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Introduction to the Monograph

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“.....never send to know for whom the bells tolls; it tolls for thee.”

“Devotions Upon Emergent Occasions, and several steps in my Sickness- Meditation XVII” John Donne, Dean of St. Paul’s Cathedral, London- written in 1624

Sir Christopher Booth (June 1924 - July 2012), medical historian, Dean of Northwick Park Hospital, in London, "one of the great characters of British medicine", is better known to us as the researcher who discovered that B₁₂ absorption was from the distal small gut. His *“On Being a Patient”* [1], the first chapter of the last edition of the Oxford Textbook of Medicine, ought to be made compulsory reading for all doctors and medical students. He writes with sadness but with detachment about his transition from youth to old age, from a healthy carefree existence to dependence to hospital: he reminds us how, as one gets older, disability strikes suddenly, severely, ferociously, furiously, with the person and his family often totally unprepared.

A young doctor in India, just out of medical school, learns to take a good history and make a thorough physical examination- even his final examination is often on a young adult. With children, he is less comfortable, but with an old person, he frequently feels very exasperated. It is not unusual for him to lose his cool when he finds that the patient brought in on a wheelchair is often deaf, possibly incontinent, unable to comprehend, has hallucinations, is in pain and gives rambling answers. A full examination is difficult, there are innumerable questions from relatives who demand ‘quickfix’ solutions. The myriad problems and protean manifestations of the same disease may baffle a novice. Hyponatemia, hypercalcemia, hyperglycemia, any infection, even faecal impaction, may all manifest identically - with confusion, abnormal behaviour, even aggression. There may be no lateralising neurological deficit or fever and the doctor has no clue about what is wrong with this lethargic, confused, restless, often agitated individual in front of him. Time and again, the junior doctor labels him/her as ‘uncooperative’. Was it urinary or chest infection, stroke, electrolyte abnormality, a drug or something else that landed this person in hospital? What is his prognosis? And honestly, no one is very sympathetic! In his medical curriculum, the medical student here has never had any exposure to such a situation. This Workshop is intended to create an awareness of this problem.

It is estimated that those > 60 will outnumber children the world over by 2020. The population of 60+age group in the world is set to double from 12 to 22% between 2015 and 2050. Life expectancy in India was 49.7 years in 1970-75; it has gone up to 69 years, in Kerala it is 74.9 years (72 for men, 77.8 for women). More and more retired persons have their parents to look after. In addition to their individual ailments, there are frictions between the generations that have to be addressed. Loss of a

partner, depression, dementia, deafness and visual loss add to the loneliness and isolation.

Are we ready to face this medical crisis looming up before us? The background for this workshop was the awareness (or lack of it!) among the doctors who normally examine and treat the older individual.

Geriatrics and Gerontology

Physicians have always accepted that managing disease in the old demands tact and considerable finesse. Our ancient treatises teach about 'Jara' –the wrinkles of old age. Mythology has it that the Gods invented *Chyavanaprash* to keep people young. Charaka in his *Samhita* described the changes caused by severe exertion in older persons and advocated a light but nutritious diet for them. Similar references to caring for older persons are found in Roman and Arabic texts.

Geriatrics (Gk : γέρων geron = "old man"+ ιατρός iatros = "healer") is a sub-specialty of medicine which deals with *diseases of older individuals and health care of the Elderly*. It aims to promote health by preventing illness, treating diseases and disabilities in older adults. The word 'Geriatrics' first coined in 1909 by Ignatz Leo Nascher, Austrian-American doctor, then Chief of Mount Sinai Hospital, New York, translates into 'care of aged people' on lines similar to 'Paediatrics'. A Geriatrician is a physician who specializes in the care of elderly people.

Marjorie Warren, after working for several years in Isleworth Infirmary and the adjacent Warkworth House Workhouse in London, analyzed her own experiences and wrote seminal articles in the *BMJ* [2] and *Lancet* [3] of 1960, to point out that keeping older patients well fed till they died was not good enough. If their ailments could be diagnosed and treated, they could be rehabilitated to become useful members of society. She campaigned for the creation of a medical specialty of Geriatrics within the newly formed NHS and the starting of special such units in general hospitals. She felt strongly that medical students should be taught early in their career the basics of care of the elderly by senior doctors who had interest and expertise in this field. She was one of the eight doctors who founded the Medical Society for the Care of the Elderly, which went on to become the British Geriatrics Society.

We owe it to Prof. Bernard Isaacs of the University of Birmingham, who after joining this unfashionable specialty in its early days, made it highly popular and challenging by infusing it with his great enthusiasm and energy. He listed the four 'Giants' of Geriatrics - Immobility, Instability, Incontinence and Intellectual impairment; he also identified the four common causes for admission to a Geriatric unit: expectation of therapeutic recovery, medical urgency (the need for hospital care), basic care (being unfit to fend for themselves in providing food, warmth, cleanliness and being unsafe) and relief of strain on relatives. He established a gait laboratory in his hospital to study balance problems and the causes for falls and also a Centre for Applied Gerontology to promote awareness among architects, service providers and others in society of the needs of the old.

Geriatrics is a well established specialty now in the West. To find out for themselves whether they like Medicine as a vocation, aspiring medical students do community service in long-stay and short stay hospitals for the Elderly; they thus notch up 'points' for entry into medical school. Rotations through geriatric units give medical students good exposure.

An article in The Daily Telegraph, London, of 29th March 2012 quoted a study which suggested that "Elderly patients could spend much less time in hospital if they were assessed earlier by *geriatricians or General Physicians* who understand their health problems". My exposure to Geriatrics started when I worked for Prof. M.R.P. Hall at the University of Southampton, U.K. We had several old people in our own family and the experience has been invaluable. I can never forget a hitherto fit 90 year old admitted to our unit with an acute upper G.I bleed. As a new Registrar, my first response was 'leave her alone, considering her age'. My Consultant insisted on an Endoscopy, a

duodenal ulcer was found, transfusions arranged, H₂ antagonists given, and she walked out of hospital to her independent existence after she was declared safe at home, restored to her own environment, well.

Gerontology (Gk, *geron* = "old man" + *logos* = "study of") was a term coined in 1903 by Ilya Ilyich Mechnikov [Élie Metchnikoff] (1845 –1916), who shared with Paul Ehrlich for work on Phagocytosis the 1908 Nobel Prize. It is the study of the social, psychological & biological aspects of ageing, the *study of the ageing process itself, its Science*. Gerontologists are researchers and practitioners in various fields of biology, medicine, pharmacy, nursing, public health, optometry, dentistry, social work, physical & occupational therapy, psychology, psychiatry, sociology, economics, political science, architecture, housing & anthropology - different aspects of Aging.

Geriatrics is sometimes called Medical Gerontology. There is no set age at which patients may be under the care of a geriatrician or general physician, the decision determined by the individual patient's needs and the availability of a specialist. By convention, an Older adult is > 65 years. But then there is the "young old" & the "old...old" !

The Workshop on Geriatrics and Gerontology

The concept of this Workshop started as a one-day minimalist affair to flag off the *WHO Decade of Healthy Ageing, 2020-30*, after discussions Prof. Kichu Nair from Newcastle, Australia had at Trissur with Prof. K. Mohanan, Vice Chancellor of The Kerala University of Health Sciences (KUHS). Baby Memorial Hospital, Kozhikode volunteered to conduct the first of a series of CMEs in North Kerala to sensitize doctors in our midst: dates chosen were February 29 and 1st March 2020, with Dr. K.P. Dipu as Organising Secretary.

It was for Geriatrics a first serious CME in Kerala. We had one under CALFIM at Calicut years ago, there have been a few more. Many aspects are being discussed now. KUHS hopes it will stimulate research in various aspects of Health Care in Kerala.

This time we had a wide range of topics with eminent speakers - many of them after decades of experience in General Medicine, had opted to spread the message of Geriatrics because of their passion for the care of the Elderly and dedication to training students and doctors in this fledgling specialty in India. We chose them to sensitise doctors and carers of the Elderly, help them identify problems - intervene where possible, draw the line where they could not. Obviously all aspects could not be covered by such a short workshop. Our own experts are sharing their wisdom - their experience ought to benefit us all. Profs. P. Sugathan, Roy Chally, N.J Mani, Ashokan Nambiar, K.V Sahasranam, K.S. Shaji came on board first, we then expanded the repertoire to include Profs. Alka Ganesh on the Clinical Manifestations of Ageing, Prabha Adhikari on Comprehensive Geriatric assessment, Prof. Prasad Mathews on the Perils of Polypharmacy, the last a major issue in older persons.

We include here among the references below a link to the Updated Beers Criteria [4] which ought to be useful.

The boundless enthusiasm of Prof. M.V. Pillai and Prof. M.R. Rajagopal made this snowball into a major event for BMH, KUHS and Pallium India. Palliative Care includes managing pain, a source of universal apprehension and helplessness. Prof. Lulu Mathews, paediatrician by training, accepted our invitation to speak on this. Several aspects of Geriatric care, Palliation and End-of-Life Care are discussed, all live, burning issues.

Mr. V, 96, had led an active life: he enjoyed long walks, reading, writing, working on his i-Pad.

Medically he was fit, ECG, Echo etc had been normal. Over the years, he became progressively unsteady and insecure, his peripheral neuropathy made him convinced there was water on the floor; repeated falls caused intense pain from vertebral fractures. He lost his confidence, was apprehensive of finding himself on the floor unable to summon aid. His wife, equally frail but intellectually active, concurred with his decision to move to their daughter's house nearby. He had left clear instructions: he did not wish to be taken to hospital at all, certainly no tubes, ventilators or interventions. He sustained a fall and consequent inter-trochanteric femoral fracture. That he needed surgery was clear - leave him alone in bed, and he risked pneumonia, DVT, bedsores and worst of all, intense psychological morbidity.

In hospital, he collapsed, was found to be very dehydrated-the smart doctors in the ED identified this when the probe over the Inferior vena cava revealed it had been reduced to a slit. His ECG showed left bundle branch block and Ejection fraction was very low but Troponin was normal - so the cardiac events were fairly old. They did not have to put long lines to monitor- mercifully he was well pre-op.

The Cardiologist helped the family decide – and he went through surgery easily. Post-op, he aspirated, Oxygen saturation fell. He became confused. N.G feeding was instituted with his consent. A bronchoscopic aspiration was attempted. Ventilation was on option – but this was declined. He had a sudden bradycardia, the ECG became a straight line. No energetic attempt was made to resuscitate.

This is the story of what happened to my father-in-law in February, after this Workshop was planned. There were several questions raised:

1. Should my in-laws have given up their independent existence and privacy by moving out of their own house?
2. Should we have respected his wishes and managed him at home after the fracture?
3. Should we have agreed to have long lines inserted to monitor his circulation? What about intubation, ventilation as the next logical step to get him better?
4. Was it right to shift him into the ICU knowing that he would be lonely and lost, unable to see his dear ones, should surgery have been postponed in an attempt to stabilise his fluid status? But then the question was for how long ? It could have been an indefinite wait.
5. Did he 'give up' after he heard someone discuss within earshot the grave prognosis?

How do you reconcile the patient's wishes with the need for early ambulation after a 'quick, simple' procedure? Was it ethically correct at all to take him into hospital? But how could one leave him in pain - and in bed with a bleak future and no prospect of rehab?

This is the subject of this Workshop.

The Monograph

The range of subjects to be discussed was so vast - all aspects could not be included, Gastroenterology, Pulmonology, Neurology, Cardiology, Diseases of Women, to mention just a few. This Workshop was meant to be the first of a series - so we started with assessment and basics. We leave it to other centres to emulate and excel !!

Any workshop or CME however well-conducted, leaves nothing permanent behind. Something accessible either on paper or the net would be useful, long term. So we thought of a Monograph -

and invited experts to contribute.

It had to be a free access, online version, so we got rid of glossy paper and waste. Revisions would be easy. Even a formal text-book might evolve, who knows? And wisely, in retrospect! Many have not been able to meet our short deadline.

We asked several experts to write off hand. The articles did not have to be erudite, but the reader could clear a doubt or get information through the links provided by the writer, who after all had decades of experience to bank upon. Length was no issue, but readability was. Anything useful in the care of the elderly was welcome. We have tried to avoid copyright issues.

We were moved and overwhelmed by the response. Prof. Thomas Mathew set the ball rolling by starting to write on the 'Ageing Kidney'. Others took up the idea. The very first article to reach us was Prof. C. Ravindran's on the 'Ageing Lung'. We thank everyone - Profs. M.V. Muraleedharan, Kasi Visweswaran, M. Narendrandranathan, S. Sreekumari, Jame Abraham - who made it an interesting experience for us as editors. Prof. Nandini Kumar writes on Ethical Aspects of Research in the Elderly. Kathryn Mannix, retired British Consultant in Palliative Care, whose "With the End in Mind" elicited favourable reviews, has contributed a wonderful piece.

The Monograph is being launched as a Supplement at the already existing BMH Journal website archived at Index Copernicus International. The link for its access is https://www.babymhospital.org/BMH_MJ/index.php/BMHMJ/issue/view/31. Prof. Johnson Francis and Dr. Robin George have worked long hours and deserve full credit for their efforts.

The Monograph has several articles, which discuss many common problems, interpretations. You will find a new perspective, there are links in case someone wishes to follow a lead. It is not intended to be a compendium of facts. If a distraught physician can get some guidelines for management, or find pleasure reading it or contacting the author via email, it would have served its purpose.

Articles are still coming in, and we will add them on. Do let us have your feedback and comments. We hope you will enjoy browsing through the monograph. We had a great time collating it, we hope you will cherish it.

I am thankful to all the participants, speakers, Chairpersons at the Workshop and contributors to the Monograph, most so, my 'team' notably led by Dr. K.G. Alexander from the front, Prof. M.V. Pillai, Prof. M.R. Rajagopal, Prof. K. Mohanan, VC of KUHS, for making this event possible.

Taking up Geriatrics calls for commitment and compassion. With mounting numbers of the elderly in our very midst in Kerala, we are fast catching up with the West. Many of these senior citizens had important jobs, were pillars of society, are still mentally agile, want to retain their independence and dignity. Managing their welfare and medical problems is something we can ill afford to ignore. Our young doctors must know how best to care for the elderly, understand that the approach to an ill older person is not the same as for a young adult, that personal preferences, family concerns have all to be taken into account while handling these patients.

References

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