

Rights, Bunche, Rose and the “Pipeline”

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We address education “pipelines” and their social ecology, drawing on the 1930’s writing of Ralph J. Bunche, a Nobel peace maker whose war against systematic second-class education for the poor, minority and nonminority alike is nearly forgotten;^{1,2} and of the epidemiologist Geoffrey Rose, whose 1985 paper spotlighted the difficulty of shifting health status and risks in a “sick society.”³⁻⁵ From the perspective of human rights and human development, we offer suggestions toward the paired “ends” of the pipeline: equality of opportunity for individuals, and equality of health for populations. We offer a national “to do” list to improve pipeline flow and then reconsider the merits of the “pipeline” metaphor, which neither matches the reality of lived education pathways nor supports notions of human rights, freedoms and capabilities, but rather reflects a commoditizing stance to free persons.

Key words: education ■ social ecology ■ human rights ■ inequality

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The condition of the “education pipeline” (i.e., the processes related to likelihood of educational success from kindergarten to postgraduate education) affects socioeconomic status (SES) and, thus, health disparities (Figure 1). The medical education pipeline resides in a social ecology^{6,7} of interrelated disparities in justice, economic and interpersonal relations⁸⁻¹⁵ that shape both individual- and population-level health and education outcomes.¹⁶⁻²² For example, while making up about 25% of the population, only 7% of attorneys²³ and 6% of undergraduate engineering enrollment²⁴ are minority persons. Another example of disparity is the immuring of more than a million minority persons. Incarceration disproportionately reduces the life chances of the imprisoned and their children. It also leaves entire communities underrep-

resented politically and has led to underestimation of U.S. inequality levels.²⁵

In studies of the medical education pipeline, African-, Latino-, Pacific Island- and Native American-ancestry professionals have been termed “underrepresented minorities” (URMs). URMs make up about 25% of the U.S. population, but “only 9% of the nation’s nurses, 6% of its physicians and 5% of dentists.”²⁶ The disparity in URM physicians leads to URM populations receiving inadequate healthcare²⁷ (i.e., healthcare disparity). This disparity, among others, leads to URM health risk and health outcomes disparities.²⁸

Disparities in healthcare, health status and in education have been well described, and it is now time, as the president of the National Medical Association (NMA) and others urge^{29,30} to move from description to corrective action. Recent reviews³¹⁻³⁴ of the medical education pipeline highlight best practices and achievements by institutions and individuals³⁵⁻³⁷ as well as a need for further progress³⁸ and alternative suggestions.³⁹

Rights

We suggest focusing on human rights to health and education, as these are integral with equity in social and economic conditions.⁴⁰ The president of another NMA (i.e., the Nepal Medical Association, in its own *JNMA*) recently noted how developing nations are effectively organizing healthcare delivery around a set of principles.⁴¹ One such principle that U.S. citizens, regardless of ethnicity, do not enjoy is the legal human right to health and education.⁴² For a developed nation, the human right to education includes not only basic literacy but secondary and tertiary education as well.⁴³ Some U.S. states’ constitutions (e.g., Connecticut) include a right to education. However, the U.S. Senate has failed to ratify or agree to enforce human rights instruments bearing on parity in health and education (e.g., International Covenant on Economic, Social and Cultural Rights, 1966; International Convention on the Elimination of All Forms of Discrimination Against Women, 1980; International Convention on the Rights of the Child, 1989).

Our nation will benefit by organizing health and

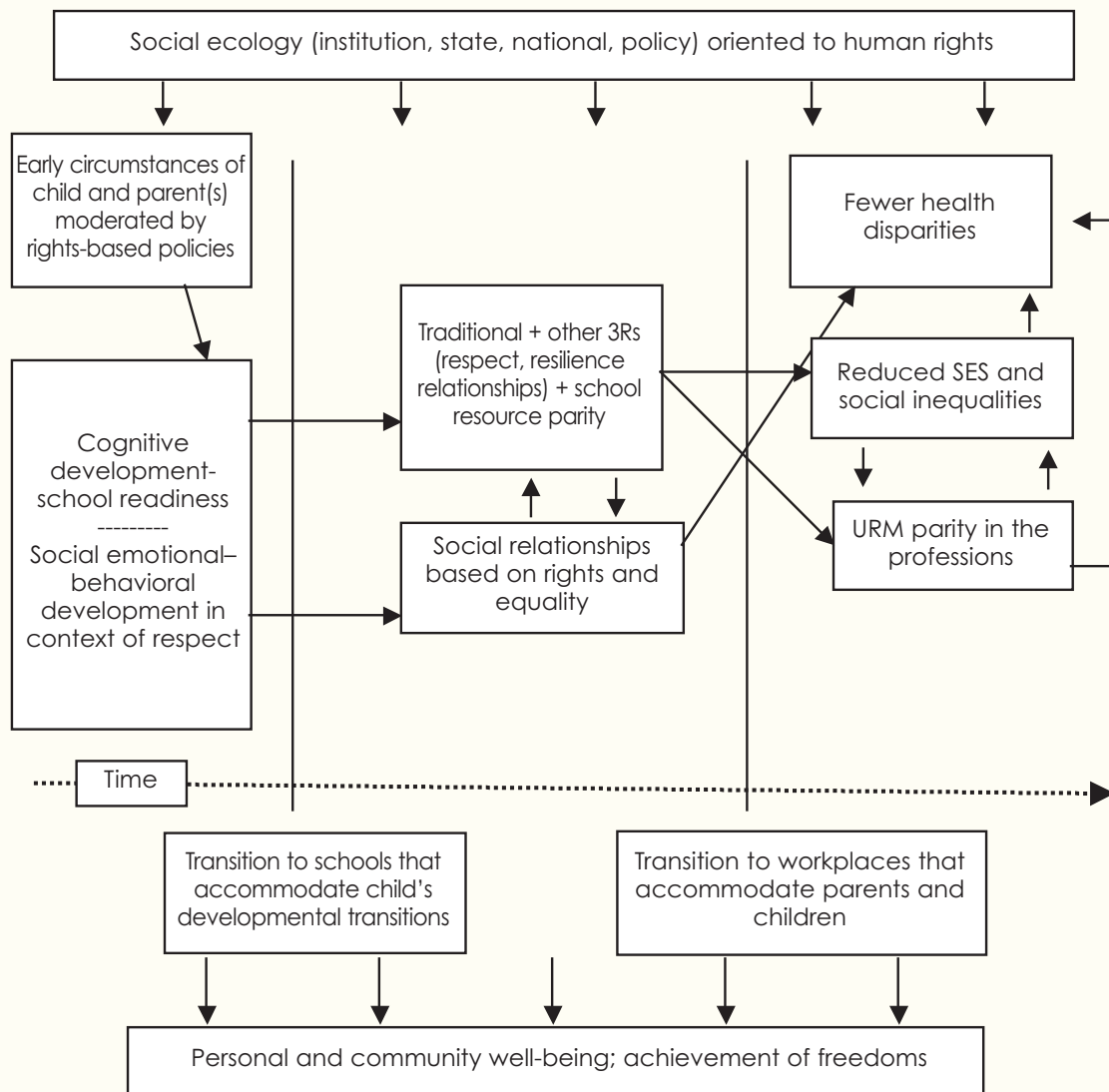
education systems on the principles of human rights and dignity.^{44,45} A human rights approach to health and education rights in the United States can also vitalize parity efforts in the present anti-affirmative action era.⁴⁶⁻⁴⁹ The synergistic power of the NMA, Institute of Medicine, American Academy for the Advancement of Science, American Medical Association, American Bar Association, National Black Nurses Association, American Public Health Association and others⁵⁰ could help the U.S. Senate see the light on human rights treaty ratification. If minority communities and their allies could create the tidal wave of South African divestiture, they could claim human rights at home. In the meantime, we need not sit still.

Radical “To Do” List

In 1936, Ralph J. Bunche wrote that if Americans were “... to win the right to education [including higher education], it will only be as the result of their combined efforts ...” Bunche urged us to think radically, to see the roots of education inequity. Given that: 1) programs and individual institutions have learned much and doing what they can severally, and yet 2) we as a nation have not reached health and education parity, it is time for a radical “to do” list (Table 1).

Coordinate. We suggest a radical approach to pipeline “flow restrictions.” At present, every profession has its unique effort to promote URM student presence in that profession. One “to do” is to coordinate efforts at reform across professions and institutions as they share

Figure 1. Conceptual model: human rights, education and health disparities



Adapted from Latency and pathway effects (Figure 4.6; page 95). Hertzman, C & Powers, C. Chapter 4. A life course approach to health and human development. In Heymann J, Hertzman, C, et al. *Healthier Societies*. Oxford University Press: 2006.

a common pre-K–16 flow and common ecology (e.g., maternal health, early education, schooling, parental poverty, debt burden, etc.). Seeing the shared origins of disparity in all professions' education might lead to their collaboration on a national problem across professions. Institutions now compete for limited funds and numbers of URM persons. Imagine if institutions that normally competed (or ignored each other) presented a united front, collaborated or coordinated their contributions to pipeline reform or ecological change.

Uncertainty, individual-focused ideologies and gaming in the matrix of state-federal education and health-care funding increase healthcare disparities.⁵¹ We need multiyear authorizations and appropriations and interagency coordinating councils and more joint efforts.⁵² Ratification of the human rights to health and education would support those working for a more stable, national system of funding for the education pipeline and for healthcare.

More pipe. Some have suggested laying more pipe, i.e., increasing the numbers of medical schools and students admitted to them.⁵³ The flow of both minority and majority physicians and others in higher education today is said to derive from market forces.⁵⁴ In the case of allopathic medicine, it is also a legacy of predictions made in the 1980s of an oversupply of U.S. physicians.⁵⁵ Our napkin-back calculation using U.S. census and AAMC⁵⁶ data shows that between 1980 and 2004 the U.S. population grew about 28%, while the number of physicians of all ethnicities graduated from allopathic colleges of medicine grew by about 14%. Bunche might note that these market predictions disserved both URM and majority patients.

Until recently, U.S. medical schools forecast graduating about 7% more physicians on average.⁵⁷ This "7% solution," in a context of population aging, disparity-related chronic and acute diseases as well as increases in immigration, risks repeating a bias toward keeping numbers of all physicians lower than all Americans needed. Fortunately, in June 2006, the Association of American Medical Colleges (AAMC) called for a 30% increase in physicians.⁵⁸ While the AAMC statement addresses an increase in foreign medical school graduates (FMGs)⁵⁹—perhaps because they may perform a

safety net function in underserved areas⁶⁰—it is comparatively silent on URM training.

While U.S. medicine has lately been market driven, it has not always been so. In times of national emergency, the number of medical providers has rapidly increased,⁶¹ with the needs of the populace, not markets, foremost. Adam Smith's "invisible hand" need not snare us; indeed, Smith did not favor injustice or blind markets but public responsibility for public goods.^{62,63} A market approach to Americans' health stands in contrast to a human rights approach; in the latter, inefficiencies derive from risking a surplus of physicians rather than a deficit.

Perhaps the educator–radical Ralph J. Bunche and the physician–epidemiologist Geoffrey Rose (who argued that the best defense of individual health was shifting social relations and so the distribution of health risk) inspired U.S. medical students to draft and promote the U.S. Public Health Medical College Act⁶⁴ to increase the number of physicians. The Act holds promise to reduce health inequity while also increasing equity of opportunity in medical careers. Interestingly, the Act is not market driven but focuses on meeting public needs, in effect focusing on the human rights to health and education.

Prepipeline. The 2004 Sullivan Commission Report and others do emphasize the need to reform K–12 and higher education systems, as was Bunche's concern in 1936. However, child well-being and preparedness for the K–12 pipeline starts in parents' lives and access to preschool.^{65–71} Universal high-quality preschool enrollment for three- and four-year-olds in poverty would close up to 20% of the black–white school readiness gap and up to 36% of the Hispanic–white gap in school readiness.⁷² However, in a recent "charting" of 126 medical colleges' efforts to promote diversity,⁷³ 38 colleges reported elementary and middle-school programming and 86 reported high-school programming. Absent from the chart is any note on early education interventions. "If it is not in the chart, it did not happen" is both truism and lesson. Pre-K education should be "on the chart" and the education pipeline needs extending to pre-K.

Schooling. At the middle-school and high-school level, no one suggests lowering academic standards, but existing standards are not working for many students. In middle and high school, we must better integrate aca-

Table 1. National "to do" list

- Replace minimum wage with living wage
- Universal, free, high-quality pre-K programs
- Make teacher training more rigorous
- Address the other three Rs (resilience, responsibility, reasoning)
- See beyond "most likely to succeed"; focus on moving top 20% into ranks of "talented 10th"
- Establish a parents' "GI Bill," linking college grants and loan forgiveness to postgraduation community service
- Collaborate across disciplines, institutions and funding sources to support above
- Ratify UN human rights treaties bearing on education and health

ademic preparation with identity, integrity, competence and belonging⁷⁴⁻⁷⁶ in, ideally, smaller classes, such as mandated in Florida's state constitution. Indeed, low levels of academic preparation in grades 9–12 keep URM students out of college. However, in Arizona, raising the bar (increasing the required number of units of math and English for high-school graduation) resulted in more students meeting the requirements for university admission without the anticipated drop in high-school graduation rates among minority or rural students.^{77,78} Fears that rural and inner-city schools could not provide the additional courses proved unfounded. To mix metaphors, raising the bar did not raise a hurdle as much as it raised all boats on a raised tide of expectations. Higher expectations can help overcome the effects of “tracking” students and help the “almost ready” become ready and double the “talented 10th” into a capable fifth (or more). A rights approach to education would automatically put the focus on equally high expectations for all.

Families. Students live in families, not pipelines. Recent data suggest that a greater proportion of URM parents than white parents want their children to earn a college degree.⁷⁹ Close ties to family are associated with greater academic achievement⁸⁰⁻⁸² and, at the same time, parents who have limited education are less likely to facilitate their child's education, have their child placed in gifted-and-talented programs or removed from low-ability tracks in elementary and middle school. Their children are thus less likely placed in rigorous college preparatory classes in high school.⁸³⁻⁸⁵ The “culture of college” is a given for the more privileged but poses a challenge for parents and students from lower-SES families.⁸⁶

When parents are not impoverished, they parent in ways that help children learn. Parents' poverty declines when parents attain a high-school, associate or bachelor degree.⁸⁷ Degree-attainment programs for parents work best when they are grant rather than loan based. A GI Bill for all low-income parents that linked loan forgiveness to postgraduation community service and personal health risk behaviors might appeal to a broad political spectrum and so become achievable.

Colleges too could address this need by pairing scholarships so the child and parent could attend part or full time, allowing parents to understand and thus better support their child's college and professional goals as well as increase their own capabilities—and thus that of their community. Enrolling parents in college or at least enlisting parents in their children's' educational goals is important as research suggests that between 20–30% of parents of first-generation college attendees and URM medical students oppose or resist the child's pursuit of higher education.^{88,89} Many colleges' endowments and stated willingness to help URM students and their families are at all-time highs. Now may be the time to pilot such pairings.

Yet realizing these changes for all children will be complicated. While most families and schools support

most children, sexual minority children (i.e., those marginalized for being homosexual, transgender, etc.) may not be accepted in the family or school.⁹⁰ We need to improve school climate (“pipeline safety”) at all levels of education.⁹¹ Ethnic and gender harassment begin in middle school and predict lower GPAs and college aspirations,^{92,93} perhaps mediated by school absences, which in turn, have large fiscal and personal costs (Russell, et al., unpublished data). Gender-based discrimination occurs all along the pipeline,⁹⁴⁻⁹⁶ causing the pipeline to hemorrhage talent and futures. A challenge then for pipeline research is to understand how families, schools and the professions can better support their children.

Scale. Students need schools that recognize the importance of family and parents, support college preparation and goal-setting,⁹⁷ and provide settings that encourage all students regardless of gender or ethnicity to achieve. High-school health career academies fit the bill.⁹⁸⁻¹⁰² One such program is a public school–university partnership, the Boston Health Careers Academy (HCA) on the campus of Northeastern University. Graduating its 11th class of approximately 40 high-school seniors, it focuses on academic rigor, community service, and socially and developmentally appropriate activities. For example, HCA provides two social workers to support students and parents with social and academic issues, and lessons in local biotech labs; and collaboration with a local corporation provides students with professional dress clothing for their work internships. In addition, HCA provides free SAT preparation courses. Based in cross-institutional collaboration, responsive to parents and open to all, HCA instantiates the development of human capabilities and the reversal of social exclusion.^{103,104} Indicative of its success is that in 2003, 97% of its 38 seniors graduated with a high-school diploma and 65% of these HCA students matriculated to a four-year college. In 2004, it was among the top 10 Boston area high schools in MCAS testing (state-mandated achievement assessments). HCA graduates from prior cohorts have begun to enter health professions, including pharmacy and nursing. We suggest taking HCA's school–healthcare–university–business collaborations to scale. If health and education were recognized human rights, there would be more emphasis on integrating replicating successful pilot programs.

Listening. To help URM students, we must understand their lives and not only their demographics.¹⁰⁵ For example, regardless of ethnicity, one in five medical school applicants pursued a graduate degree between completing college and entering medical school.¹⁰⁶ While the rate of college degree attainment among URM students is growing,¹⁰⁷⁻¹⁰⁹ little is known about master degree study along the road to doctoral study. We suggest heeding those who have called for listening to URM students and faculty via qualitative and ethnographic studies.¹¹⁰ We need a clearer phenomenological picture

of the pathway(s) to success among URM students.¹¹¹

Metaphors map social realities.¹¹² A metaphor like “pipeline” connotes the transport of human capital, an historically resonant image. “Pipeline” connotes commodification and control, absence of choice, and confinement for the benefit of others. Yet, while human capital as a scientific construct has been found wanting,¹¹³ its use persists. URM students show that pathway and journey metaphors more accurately portray the challenges and adventures chosen and found in the search for self, and for right service to others.¹¹⁴ We do not suggest political correctness. We call for correcting policy and begin by invoking a metaphor that reflects on humans’ capabilities and freedoms and, thus, human rights to health and education.

Respect. Human rights derive from human dignity. At a micro-level, emerging research on dignity¹¹⁵ reveals the daily indignities and discrimination experienced by minority students’ staff and faculty. Daily indignities are also implicated in population health inequities.¹¹⁶ In majority populations, owning up to one’s privileges and personal responsibility for intentional or unconscious insults is too often denied.¹¹⁷ We must address both the person level (respect) and the policy level (rights) to shift the social ecology.

Despite the odds reckoned here, remarkable minority scholars have enriched and continue to enrich the academy. However, in the face of continuing pre-K–16 education inequity, in the main they educate majority students (an area that has largely gone unresearched) as well as pay a “minority tax”¹¹⁸ by being the presumptive mentor of URM students. A human rights approach would place URM mentors and disparities researchers in a position of respect for their work.

CONCLUSION

Rose focused on the fact that increasing health services will not necessarily increase population health where conditions lead to a “sick society.” While in 1936 Bunche wrote on “black and white,” Bunche in collaboration with Eleanor Roosevelt was a key actor on the world stage in devising the Universal Declaration of Human Rights.¹¹⁹ Seventy years later, he would surely have urged us to foreground the ecology of the pipeline and not one profession, nationality, culture or ancestry. If we are, in Rose’s terms, to shift “the curve” to build a healthy society, we must take to scale the best of existing and emerging interdisciplinary programs^{120–122} and organize healthcare and education policy on the principles of human rights.

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