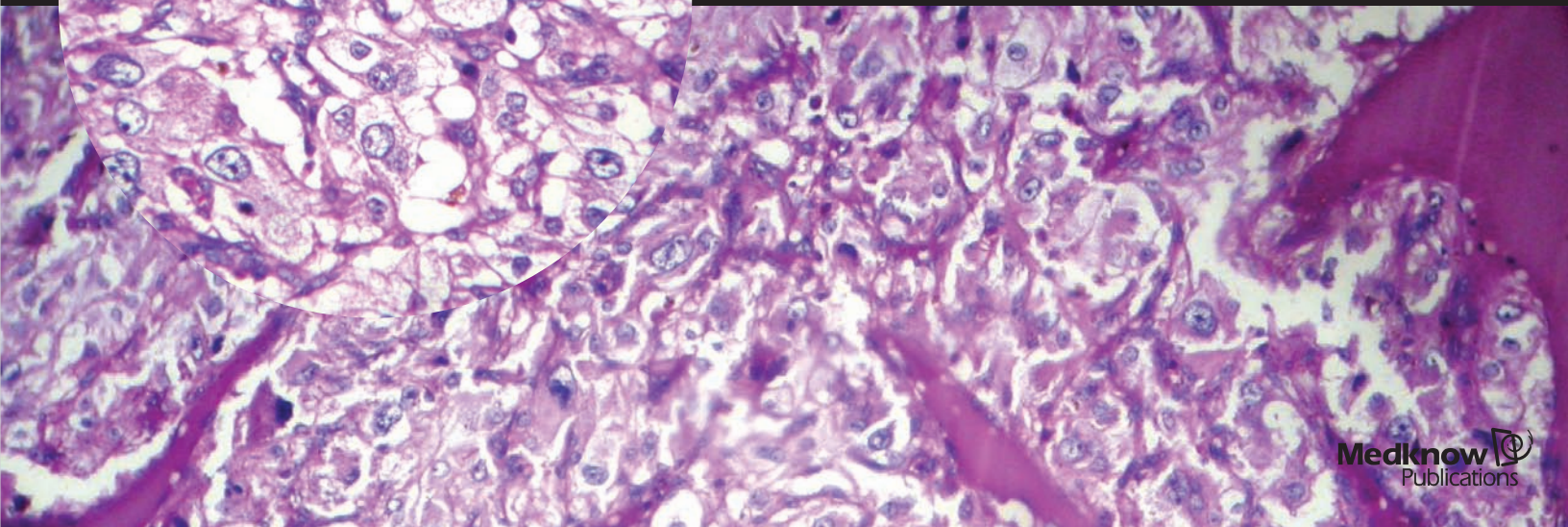
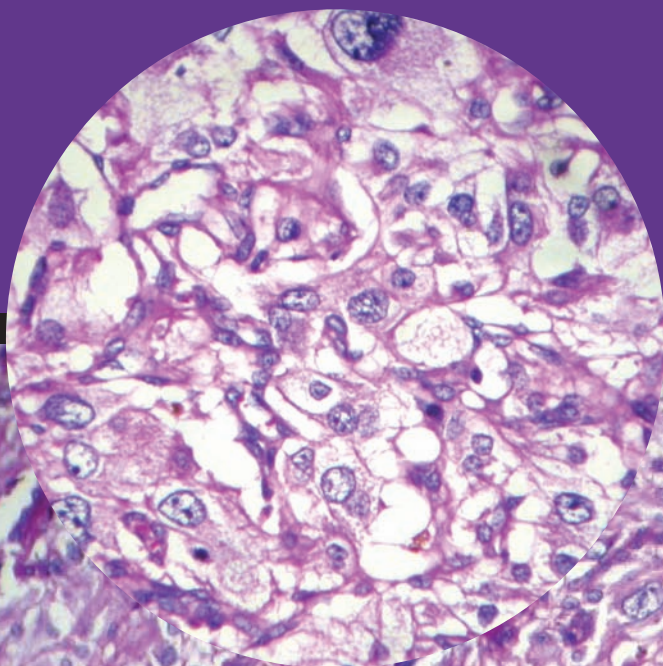


January 2011 / Vol 15 / Issue 1

# Indian Journal of Endocrinology and Metabolism

Official Publication of The Endocrine Society of India

[www.ijem.in](http://www.ijem.in)



## Endocrinology in Nepal: Unique challenges, unique solutions

**Dina Shrestha**

*Department of Endocrinology, Norvic International Hospital and Hospital for Advanced Medicine and Surgery, Kathmandu, Nepal*

### ABSTRACT

Nepal has a high prevalence of various endocrine diseases, which is a challenge for its endocrinologists. This article reviews the unique features and trends of endocrine disease, including diabetes, in Nepal. It focuses on the challenges and solutions that endocrine care providers face in the country.

**Key words:** Nepal, endocrinology, trends, diabetes

Nepal is a relatively small landlocked country between India and China spanning over an area of 56,827 square miles with a population of approximately 30 million.<sup>[1]</sup> It is a relatively poor developing country and even though Nepal has seen a relative stagnation in its development in this last decade due to continuous political strife and instability, it has, however, managed to witness some development in the Medical sector in these past years.

The Nepal Medical Council, which is responsible for the medical licenses in the country, gives out about a little over 900 practice licenses to fresh medical graduates each year. This number is an exponential growth and can be accredited to the increase in the number of medical colleges in the country, which are mostly private universities, and to the easy access to medical education in places outside the country, such as China, India, Bangladesh, Philippines, and Pakistan, to name a few. However, as in many other developing countries we face the problem of brain drain. A large ratio of these graduates leave the country in hope for better employment to the west, depriving the country of their benefit of education and service.

With more medical graduates each year, Nepal has also seen a gradual rise in its number of specialists, especially in Cardiac, Gynecology, and Surgery; we still have a huge need for specialists and specialty care as in tertiary care centers.

Endocrinologists are few and only have been recently introduced to the medical fraternity in the last 3 years. Most of these doctors are all working in the private hospitals in the cities. Government hospitals till date do not have any endocrinologists. As of now there are 6 endocrinologists who have all been trained outside because medical universities in Nepal do not offer any such courses. The endocrine society has been established by the endocrinologists who are currently working in Kathmandu but the society is relatively inactive.

Clinical practice as an endocrinologist mostly involves diabetics and make up for more than 70% of our patients among of whom less than 2% are Type 1 diabetics. Patients with thyroid disorder make up for nearly 10%–15%, and we see less than 15% with other disorders in our practice. Referral among doctors is not a very common practice and hence surgeons continue to treat the endocrine disorder similar to the diseases of the pituitary gland or adrenal masses. Osteoporosis is treated mostly by orthopedics as there is very little public awareness and any active prevention programs. Members of the endocrine society have established an osteoporosis society joint with gynecologist, radiologists, and orthopedics to help resolve some of these issues. Infertility due to thyroid disorders is common among reproductive women.

#### Access this article online

##### Quick Response Code:



##### Website:

[www.ijem.in](http://www.ijem.in)

##### DOI:

10.4103/2230-8210.77585

**Corresponding Author:** Dr. Dina Shrestha, Battisputali, Kathmandu, Nepal. E-mail: [dinadoc@yahoo.com](mailto:dinadoc@yahoo.com)

Obesity and metabolic syndrome affects our society in great proportion. Studies have shown prevalence of overweight and obesity in certain sections of the population to be as high as 32.9% and 7.2%, respectively.<sup>[2]</sup> Nepal, similar to any other country, is facing the consequences of urban lifestyle, which is directly reflected in patients with metabolic syndrome. It is very uncommon to see a diabetic patient without hypertension, dyslipidemia, and an abnormally high abdominal girth. Alcohol and a diet based in very high proportion of carbohydrate mostly consumed as rice probably is responsible for this increase in the waist-hip ratio.

Diagnostics has only improved in the last 3–5 years in Nepal but only marginally. Laboratories are mushrooming throughout the country but there is a lack of quality control, and hence reliable laboratories that produce reproducible results are only a handful. A few hormonal assays can be done in Nepal but most of them are still sent to the laboratories in India. There is but one 64-slice CT and one dual-emission X-ray absorptiometry scan, which have only been introduced in the last 2 years. MRI scans are available but are primitive, given that they are all using less than 1 Tesla scanners.

Diabetes is a global problem affecting an estimate of 285 million people, corresponding to 6.4% of the world's adult population.<sup>[3]</sup> The number is expected to grow to 438 million by 2030, corresponding to 7.8% of the adult population and this can be reflected in our clinical practice where diabetic patients make up for more than 70% of our clinical endocrine practice. Nepal, is a landlocked country between, India and China both leading countries with a high prevalence of diabetes, is on a similar path.<sup>[4]</sup> The prevalence of diabetes is around 15% among people 20 years and older, and 19% among people 40 years and older.<sup>[5]</sup> There is, however, a great need for diabetic educators and nurses as patient education plays an important factor in the prognosis of this disease. As noted earlier, there are only a small number of specialists, and hence outpatient clinics are usually crowded. Counseling and dietician support is very essential but economical restraints due to lack of insurance make it difficult to convince them for such care.

Acute complications of diabetes are not uncommonly seen in the emergency department. Lack of awareness, education, and old beliefs are contributing factors. Even once diagnosed, a lot of patients believe they can be cured with yoga or herbal/ayurvedic medications and thinking the allopathic medications have long-term side effects and are addictive. They tend to avoid and delay treatment, leading them to acute complications. Even so the same reasons can be attributed to the long-term chronic complications. Poor follow-ups and compliance due to the above-mentioned factors and also economic restraint.

Very few studies have been done and little data collected in the last few years. However, no major research in endocrine has been conducted for Nepal. This could primarily be due to lack of funding and no central electronic database or collection system.

Challenges also lie in the lack of support of trained personnel, referral system, patient education, and proper data collection. Close collaboration with *Indian Journal of Endocrinology and Metabolism* will help strengthen Endocrinology in Nepal.

## REFERENCES

1. Available from: <https://www.cia.gov/library/publications/the-world-factbook/geos/np.html#>. [cited in 2010].
2. Vaidya AK, Pokharel PK, Nagesh S, Karki P, Kumar S, Majhi S. Association of obesity and physical activity in adult males of Dharan, Nepal. *Kathmandu Univ Med J (KUMJ)* 2006;4:192-7.
3. IDF, Diabetes Atlas, 4<sup>th</sup> ed. © 2011 International Diabetes Federation - atlas@idf.org - 166 Chaussée de la Hulpe, B-1170 Brussels, Belgium: International Diabetes Federation; 2011.
4. Available from: <http://www.who.int/diabetes/actionnow/en/mapdiabprev.pdf>. [cited in 2010].
5. Learning the lessons – preventing type 2 diabetes in Nepal. Madhur Dev Bhattarai and Dhruva Lal Singh *Diabetes Voice* 2007;52:2.

**Cite this article as:** Shrestha D. Endocrinology in Nepal: Unique challenges, unique solutions. *Indian J Endocr Metab* 2011;15:46-7.

**Source of Support:** Nil, **Conflict of Interest:** None declared.