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EDITORIAL

M.I.A.M.I.: The Whealth Di$parity

Drs Deidra C. Crews and Yoshio N. Hall tackle the subject of health disparity in CKD in this issue of *Advances in Chronic Kidney Disease*. What does that mean? At a basic level, one or more socially disadvantaged groups experiences worse health, less quality of care, or inferior outcomes to a comparator group. Disparity variables often include those of social or political significance: race, ethnicity, poverty level, literacy (general or health related), immigrant status, sexual orientation, and English proficiency. Disparities may also exist at the individual or community level or both. For example, it may matter more if an individual lives in a poor or resource-poor environment than if that individual is poor.

Health disparity is not equivalent to disparities in health care, but they are inextricably linked. Health disparity reflects disease prevalence, mortality, and functional status. The latter reflects resource allocation, implementation, and outcomes to a degree. Health care outcomes may be disparate for any of the aforementioned groups, but disparate outcomes do not directly implicate disparate health care as causality. Nevertheless, health care disparities in CKD are under our purview and are finely discussed throughout this issue.

It is well established that the United States falls short of the mark when examined as a business of health care. Principally, we spend more than all other nations to purchase inferior outcomes. We spend more for health care than any other nation. In 2013, the Commonwealth fund reported that the United States spent $8,508 per capita to achieve the worst efficiency, equity, and ease of access.[1] This report was the third annual report that stated the same. Succintly, the report was admonishing: if one were to enter the health system, albeit late, one should typically expect to be routed through it relatively slowly and possibly, differentially. In contrast, within the United Kingdom, $3,405 is spent per capita on health care to achieve the best outcomes. To be fair, the difference between the countries is in part attributable to the United States' tremendously expensive end-of-life care—undoubtedly, the costly manifestation of the nation's psyche regarding the appreciation of what can be done during the last year of life where Medicare decedent costs are 6-fold that of survivors.[2]

Therefore, I now turn to one of the fundamental issues of resolving health care disparities and that is money. Unfortunately, the single most important aspect of any health care project's success is not how well it is devised, how many persons work on it (volunteer or paid), or how high the emotions attached to it. The crux of the matter is money, a paucity of which automatically creates a wealth and disparity within any health sector. This "*whealth*" disparity, if you will, is solved only by financial solvency. The implementation of the recent Patient Protection and Affordable Care Act, Public Law 111-148, enacted March 23, 2010,[3] was conceived to reduce health and health care disparities and remedy inequitable health care, but it too has cost money to properly implement and maintain: savings await as do outcome measures. Certainly, one anticipates that a proposal is well researched, smartly written, and will provide measurable outcomes on which to develop an even better and sustainable model, but as the musical artist Pitbull proclaimed on his 2004 debut album, M.I.A.M.I.: "Money Is A Major Issue."

Although money is the major issue, it is not the only issue. In a recent treatise by Harris,[4] the underdevelopment of children cerebrally and physically was described in the Sheohar District of India. Hindu children who were not considered poor and had sufficient caloric and protein intake were of short stature and behind developmentally. The cause of these richer children who bore the poorer physical phenotype was attributed to contaminated drinking water, and this was due to a cultural acceptance of open defecation. The conjecture is that one-third of gut-delivered nutrients are rendered unavailable because of repeated intestinal infections from infected water-flattening intestinal epithelia (think podocyte effacement and proteinuria).

The same article revealed that Indian Muslim children had a 17% survival advantage over their Hindu counterparts, despite a relatively lower level of education and wealth. The paradox was explained by the comparatively greater cultural acceptance of latrine use by Indian Muslims. The verity of the "latrine hypothesis" is currently

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being tested as a clinical trial in Bangladesh by Doctor Stephen Luby (Senior Fellow-Stanford Woods Institute for the Environment) whose infectious diseases and geographic medicine research strives to leverage and better understand the political, economic, institutional, historical, and cultural dimensions of public health problems with the aim of developing effective strategies that are sufficiently sensitive to these contexts. Therefore, cultural change and health literary along with money form a triangle, with dependency of each leg on the adjoining two. However, the shape of each triangle may differ for a given initiative. For example, in one instance, the magnitude of cultural change required may exceed that of the educational effort required and vice versa, but the longest side and base of the triangle is in all probability financial. Overall, the solution to *whealth* disparity circumstances is clearly not defined by the logical premise, "if p (money) → q (positive result)," but it is defined by the concept of "if ∼ p (no money) → ∼q (no positive result)."

Worldwide, individuals and foundations donate funds for a multitude of "good" causes. Some are for health care and some are not. Some are for sustainable programs and some are not. Projects that are not in it for the long run are often ill conceived, politically or personally motivated, or simply misguided. Unfortunately, there are no laws that preclude such one-off projects. The keys to programmatic sustainability are sufficient funding and onsite efforts that can support and effectively manage projects into the future after initial and successful implementation. Again, changes in local and regional education and culture are paramount. Each program's goal must be a complete financial disengagement from its funding source in a specified interval. Only then can it be said that a program has matured and become self-sustaining, which is a combined metric for the acquisition of expertise, administrative skills, and recognition by those who matter the most, the people served by the program.

At the individual level, only one's heart and mind determine where one's funds will flow, but at the corporate level, this could be energized. Incentivization of "doing good" by governments is one-way. Voluntary tax reduction with equal monetary donation to governmentally approved programs would not alter the bottom line of budgets, injure shareholders, or reduce the equity value of a company. A socially and civically minded board of trustees and chief executive officer dually embracing this concept are afforded the opportunity for transformative leadership. When there is personal contribution by the board to such an effort, there is often has a resonating effect throughout a corporation. The net effect of reduced corporate taxation is anathema to some, but in the United States, the growing concern of regarding profit expatriation by foreign reincorporation (inversion) forebodes an even worse financial calculus. Essentially, if corporate entities can with governmental assistance adopt their core values to make money for their shareholders while allocating a proportion of profits at doing good, especially for health care, we are all for the better. An embrace and coalescence around this concept by corporations will result in the payback of healthier populations and economies. Only those with sufficient global financial might wield the power to develop collaborative research efforts to do so. To this end, the World Bank Group has committed to ending absolute poverty by 2030.[5]

Can economists not figure out the way to keep companies within the United States and increase funds for social and civic programs, including those of health care? If they can, the tremendous financial burden of federally funded health care systems may be alleviated somewhat. In the United States, with appropriate direction and distribution, preventive care could become a reality. Type 2 diabetes mellitus, obesity, and hypertension represent a triangle of interlinked disorders with significant cardiovascular morbidity, which affects both rich and poor. Among the wealthy, caloric excess is causative. In China, the frequencies of noncommunicable diseases, specifically type 2 diabetes and hypertension, are escalating wildly,[6] and the now-wealthy Chinese are sending their teenage children to "fat" farms to enforce weight loss. This scenario is akin to the appearance of gout as "rich man's disease" and "the disease of kings."[7] Among the poor, in the absence of an abject lack of food, poor health literacy and education regarding food choice often lead to the same triad of diabetes, obesity, and hypertension. Furthermore, suboptimal food availability compounds the above. Finally, environments that do not offer affordable and healthy food engender malnutrition, irrespective of poverty level.

For diabetes alone, the estimated total cost of diagnosed diabetes of any type was $245 billion in 2012.[8] For hypertension and its 67 million afflicted American adults, the cost is nearly $48 billion.[9] For obesity, in 2008, the estimated medical cost was $147 billion, accounting for 10% of all medical spending then and potentially 16% to 18% by 2030.[10,11] For comparative purposes, the National Health Services estimates the direct costs to the United Kingdom (population, 188.8 million) in 2013 for obesity treatment at £5 to £6 billion (∼$8.8 billion), which is bankrupting this entity.[12] I and others posit that prevention programs that simply target food health among all persons will substantially reduce the amount of money spent treating them. This "leveling of the playing field" approach has been espoused by Phelan[13] who concluded that we must either reduce disparities in socioeconomic resources themselves or "develop interventions that, by their nature, are more equally distributed across socioeconomic status groups."

In the United States, targeting the elimination of disparities in health care delivery for diabetes, hypertension, and obesity affords tremendous cost savings, and equally importantly, the savings can fuel and propel the initiation of future and sustainable models of health care delivery. The impact on CKD would be tremendous and exciting. As the business saying goes, "it takes money to make money," and as we focus on the ultimate goal of eradicating *whealth* disparities for all, we should be listening and prepared to spend even more, especially given that in 2012 the National Institutes of Health funded just $2.7 billion for projects dedicated to health disparities research. Of 235 disease categories as classified by the Research, Condition, and Disease Categories System, funding for this health equity research ranked 16 of 235 disease categories.[14] Notably, in an analysis by AcademyHealth under the auspices of the

Health Services Projects-in-Progress, of 1,268 disparities-focused HSR projects assessed for health outcomes, kidney conditions overall accounted for only 2% of the total, lagging behind the aggregated studies of diet, obesity, and physical activity (18%); diabetes (7%); and cardiovascular health (6%). Given the financial impact of treating diabetes, hypertension, and obesity, I hear Pitbull resounding on his second album: "Money Is *Still* A Major Issue."

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A good man draws a circle around himself and cares for those within. His woman, his children. Other men draw a larger circle and bring within their brothers and sisters. But some men have a great destiny. They must draw around themselves a circle that includes many, many more.
—TT

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