

USC Law and Global Health Working Group - Meeting Notes
November 5th, 2015
12:30pm-1:30pm PST

Participants

Michael Cousineau, Laura Ferguson, Caleb Finch, Sofia Gruskin, Ian Henry, Charles Kaplan, Shubha Kumar, Doe Mayer, Alexandra Nicholson, Larry Palinkas, Allison Renteln

Meeting Summary

This was the second meeting of the Law and Global Health Working Group in Fall 2015. After a brief summary of the process last year (in which the group explored conceptual links between law and global health, see prior notes) including the decision to focus on aging as the topic for engagement over this academic year, the group moved into its exploration of the topic at hand. Dr. Caleb Finch was invited to help orient the group as to the key issues to be considered in relation to aging, as they could help shape the work of the group in relation to the law and global health intersection, and with attention to the strengths of the different disciplines and schools represented.

Presentation from Dr. Caleb Finch

Dr. Finch began with a brief overview of his background and research interests. He is a biologist with a background in chemistry and physics, and has been interested since his grad student days in human aging and the evolution of the human lifespan. He has been at USC since 1972, and is among the cofounders of several graduate programs, including molecular biology and neurobiology. He is also the founding director of USC's Alzheimer disease laboratory. Dr. Finch is particularly interested in outcomes of human aging as we enter an increasingly troubled environment, with global warming and pollution posing particular challenges in optimizing human health across our lifespans.

Dr. Finch then gave a brief, broad stroke statement concerning some of the problems that he thinks are critical to consider in any work on aging. In the last 200 years, human life expectancy at birth has doubled from about age 35 to now 70+. Additionally, life expectancy at age 70 has more than tripled, from 2 or 3 years to 10-15. This increase is scaled with socioeconomic position within and between countries, and starting about 1870, the life expectancy of women improved faster than that of men. Infectious disease is no longer the global scale killer it once was. In the pre-antibiotic world, 70-80 percent of deaths occurred because of infections (whether acute or by sepsis), which remains true for those outside or with limited reach to modern medicine, e.g. the Tsimane, an indigenous population in Bolivia. Additionally, maternal mortality has also fallen rapidly, particularly with the advent of antibiotics in many places. So on a global scale we are in an era of minimal natural selection from the forces that were operating on us for the last millions of years in the natural world.

Despite this, current demographic trends are really stark: within resource-rich countries if you have less than a high school education, your lifespan is 20-30 years shorter than those with this level of education or better. Additionally, your risk of Alzheimer disease is two-fold higher. Looking ahead, we can anticipate that there will be continued additional medical marvels, but they will be very expensive and will serve what Dr. Finch calls "the health elite" of the world.

Looking ahead, Dr. Finch highlighted two huge global health challenges: (1) the increasing expense of new medical approaches, e.g. antibodies that would shrink blood vessel

atheromas or reduce the progress of Alzheimer's. These sorts of interventions will cost between \$20,000-\$30,000 per year in at least the first few years of their construction. Thus they will be mainly accessible to the health elite, and that will expand health disparities that already exist. The second challenge (2) is climate change and the resulting massive environmental shifts, which will increase temperature--ozone production is directly related --and expand coastal brackish zones as sea levels rise, which are massive breeding reservoirs for insects and insect borne diseases. An additional concern is particulate matter pollution in the air. China alone has underestimated their rate of use of coal beyond 2030 (as highlighted in a recent Wall Street Journal Article), which is likely true also for other countries, which need coal not only for industrial production but for air conditioning and power. Thus, a small percentage of the world will be able to afford protected environments, and Dr. Finch anticipates a progressive global decline in gains in life expectancy and health, with differences accentuated by socioeconomic status and gender.

Follow-up Questions for Dr. Finch, and Group Discussion

The group questioned the extent to which law could be relevant or helpful to the problems laid out in Dr. Finch's comments. Dr. Finch noted that this is in fact a multigenerational issue, but highlighted that a considerable amount of the necessary work that could both articulate the problem and help to address it could be done through legislation at various levels which consciously sought to improve lives and protect people.

The group then reflected on the globalization of obesity, as a massive problem. Dr. Finch noted that obesity was generally distributed within populations from top to bottom as well.

Participants also wished to further explore some of Dr. Finch's statements about socioeconomic status and gender. Participants noted that men are, at least in some countries, catching up in terms of life expectancy. Further, participants noted that it is important to look at the intersection of SES and gender and not consider them simply as two very different markers in that, for example, for women at the lowest end of the socioeconomic status bracket, the situation is actually most dire.

Looking at the interaction of several of these issues, participants expressed a desire to explore policy responses to these inequities in global health, with particular attention to climate change and access to medical devices, as relates to the ability to access health services more generally.

Participants further noted the impact of large-scale legal agreements and their potential impacts on global health, including, for example, the new Pacific Trade Agreement and considered whether the multi-disciplinary perspectives of the group could be relevant to assessment, research and action in relation to these types of agreements. The fact that the same piece of legislation is both furthering disparities on one hand, and trying to solve them on the other, is certainly worthy of further discussion and analysis with particular emphasis on the impacts on vulnerable populations. The important role that global politics plays in the drafting and implementation of such agreements was also discussed.

Participants discussed other examples of efforts to address health concerns with good intent but which have gone horribly wrong. All pose ethical issues around uncertainty. For everything we think we are doing right, we may be also be doing a lot wrong. Participants noted that there is always a risk of creating new problems in science, but noted that these sorts of questions in relation to new legislation are asked only sporadically and very often only on the very local level. To the extent that law may play a major role in governing uncertainty or

protecting populations against uncertainty in the face of many global health problems, health and rights impact assessments might be an important contribution which could draw on the various strengths of the group.

Participants also noted other areas in aging relevant to the law and global health intersection including competency concerns when people have dementia; issues of age discrimination are also relevant as these may impact physical and mental well-being. For example, in several places in Europe and Japan, there is pressure to slow down at 62, and if people wish to continue in full time employment, they may end up in the US or Canada.

Participants then brought up some of the practical challenges that governments face regarding climate change. There is pressure to enact legislation to address it, whether by laws that restrict use of coal as an energy source, cap and trade agreements, or other measures. But relevant to this group, do people and legislators think about the health impacts of climate change, such as reduced longevity or increased disparities? Certain age groups are definitely more vulnerable, but you don't hear a lot about health impacts in the climate change discussions, you hear about economic consequences.

Participants noted that they were particularly struck by Dr. Finch's points about disparities and also the layering of axes of disparity, aging, climate change, and the sorts of prevention interventions, including in the realm of law and policy, that might help people globally to live longer and healthier lives. This opens up points of research and engagement at the global, national and sub-national levels.

Participants noted that part of addressing these issues is engaging with the fact that political decisions require evidence, but how we construct and use that evidence is an important area for discussion. And in relation to law, we certainly want to look at the law on its face, but what is occurring around implementation is equally or perhaps even more critical.

Participants noted that although social disparities are not new, there is certainly potential for the work of this group to focus on inequities in law and global health as relates to aging. The question remains to be framed, but inequities is a clear and interesting entry point that engages much of the expertise and experience of the group and the university more generally. In a sense, this is pulling back to the larger points that bring us all together.

Participants noted that several of these issues--health inequities, how legislation engages health, population coverage, and political concerns--also arise regarding recent trends in universal health coverage. It's a popular topic, and in certain areas, UHC reforms have been framed as addressing these inequities through law and policy, but the extent to which they actually improve access to health services and impact longevity varies. This is another interesting angle, particularly as it deals with aging populations.

Further problematizing the issue, participants noted that as individuals we make decisions largely based on emotion, not necessarily fact. Not all people live in a world of data, so multiple pronged strategies will be necessary to change things--data are critical, but also framing efforts to impact how people feel.

Finally, participants reiterated their support for an extended focus on aging and inequity in the global health arena. Eileen Crimmins was suggested as a person who has done pioneering work in this area, so efforts should be made to reach out to her.

As for the next meeting, there was general consensus that a meeting in January is likely the best option, and Charlie Kaplan and Larry Palinkas graciously offered to cover the lunch through the School of Social Work.

Finally, we wish to extend our sincere thanks to Dr. Finch for his willingness to present and his help in stimulating important thought and discussion, which will help our work to move forward.