When anthropologist Robert A. LeVine and his Harvard Graduate School of Education (GSE) colleagues studied young mothers and their children's health in four countries in the late 1980s and 1990s, they were able to prove that girls' schooling was good for children's health. What mystified them was why. How could a few short years in substandard schools in poor communities in Mexico, Nepal, Zambia, or Venezuela, markedly reduce child mortality when the girls became mothers? To the researchers' surprise, the results suggested that the key was literacy. The results were based on quantitative analyses, not just on interviews but on literacy tests that were numerically scored and then aggregated for statistical analysis. LeVine would later discover that their findings were consistent with a larger 2010 *Lancet* study by Christopher Murray and colleagues in 175 countries. But what did literacy mean? How much was enough? And, if schooling can save lives, how might educators, experts in maternal-child health, as well as government ministers of health and education, collaborate more creatively on effective systems and policies in communities that are often marked by high maternal, infant, and child mortality rates, and where schooling for girls is a low priority? The challenges were compounded, the group knew, by the "silo effect" in academia, medicine, and politics, in which communities of knowledge are often fractured into specialties in such a way that discourages collaboration or cross-disciplinary communication. Their results were published in 2012 in an award-winning book, *Literacy and Mothering: How Women's Schooling Changes the Lives of the World's Children*. (Read a recent review)

To encourage discourse across these fractured disciplines, the Harvard Global Health Institute (HGHI) recently invited LeVine to discuss his work at a March 11 roundtable session, part of the Institute’s Informal Conversation Series, which offers faculty and students the opportunity to engage in dialogue on cutting-edge, cross-disciplinary issues. LeVine was joined by Dr. Ana Langer, a pediatrician who is Professor of the Practice of Public Health, Director of the Women and Health Initiative, and Director of the Maternal Health Task Force at the Harvard School of Public Health. One objective of the Maternal Health Task Force is to bridge gaps or disconnects between maternal health and other fields, such as education.
Schooling promotes literacy, LeVine said, by teaching a different way to learn: to follow verbal instructions, to pay attention, and to heed authority figures outside the household. This type of learning contrasts with the observation and imitation or "apprenticeship" model that often shapes how family members learn from one another at home. Literacy's impact on health reflects the challenges of navigating complex medical systems and language, understand health professionals, and interpret media messages about health, including those they hear on the radio or television. Clinics in poor communities may still be scary places for women, said LeVine, but literacy skills may lower a woman's anxiety level about seeking medical care, and help her to overcome systemic barriers.

Educational research is not easy, he added, admitting, "it took us 30 years." The significance of educational research is often ignored or inadequately analyzed because "people from different fields think they already know what education means around the world." Social scientists, economists, and demographers, for instance, have different views on how (and whether) classroom education works. "My challenge is 'Prove us wrong,'" said LeVine. He is encouraged by the work of a number of colleagues, including former GSE faculty member, John Comings, now at the University of Massachusetts, an expert in designing effective literacy tests, as well as by emerging new opportunities in health literacy studies at Harvard School of Public Health, including a course taught in the Fall of 2013 by Professor Rima Rudd. National and longitudinal studies, said LeVine, could further validate and nuance results to shape public policy.

"This is a critical time for this type of discussion," said Dr. Ana Langer, as she reflected on the role of girls' education in the field of maternal–child health. Langer pointed to the post–2015 transition from the Millennium Development Goals (MDGs) toward a development vision that will likely encompass some discussion about universal health coverage. While some examples of health and education working successfully in tandem are well known—Mexico's Oportunidades conditional cash transfer program, for instance—further academic work across disciplines remains vital.

Langer appealed particularly to the students in the room, noting,

The bottom line is that it's definitely critical for us as a community, in whatever manner we define it, to bring to the same table our different approaches, our different tools, our different areas of expertise, our different passions, and I think that you young people are particularly well-positioned to do so because you are not completely 'siloed' yet. Instead of trying to get rid of those silos, as we are trying to do, you could prevent those silos by thinking broadly, and connecting with peers and colleagues in other disciplines and working in other fields towards a common goal: the improvement of maternal and child health.

Schools are often known for their arcane bureaucracy, hardly suggesting formal education as the perfect model in any country. And the March 11 conversation included lively exchange about what could be done better, including alternative educational methods such as social media to aid navigation of information in a world of rapidly changing technology. "Could some variant of EdX be applied in a rural setting?" one student asked. Even if the answer is yes, replied HGHI Curriculum Fellow, Dr. Cherie Ramirez, how do we ensure that these tools are not only accessible but also relevant to the
intended audience—and that learners have (or can take) the time to learn from online resources? Langer noted that implementing social media in maternal–child health research needs carefully evaluation for effectiveness. And in many communities, women must still defer to the permissions and opinions of grandmothers and mothers–in–law, especially when it comes to seeking health interventions. The rise in urbanization paradoxically fractures families in ways that further constrain educational opportunities. Global health is local health, too; what about social media here in the U.S., asked Dr. Brittany Seymour, HGHI Inaugural Global Health Fellow and a member of the faculty at the Harvard School of Dental Medicine. Many educated literate women in the U.S. make choices—such as refusing vaccination for their children—that flagrantly disregard the voice of health authorities. And what about the role of men as a component in maternal and child health, added several students. Langer and LeVine agreed that male partners, as well as community leaders such as religious authorities and government representatives, shape policy in maternal–child health. The role of men in women and girls' health and schooling can vary in different communities. 

While research is thin on male involvement in girls' literacy and children's health, Langer noted, we have some evidence, for example, from the "Men as Partners" program of EngenderHealth, which she formerly directed, as well as the work of Harvard Business School professor, Nava Ashraf. Ashraf will be speaking at the Informal Conversation series on April 24, 2014.

"I really enjoyed the opportunity to engage in this conversation," concluded Langer, "and I hope something very concrete comes out of this discussion."

"I agree," said LeVine.