## Letter to Editor

## Medical and social transformations in an aging world

Sharon R. Kaufman<sup>1\*</sup>

<sup>1</sup> Chair, Department of Anthropology, History and Social Medicine University of California San Francisco, San Francisco, California, USA **Corresponding author and reprints:** Sharon R. Kaufman. Chair, Department of Anthropology, History and Social Medicine University of California San Francisco, San Francisco, California, USA. **Email:** sharon.kaufman@ucsf.edu **Accepted for publication:** 7 Aug 2017

**Cite this article as:** Kaufman S. Medical and social transformations in an aging world. SDH. 2017;3(3).114-16. DOI: http://dx.doi.org/10.22037/sdh.v3i3.18200

ow do we know and live old age today? What does it mean to be old in a time of the promise of high-tech medical interventions? Anthropologists and sociologists address the phenomenon of growing old both as experienced by individuals and their families and by the ways in which older lives are embedded in social, historical and political contexts. In recent decades a multitude of factors ensure that the very ideas of 'aging' and 'health' in late life are being transformed. As a result, many social scientists have turned their attention to global developments in the spread of biomedical knowledge, the impacts of high-tech interventions on the practice of medicine in an aging world and shifting societal expectations about longevity.

The world population is growing older. The proportion of those over 80 and 90 is increasing worldwide, along with the chronic illnesses that accompany later life. Those over 85, including centenarians, are the most rapidly growing age group in Japan, the U.S., Canada and most of Europe. Even so, the absolute numbers of individuals over 85 is growing fastest in the developing world (1). While developing countries still face enormous challenges in the face of infectious diseases, those challenges are now accompanied by a growing older population with chronic ills - for example, cardiac disease, cancer, diabetes and the dementias. Thus there is now a double burden on poor countries, whose leaders must decide how to apportion limited health care resources. In affluent countries the cost of drugs, other treatments and health care services continues to rise, posing scenarios of economic unsustainability for governments and social welfare systems.

Previously fatal diseases are becoming chronic illnesses in need of surveillance and management. The combination of greater age and chronic illness has led to increasing caregiving burdens worldwide, and these are handled differently depending on family availability, medical insurance. social support and local resources. Families can no longer be depended on to care for infirm elderly for years or even decades because many no longer live in the same household, village or city as their parents and grandparents, and because values about the necessity of family care often give way to

the practical need for paid caregivers. A global

flow of caregivers from resource poor countries to rich countries has been taking place over several decades as women (and sometimes men) leave their own homes and families to care for the elderly in other countries.

With the help of the internet, older individuals worldwide have become medically sophisticated, risk aware and demanding about The treatments. paternalistic physician who knew the patient and family and made the decisions into the 1960s has been succeeded by a culture of patient autonomy, hospital-centered medicine and the new importance of medical In developed and developing teams. countries alike public understandings of the promise of treatments are facilitated by online information at the same time as the distribution of those expensive treatments remains uneven throughout the world.

Treatment capabilities, and thus disease trajectories, have changed enormously with the expansion of medical technology and the proliferation of tools that enable earlier diagnosis of problems. More diseases can be treated effectively with drugs and devices that did not exist or were in their infancy 20, 30 or 40 years ago, and more kinds of risks be controlled. Simpler can surgical techniques now enable swifter recovery, making older, frail patients candidates for surgery. Cardiac valve replacement, kidney and liver transplants, and the implantable cardiac defibrillator have become unremarkable in the U.S. and other places for those in their seventh and eighth decades, as are renal dialysis and treatments for advanced, metastatic cancers. Some therapies are now offered, wanted and

employed among patients in their 90s. Such advances have greatly increased the need for decision-making by doctors, patients and their families regarding which treatments to choose and how long to continue them.

For clinicians, the unavoidable "technological imperative" in medicine, first described by health economist Victor Fuchs (2), becomes, also, a moral imperative. Once a new technology is developed, the bureaucratic and cultural forces within medical practice are exceptionally difficult for physicians, patients and families to refuse. Furthermore, once new technologies are approved for public use, they often are extended far beyond the younger populations on which they were originally tested in clinical trials.

In U.S. aging society especially the role of technology is complicated because studies show that high tech treatments for persons in later life with multiple chronic illnesses sometimes opens up a murky ethical terrain in which the press to prolong life comes up against the cry to reduce suffering (3). There is substantial tension between the widespread demand for life-prolonging interventions on the one hand, and, on the other hand, the desire among individuals to control the timing of their own deaths without technology that prolongs the dying process.

Medicine has always pushed the boundaries of what is possible. What is different today in industrialized and post-industrialized societies, markedly so in the U.S., is the availability of life-extending technologies, increasing life expectancy, higher expectations about good health into very late life and greater longevity. Along with these developments come new kinds of clinical and emotional burdens that the technological imperative, emerging standards of care and ethical necessity foster. For clinicians, those burdens include weighing the evidence against the "technology parade" (4), that is, the overuse or inappropriate use of medical interventions. For patients, those burdens include experiencing the need to pursue treatments to stay alive, sometimes for the sake of their families. For families, the burden is living with questions that are becoming so common in the U.S. – should I encourage my parent to have this treatment? What does it mean if I do not? Am I a good enough spouse or child if I do not advocate for aggressive intervention? Clinicians need to be aware that these questions are becoming more common, though they are not often articulated.

## References

1. Kinsella, K. Global perspectives on the demography of aging. In J. Sokolovsky, The cultural context of aging: Worldwide perspectives. Westport, CT: Praeger/Greenwood. 2009;13-29.

2. Fuchs, VR. Who Shall Live? Health, Economics and Social Change. New York: Basic Books; 1975.

3. Kaufman, S. Ordinary Medicine: Extraordinary Treatments, Longer Lives and Where to Draw the Line. Durham, North Carolina: Duke U. Press; 2015.

4. S Shim JK, Russ AJ, Kaufman SR. Late-life cardiac interventions and the treatment imperative. PLoS Med. 2008; 5(3): e7.