

thyrotoxic, 6 of them had thyroiditis whereas 4 patients had multinodular goiter (MNG), while 31 (15.5%) patients were clinically and biochemically euthyroid.

Our study showed that the overall prevalence of anti-thyroglobulin antibodies was 100% in all groups, while TPO antibodies were positive in 91 patients (45.5%). Antimicrosomal TPO antibodies was positive in 58% in the goiter group, 50.4% in hypothyroid group, and around 30% in both Grave's and thyrotoxic group. In all 4 groups, the prevalence of positive Tg antibodies was significantly more than antimicrosomal antibodies with preponderance of females in all groups with p value <0.001. Autoimmune thyroid disease exists practically in all parts of the world but with different frequencies. Our data clearly showed female preponderance, finding which is consistent with other studies.^{1,2} In this study we have assessed the relative prevalence of the TPO and Tg antibodies in patients with different thyroid diseases and have demonstrated that that measurement of Tg antibodies in the initial assessment of patients with primary hypothyroidism, Grave's disease and thyrotoxicosis due to different causes contributes little additional information to that provided by TPO antibodies. This is in contrast to other comparative of TPO and Tg antibodies carried out in the United Kingdom, and other countries. Presence of TPO antibodies was significantly higher than Tg antibodies in goiter patients who were clinically and biochemically euthyroid. This finding was a similar to those reported in other studies.^{3,4} Factors responsible for the discrepancy between our results and the results of other studies could be related to the use of different commercial kits in different labs or related to genetic factors,⁵ and human leukocyte antigen as some of the Saudi patients in the Western region of KSA were originally from different ethnic groups associations as patients were coming from different ethnic groups even in the Saudi patients in the Western region of KSA. We suggest routine measurement of both TPO and Tg antibodies in the initial assessment of patients with suspected autoimmune thyroid disease, although Tg antibodies are more sensitive in detecting autoimmune thyroid diseases.

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Globalization and health: Challenges imposed upon the medical profession

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As a modern concept, globalization is a state of increased integration of different societies and economies as a result of greater flow of goods, capital, people and ideas. Thus, globalization encompasses an accelerating process of economic and cultural openness and relentless breaking down of geographical boundaries. Since the early 1980s the process of globalization has been sped by the gross changes in international organizational architecture, domestic policies of reform and the dramatic improvements in communication technologies. For the purposes of this paper, I tackle globalization as a 2 arm process. The first arm is the economic openness or globalization, and the 2nd, is the information and communication technologies (ICTs).

Economic globalization. Economic globalization has been the fundamental driving force behind the overall process of globalization. The economic globalization is now accelerating to the extent that trade and foreign assets have hit new highs relative to the world incomes.¹

Linkage of economic globalization to health. In the age of globalization the interacting economic factors have a significant impact on health. The surges in economic growth of some globalizing countries namely Vietnam, India, has a positive effect on the health status of their peoples.² There is an increasing availability of financial flow to health expenditure. There are also positive effects on the individuals health due to impacts on the household incomes (namely, effects on nutrition, affordability to services for example). The economic globalization lead to high advancements in health care technologies, and improvement in the living standards, leading in turn, to increased demand on the costly advanced diagnostic and therapeutic procedures. Factors contribute to the high costs of

health services in globalization societies include privatization, introduction of users' charge in public hospitals, increasing and often, unnecessary use of technology and rise of drug prices. This has led to a noticeable phenomenon, the unequal access to medical care by different social groups. At the same time, the emphasis in some developing countries on investing on modern ICTs would divert the already limited resources from the much more crucial expenditure in education and basic health needs.³ This usually occurs where premature, rapid and unconditioned globalization tried, resulting in worsened growth performance and health outcomes. One of the prevailing themes of globalization is privatization of both goods production and services delivery especially in health care and high education). Private health care is growing rapidly even in poor nations. Even conditions of public health importance such as malaria, tuberculosis and acquired immuno-deficiency syndrome (AIDS) are not exempted from privatization. There is a trend among a large number of users to rely on the private sector. Reasons cited included better and more flexible access, greater confidentiality and sensitivity to the users needs. The policy makers then should ensure both improved quality and non-exploitive prices for such services.

Information and communication technologies (ICTs). The today information age is heralded by the rapidly growing development in the ICTs. Similar to the previous technological revolutions in the human history such as steam engines and electricity, the ICTs revolution has been associated with high degrees of widening and transformations in the global economic and social activities. A simple example to mention, is that a 3-minute telephone call from New York to London, today, costs 30 cents, whereas it was costing 300 dollars in 1930. The ICTs can affect the health condition of a nation directly by improving the health care provision, and indirectly through its effects on the broader determinations of health such as growth, social infrastructure and economic position of the households. For the poor world the internet enhances the ability of the companies to participate in the global trade. It also improves the surveillance of epidemic diseases and response to epidemics and disasters. The ICTs highly contribute to delivery of continuing medical education and delivery of health services to remote areas. The typical example of use of ICTs in health is the telemedicine. Telemedicine is a term encompasses any medical activity involving an element of distance, where health professionals can communicate faster, more widely and directly with clients and colleagues, no matter where they are. The terms telehealth, telecare, online health and e-health are used interchangeably with telemedicine. The simple application of telemedicine is the straightforward use of land telephones (telephone

helpline triage and follow-up). But the internet and communication satellites provide sophisticated vessels for telemedicine such as e-mail, chatlines, internet phones, videoconferences and scanning of pictures and data. Although the e-mail messages with still pictures attached are cheaper than real time video links but have a lower diagnostic value. The current applications of telemedicine include teleradiology, teleconsultation, call centers, home telenursing, videolinks and electronic referral to specialists and hospitals. There are many other uses of ICTs in medicine. Medical research has benefited from the Internet. Instead of waiting for up to a year, the peer reviewed research results can now be published in as early as a few days. The Internet has given life to the concept of evidence-based medicine. On facing a difficult or rare problem, one can retrieve reports of similar conditions from the internet in a few seconds, instead of days of ploughing through catalogues and shelves for journal articles. The wide dissemination of knowledge and expertise may abridge to some extent the information gap between the developed and developing countries.

Other health impacts of globalization. With globalization, there is vast changing in health-related traditional values, habits, norms, and lifestyles through the world in desired and undesired patterns. As with goods and capitals, barriers to flow of people are also removed, so that the international travel is at a unprecedented level. Also there are waves of large scale migration and renationalization (especially to Northern America, Australia and to lesser extent to Europe). A significant health impact of the travel is that it has shaped the epidemics. Examples include the widespread of AIDS, resurgence of old infections such as tuberculosis and the worldwide reverberation of the recent epidemics of plague, Ebola and foot and mouth disease. With globalization there is an increased reliance on imported Western-like foods, (with high fat and refined carbohydrate contents) to replace the local healthy traditional ones. It was suggested that the preference of these unhealthy foods is related to their availability and cheap costs. In other words the wrong nutrition is not simply a health educational issue, it can be an economical matter.⁴ The overall shift from food scarcity to food surplus in globalizing societies is accompanied by rising obesity and its consequences such as diabetes mellitus and hypertension. In addition to unhealthy foods, globalization has promoted the fashionable drugs (Viagra, melatonin), tobacco and alcohol. But the plant remedies still remain the mainstay of the traditional medical systems in many parts of the world. In the global age there is a need to reserve a place for issuing and updating guidelines of safe and efficient herbal medicines and other useful traditional remedies. Barriers to ideas are also removed. The trend toward global moral and ethical standards lead to improve the rights and prospects of vulnerable

social sectors such as the elderly, prisoners, mentally-retarded and crippled. The openness of the international relations constraints the egregious human rights abuses, and violence against women and children. New ethical issues have appeared, namely the option for genetic manipulation and patenting the technologies that will affect the health and social being. Where the globalization measures found difficulties namely in Russia and Mexico, the economic depression, poverty and unemployment lead to high rates of crime, migration, prostitution and suicide.⁵ Some authorities in the Third World still resist adopting a global or universal code of medical ethics, insisting in what they claim a culture-sensitive code in the current controversial ethical issues. This may be seen, especially in the West, as no more than a "chauvinism" in a world using the same goods, services, food and communicating at anywhere, anytime.

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