

PRACTITIONERS' GUIDANCE SERIES - VII



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Radiation Risks in Medical Imaging

Hygiene and Public Health

Frailty Syndrome

Monotony of Repetitive behaviour - Autism Spectrum Disorder

KARNATAKA MEDICAL COUNCIL

BENGALURU

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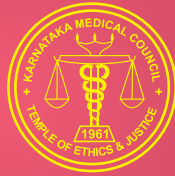
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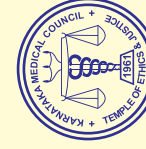
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President's Remarks



Karnataka Medical Council is publishing Books under '**Practitioner series**' for the benefit of Registered Medical Practitioners. Council would like to elicit some feedback from practitioners about usefulness of these books. Kindly send your opinion to our website, or email address.

Topics chosen for these series are on common subjects which I believe are very useful to General Practitioners and Specialists also.

I would like to request various professional bodies of Medical fraternity to conduct CMEs regularly for the benefit of practitioners which will keep them abreast with recent developments in the field of Medicine. Council is launching online CMEs, which are being accredited, and at present BMJ, Amnicuris, V works, have come forward to give services. These sites will be available on KMC website. Doctors at their convenience take the test and earn credit points.

I would like to request practitioners to help in providing AADHAR number for generating unique I.D. by Medical Council of India.

Doctors should make use of smart phones for discussing difficult and interesting cases, and for sharing various useful articles of Medical journals. Whats-App and face books are consuming valuable time of the practitioners. Overindulgence in electronic gadgets is causing behavioral problems in children and also in adults.

In the present series, hygiene and Public Health is one of the topics covered. Diseases drain resources of the family for the treatment, and curtail productivity. Public Health mostly involves preventive aspect of diseases and effective use of vaccination. Life style diseases are preventable by educating about changes in food habit, exercise and changes in behavior of individuals. Public Health delivery should be separated from curative health care, and effective implementation will help in maintaining health of people.

Radiation from modern diagnostic gadgets and equipments needs to be understood. Unnecessary use of CT scan, X- rays may pose risk of developing malignancy. **My thanks to the Editorial Board for their good work.**

H. VEERABHADRAPPA
President, KMC



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Editorial



It gives me a great pleasure to place in your hands the seventh series of booklets that deal with radiation risks with medical imaging, Geriatric syndrome of frailty, Autism spectrum disorders and hygiene and public health.

X-rays, Computerized tomography (CT), magnetic resonance imaging (MRI) and ultrasound are utilized to produce images that help in the diagnosis of disease or injury. In addition they guide procedures used in the treatment of the disease. Ultrasound and MRI do not use or produce ionizing radiation. Medical Practitioner should have basic understanding of the risk from radiation following medical imaging. Often patients express concern about radiation risk. Medical practitioner has a great role in reducing radiation risk to their patients by analysing these risks while making suggestion to imaging studies. The radiation protection measures include time, distance and shielding. Reduction of exposure time, increasing distance from source, and shielding of patients and occupational workers have shown to be effective in offering protection from the potential risks of radiation.

Elderly persons can become frail. Frailty is a condition in which a person exhibits diminished ability to undertake essential social activities of daily living under minor environmental stressful situations. They exhibit a diminished reserve in the physiological function of different organ-systems of the body to carry out important daily activities and to maintain adequate homeostasis. These individuals are more vulnerable, and weak and they show many complications with advancing age. They are highly susceptible to adverse health outcomes. These persons exhibit functional decline, decreased mobility, falls and social withdrawal.

Autism spectrum disorder is a neuro-developmental condition exhibiting deficits in social reciprocity and communication. There is unusual restricted, repetitive behaviours. The condition makes a beginning in first three years of life. The child fails to use words to communicate even though able to say the alphabets. Social deficits become evident as the child grows. Autism is a heterogeneous disorder and no two persons with autism exhibit similar features. Autism is a disorder of contrasts between spared abilities and deficits in social communicative development. In the recent decades there is a conceptualization of a spectrum of autism-related disorders that include Childhood disintegrative disorder, Asperger's disorder, Rett's syndrome, and Pervasive developmental disorder-not otherwise specified. They include qualitative deficits in social behaviour and communication.

Hygiene is the science of preventive medicine and preservation of health. It predominantly refers to maintenance of cleanliness and sanitation. It includes personal and community hygiene that facilitate disease prevention. The Alma-Ata Declaration (1978) is a major milestone in the field of public health and it identified primary health care as the key to the attainment of the goal of Health for All. It emphasized that people have a right and duty to participate individually and collectively in the planning and implementation of their health care. Good health can be maintained if a person drinks pure drinking water, consumes clean, nutritious food, and breathes fresh, unpolluted air.

The above four topics have been described in detail to make the practitioner aware of the conditions they encounter in clinical practice. By the study of the material present in the booklets, they will get the necessary knowledge of the conditions. It is hoped it will expand the horizons of their knowledge.

P.S. SHANKAR
Editor-in-Chief

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