.

We thank Dr Deepthi for giving us valuable insights during the webinar.

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