The Legacy of an All-Around Physical Activity and Health Scientist: Harold W. (Bill) Kohl III

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Since the unexpected and premature passing of Professor Harold W. (Bill) Kohl III on January 7, 2024, the field of physical activity and health has been mourning. Many colleagues, students, and friends paid their tribute to Bill through wholehearted texts, several of which have been published by the Journal of Physical Activity and Health.1–4 Our field is based on the notion of movement and activity, and therefore, it would not be expected for us to be quiet and passive in processing the tragic loss of Bill. I (Hallal) was an exception—simply frozen and unable to translate my feelings into words for more than a month. But then, I (Hallal) visited Austin for a last beer in Bill’s favorite pub and after that, I was finally ready to honor his legacy and translate some of my feelings into words.

Before that, however, on January 31, 2024, the Epidemiology, Physical Activity, and International Collaboration (EPIC) lab at the University of Illinois at Urbana-Champaign met to honor Bill’s legacy in the field of physical activity and health. Each of the lab members was asked to read a paper or a book by Prof. Kohl and give a short presentation about it. Before mentioning what we learned from this exercise, it is important to highlight who these people are. We had undergraduate and graduate students, post-docs, junior and senior faculty from different generations and backgrounds, all sitting together. Although the meeting took place in the United States, these individuals come from around the world, including Brazil, Canada, China, and Mexico. This is what Bill advocated for during his entire career: science needs to happen globally, and not only in a few places. A sample of just 10 of Bill’s hundreds of publications was presented, but it was powerful enough to provide students with a sense of how impactful Bill’s contributions are to the field of physical activity and health. Any categorization one can use to divide the field of physical activity and health will include Bill’s legacy in most (if not all) categories. In The Lancet 2012 Physical Activity Series, the field was divided into five areas: surveillance, correlates and determinants, health consequences, interventions, and policy. Bill contributed massively to the advancement of each of these five areas.

In terms of the surveillance of physical activity, Bill and colleagues used data from the Behavioral Risk Factor Surveillance System to analyze diet and physical activity behaviors of those trying to lose weight.5 They observed that less than one-fifth of adults trying to lose weight met the minimal recommendations of eating fewer calories and participating in ≥ 150 minutes per week of physical activity, underscoring the need for future initiatives that are both educational and motivational to support these individuals. This publication also speaks to Bill’s extraordinary ability to conduct interdisciplinary work and interact with colleagues from other fields. Bill always knew that combining expertise was essential to fight major public health challenges. Furthermore, with physical activity being a key health indicator, Bill had a strong commitment to understanding global patterns of physical activity. This led to Bill contributing to a publication that focused on understanding the prevalence of physical inactivity and its association with Human Development Index.6 These findings further highlighted the need for population surveillance across the globe to better assess physical activity trends over time.

In the 1990s, Bill published an article on the development of physical activity behaviors among children and adolescents.7 This is just one example of Bill’s scientific contribution on the correlates and determinants of physical activity. In this publication, the importance of physiological, developmental, environmental, psychological, social, and demographic factors in influencing physical activity was highlighted.7 The influence of each of these factors on physical activity is now widely acknowledged in the field.

In terms of the health consequences of physical activity, Bill was involved in many of the most important publications examining the association between physical activity and noncommunicable diseases. For example, Bill was part of a meta-analysis8 published in 2011 on the association between physical activity and coronary heart disease. This analysis revealed that individuals who engaged in physical activity below the minimum recommendations still had a significantly lower risk for coronary heart disease, further supporting the idea that some physical activity is better than none. In addition to the essential role of physical activity at preventing noncommunicable diseases, the hypothesis that physical activity might have other health benefits was also of interest to Bill. For example, Bill and colleagues found that there was a significant positive association between physical fitness and academic performance among school children, illustrating the importance of providing quality physical education curricula with an emphasis on cardiovascular fitness.9

When the field was only starting to consider the costs of inactivity, Bill and colleagues analyzed the cost-effectiveness of community-based physical activity interventions.10 In the early 2000s, Bill also observed that there was a need for greater evaluation of the diffusion and sustainability of evidence-based physical education programs. This resulted in the publishing of a case study that examined the sustainability of the SPARK (Sports,

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Play, and Active Recreation for Kids) physical education program in schools.\textsuperscript{11} Bill’s career clearly transitioned toward interventions and policy action during the past two decades.

In 2023, Bill authored a policy article on the state-level promotion of physical activity in the United States.\textsuperscript{12} In this paper, Bill and colleagues identified two states that had policy documents specifically related to physical activity, highlighting that future actions should be targeted at developing stand-alone physical activity policy documents at the state level. Most importantly, Bill led the first article ever to appropriately use the word “pandemic” to describe the status of physical inactivity worldwide,\textsuperscript{13} and in a 2019 publication (prior to COVID-19), Bill and coworkers explored the factors holding us back at responding to the physical inactivity pandemic.\textsuperscript{14}

Finally, Bill had a strong passion for sharing knowledge with his students and emphasized the important intersection of kinesiology and public health. To better equip students to become future leaders in the field, Bill and colleagues published the textbook \textit{Foundations of Physical Activity and Public Health}.\textsuperscript{15} This book not only offers an encompassing overview on the fundamentals of kinesiology and public health, but also bridges theory to practice by providing both strategies and policy approaches to effectively promote physical activity.

The contributions Bill has had on the field of physical activity and health are immeasurable. Through his unwavering dedication and commitment to cultivating change, he became an admirable all-around leader in the field. Beyond his influence in the scientific world, he will be greatly remembered for creating an environment conducive to collaboration and support. While his impact will be forever felt, his legacy will serve as a guiding light, inspiring future researchers and students like us in the EPIC lab to build upon the foundation he has laid to foster a more active world.

\textbf{References}