Journal of Adolescent Health 55 (2014) 458–462

ELSEVIER

JOURNAL OF ADOLESCENT HEALTH

www.jahonline.org

Presidential address

Celebrating Progress in Adolescent Health and Optimism for the Future

It is important to remember why we attend annual meetings of the Society for Adolescent Health and Medicine (SAHM). I believe that the fundamental thing that brings us together year after year is our deep commitment to young people. Our professional lives are dedicated to the health and well-being of young people. This is our common ground. This is why our work is important.

For my presidential address, I share with you my perspective on important changes and progress that have been made in the field of adolescent health and medicine over the past 25 years. In 1990, I was practicing as an internist and pediatrician in coastal North Carolina. I became concerned that adolescent and young adult health was being overlooked and that this was having substantial negative impact on young people and their entire life trajectories of health. I discovered the field of adolescent medicine, completed a subspecialty fellowship at the University of California San Francisco in the early 1990s, and since then have devoted my career to academic medicine. Although we all know there is a tremendous amount of work still ahead of us, I think it is important to reflect on the progress we have made in adolescent health over the past 25 years.

Change and Progress Over the Past 25 Years

Public health

In the United States, the leading cause of death and injury among adolescents is from motor vehicle crashes [1,2]. Over the past 25 years, the death rate from motor vehicle crashes among both male and female teens between 15 and 19 years of age has decreased >50%, from 33 to 13 deaths per 100,000 [2]. Over the past 25 years, the percentage of high school students who smoked one or more cigarettes in the previous 30 days rose to a high of 36% but has since dropped by half to 18% [3]. Over the past 25 years, birth rates among white, black, and Hispanic females aged 15–19 years have dropped by 50%, from 60 to 30 births per 1,000 [4]. In the United States, 21 public health objectives for adolescents and young adults were derived from the National Healthy People 2010 goals; two objectives were achieved, and significant progress was made on another 10 objectives [5].

Health care

In 1990, the American Academy of Pediatrics recommendations were for routine well-child visits every other year during adolescence, although this was controversial with some advocating for less frequent visits [6]. It was Dr. Art Elster, an SAHM leader, who articulated the rationale and recommendations for annual routine visits during adolescence and who worked hard from his position at the American Medical Association to facilitate clinicians being able to operationalize this level of care in primary care settings [7–9]. There has been a cultural and professional shift to support annual visits, and by at least one data source, 73% of adolescents had an annual physical in 2012 [10]. The US Preventive Services Task Force has provided us with clear science-based recommendations for the content of these visits [11]. There has been expansion of contraceptive options. In 1990, only barrier methods and contraceptive pills were available, and off-label emergency contraception was being used at college student health services. Now, we have available contraceptive pills, patches, vaginal rings, Depo-Provera, long-acting reversible contraceptives, and over-the-counter emergency contraception [12,13]. We now have three vaccines specifically intended for the adolescent population—meningococcal, Tdap, and human papillomavirus vaccinations—with more on the horizon [14]. Over the past 25 years, there has been steady progress in the percentage of adolescents in the United States with insurance coverage because of expansion of Medicaid and the Child Health Insurance Program, and the Affordable Care Act passed in 2010 holds the promise of further improving adolescents' access to health insurance and health care [10]. In part because of the Affordable Care Act, there is a meaningful dialog now emerging to better define and meet the health needs of young adults [15,16].

Illness and disease

Because of steady advances in treating childhood illness and disease over the past 25 years, we have seen a steady increase in the number of children that survive into adolescence and adulthood who would have previously died during childhood [17–20]. HIV is no longer a fatal illness, but a chronic condition [21]. We have experienced an increased emphasis on recognizing risk markers for adult disease during childhood and adolescence, such as risk factors for adult cardiovascular (e.g., hypertension, obesity) and prodromal symptoms of schizophrenia or other significant mental illness, with the hope that managing these risk factors will have a favorable impact on the evolution of adult illness [22–24].

Global health

Over the past 25 years, there has been increased attention to global adolescent health. There are now 1.2 billion young people

http://dx.doi.org/10.1016/j.jadohealth.2014.07.005

between the ages of 10 and 19 years globally, and we have seen increasing efforts to build awareness of the importance of adolescent health around the world [25]. Over the past 3 years, there have been highly visible publications around this theme, and the World Health Organization is launching a major effort to focus on global health among young people in the second decade of life [26–30]. SAHM's International Chapter and the International Association of Adolescent Health [31] have grown substantially, and members of both organizations were involved in a successful 10th International Association of Adolescent Health World Congress in Istanbul, Turkey in 2013. Nearly 500 participants from 55 countries attended this meeting, which was particularly exciting because of disturbances in nearby Taksim square. An editorial, written by Dr. Sabine Kleinert, appeared in Lancet describing the Congress and her observation that the demonstrators "were young educated people who wanted their voices heard" [32].

Science

Over the past 25 years, stronger medical, behavioral, social, epidemiologic, and public health science have emerged to improve adolescent health and health care, and this science has also become more accessible. A few of the organizations that provide high-quality summaries of research related to this age group are National Adolescent Health Information Center [33,34]; Child Trends [35]; Center for Disease Control and Prevention's Community Guide [36]; US Preventive Service Task Force [37]; The Cochrane Collaboration [38]; and the National Institutes of Health [39]. There has been an explosion of science related to the adolescent brain, which started with imaging studies, then functional studies, and now studies looking at connections within the brain. [40] The human genome project was completed in 2003; since then, we have understood exactly how complicated biology and chemistry can be and what we had hoped would be simple is clearly very complex [41]. This will however lay the groundwork for personalized medicine, which in the long run may be of great benefit to adolescent health.

Technology explosion

Technology has also exploded in the past 25 years. Adolescents now have access to a vast amount of information through the Internet, multiple new ways to use technology for communication, and access to new interactive modes of learning that expand far beyond traditional "school" activities [42]. Technology has provided new strategies for intervention work [43,44]. It has also created electronic medical records with the potential opportunity to improve the quality of medical care [45].

Framing adolescence

The framing of adolescent health has changed over the past 25 years. It is more balanced. We no longer focus only on the negative framing traditionally linked to adolescents. We now talk about risk factors *and* protective factors, problem-specific *and* youth development strategies to improve adolescent health, vulnerability *and* resilience. Drs. Ken Ginsburg and Sara Kinsman recently published a book with the American Academy of Pediatrics that included videotapes of many leaders in adolescent health and medicine, with the aim of reaching clinicians and community partners to use strength-based communication to build resilience and support healthy adolescent development [46]. Dr. Steinberg will soon be publishing a book entitled "Age of Opportunity" [47]. This is framing that was nonexistent 25 years ago.

Training

In the United States, adolescent medicine became a recognized subspecialty with board certification in 1994, which was an intentional strategy to bring increased recognition and credibility to the field [48]. Mandatory adolescent medicine residency training provided by faculty with appropriate expertise became required for the first time in pediatrics in 1996. Similar language has followed in internal medicine and family medicine [49].

Future Challenges

It is important to recognize and celebrate that in each of these areas, we have made important progress or seen important change because it demonstrates what can be achieved. And yet there is still much work to be done [50]. For example, motor vehicle crashes still cause one-third of all teen deaths in the United States, and motor vehicle–related deaths remain very high in many countries across the globe [2,30,51]. We still have about one in five teens who are current smokers in the United States, and although smoking prevalence has gone down in the United States and many industrialized countries, it has sky rocketed globally [3,27]. The teen birth rate in the United States is still higher than other similar developed countries, and teen pregnancy across the globe is an ongoing concern [27]. Of the twenty-one 2010 US Critical Health Objectives for young people, no progress was seen in regards to four objectives, and data looked worse for objectives related to chlamydial infections, obesity, and mortality among 20- to 24-year olds [5]. For almost all measures of public health, there are disparities by sex, race and/or ethnicity, or socioeconomic status [50,52].

Many adolescents still do not get routine preventive health care, and when they do, the quality of services varies dramatically [10,53]. Less than half of adolescents spend time alone with a clinician or discuss health-related behaviors [10]. The rates of delivery of science-based recommendations, such as chlamydia screening among sexually active girls and adolescent vaccination, remain lower than science-based recommendations among young children [54–56]. Although we have more contraceptive options, we continue to struggle to connect teens who would benefit to the most effective options [13]. Our progress in increasing the number of adolescents and young adults with insurance needs to continue, and we will need to work to increase the chance that the promise of the Affordable Care Act translates into increased utilization of high-quality health care services among this age group [10,16]. We do not have a health care system well organized to provide longitudinal care through adolescence into adulthood in a way that will reliably provide high-quality ongoing health care, which is especially important for adolescents with chronic medical or psychiatric illness, and for adolescents with modifiable risk factors for adult-onset disease [15,57]. We have not developed a science-based or sophisticated understanding of how we might reach parents in or through clinical settings to engage them in parent interventions to improve adolescent and young adult health.

There is a tremendous amount of work still to be done in global health [51]. We need more good science, and we need to understand how to effectively translate the science we have into