

## PUBLIC HEALTH AND CLINICAL SCIENCE A HISTORICAL PERSPECTIVE

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**This editorial may be cited as:** Gul R. Public health and clinical science a historical perspective. *J Med Sci* 2022 April;30(2):107-108

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Medical students entering medical schools have a negligible idea about public health, just like me. I wanted to be a doctor to treat the sick. But during the internship, I saw children, and adults who were very sick. While looking after them, which made me wonder: why did this child end up like this in ICU who was involved in a motorbike accident? Why was this underage child driving a bike? Why was he not wearing a helmet? Why was this patient smoking when it's known to them the damage smoking can cause and can predispose them to lung cancer? The answer to these questions is always there in the textbooks of medicine under the heading of epidemiology where not only causative agent is identified but also preventive strategies are discussed. But in practice, prevention is underestimated.

As a public health expert, I observed that medical students in year 4, for the first time, are exposed to the concept of public health. They have to do the mandatory research and appear for the assessments at the end of the year. To tackle this issue, public health awareness sessions are arranged for undergraduate students. But due to a lack of awareness, only a few show interest. In our experience, by inviting clinicians, who talk about their experiences as a clinician and as public health workers, the students listen intently and at the end of the session, they either want to work with them as clinicians or as public health workers in the community. It has been observed that clinicians working in the community make them better doctors and practicing medicine makes them better clinicians.

The perception of a split or division between public health and clinical sciences caused by differences in opinion or belief. As this drift is hundred years old rather than a decade old. But this was not always so. Medicine and public health were always joined impeccably in 1800 when physicians like John Snow identified the cause of the Cholera outbreak by using the essential tools of epidemiology. <sup>1</sup> When Robert Koch, a physician, and microbiologist, discovered the etiology infectious diseases like

tuberculosis, cholera, and anthrax.<sup>2</sup> Edward Jenner, a physician, and scientist created the Smallpox vaccine.<sup>3</sup> The leading physicians of their time worked hand in hand with public health. But then in early 1900; the report of Abraham Flexner with a group of experts was published- "the Flexner Report", suggesting a four-year curriculum for undergraduate medical education, with two years each of basic science and clinical science. <sup>4</sup> As a result, more than 200 medical colleges either merged or were closed to improve the quality of medical education. But it resulted in a chockfull curriculum with very little room for public health.

So, the experts all over the world got together to educate the communities about improving their effective measures, as this opportunity was not available in medical schools. In 1915, Welch-Rose reported to have independent Public health schools as a result of which public and medical schools were established all over, and these schools grew apart in succeeding years, as they have striven for the scarce resources available. <sup>5</sup>

Now, the current curriculum has topics on public health right from the first year to the final year but the cold dark reality is the drift between public health and medicine is still there. Medicine still focuses on diagnosis and treatment often in for-profit settings where incentives are for more care with rising costs. Public health on other hand is focusing on prevention in non-profit settings where the goal is better health with crumbling infrastructure. This drift is a challenge for us to move forward. A physician talks to an obese patient about what can they offer medicine to treat diabetes, drugs to reduce weight, and in extreme cases surgery. But when this patient leaves the clinic, he is faced with a dilemma like how much time they spend in the car, screen time, sedentary lifestyle, and fast food which is not addressed in clinical settings.

To address this rift and bring medicine and public health together: prevention is better than cure, resulted in the growth of undergraduate public health education in accredited schools and programs that proceeded rapidly from 2003–2005. By 2005, data collected by the Associa-

tion of Schools of Public Health indicated that the majority of accredited Schools offer graduate public health education, both as majors, minors, or individual public health programs for undergraduates. <sup>6</sup> However, there was still much more to do to bring education for public health to the majority of undergraduates. Undergraduate education for public health has been a game-changer as the emergence of undergraduate education for public health is already shaping the view of public health in the communities.

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