show impaired adaptation compared with dentate patients. In industrialized economies, priorities for health management include the desire to retain youth, beauty, and optimum function. These are a byproduct of the education and knowledge revolution and have extended the survival instinct of the past to focus on self-preservation.
- Functional occlusal rehabilitation with dental implant therapy proves that osseoperception is achievable. However, data have confirmed that, although implant rehabilitation can predictably restore esthetics and function, it does not restore neurosensory equivalence with the natural dentition.

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Is Complete Denture Therapy Still a Viable Option in a Global Context?

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- The current world order is characterized by the one thing that perpetuates the existence of underprivileged individuals and communities: inequality. The World Health Organization (WHO) Commission on the Social Determinants of Health stated that "Inequities are killing people on a grand scale," and "In countries at all levels of income, health and illness follow a social gradient: the lower the socioeconomic position, the worse the health." It is a sad fact that almost half the world—more than 3 billion people—live on less than $2.50 a day[1] and that at least 80% of humanity lives on less than $10 a day. More depressing still is the fact that 22,000 children die each day due to poverty.
- Throughout the world, people are living longer; with age comes tooth loss, which our profession has been unable to prevent. Aging populations and communities without a necessary decrease in edentulism remain a harsh reality for the foreseeable future. Rates of edentulism, though, are hard to explain and vary widely among countries and in different communities within the same country. The comparatively new field of cognitive epidemiology[2] may help to explain some of these differences. Percentage rates must be viewed with caution and translated into real numbers. For example, it is estimated that 11% of people aged 65-plus years in China are edentulous—a staggering 22 million people.
- Being edentulous conforms to the WHO's criteria for disability and is also associated with intellectual and developmental disabilities across the age spectrum,[3] plus other comorbid factors. An association between food choices and inability to chew had already emerged as a threat to morbidity since the former were cited as most frequently associated with increased risk of systemic diseases, eg, coronary heart disease.[4] Moreover, an association between masticatory ability and cognitive function, with a suggested dementia link, has also been proposed.
- Current implant overdenture therapy has been proposed as the standard of care for edentulous patients. This popular professional conviction is vulnerable to a self-serving and simplistic label, apart from being grossly insensitive to the real global predicament of edentulism. A standard of care implies that (a) anything less is legally negligent and (b) anything more is overtreatment. It also ignores simple facts: *(1)* Not all patients are surgical candidates for systemic health or personal preference reasons[5,6]; *(2)* implant therapy is frequently unaffordable. It has been estimated that less than 0.1% of global edentulous patients have received implant dentistry—a compelling rebuttal of a "standard of care" conviction. Furthermore, healthy implant-treated patients can become sick patients, or similarly managed healthy elders end up as frail elders. These patients' oral hygiene demands will include challenging dexterity requirements and caregiver concerns leading to a need for reconsidering the merits of mucosa-borne complete dentures.
- It is important to remember that, in many dental schools, dental students have minimal experience in carrying out complete denture therapy for patients. Prosthodontic educators must continue to ensure that their students acquire the necessary skills to enable them to improve the quality of life of

their edentulous patients. This remains our profession's primary social responsibility!
- So, the answer to the titular question is a resounding "yes!" There is clearly a huge need for complete denture therapy in all countries, more in some than in others. But the need persists and we must ensure that the necessary skill-sets are passed on to help these patients not only improve their quality of life, but also to help them maintain and improve their cognitive, physical, and social health.

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Shortened Dental Arch Research Considerations for Edentulous Patient Management

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- Published outcome studies on patients with shortened dental arches (SDAs) when compared with other patients with complete arches (CDAs) reveal similar vertical and horizontal teeth overlap and occlusal wear, more interdental spacing in the premolar regions, more anterior teeth in occlusal contact in intercuspal position, and lower alveolar bone scores. However, the SDA status did not change over the years and demonstrated long-term sustainability.[1] Other studies reported minor reductions in masticatory efficiency that are compensated for by longer chewing; no increased risk for temporomandibular disorders and periodontal health compromise; and minor effects on tooth wear. Moreover, subjects with SDA reported only minor or no negative health–related quality of life (OHRQoL) impact scores.[2]
- The approximately 10 occluding pairs of natural teeth in SDAs are the incisors, canines, and premolars. Most early implant-supported fixed dental prostheses in edentulous patients simulate this situation; and it has been shown that a lower number of implants than the number of replaced teeth in these regions can readily withstand occlusal forces. It is also suggested that neuromuscular regulatory systems are controlling muscular forces depending on the reduction of the number of occluding teeth. Hence, there are lingering queries as to whether these regulatory mechanisms that seem to exist in subjects with "natural" SDAs are also present in "implant-fixed" SDA versions.[3] However, a study in subjects with unilaterally natural posterior teeth and unilaterally implant-supported fixed dental prostheses for replacement of posterior teeth showed that maximum bite forces on the implant-supported side were lower than on the natural teeth side, which suggests that osseoperception regulates maximum occlusal forces. Moreover, a recent review stated that, in spite of the fact that individuals with fixed dental prostheses (FDPs) on natural teeth have periodontal mechanoreceptors while those with implant-supported FDPs in both jaws do not, motor performance in both groups is impaired to a similar degree.[4] While direct evidence is lacking, it seems plausible to conclude that implant-supported SDAs provide similar—albeit with a reduced feedback mechanism—functionality as natural SDAs.
- The use of the minimum number of longer and tilted implants so as to avoid anatomically challenging structures, as well as to preclude invasive surgery, underscores the concept of the so-called all-on-four treatment protocol. Moreover, this strategy achieves a more favorable anteroposterior distribution of implant abutments. This approach can also minimize the length of cantilever extensions that are popularly regarded as compromising distal implants' longevity. Tilted implants are also reported to function just as well as axially loaded ones, and numerous midterm survival data already indicate sustainable performances for interforaminal and anterior-sinus implant-supported SDAs.[5]