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V Mohan, B B Tripathy

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One more textbook on diabetes? This is a question, which comes to anyone's mind whenever they see a new book. One then asks the next obvious question, what is the justification for producing such a book? In the case of the textbook you now hold in your hands – **"The RSSDI Textbook of Diabetes Mellitus - Second Edition"**, the answer is very clear. This is the textbook on diabetes for India, South Asia and indeed developing countries and not just ***another*** textbook.

Why is this so? Most books on diabetes come from the West. While the basic scientific data expounded in these books are applicable worldwide, it is not unfair to state that a lot of subject matter in these books may not be directly applicable to countries such as India and indeed, in some instances, may even be misleading. Moreover, diabetes in Asian Indians (the term "South Asians" could be substituted whenever Asian Indians is use d) presents several fascinating clinical features, which are rarely, if ever, mentioned in standard textbooks on diabetes published in the West. More recently a few publications such as World Book of Diabetes in Practice and International Textbook of Diabetes Mellitus have included chapters on Diabetes in the Tropics. But these cannot fulfill the requirements of practitioners for comprehensive diabetes care in South Asian India and neighbouring countries in Asia.

Bose[1] in his comments on diabetes in the Tropics at a conference held in London in 1907 did not have enough data to highlight major differences in the clinical spectrum of diabetes in India and the West. A publication from Sri Lanka (then Ceylon) by De Zoysa 1951[2] brought out that a high proportion of patients with diabetes in that country were very lean. Hugh Jones 1955[3] first described J-type diabetes in Jamaica. Tullock's book on Diabetes in the Tropics was published in 1962.[4]

Yet in India, the awareness on these aspects was not high and teaching followed the Western text books almost word for word up to around 1960. Around that time, a number of workers emerged specially in Delhi, Cuttack, Chennai, Trivandrum and Mumbai who generated adequate data to convene the First World Congress on Diabetes in the Tropics in 1966.[5]

In 1965, a paper on diabetes in India published by Journal 'DIABETES'[6] comprehensively highlighted the difference in the clinical spectrum of diabetes in this country compared to what was described in Western textbooks. Following this publication, Philip K Bondy, an acknowledged authority on metabolic disorders, commented as follows. "These patients do not fit into the clichés of European and American nosology. The fact that Indian private patients appeared more like those seen in better nourished Western countries suggests that environmental rather than genetic factors are at work. But this contradicts another cherished clichés – that diabetes is a disease of over nutrition. Comparative clinical observations in various populations are important both because they test the parochial viewpoint most of us assume on the basis of our geographically and sociologically limited experience and because they suggest avenues of approach to problems which might otherwise be overlooked. It is disturbing that most American physicians know more about alloxan diabetes in rats than about human diabetes in India."

During the last decades of the last century, difference in prescription of diet of patients with diabetes prevalent in India with those in the Western countries' its outcome and rationality were taken note of in the Western countries which led to the revision of dietary recommendation of the American Diabetes Association (1970).

In more recent times, several diabetologists in India have generated a plethora of data on epidemiology, adiposity, insulin resistance and maternal and fetal problems peculiar to the Indian scenario.

All the above call for documentation in a comprehensive textbook for educating contemporary practitioners and researches on the complex and enigmatic topic of diabetes.

It is needless to repeat here the awesome data on the explosive increase in the incidence of diabetes globally and more so in South Asian countries including India as these are covered in several excellent chapters. These data in fact, stress the need for adoption of appropriate preventive measures.

Thirty years ago, the prevalence of diabetes in India based on the Indian Council of Medical Research (ICMR) multicentric survey was around 2.0% in urban India and 1.0% in rural India. In just three decades, these prevalence rates have shot up to 12-16% in urban India and 3-8% in rural India, in adults over 20 years of age. This represents a 600-800% increase in prevalence rates of diabetes-something which is unparalleled in any Western nation. Indeed, India is now referred to as the "Diabetic Capital" of the world! By the age of 50 to 60 years, almost half the population in urban India now has either diabetes or pre-diabetes. Migrant studies have consistently reported higher rates of diabetes in Asian Indians compared to virtually every other race studied including White Caucasians, Afro Caucasians, Chinese, Japanese and other ethnic groups. This increased ethnic susceptibility to diabetes is part of what is now being variously called as the "South Asian Phenotype", "Asian Indian Phenotype" or "The Asian Indian Paradox." Other features of this unique phenotype include: increased insulin resistance, lower generalized obesity (as defined by body mass index) but increased central body obesity (as defined by increased waist circumference or waist hip ratios), excessive body fat particularly abdominal or visceral fat; a characteristic dyslipidemia with a low HDL cholesterol, increased serum triglyceride levels and increase in the atherogenic small dense LDL cholesterol concentrations; lower serum adiponectin levels; higher inflammatory markers like high sensitive C-Reactive protein (CRP) and a higher prevalence of the metabolic syndrome. Unique genetic markers for type 2 diabetes have also been described in Indians. This constellation of metabolic and genetic abnormalities have resulted in a further health hazard – a higher prevalence of premature coronary artery disease which has again been consistently reported in Indians and this peculiar phenotype/genotype contributes to the increased mortality described in Indians. Thus, from the point of view of the descriptive epidemiology, the unique phenotype/genotype, the complications profile and the mortality related issues, it is clear that a textbook highlighting these unique features is not only necessary, but is also perhaps more appropriate, for students and others interested in studying diabetes in this part of the world.

What about treatment options? In the West, the majority of type 2 diabetic subjects are obese (>80%). As already pointed out, generalized obesity is not that common in India. Indeed, many of our type 2 diabetic patients are non obese while a significant number are actually lean or underweight. Therefore, the treatment patterns and approaches in India have to show some variations from that described in western textbooks. Indeed the treatment guidelines proposed in the West may not be entirely appropriate for Indians. Particularly, these "desi" options have to be different, as they depend on socio-economic factors as well. The authors and editors of the RSSDI Textbook of Diabetes are drawn mostly from practicing clinical diabetologists in India. Hence this book is unique in providing an uniquely Indian view point to the whole gamut of diabetology, right from epidemiology, clinical features, pathology and complications to management and prevention. It also incorporates a large body of the published research on diabetes in India - a lot of this work is sadly ignored and do not find their due place in Western textbooks. For example, forms of diabetes peculiar to the tropics such as Malnutrition Modulated Diabetes Mellitus (MMDM) and Fibrocalculous Pancreatic Diabetes (FCPD) where so much original work is done in India are rarely, if ever, mentioned in western textbooks. On the other hand, whole chapters in this text-book are devoted to these and other types of diabetes peculiar to India. Sections on dietary therapy of diabetes found in western textbooks are usually not relevant or applicable to the Indian context. This is another area where this book scores.

In summary, the RSSDI Textbook of Diabetes represents the quintessence of "Diabetes in India" in addition to providing the international view points as well. From the response that the first edition of this book received, it is obvious that the book is welcomed and read far beyond India's shores. Most Asian Countries, the Asia Pacific region including Australia, several African nations, not to speak of Europe and the Americas have shown great interest in the book.

The second edition is a revised and largely expanded version of the first: while there were 62 chapters in the first the second incorporates 95. Details

of the chapters are highlighted in the 'Preface'. The escalation in price is relatively modest making this book much more affordable when compared to similar textbooks from Western publishers.

We wish you happy reading.

REFERENCES

1. Bose RKC. Comments on diabetes in the tropics. Brit Med J 1907, ii :1053.
2. Dezoysa VP. Clinical variations of the diabetic syndrome in a tropical country of Ceylon. Arch Intern Med 1951; 88;812-18
3. HughJones P. Diabetes in Jamaica. Lancet 1955;2:891-97.
4. Tulloch JA. Diabetes Mellitus in the Tropics. Edinburgh E & S Livingstone Ltd, 1962.
5. Patel JC, Talwalkar NG. Diabetes in the Tropics. Proceedings of the World Congress on Diabetes in the Tropics. Bombay Diab. Assoc. India, 1966.
6. Tripathy BB, Kar BC. Observations on clinical pattern of diabetes mellitus in India. Diabetes 1965;12:414-22.
7. Bondy PK. In: Benson PB et al (eds). The Year Book of Medicine 1966-67, Year Book series, Chicago, Year Book Medical Publishers. 1967, pp.582-83.