Thyroid Advocacy: The World Order Needs Change

SANJAY KALRA*, ASHOK BHASEEN[†], MADHUR VERMA[‡], NITIN KAPOOR[#]

CHANGE IS AROUND US

The world that we live in is changing, and changing rapidly. The challenges that we face, as we try to create a sustainable world, are changing as well. These include the disease, dysfunction and disability that humankind deals with, as it seeks to navigate life in an increasingly unhealthy environment. The health professions are cognizant of these dynamics, and constantly evolve in order to ensure healthier outcomes for all. One example of this evolution is the recognition of noncommunicable disease (NCD) as a major public health concern. From stray and scattered reports, published just a few decades ago, NCD now occupies center stage in global health discourse¹.

NONCOMMUNICABLE DISEASE

The World Health Organization (WHO) advocates a 4×4 framework for NCD². This includes 4 diseases (heart disease, diabetes, cancer, and hypertension), which are fed by 4 risk factors. While this framework offers ease of understanding, and ease of action, it does not represent the entire spectrum of NCD. Various experts have suggested additions and edits to the 4×4 rubric. Oral health, cancer, and chronic obstructive pulmonary disease have been proposed as worthy additions to the NCD list. In recent years, obesity has emerged as a major disease, with significant adverse outcomes. This too, has been suggested as an inclusion in NCD³.

VOICES OF THE THYROID

One equally important disease, which deserves mention as an NCD, is thyroid disease⁴.

Thyroid disease, in its various forms (hypothyroidism, subclinical hypothyroidism, hyperthyroidism, subclinical hyperthyroidism, thyroid cancer) is a major public health problem across the world. Noncommunicable in etiology, this group of diseases affects different age groups in varying manners. Relatively easy to manage, delayed treatment can result in negative outcomes, which could have been avoided with timely intervention. If undiagnosed during the neonatal period, congenital hypothyroidism leads to lasting intellectual and physical disability. Similarly, thyroid disease can lead to significant physical, psychological, and social morbidity across all ages of life.

It is noteworthy that thyroid disease is common in the younger, productive population, especially women of child-bearing age. This has a direct influence on the financial health, not only of the individual and family, but also of the society and nation as a whole. Thyroid disease, if left undiagnosed and untreated during pregnancy, may harm the health of the fetus, and the unborn offspring, too. This phenomenon has been termed as transgenerational thyro-karma⁵.

VOICES OF CHANGE

All these features of thyroid disease suggest that it must be included as an NCD. Efforts at advocacy, led by organizations such as Thyroid Federation International (TFI) and Global Alliance for Patient Access (GAfPA), are ongoing^{6,7}. At a national level, the Indian Association of Patient Groups (IAPG), a part of the International Alliance of Patients Organizations (IAPO), has initiated efforts in this regard.

DISCRIMINATION AGAINST THYROID DISEASE

Thyroid diseases have been termed "children of a lesser gland"⁸. They usually do not cause immediate death or disability. Rather, their insidious onset and progression

^{*}Treasurer, International Society of Endocrinology (ISE); Vice President, South Asian Obesity Forum (SOF); Bharti Hospital, Karnal, Haryana, India

[†]President, Thyroid Federation International, Canada

[‡]Dept. of Community/Family Medicine, All India Institute of Medical Sciences, Bathinda, Punjab, India

[#]Dept. of Endocrinology, Diabetes and Metabolism, Christian Medical College, Vellore, Tamil Nadu, India; Noncommunicable Disease Unit, Baker Heart and Diabetes Institute, Melbourne, Victoria, Australia

leads to delayed dysfunction and disability. This characteristic, "a slowly ticking timebomb", prevents the public from recognizing the thyroid's links with vasculo-metabolic disease and general ill-health. The poor understanding of environmental determinants of thyroid physiology such as endocrine disruptor chemicals and micronutrients, adds to the inertia.

This inertia is seen not only at a micro-, or individual level, but also at a meso- (system) and macro- (health policy) level as well. Overcoming this inertia is one of the aims of a proactive thyroid health policy. Thyroid inertia can be defined as an irrational delay in institution, intensification or maintenance of appropriate screening, diagnosis, preventive measures or therapeutic interventions related to thyroid health. This includes not only clinical facets of care (diagnostics, therapeutics) but also public health aspects of thyroid health (preventive and social health).

VOICES OF COLLABORATION

Such inertia is best tackled through teamwork. For successful outcomes, thyroid disease should not be viewed in isolation. Thyroid health is not just an end in itself, it is also a means to better pediatric/adolescent, obstetric/gynecological, medical, psychological, and surgical health. Thyroid health also contributes to overall national development, by reducing health expenditures and improving productivity. Commentators have highlighted the role of maternal euthyroidism in improving the intelligence of the next generation⁹. These aspects of thyroidology suggest limitless opportunities for advocacy of thyroid disease as a NCD.

Thyroid disease should be viewed, and discussed as a multisystemic syndrome³, with links to existing NCD and ongoing global health programs. Advocacy should include all related specialties, including not only endocrinology, pediatric endocrinology, and obstetrics, but also public health and oncology. Patient organizations can play a major role in getting these diverse disciplines together, to speak in one voice.

FROM PAST LAURELS TO FUTURE SUCCESS

These efforts, based upon path breaking research of illustrious scientists, have succeeded in creating programs on salt iodization, newborn screening for congenital hypothyroidism, and universal screening during pregnancy. Enhanced discussion and deliberation has facilitated inclusion of thyroid screening in treatment guidelines on conditions as varied as atrial fibrillation, dyslipidemia, chronic kidney disease, diabetes, depression, and obesity. Multinational efforts, such as TFI's Mother Baby Iodine Initiative¹⁰, ensure action on the ground, while maintaining attention towards thyroid health. This momentum needs to be built upon. Including thyroid disease in national, as well as WHO NCD lists, is the next logical step in our efforts to improve thyroid health.

A concerted and continued effort for thyroid advocacy is needed today, more than ever. Avoiding discrimination between diseases, and ensuring inclusivity in NCD planning, is the way. As the world order changes, one goal must be kept constant: the target of optimal health, including optimal thyroid health.

REFERENCES

- Ramesh S, Kosalram K. The burden of non-communicable diseases: a scoping review focus on the context of India. J Educ Health Promot. 2023;12(1):41.
- Schwartz LN, Shaffer JD, Bukhman G. The origins of the 4×4 framework for noncommunicable disease at the World Health Organization. SSM Popul Health. 2021;13:100731.
- Kalra S Verma M, Kapoor N. Including obesity in the noncommunicable disease definition: The 4-1-4 framework. Indian J Clin Pract. 2024;35(5):7-8.
- 4. Kalra S, Unnikrishnan AG, Sahay R. The global burden of thyroid disease. Thyroid Res Pract. 2013;10(3):89-90.
- Kalra B, Kalra S, Unnikrishnan AG, Baruah MP, Khandelwal D, Gupta Y. Transgenerational karma. Indian J Endocrinol Metab. 2017;21(2):265-7.
- Duntas L, Amino N, Hay I, McDermott M, Peeters R, Vaismann M, et al. Thyroid disorders, noncommunicable diseases that gravely impact public health: a commentary and statement by the Advisory Board of the World Thyroid Federation. Thyroid. 2012;22(6):566-7.
- GAfPA. Available at: https://gafpa.org/. Last accessed February 28, 2025.
- 8. Kalra S, Unnikrishnan AG, Baruah MP. Thyroid: Disorders of a lesser gland. Thyroid Res Pract. 2013;10(2):45-6.
- Sahay R, Kalra S, Magon N. Ensuring an intelligent India: Managing hypothyroidism in pregnancy. Indian J Endocrinol Metab. 2011;15(Suppl 2):S76-7.
- MotherBabyIodine. Available at: https://www.thyroid-federation.org/projects/motherbabyiodine/#:~:text= The%20MotherBabyIodine%20project%20aims%20to% 20bring%20attention%20to,affect%20both%20 developed%20economies%20and%20countries%20in% 20development. Last accessed February 28, 2025.

....