

## President's Letter

Hello everyone. Happy New Year!

I take this opportunity to place on records a BIG THANKS to all readers for their support and contribution in 2017. It would not have been possible to accomplish what we have without your excellent support and faith in all our endeavors over the past year.

2017 has been an eventful year to cherish and also to reflect upon. The year started with our members actively participating in the National Conference at Kochi where the state chapter also received an award for the best unit of the academy. I can say with pride that we have created a respectable place for ourselves amongst the practitioners across the state through our high quality academic activities. Collaborative events that we conducted with prestigious institutes like National Tuberculosis Institute (NTI), Manipal hospital, Baptist Hospital and People Tree Hospital are a testimony to the growing reputation of AFPI over the last year. It was great to see Rangadore Memorial Hospital starting the DNB Family Medicine course and hosting an orientation program for all residents from Bangalore. We wish many more institutes will follow suit in promoting Family Medicine as a specialty. Apart from the offline CMEs, we could successfully launch two online events during last year. Our web-based case discussion and the E-Newsletter have generated lot of interest and positive reviews from the fraternity.

While we take pride on our accomplishments, it is also time to reflect on our shortfalls and adopt new strategies to overcome them. We have realized that CMEs alone will not meet the needs of this young specialty. There is a need to popularize the concept of Family Medicine through awareness/outreach activities. In addition to strengthening our academic collaborations we shall be focusing on evolving successful models of Family practice through Family Physician mentorship programs and establishment of a consortium of practitioners. It's important for us to use our time wisely and move forward as decisively as we can in 2018. That will only be possible with your continued support and teamwork. The year ahead will bring its own challenges but I'm sure by working together, keeping focused on our priorities we can realize our ambitions.

Once again, my sincere thanks to the editorial team of this Newsletter for creating this platform of sharing knowledge and ideas. Wishing all the members and their families a very happy and prosperous new year.

Looking forward to your active contribution and valuable feedback as always.

**Col (Dr.) Mohan Kubendra**

## Editorial Note

In this issue one of the residents has highlighted the deficiencies in the training of the residents leading to family medicine DNB.

The main reason why this is happening is because of the fact that most training takes place in the institutional set up and not in community-based set up. As he says, hospitals have their own agenda and generally there is no family medicine qualified supervisor to oversee the training. Willy-nilly, Internal

## AFPI KARNATAKA

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Medicine departments provide most of the training at the cost of other relevant disciplines. Most receive hardly any training in minor OPD procedures in Surgery, Orthopedics, Skin, Obstetrics, Gynecology and Ophthalmology. These disciplines cover important aspect of family medicine and contribute to separating family medicine specialist from that of internal medicine specialist.

Will training under a General practitioner or established practice help? Answer is yes. But then one has to find such practices where comprehensive care as described above is practiced and a practice that has the wherewith all to provide the required training. In case of not being able to identify such practices, it is time that efforts are made to develop such practices by funding DNB graduates.

Alternatively, identify community health centers and place them under the overall supervision of DNBs with the specific purpose of training. The whole orientation of health care delivery should move from institutions to the community based centers, if the dismal picture of health in this country is to change. Dr Swapna Bhaskar has written about one such effort at developing a community health center as an extension of her hospital.

This issue also carries a letter that Dr. B. C. Rao wrote to Dr. K. S. Jacob, Professor of Psychiatry, CMC Vellore in response to his article, 'theorizing medical practice for India' which appeared as editorial in the August issue of National Medical journal of India. This letter too validates the argument.

## **AFPI-NEWS**

### **Summary of AFPI Karnataka events: 2017**

It's an anniversary marking the start of our AFPI Karnataka newsletter. As we look back, we are reminded of a journey with many constructive activities. We thought we would take this opportunity firstly to say a big thank you to all of you. 2017 has been an eventful year for AFPI Karnataka and we could not have done it without you. A big thanks to all of you!

The year began on an excellent note with AFPI Karnataka winning the **Best State Chapter Award** at the FMPC National Conference 2017.

The newsletter was soon introduced to foster communication and academic interaction in a consolidated way. I am glad that it is with all your contributions that we have been successful in bringing out the newsletter with high quality content on a quarterly basis.

In addition to the newsletter, 2017 has also been a remarkable year with many other events and activities. In the first quarter, AFPI Karnataka started with a CME on ENT update in association with Bangalore Baptist Hospital. This CME brought in a change with emphasis on hands on training and practical skills breaking the monotonous theoretical approach. The bonus event in the first quarter was the TB CME in collaboration with National Tuberculosis Institute which attempted at streamlining processes to make TB care more accessible and collaborative.

Real time learning was embarked on our Telegram forum which has elicited a lot of zeal and enthusiasm by the participants. Many important topics were discussed. The sessions were conducted jointly by a family physician moderator and a specialist in that particular topic. It has been well received.

In the second quarter AFPI conducted its 2<sup>nd</sup> CME in collaboration with Manipal hospital on Dermatology. A comprehensive list of topics was chosen from the family medicine perspective with a focus on case discussions.

The third quarter was packed with many events both locally and at the national level. The Mental Health CME at People Tree Hospital was organized in association with the Live Love Laugh Foundation. Soon it was followed by OSCE workshops on the national platform (online) and in Belgaum (USMKLE). The OSCE workshop in Belgaum was organized by the Department of Family Medicine, USMKLE and led by Dr. Geeta Pangî, Dr. Smruti Haval, and Dr. Sunita Bidari. Dr Ramakrishna Prasad represented AFPI Karnataka at the program.

Dr Roshni and Dr Srividya lead the online OSCE workshop on the National AFPI Continuing Professional Development (CPD) Platform.

Another unique program that was well received was the DNB orientation program organized for first year DNB family medicine residents at Rangadore Hospital. Recently graduated family medicine specialists, Dr Shwetha, Dr Krithika, and Dr Deepa took the lead in organizing this program.

Our president Dr Mohan participated in the WONCA Europe conference which took place in Prague.

With your continued support we hope to further strengthen the activities and impact of AFPI Karnataka in 2018 and beyond.

## **Gleanings**

### **New guidelines on blood pressure readings**

A blood pressure (BP) reading of 130/80 mm Hg or higher is the 'new high' in the latest AHA/ACC\* hypertension guidelines, a threshold that is tighter than the JNC 7\*\*cut point of 140/90 mm Hg for stage 1 hypertension in the general population. The change will mean more patients being labelled with hypertension.

“These are pragmatic decisions, the last time we changed the classification was in 1993. We moved the bar down because there’s convincing evidence that at stage 1, you’re already at double the risk for a heart attack or stroke. People should know that and they should be empowered to make a change and there’s evidence from non-drug and drug trials that going down below this level is beneficial,” said writing committee chairman Dr Paul K. Whelton from Tulane University School of Public Health and Tropical Medicine and School of Medicine in New Orleans, Louisiana, US.

The normal BP has not changed at <120 systolic and <80 diastolic. “When you get above that at 120-129 and <80 mm Hg, that’s already elevated BP and a signal that we should be concerned, so we recommend lifestyle changes. A BP of 130–139 systolic or 80–89 diastolic [previously called pre-hypertension], is already stage 1 hypertension in the new guidelines. Lastly, a BP of 140/90 and above is stage 2 hypertension.”

The last comprehensive guideline was by the JNC 7 in 2003. Whelton said the new definition of high BP makes nearly half of the US adult population hypertensive and a target of BP control strategies. “It doesn’t mean they need medication, but at a minimum it’s a yellow light that they need to lower their BP, mainly with non-drug approaches.”

### **How best to measure BP?**

The guidelines emphasize that to categorize BP levels, clinicians should have an accurate BP measurement taken in both arms and to use the arm that gives the higher BP for an average of  $\geq 2$  readings on  $\geq 2$  occasions. Out-of-office BP measurement is likewise recommended.

“What we get in the office is helpful, but it provides a very small window,” said Whelton.

For those with masked hypertension (normal BP in the clinic but high at home), their pattern of risk is similar to sustained hypertension. On the flip side, for those with white coat hypertension (high in office but normal outside), their risk pattern is very similar to the normotensive. “So, it’s important to get out-of-office BP to confirm office hypertension, recognize white coat or masked hypertension, and protect those with masked hypertension,” said Whelton. “These, together with the underlying CV risk, are important in making treatment decisions. Only then do we decide what to do – do we advise lifestyle change or lifestyle change with medication?”

Weight loss, the DASH (Dietary Approaches to Stop Hypertension) diet, sodium reduction (to 1,500 mg/day), and increased physical activity (at least 30 minutes of exercise thrice weekly) are recommended. Correcting the dietary aberrations and excessive alcohol intake are also part of the prevention and management strategies, either alone or in combination with a pharmacological regimen. When clinicians embark on therapy, particularly intensive therapy, it has to be done carefully. Adverse outcomes should be monitored, whether it be symptomatic, hypertension, or electrolyte imbalances. “We should be ready to adapt to the outcomes by changing drugs or modifying the dose,” he added.

### **BP targets in special populations**

For adults with confirmed hypertension and known CVD or 10-year atherosclerotic CVD event risk of 10 percent or higher, a BP target of <130/80 mm Hg is recommended. For those with hypertension but without additional markers of increased CVD risk, a target of <130/80 mm Hg may be reasonable.

“In older adults with high BP, we know from several trials particularly from SPRINT that lowering their BP is very helpful and that you can do it effectively without commonly seeing major problems like hypotension, falls, and fractures. We recommend patients who are 65 or older or those at high cardiovascular risk to receive drug therapy.”

In adults at increased risk of heart failure (HF) and in those with hypertension and CKD, they should be treated to a goal of <130/80 mm Hg. In patients with diabetes and hypertension, antihypertensive treatment should be initiated at a BP of 130/80 or higher, with a treatment goal of <130/80. All first-line agents (i.e. diuretics, ACE inhibitors, ARBs, and CCBs) are effective.

For pregnant hypertensive women, the goal of treatment is the prevention of severe hypertension and to prolong gestation to allow the foetus more time to mature before delivery. Transitioning to methyldopa, nifedipine, and/or labetalol is indicated. ACE inhibitors, ARBs, or direct renin inhibitors are contraindicated because of potential harm to the foetus.

“This is a very rigorous guideline,” said Whelton. “We are more careful in defining hypertension and recommend more intensive treatment of hypertension. The bottom line is if we implement this, it will improve the cardiovascular health of most adults with high BP.”

In an accompanying editorial, Dr Philip Greenland from the Northwestern University’s Feinberg School of Medicine in Chicago, Illinois, US said a huge challenge for clinicians is how to translate these guidelines into clinical practice. Only half of patients classified as hypertensive under the previous guidelines had their BP controlled, and the proportion at the new goals will be even lower. This ups the pressure on clinicians to more effectively treat BP. [JAMA 2017;doi:10.1001/jama.2017.18605]

\*AHA/ACC: American Heart Association/American College of Cardiology

\*\*JNC 7: Joint National Committee 7th Report

## **Should we as family physicians follow the above guidelines? An alternate view**

### **TOO MUCH MEDICINE: Mild hypertension in people at low risk**

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**Clinical context**—Up to 40% of adults worldwide have hypertension, complications of which may account for up to 9.4 million deaths annually from cardiovascular disease.

**Diagnostic change**—Recommendations for drug treatment have decreased from diastolic pressure of >115 mm Hg to ≥140/90 mm Hg. A new category, prehypertension (120/80-139/89 mm Hg), has also been introduced.

**Rationale for change**—Patients with even mildly raised blood pressure may have increased cardiovascular risk.

**Leap of faith**—Lowering threshold blood pressures will lead to increased diagnosis and treatment, which will decrease mortality.

**Impact on prevalence**—22% of adults worldwide have mild hypertension (systolic pressure 140-159 mm Hg) and 13.5% have a systolic pressure ≥160 mm Hg.

**Evidence of overdiagnosis**—Use of a uniform threshold (140 mm Hg) to mark hypertension risk ignores evidence that risk varies by individual and includes many people who will not benefit from drug treatment.

**Harms from overdiagnosis**—Studies suggest over half of people with mild hypertension are treated with drugs even though this approach has not been proved to decrease mortality or morbidity. Overemphasis on drug treatment risks adverse effects, such as increased risk of falls, and misses opportunities to modify individual lifestyle choices and tackle lifestyle factors at a public health level.

**Limitations of evidence** — Lack of randomised trials that use hard outcomes and compare drugs with lifestyle interventions and placebo in patients with mild hypertension.

**Conclusion**—**Lowering definitions of hypertension has led to identification and drug treatment of larger populations of patients despite lack of evidence that drugs reduce morbidity or mortality.**

In this connection, you may consider reading the following Cochrane evidence review on this question.

<http://www.cochrane.org/podcasts/10.1002/14651858.CD006742.pub2> (PODCAST)

<https://pdfs.semanticscholar.org/e11f/b277ca5d2cf730ca80b34a0ab9f107898ce2.pdf> (PDF)

Bleeding symptoms	Bleeding disorder	
	Platelet defects (qualitative or quantitative)	Clotting factor deficiencies (eg, factor VIII or factor IX deficiencies)
<b>Overview of bleeding events</b>	<b>Mucocutaneous bleeding (oral cavity, nasal, gastrointestinal, and genitourinary sites)</b>	<b>Deep tissue bleeding (including joints and muscles)</b>
Excessive bleeding after minor cuts	Yes	Not usually
Petechiae	Common	Uncommon
Ecchymoses	Generally small and superficial; may be significant, depending upon the defect or degree of thrombocytopenia	May develop large subcutaneous and soft tissue hematomas
Hemarthroses, muscle hematomas	Uncommon	Common in severe deficiency states or in association with injury in those with mild to moderate deficiency states
Bleeding with invasive procedures, including surgery	Often immediate, with degree of bleeding dependent upon the severity of the defect, ranging from none (eg, mild degrees of thrombocytopenia or mild platelet function defect) to mild to severe (eg, Glanzmann thrombasthenia)	May be associated either with procedural bleeding or delayed bleeding, depending upon the type and severity of the defect

## NSAIDs and the risk of myocardial infarction

A meta-analysis using individual patient data from a cohort of 446763 individuals, including 61460 with acute MI, assessed the risk of MI with the use of different nonsteroidal anti-inflammatory drugs. Taking NSAIDs in any dose even for a week was found to have the risk of having an MI. Using an NSAID for one to seven days increased the risk of having an MI by 24% for celecoxib, 48% for ibuprofen, 50% for diclofenac, 53% for naproxen and 58% for rofecoxib. The risk was greater with higher doses; risk remained the same for use beyond one month as for shorter durations. These data are surprising considering the fact that naproxen has always been considered to be a cardiac friendly NSAID, with some studies finding that it lowered the risk of cardiovascular disease (BMJ2017;357:j1909)

## HEART helps in triaging patients with chest pain

Researchers in the Netherlands assessed the effect of using the HEART (History, ECG, Age, Risk factors and initial Troponin) score for triaging patients with chest pain presenting to the

emergency department. A total of 3648 patients were included. 1827 were randomly assigned to receive usual care and 1821 were managed based on HEART score at presentation. Those with a score of <3 were discharged: those with scores of 4-6 were admitted for observation and those with scores of 7-10 were taken for invasive management. The incidence of major cardiovascular events at 6 weeks was similar in the two groups (2% to 3%) and there was no difference in readmission or recurrent emergency department visits.

From a healthcare system cost perspective, use of the HEART scoring is a safe and effective method for systematic triaging and could result in savings of 40 million euros annually in the Netherlands alone (Annals Internal Medicine 2017;166:689-97)

## Real time learning

### Approach to bleeding disorders with special emphasis on Immune thrombocytopenic purpura (ITP)

A 28-year-old lady presented with bruises on skin for the past 1 day. Initially seen on hands and then gradually spread to the abdomen. History of mild pain on some of the bruises. No history of injury/trauma/fever/joint swelling/pain or gum bleeding. No active bleeding from other sites. No history of similar episodes in the past.

Menstrual cycles – Normal; No Aspirin, oral contraceptive use; Habits –Occasional use of alcohol; Recently married

**Question: How can we differentiate between platelet defects and coagulation defects based on history?**

## **On Examination:**

Scared look  
BP – 120/70mmHg  
Pulse – 88/min  
No Pallor / LNs; Ecchymotic patches all over the body  
Systemically – No abnormality detected

When examining one should look for palpable lymph nodes and enlargement of organs such as spleen and liver. No nodes or organomegaly the condition is likely to be ITP. Palpable nodes with organomegaly it is likely to be serious hematological disorders like lymphoma and leukemias

ITP [Immunogenic Thrombocytopenic Purpura] is essentially a diagnosis of exclusion that is made in patients with isolated thrombocytopenia. evaluation to exclude other possible causes of thrombocytopenia, and identifying conditions that may be responsible for secondary ITP.

There is no single test to confirm the diagnosis of ITP

## **Diagnostic evaluation of ITP**

CBC, Peripheral blood smear  
HIV HBsAG HCV testing  
Additional testing in selected patients  
Coagulation studies  
DAT/IAT  
Helicobacter pylori testing  
Thyroid function testing  
Bone marrow examination  
Rheumatologic studies  
Vitamin B12 and folate levels

**Marrow Studies are not done to diagnose ITP, rather done to rule out more sinister Marrow disorders as described later.**

**DAT (Direct Antiglobulin Test) is done for Evan's Syndrome (ITP+AIHA [Auto Immune Hemolytic Anemia]) usually seen with SLE.**

## **Reports:**

Platelets: 4000/mm<sup>3</sup>  
Rest of the results. Normal  
Urgent referral done for hematology opinion.

## **In hospital:**

Repeat Hemogram showed a platelet count of 2000, hepatitis profile negative.  
USG was Normal, vitamin B12 120 pg ; bone marrow biopsy revealed Megakaryocytic Thrombocytopenia.

**Vitamin B12 deficiency is one of the confounding factors!**



## **Treatment:**

Transfusion not necessary unless there is active bleeding. [even with this low platelet count].

The antibodies destroying patients own platelets would do the same with transfused platelets. We would still transfuse in life threatening situations to buy that little extra time.

1<sup>st</sup> line agents. Steroids, IV Immunoglobulin and Anti D

1. Prednisolone 1-2mg/kg or Dexamethasone 40mg once a day for 4 days (IV better than Oral)
2. Ensure enough antacids, calcium , vitamin D supplementation.
3. Dapsone or Septran prophylaxis to prevent Pneumocystis Carinii infection
4. Dapsone is preferred to Septran as Dapsone has independent activity in ITP, but one needs to check G6PD deficiency before starting! However, Dapsone is not a first line drug and takes several weeks to raise the platelet count in ITP.
5. Other agents used are Azathioprine, Eltrombopag, Rituximab (Anti CD20 monoclonal Antibody), Mycophenolate. Use of second line agents would depend on comorbidities and affordability.
6. Rituximab dosage is 375mg/m<sup>2</sup> once a week for 4 doses. The effect takes 20-40 days post 4<sup>th</sup> cycle to raise platelet count [60-70% respond to Rituximab]

The aim of treating ITP is to raise the platelet count to safety above 30000-40000/mm<sup>3</sup> and not cure it. In adults 70-80% will have chronic relapsing ITP.

The only treatments known to put patients in long term remission are Rituximab and Splenectomy. However, Splenectomy cannot be done in the first 3-6 months of diagnosis as the disease may go into spontaneous remission. Try to avoid splenectomy in children less than 6 years of age. Vaccinate patients 2 weeks prior to splenectomy (Pneumococcal, H Influenza B, Meningococcal and Infuenza Vaccines). Inform patients about Post splenectomy sepsis. Oral Penicillin (Pentid 400 BD) prophylaxis is required for 5 years post splenectomy.

Assessment of treatment response: With platelet count. Initially 1-2 times in a week for severe thrombocytopenia and then once counts rise to >30000/mm<sup>3</sup> then on an outpatient basis. Avoid antiplatelet medications and anticoagulation, if platelet count is less than 50000/mm<sup>3</sup>. Unless there are exceptional circumstances like acute cortical vein thrombosis, IHD, stroke and Aplas [antiphospholipid antibody] Syndrome.

## **ITP in Pregnancy:**

Can happen in any trimester. Therapy (Glucocorticoid/IV Ig) indicated only if platelet count goes below 20000-30000 or if patient is required at higher count for an invasive procedure. Splenectomy should be avoided if possible.

For Dental procedure: At 50000 to 75000/mm<sup>3</sup> one can give a clearance for dental procedure.

## **Conclusion:**

In this brief discussion while broadly discussing bleeding disorders, we have tried to give an overview of Immune Thrombocytopenic Purpura, and how platelet disorders differ from coagulation disorders, how and when to treat, when to refer and aspects of management, as patients with ITP needs to be watched even when in remission.

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## Case Report

### Drug induced hyperglycaemia with Isoniazid Preventive therapy

Introduction: India has the largest burden of tuberculosis, 2<sup>nd</sup> largest burden of diabetes and 3<sup>rd</sup> largest HIV burden in the world. To find patients with the presence of all three is not an uncommon occurrence globally. Isoniazid (INH) is a highly specific bactericidal drug used against tuberculosis.

Since 2016, the National AIDS Control Organisation (NACO), India, recommends “All asymptomatic HIV patients and those, in whom active TB is ruled out, should be offered Isoniazid Preventive Therapy (IPT) for six months.”.

While clinicians maintain a high index of suspicion for INH induced hepatitis and peripheral neuropathy, most of them are unaware of INH induced hyperglycaemia. Here we present a case report of worsening glycaemic control following the initiation of IPT in a 48-year-old HIV positive woman with previously well controlled type 2 diabetes mellitus.

Case report:

A 48-year-old HIV positive woman with previously well controlled type 2 diabetes mellitus presented on 5<sup>th</sup> May 2017 to her family physician with high blood glucose levels (fasting blood sugars(FBS) of 173mg/dl and HbA1c of 9.6%) and elevated liver enzymes (direct and indirect bilirubin, ALT, AST and GGTP were raised and were 287U/L, 337U/L and 726U/L respectively).

She was diagnosed with type 2 diabetes mellitus 4 years back. Prior to this visit her blood sugars were well controlled (previous reports on 3<sup>rd</sup> February 2017: FBS: 111mg/dl, HbA1c: 5.7%; 7<sup>th</sup> July 2016: FBS: 100mg/dl, HbA1c: 6%). She was on Metformin sustained release 500mg BD and Atorvastatin 10mg daily.

The patient also stated that she was started on INH prophylaxis therapy (IPT) on 5<sup>th</sup> February 2017 with dose of 300mg and for a planned duration of 6 months of which she had completed 3 months. She was given pyridoxine 40mg daily to prevent INH induced peripheral neuritis, a well-known side effect. Additionally, Fenofibrate was started for high blood triglyceride levels on 28<sup>th</sup> January 2017.

The patient gives no history of other changes in her medication, no gross change in weight, no significant change in her diet, or fever. The patient claims to be compliant with her medication. There was no history of any other comorbidities such as hypertension, tuberculosis, obesity, coronary heart disease, stroke, previous surgeries or recent trauma. No history of substance abuse.

She was diagnosed with HIV-1 infection 7 years back after her husband tested positive. Her initial CD4 count was 377/mm<sup>3</sup> (20<sup>th</sup> September 2010) and was started on antiretroviral therapy (Lamivudine 150mg, Nevirapine 200mg, Zidovudine 300mg) on 17<sup>th</sup> May 2011 after her CD4 count had dropped to 264/mm<sup>3</sup>. She has been compliant with her ART. She has been responsive to treatment with her latest CD4 count of 504/mm<sup>3</sup> (16 December 2016).

On examination, she was moderately built and nourished. Her BMI was 23.45 kg/m<sup>2</sup>. Her vitals were within normal limits. No icterus was noted. Systemic examination was unremarkable.

Impression: The sudden worsening of her glycaemic control was a puzzle to her physician and was causing distress to the patient. Taking into account that the only recent significant change was the initiation of INH, we looked at the possibility of this being a result of drug induced hyperglycaemia. Our literature review showed one other documented case of hyperglycaemia caused by INH, hyperglycaemia was also known as an uncommon side effect.

The hypothesis that hyperglycaemia was caused by INH, we stopped INH and found that after six weeks of stoppings her FBS was 140mg/dl and AST 40U/L. 3 months after treatment was stopped her HbA1c was 6.2%. This supported our hypothesis.

Discussion: This is among the very few cases that document the occurrence of hyperglycaemia with IPT. Literature review using the keywords “Isoniazid prophylaxis therapy and hyperglycaemia” showed no results. Broadening the search to “Isoniazid and hyperglycaemia” showed 11 results. Based on FDA reports between 2005 and 2017 there have been 10,749 patients that experienced side effects with isoniazid of these only 41 (0.38%) reported hyperglycaemia. It should be noted that that the proportion of people receiving INH who were also tested for hyperglycaemia is unknown. The true incidence of hyperglycaemia with INH might be under recognised and under reported.

INH impairs glucose metabolism in several ways. While it is known that INH antagonises the effect of sulphonylureas and worsens the glycaemic control of diabetics. The effect of INH on biguanides is not well documented. INH also impairs the

release and action of insulin leading to hyperglycaemia even in non-diabetics. In a case of sudden deterioration of diabetic control, drug induced hyperglycaemia should be ruled out.

Diabetics have a threefold increase risk of tuberculosis. IPT reduces the risk of tuberculosis in HIV positive patients by 30-35%.

The occurrence of hyperglycaemia in a patient receiving INH poses a clinical dilemma. The treating clinician must weigh the risks and benefits of continuing INH especially in situations where it used for prophylaxis. The optimal approach should depend on clinical judgement and patient preference.

In purview of the benefit of IPT to HIV patients and even more so for HIV patients with diabetes, we recommend the use of newer insulin analogues (in view of their predictable action) to control hyperglycaemia in patients on IPT, who do not present with elevated liver enzymes.

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## **Practice Experience – 1**

### **Tale of a ‘heart-sink’ patient**

One of the charms of practicing family medicine is the slight shiver of uncertainty before the door opens for each patient. Even the most familiar ‘friend’ could turn out to have a new illness.

She is a neighbor who has recently moved to our area and I routinely exchange pleasantries during morning walks. She generally seemed unhappy with her life, haunted by aches and pains and I found her disrespectful of doctor community. Fed up of doctor shopping, she has reconciled to the fact that she has to live with her medical problems. Her husband has not been able to convince her for a cardiac evaluation as suggested by a doctor in their home town. She would not heed my advice to her coming with her records to my clinic and see if I could be of any help.

It was therefore, a pleasant surprise to find her one morning opening the door of my clinic with a sheepish smile on her face. Sitting on the chair she said “You are the last doctor I will see” and placed her old records which were stuffed into two bulky envelopes. By now I was mentally prepared to lend a patient ear to her story of many consultations with doctors over the years in that small town where she had lived all these years.

Started reading the crumpled papers- symptoms such as backache, headache, dizziness, weakness, dry cough filled the pages with no clear diagnosis emerging, apart from vague labels such as ‘neurasthenia’, ‘fibromyalgia’ and ‘psychosomatic’. To my surprise I did not find tests other hemogram done couple of times.

Meeting her for the first time as a patient, I found her slightly vague, gave a rambling history of indigestion, aches and pains, constipation, swollen legs, and so on. I started to feel the pulse. It was regular, but a surprising 48 beats/minute. Her blood pressure was 140/94 mmHg, her skin felt cool and dry, she had bilateral indurate leg edema, with some reddening of the skin.

She had no goiter, her tendon reflexes were difficult to assess. I thought of getting her evaluated afresh. She came with the results. Her complete blood count, blood glucose, renal and liver function tests were normal with a slightly deranged lipid profile.

Her thyroid function test showed a high thyroid-stimulating hormone (TSH) level and a very low free thyroxine, a clear case of primary hypothyroidism. The laboratory reports on her Anti TPO antibodies also came positive. An electrocardiogram (ECG) showed low-voltage bradycardia. She was initiated on treatment with 25 mcg of levothyroxine daily with a step-wise increase to 100 mcg. The transformation was remarkable. In two months, she became alert and active, with bright eyes; she lost 2 kg in weight and smartened her hairstyle and her clothing. She still has problems, but she is no longer a ‘heart-sink’ and her poor impression of doctors has changed for good.

When facing a 'heart-sink' patient with a familiar repetitive recital, one should listen to the tale with a fresh ear and an unbiased mind. You may yet discover something new.

Col (Dr) Mohan Kubendra

## **Practice Experience 2**

### **A very good patient with very bad sugars!**

This elderly gentleman was a regular patient of one of the leading endocrinologists of the city on a moderate dose of an expensive insulin plus multiple OADs. Despite this, sugars were under poor control since some months. He was a well placed retired bank manager with a compliant diet and lifestyle strictly in accordance with the orders of his endocrinologist. He had a graceful wife and 3 children, one of whom had recently expired following a stroke. He was heartbroken, and was taking medications irregularly for the past few weeks and wasn't in a state of mind to travel and wait to meet with his doctor in the crowded corporate hospital. He therefore came to my clinic as it was close to his home.

Assuming his stressful state to be the cause of his uncontrolled sugars, I gave him moral support and increased his dose of insulin and advised him to be regular with his medications and sent him home, hoping to see better results when he came next. When he came next, again it was with persistent high sugars. I went on increasing his insulin and checked his sugar levels meticulously every time, every time ended up seeing similar blood sugar values! To my surprise unlike other patients who look for other and better doctors when their sugars are not controlled, this patient had no complaint with my treatment, nor did he grumble about the cost or pain of insulin pricks. I was becoming increasingly uncomfortable and restless wondering where I was going wrong and what I could do further? I didn't know what was going on. Was it insulin resistance? noncompliance? occult infection? I racked my brain at every visit of his!!

Around this time his wife got admitted to the hospital for a cholecystectomy under a surgeon friend of mine. One afternoon when I went on my rounds, he gleamed at me and said, "doctor, today I learned something new from your nurse here, the right method of taking insulin after removing the cap off the needle (and IT DOES PAIN QUITE A BIT!). (Thanks to the nurse here who taught me that)". His wife, daughter, his endocrinologist and I, his treating physician, were totally unaware that he was "injecting" himself with the cap kept securely on the pen!

Within weeks of the "proper dosaging", his blood sugars came under good control.

I was wondering on my ignorance about patients' knowledge of insulin and its way of administering! How much do we physicians actually know about the patient, his knowledge, attitude and practices? How much do we assume and not enquire or educate? Those few extra minutes of time would have saved a lot of money for him and a lot of brain-racking for me! Interestingly he has not left me, still comes regularly for checkups with his family and is thankful to my nurse for enlightening him about the actual usage of insulin pen!

### **The transformation of an urban PHC with partnership of a postgraduate teaching institute**

Lakshman Rao Nagar PHC is situated in the heart of Bangalore city. Surrounded by upper and middle-class localities of Koramangala and Neelasandra, and slums of Ambedkar nagar, Rajendra nagar, Samantha nagar. This PHC at LR nagar, caters to a population of more than 50000 people from poor and very poor economic sections of the society.

As in many of our government centers, the place was run by a lone medical officer, who had the additional responsibility of few other urban health centers and anganwadis apart from his other administrative activities. He had a staff of 4-5 link workers (who hardly knew to read and write), few Asha workers and few ayahs. With ample space and rooms but without even a nursing staff, pharmacy and lab, this big building was catering to only about 15-20 patients in a day!

The family medicine department of St Philomena hospital decided to adopt the center as a service and also to provide hands on training in community health to its postgraduates in April 2014. After a few bureaucratic lags, we were able to start functioning by providing a postgraduate student daily on all working days under the supervision of a trained family medicine faculty. The administration of our hospital supported us by providing a vehicle for transport, a trained nurse, pediatric post graduate for immunization days, OBG post graduate for ANC days, senior gynecology residents for PMSY days and also providing free drugs.

Slowly and steadily we managed to engage ourselves in the general OP, ANC, vaccinations, outreach camps and implementation of national health programs associated with the health center. When the patients from the nearby slums started coming in increasing numbers to the center, the BBMP sanctioned a nurse, pharmacist and a lab technician to this

PHC. The pharmacy and lab added value to the services of the doctors. The center now caters to about 60 to 70 patients daily for the general OPD from 10 am to 1 pm.

As we became involved in the activities, we realized that there were quite a few diabetic and hypertensive patients who needed help with dietary advice, drugs and monitoring. We started a dedicated diabetic clinic every Tuesday with the help of an NGO [Arshirwadam trust] to provide the diabetic and other drugs free to all patients. Our consistent effort has now made a majority of diabetic, hypertensive, dyslipidemic patients adhere regularly to medications and come for follow ups and even obey a token system rather than the haphazard pushing in to see the doctor attitude. This specialty clinic has been very successfully running over the last 2 years with over 500 patients already registered and new registrations increasing slowly but steadily to about 350 this year! Free HBA1C, lipid profile camps are also done in collaboration with some pharma companies to benefit the patients. The effort put by the team has seen results in that the government has provided some antidiabetic, antihypertensive medications regularly and 1000 vials of insulin to this center for use this month! An average number of 40-50 patients come every Tuesday for their regular follow up and medications

There are regular outreach health and awareness camps conducted by the Centre in the 3 attached anganwadis apart from large programs like MR and pulse polio campaigns in which our residents take active participation. Some important days like world heart day, health day, diabetic day, AIDs day, population day, women's day, breast feeding week etc. are celebrated with poster and video presentations, skits and role plays and awareness talks by the doctors to the public.

In spite of the best effort by our residents and the staff in the center, there are still a lot of lacunae which pains us many times; including lack of many pediatric drugs, lack of infrastructure and staff to do small procedures like I&D, suturing, dressings, diabetic foot management, nail removals, pap smear, copperT insertion and removal etc. which could be easily done in such a center. Efforts are being made to overcome these.

The family medicine department of St Philomena's hospital is proud to be associated with the government health department to help the poor and needy. This Centre is an excellent example of the fruitfulness of private-government partnership for betterment of primary health care in our city and country

Dr Swapna Bhaskar, St. Philomena's Hospital, Bangalore

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### **Doctor as a patient**

I was waiting in the patient`s lounge for the doctor to come. I was in my 36<sup>th</sup> week of pregnancy. Going by what happened 3 days ago, I was worried as to what the doctor would suggest. Would that be to wind up my pregnancy prematurely next week? Is it my fault? I cannot put the clock back. All that I can do is to hope for the best.

Mine was a high-risk pregnancy being Rh negative (Indirect Coombs Test negative). I had been given Anti D. Adding to the problem I was also a gestational diabetic controlled with diet. It was also found, there was diastolic notching of left uterine artery which meant high risk of Pregnancy Induced Hypertension. Because of this and the increased risk of threatened abortion, I was also on Ecosprin and dual progesterone until now.

My Oral Glucose Tolerance Test report revealed FBS of 100mg/dl which labelled me a GDM patient at 30 weeks. I was advised to monitor my sugars with Glucometer and control my diet and exercise by the way of walks. But my obstetrician told me that I may require Insulin because of altered FBS levels. As per my doctor, the increased blood sugar level was due to placenta, which may not be controlled with Diet. She also had safety concerns about oral hypoglycemic agents like Metformin. I was confident that I could handle dietary modifications well, as I had lost 17 kgs by dieting, only to conceive. My sugar readings were 90% of the times normal. Unlike what was expected by my doc, almost always my post prandial sugars were higher than normal. I was okay with it as I was in the process of understanding how much to eat to control my PPBS. I planned my diet in such a way which would satisfy my hunger & yet control my sugars fairly well. Despite my incomplete filling, PPBS was marginally high, around 160 (Target being 140 1hr) on two or three occasions. My doctor suggested to start Insulin which would give me some freedom to eat more. Accepting insulin was like accepting my inefficiency to plan my diet. I asked the doctor If I should maintain 100% target readings at all times to which she replied without a second thought YES. There was a mismatch between my expectations and her response. I expected the doctor to calm me down and say it is okay to have few altered readings occasionally. I rather expected her to appreciate my efforts for doing a good job in planning my diet, exercise and balancing shifts at the hospital all by myself. Baby was doing fine with no polyhydramnios and it wasn't a Large for Gestational Age baby. All I expected was to stress on these positive features and advise me to be watchful about my diet at the end of the consultation by the way of reassurance. But I was horrified with the thought of 100% control. Doctor also said that with the progress of pregnancy, the insulin resistance comes down allowing me to eat as per my appetite. This had not happened so far.

Next day my PPBS readings came to 225 mg/dl which never happened in the past. The worst PPBS readings were 160,170 to the best of my memory. I was horrified. I rushed to my garden and started a brisk walk wondering what to do. I should have obliged to my doctors' opinion on starting insulin. I did not want to delay it any further. I took 4 units of Actrapid immediately. My anxiety and panic had erased rational thought. The reading was 1 hour Post prandial and the insulin was meant to be taken ½ hour before food and not 1 hour after food. I aggressively walked for ½ hour and slowly I began feeling tired and giddy. I checked my blood sugar and found it to be 33 mg/dl ! I gulped some glucose & rushed to the hospital. Continuous Non Stress Test was done and my blood sugar went up to 120mg/dl with 25% Dextrose on flow already. NST came out normal. I proved myself as a stupid and inefficient doctor at my own hospital. How would I face people around me including my own patients and my other colleagues? What if my hasty step has affected my baby? Tons of thoughts & worries.

“How could you take 4 units after 1 hour? Isn't it your responsibility to inform me about your blood Sugar report?” asked my treating doctor. Then came another statement from her, “Doctors are poor patients, you proved it to be true.” Flight of thoughts, palpitations, and guilt haunted me which disturbed my sleep. I was discharged after 24 hours with the advice to wind up pregnancy at 38 weeks because of fluctuating sugars which increased the risk of sudden intra uterine death. This added to my worries. I was unprepared for a labor in 15 days when there was still 30 days left for the due date.

I went home and thought over the reasons for my stupidity. What prevented me from calling the doctor up and informing my blood sugar result? My thought after RBS 225mg/dl was, “What if the doctor says I didn't follow her advice on insulin and the outcomes are bad now? What If the doc says I didn't care for her advice? What if she scares me even more? May be these were the reasons which prevented me to discuss my concerns with the doctor.

I was also of the opinion that the doctor \* was extra cautious about me, as I was her colleague. There are about 2 circumstances which made me feel so. I remember her advising urine culture in my first trimester when my urine report showed bacteria +. I had given those samples in collection center and not at lab. When I went to give my PPBS, I noticed that my urine sample was kept in the tray even after 2 hours. When I told this to my doctor, she told me to be cautious and perform urine culture anyway. I told the doc that I would repeat urine test from another lab and then take a call. Urine routine report came out to be normal after which she told me "if you are happy, then I am happy too".

Second instance was during my second trimester when my Hemoglobin report was 10.6g/dl and my doctor advised iron injections. I was as red as tomato already on iron tablets and iron rich diet. I doubted the lab again. The technician had taken a single drop of blood like checking for RBS and estimated Hemoglobin with capillary method. I was again suspicious and repeated Hemoglobin at another lab - It was 14!

Somehow after these incidences I felt that the doctor was extra cautious about my treatment. Maybe she felt that I was acting too smart because I was aware of these lab errors as a doctor.

I was recollecting all these incidences at the OPD of another hospital when the gynecologist walked in to the consultation room, I narrated all that had happened and this doctor reassured me that it was not critical. She also mentioned that these many NSTs were not required at all and I had ample time to deliver. Finally, I delivered after 39 weeks with baby weighing 2.8 kgs. Though I apologized to my colleague gynecologist for being a bad patient and thanked her for her loving care, I imagined my behavior with a patient like me!!

Communication is an art in clinical practice. I want to highlight here that poor communication skills between doctors themselves when one becomes a patient to another can become a barrier in the consultation. I realized that communicating with another doctor as a patient is a tougher task.

As a patient (being a doctor) I expected a few from my treating doctor - First & foremost is to calm me down when I was anxious. If a doctor visits another, it means self-diagnosis and treatment is over and its a failure. The second point is that we have some presumptions about our illness and have an expectation of our treatment in our mind. “What do you think about your GRBS readings, tell me what is the management plan according to you, then we shall discuss what will work best for us” - Interaction like this would have been healthier. Thirdly - Don't have prejudice and be judgmental that doctors are poor patients and they would invariably not follow your instructions and behave according to their will. Rather understand their concerns and expectations and discuss about it. Every patient has the right to participate in decision making about their treatment - why not a patient who is a doctor?

I don't know how to behave as a Patient (being a doctor) with my treating doctor. Doctors who are treating patients (Who are doctors) should write up about their experiences and method of communication used in such cases. Let me list a few things that I expect from my patient (I don't have any doctor patients though) - Never think I know everything & decide for yourself. You may be a doctor for your patient but when you are a patient for another doctor maintain a minimum courtesy to inform your treating doctor about any treatment plans. Accept your limitations, don't hesitate to say I have no idea about this. Never mind if your doctor thinks if you are ignorant about certain things. Knowledge is like an ocean. You

may have better clarity about certain diseases than them. Never be anxious about your illness because you are aware of some rare syndromes- You may have theoretical knowledge but your treating doc knows them practically - Trust them.

Give it a little thought - Don't get anxious to treat a doctor patient assuming that they are anxious patients because they are doctors and don't get anxious if you become a patient being a doctor.

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### **Residents' corner**

#### **DNB family medicine residency – road travelled so far**

I have had experience in Family Medicine (FM) from an elite institution in India (CMC, Vellore) and served in a community-based hospital in a tribal area. I have even ventured into setting up a private clinical practice, prior to pursuing my post graduate course in family medicine. Currently, I am a 2<sup>nd</sup> year resident in DNB family medicine. Here I am elaborating some of my observations pertaining to the training and career opportunities for DNB family medicine graduates keeping in mind my fellow trainees all over India.

My primary audience are thinkers, leaders and policy makers of health care in India.

**The DNB family medicine** residency programs came into existence as a felt need after the national health policy 2002. But the understanding of family medicine and the utility of family physicians in the community is still at a nascent stage, even after several decades of being in existence.

The course is up for taking in various community based missionary hospitals and multispecialty corporate hospitals. Each hospital has its own agenda to accommodate FM residency. Missionary hospitals have a motive to create a workforce to serve at remote locations in the country. Whereas corporate hospitals need FM trainees for their own needs.

Currently, there are limited training programs in the government run community health centers/medical colleges. The larger agenda of improving primary care in India will be better delivered if the government incorporates FM training in every community health centers across India.

**Changing trends:** Recently, there was a major change in the curriculum of DNB family medicine, where in focus of training has expanded to include maternal and child health care. This change is welcome as the needs of the country are to bring down Infant mortality and maternal mortality. Such an idea requires better utilization of family medicine graduates in government setup.

The **concept of family medicine/ general practice** arrives from 6 core principles of primary care management: community orientation, clinical problem-solving skills, comprehensive approach, person-centered care, and holistic approach. This concept has formed the foundation of the health care in the developed world and helped in gaining the confidence of the community in the health care system. The recent violence against doctors due to loss in trust could very well be prevented if we follow the above-mentioned approach. Such training of needs to be emphasized in FM residency.

**Exam pattern:** The representation of family medicine in DNB is quite miniscule which is very evident in the way the Formative Assessment Test (FAT) paper is set. Most of the recent papers I have come across are heavily skewed towards internal medicine! Whereas on the flip side the final exam question pattern is quite different (as its been pooled from various family medicine academicians spread across the country). This discrepancy between the internal assessment and final assessment confuses the candidate as to which book to read, role model to follow, and the topic to focus. The exam pattern – both internal and final- needs to assess the overall competence in the breadth of family medicine consistently.

**Unmet training needs:** Several unmet needs remain in FM training. The DNB FM residency program does provide good training in several clinical specialties. However, to become a full-fledged Family physician additional training or knowledge in fields like Communication, leadership, management, market analysis, cost accountancy, and community participation is essential. This can only be gained by spending a significant part of the one's training in the community at a community health center ideally managed by an experienced family medicine specialist. Additionally, engaging in the academic activities of organizations such as AFPI or working with another qualified family medicine specialist.

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## **A letter from Dr. B. C. Rao to Dr K.S. Jacob, Professor of Psychiatry, CMC Vellore**

Dear Dr Jacob,

I read with interest, your editorial in the August issue of NMJI, "Theorizing medical practice in India". Jacob K S. Theorizing medical practice for India. Natl Med J India [serial online] 2017 [cited 2018 Jan 10];30:183-6. Available from: <http://www.nmji.in/text.asp?2017/30/4/183/218668>

The argument for change in the training to be more community based and in primary care and secondary care setting is well taken. Even if such a transformational change were to occur, one needs teachers and institutions at these levels, specially at primary care level. My own impression is that our community health centers are best placed to impart such training. These centers must be headed by primary care specialists and not by system specialists. Skill development has better chance in these centers than in tertiary care centers. Natural outcome would be to create a large number of DNBs and MDs in primary care to man these centers.

Any carrier choice is driven by two motives. Status and drive. Today, in Indian scenario, family medicine/primary care has low status in the medical hierarchy which also influences the society at large. Drive to be a specialist or a super specialist is dictated by what the medical student experiences during his training years. As there is no training in primary care in his formative years there is no drive to become a family physician.

That family medicine is a rich (may not be so much in terms of money) carrier choice will only be known if a major part of medical training is done at primary care level supervised by competent primary care specialists, many more will opt for this discipline out of choice.

The government in the meantime, were to make some changes and gives the same emoluments to a family medicine specialist as it does to a specialist or a super specialist, a major change will occur in the carrier choice in a very short time.

Lastly, I am witness to some change, though slow, a move towards opting for Family medicine as a career choice.

**B.C. Rao**

### **Masala...**

#### **Laughter and tears**

Then one day reality broke,  
The child might not make it to a handsome bloke;  
Mom was shocked, and horrified awoke...  
She wanted to see him in his graduation cloak!!

Father had almost lost his might;  
For living felt far from his birth right.  
He would often turn blue and white  
And for each breath he had to fight.

Somehow, he turned ten,  
With squatting spells which appeared he knew not when,  
He hated coming out of his den

From fear of not making it to eleven!!

Then he met a surgeon, very new,  
Who would sew the hole that in him grew  
And make him healthy which was due  
From holy nature's point of view...

Mom was delighted  
And hugged her boy  
He was stronger and brighter  
And full of joy!!:-)

He jumped..he fell..and gave out a cry...  
He spoke and spoke and was no longer shy...  
He was alive, and said God in him lies...  
For the first time I saw laughter and tears in his eyes.....:-)

Poet: Dr. Ambika Prasad (written during her 9<sup>th</sup> semester of medical college)

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