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ARTICLE

Evolution of social medicine and community health in India

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Abstract
The turmoil industrialisation brought in nineteenth-century Europe, with fundamental changes in the economy, society, and ecology, adversely affected human health. The prevailing medical knowledge system failed to address insanitary housing conditions, filth, and pollution in human ecology, causing havoc of communicable diseases and pandemics. Amidst these public health crises, scientific discoveries and evolving modern knowledge systems, with their advancing nature as innovative disciplines, was the hope. Over the nineteenth and twentieth centuries, Social Medicine/Public Health/Community Health were such innovative disciplines that advocated for integrating medical and social sciences. Despite its initial movement for integrating the social sciences, Social Medicine has traditionally been taught in medical colleges in India as Preventive and Social Medicine with minimal social content. Deviating from the norm in India, the Centre for Social Medicine and Community Health was established within the School of Social Sciences at Jawaharlal Nehru University. This article attempts to trace the Centre's historical journey—from its initial ideas of a New Grammar of Public Health to its recent contribution of Critical Holism as a theory of public health, encompassing its role in framing the Alma-Ata Declaration and elucidating a critical public health perspective.

Keywords Social medicine · CSMCH · Community health · Public health in India · Critical holism · Primary health care

1 Introduction

With the advent of public health in the nineteenth century, Epidemiology at its core and medical doctors spearheading the idea, health has been explored as a biomedical, socio-economic, and welfare concern. Early in its development, with its application in developing interventions to combat disease at a mass level and improve population health, the need was felt to 'socialise' medicine and its practice. This understanding was well articulated by the widely known quote from a leading health researcher of his time: 'Medicine is a social science and politics is nothing but medicine on a large scale' (Mackenbach, 2009; Virchow, 1848). Rudolf Virchow, Salomon Neumann and others advocated medical reform in Germany's 1848 revolution, presenting medicine as a social science. Later, in 1865, a Belgian military physician introduced a well-designed system of Social Medicine (Rosen, 1948). These ideas and perspectives on socialising medicine created the pathways for the evolution of Social Medicine in Europe as a distinct field of study. In practice, various roles were assigned to officials from diverse backgrounds, including engineering, social work, and medicine.

In contrast, the US responded to such ideas by shaping them as Public Health, a discipline that incorporates dimensions of the Social Sciences, and social work was a prominent field among them. However, the newly independent ex-colonised countries later called it Preventive and Social Medicine (P&SM). Following the World War II, institutions such as the National Institute of Health (NIH) in the United States emphasised the integration of behavioural and social science research into health sciences (Bachrach & Abeles, 2004). The institutional efforts recongnised the fact that social science is not optional, it is essential to integrate it to understand health from multilevel perspectives. These historical developmental paths of Public Health suggest that its essence lies in the seamless integration of biomedical health components with the Social Sciences. Evident in all these terms is the crucial requirement of integrating biomedical, ecological and social dimensions, underscored also by

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insights from the annals of public health history, particularly from efforts of the NIH and John Snow's seminal study on cholera (Bachrach & Abeles, 2004; Snow, 1855). This highlights the essence of Public Health as an eco-social concern and a problem-oriented interdisciplinary field. However, since its inception was initiated by biomedical professionals sensitive to environmental and social determinants, their dominance has persisted, while social scientists have been marginalised in the discourse.

The initiative to establish Jawaharlal Nehru University (JNU) was an experiment in creating a problem-oriented interdisciplinary research institution. It was to depart from the traditional idea of teaching core disciplines through unidisciplinary or multi-disciplinary courses. The Committee of the School of Social Sciences (SSS), one of six schools established at its inception, envisioned problem-oriented interdisciplinary centres, and the Centre of Social Medicine and Community Health (CSMCH) was among the exemplary ones, established in 1971 (Banerji, 2017). At the time, it was a novel idea, departing from the traditional department of P&SM in medical colleges and establishing the discipline of Public Health in the SSS of a liberal university, and calling it Social Medicine and Community Health. Stand-alone Schools of Public Health were established outside medical colleges in the USA as early as 1916, and later, in India, the All India Institute of Hygiene and Public Health, Kolkata, was founded in 1932. Despite the establishment of these institutions outside of medical colleges, integrating social sciences into its pedagogy was not their primary objective. The establishment of CSMCH has both the objectives, of interdisciplinary teaching and research as well as giving equal weightage to the social sciences. That is the uniqueness of the Centre, located in the SSS. Until the last decade, this Centre remained the only one globally located in a SSS.

The university's first vice-chancellor, Gopalaswamy Parthasarathi, appointed Dr Debabar Banerji (a physician with seminal published research and a master's degree in Anthropology) as chairperson of the centre along with two faculty members on board, Dr Imrana Qadeer (a paediatrician) and Dr Prabha Ramalingaswami (a psychologist). This article attempts to critically examine the mandate and vision of the Centre, in particular, and trace the trajectories of public health evolution in general, drawing from literature produced and reports archived at the Centre's documentation cell.

2 Integration of medicine and the social sciences

Inspired by the global discourse on socialised medicine and aware of the health problems facing the Indian people, a subcommittee was established in 1968 to formulate a Social Science curriculum for pre-medical courses[1] (Government of India, 1968). Later, Social Sciences were recognised and recommended as science basic to undergraduate teaching of community health (Banerji, 1969). At JNU, a Working Group of experts was appointed to advise on the establishment of the CSMCH. Chaired by Prof. V. Ramalingaswami, they came with an open-ended mandate to work towards making medicine and public health meaningful to the people of India, particularly the un-served and the underserved (Banerji, 2017). Two basic principles were set to guide the Centre's activities: practical solutions with a down-to-earth approach, stemming from a sound understanding of community health problems, and acquiring suitable competence. This was considered a must to develop a new perspective for effectively dealing with India's health problems.[2] While articulating the mandate for CSMCH, the expert group cautioned against the Social Sciences marginally coming into the health field, and opined that "it should be the meeting ground of Social and Medical Sciences with a common focus", as quoted by Dr Imrana Qadeer (2020). This suggests that the idea of equal partnership in knowledge building was recommended.

At the time of the Centre's establishment, a knowledge-based hierarchical divide existed between doctors and social scientists in public health practice and its academic discipline. The knowledge-based hierarchy developed from two concepts—hierarchy within different Sciences of knowledge and Foucault's theory of knowledge as power. The positivist philosopher August Comte was among the earliest to propose a hierarchic order of scientific disciplines (Comte, 1835; Lewes, 1853). In contrast to positivist thinkers, post-positivist philosophers proposed that disciplines are the product of historical and cultural circumstances, without any specific hierarchical order. Despite being challenged, the dichotomies of Natural and Social Sciences or "hard" and "soft" sciences with their hierarchy of order still exist (Fanelli & Glänzel, 2013). In CSMCH, following the mandate and suggestions, social scientists and medical doctors have been on board as faculty members in equal numbers, as equal partners in generating knowledge to address the health needs of the people. The idea was a vanguardist one, and this genesis configured the historical trajectories of the Centre. The establishment of the Centre addressed the issues of division between Science and Art subjects, medical and non-medical academics, and set an exemplary model in integrating the Medical and Social Sciences, with commensurate contributions of both streams of faculty in the curriculum and pedagogy. Despite integration at the Centre, the role

[1] Sub-Committee on Social Science Curriculum to be Introduced in Pre-Medical Course, Government of India, 1968.

[2] *A report on the activities of the Centre*, 1972.

of the Social Sciences has yet to be actualized in the discipline's education outside the Centre and in practice at the macro level, as faculty members from eight other institutions conveyed during a panel discussion, part of the Centre's golden jubilee foundation day celebrations.[3,4]

The interdisciplinary nature of the Centre, with its diversity of faculty members from Medicine to Sociology, Psychology, and Social Work, was a strength, as evidenced by the joint design and teaching of courses by more than one faculty member. Incorporating Social Science concepts and methodologies into the pedagogy and research, not only were the courses designed differently from the standard P&SM or the internationally renowned Schools of Public Health to suit the needs of Indian public health, but the doctoral research of students and faculty research as well was interdisciplinary and problem-oriented. The Centre inspired and assisted many public health and medical institutions in the country, such as the ICMR, WHO, and the International Tuberculosis Training Programme in Tokyo, in developing their course content (CSMCH, 1975). Learnings from earlier work at the National Tuberculosis Institute (NTI) and the National Institute of Health Administration and Education helped in developing the academic programmes differently (Banerji, 2017). Being located in the SSS, the CSMCH communicated with the Centre for Historical Studies, Zakir Husain Centre for Educational Studies, Centre for Studies on Regional Development, Centre for Political Studies, Centre for Studies on Social Systems, and Centre for Economic Studies and Planning to explore the possibilities of diversifying the course content and rooting it in the social reality of the Indian people.[5] The School of Life Sciences was involved in drug and insecticide resistance problems that the centre encountered in community health programmes. The School of International Studies extended its help in studying aspects of international health institutions, such as the WHO. All the inputs sought were aimed at enriching the disciplinary contours of Public Health as suited to the Indian and 'developing country' context.

Although the Centre has attempted to diversify the course content in the past, the dynamic social and health context requires attention to meet the demands of students in contemporary times. In 2019, through a general body meeting resolution, students raised concerns about including 'caste and health' as a separate course, which has yet to be realised. Apart from caste and health, students have been vocal about mental health, tribal health, the health of religious minorities, and the inclusion of a stronger quantitative component, including software training. Given the interdisciplinary nature of the subject, there have always been contestations and debates among students, teachers and academic bodies that need attention through institutional ethnography to understand their nuances.

3 New grammar of public health

The Centre, located in the SSS, considers medical and social scientists as equal partners and offers diverse course content, making the Centre distinct. The other uniqueness is the idea of applying Social Science knowledge that is indigenously produced. Dr D. Banerji, in his autobiography, refers to such an approach by the centre as a 'New Grammar of Public Health' (Banerji, 2017, p.126). He says the 'New Grammar of Public Health' is a new thinking that includes appropriate use of technology, apart from indigenously produced Social Sciences. In an attempt to build such a system of knowledge among many "The Nineteen Village Study of Health Behaviour" was prominent that revealed differential health impact on diverse socio-economic groups (Banerji, 1989). He also argued that simple techniques are more effective than the external imposition of modern technologies, such as mass miniature radiography (MMR). When the market in developed countries declined due to a sharp fall in TB patients, WHO favouring the MMR industry, promoted its use in developing countries like India. However, the use of this technology was not appropriate (Banerji & Andersen, 1963). The appropriate use of technology means "it should be subordinate to the needs of the people" (Banerji, 2017). The Centre, with its faculty promoting a new way of thinking, started envisioning public health differently, and their approach was influential. It influenced key figures like Dr Halfdan Mahler who played a crucial role in shaping the Alma-Ata Declaration in 1978 (Brimnes, 2023; Mahler, 1975).

Dr Banerji, referring to Dr Mahler's speech at NTI says in a documentary that while staying in India as a chief of WHO group at Bangalore, he learnt from the interdisciplinary approach and data driven insights that emphasised social dimensions of epidemiology, such as presented in Banerji and Andersen's research (Banerji & Andersen, 1963). Later, when Mahler became Director-General of WHO, he, along with a team, envisioned the Primary Health Care (PHC) approach (Mahler, 1975). Dr Imrana Qadeer, in the same documentary says, "We were part of the initial forces which started talking in a different way" that influenced

[3] *Celebrating 50 Years of the Centre of Social Medicine and Community Health (1971-2021), 2023.*

[4] *50 Years of CSMCH: Evening Session*, 2023. https://www.youtube.com/watch?v=N5RdmMBul94&t=636s

[5] *A brief review of the activities of the Centre*, 1975.

international scholars to draft the Alma-Ata Declaration.[6] In the preparations towards the Alma-Ata conference, WHO had invited the Centre's faculty for presenting a background paper for the Earthscan press briefing seminar on PHC at London on June 5, 1978, three months before the Alma-Ata Conference (Banerji, 1978). The paper elaborates on a popular tagline "people's health in people's hands" and proposes that health services should start with the people meaning that, "instead of fitting in people within a predetermined framework of health services a framework is designed for a health services system which is specially tailored to suit the requirements of the people" (Banerji, 1978, p. 13). Apart from being involved in the process of the Alma-Ata Declaration, the Centre had been engaged in writing on political economy of health and an alternative systems framework for India's health system.

Dr Banerji suggests the framework of indigenously produced knowledge and traditional systems of medicine interlacing with Western medicine in India's health system (Banerji, 1981). In his opinion, the overemphasis on Western medicine for the privileged classes undermined the indigenous medical system. Unfortunately, the orientation towards Western approaches has persisted among the ruling and privileged classes in postcolonial India, including in the healthcare sector. The damage done to the indigenous system should be rectified, and new knowledge introduced through an alternative system, starting with the people at its core. The sickness of the health system is also due to the intellectual fascism and totalitarianism of the hegemonic Western world (Banerji, 1999). The Centre took up this diagnosis, and the political economy of health was one of the approaches for studying health services development. Prominent health issues studied through political economy, among others, included the most debated family planning campaign/programme, which Dr Banerji opines was 'the largest and darkest blot on the horizon of health services in India' (Banerji, 1985). It was argued that the politics of local elites, in cahoots with the Ford Foundation and the World Bank, imposed it on poor countries. However, innovative initiatives such as the Community Health Worker and the Multi-purpose worker scheme were appreciated.

4 Critical public health

Aligning with the centre's mandate, Dr Qadeer argued that family planning was an anti-people programme which was coercive and imposed such that it adversely affected poor people, especially women (Qadeer, 2005). Considering India's stratified society is of utmost importance for a more inclusive health programme, Dr Imrana Qadeer contextualised modern medicine and advanced the idea of people-centric public health by suggesting criticality in it, conveying that the theory of oppression has to be applied to understanding public health inequalities in India and designing the health system to address them (Qadeer, 2011). Her writings, for instance, on the political economy of nutrition, healthcare, and women's health, are prime examples of an interdisciplinary perspective on core epidemiological and health systems issues (Qadeer, 1978, 1998).

It is evident from Dr. Qadeer's writing on Universal Health Coverage as the Trojan horse of neoliberal politics that, in her analysis, it was a ploy to enhance the privatization of health services (Qadeer, 2013). Among the next generation of faculty at the centre, Dr Mohan Rao and Dr Rama Baru were immersed in critiquing the structural health reforms of the globalisation era and contributed research and analysis on contemporary health issues such as population control and political economy of health care (Baru, 1998, 2012; Rao, 1994, 2010). The critical perspective remains the analytical paradigm for interrogating politics of knowledge in public health and modern knowledge systems (Priya, 2013; Priya et al., 2023).

The modern knowledge system, criticized for being compartmentalized and the classical reductionist biomedical perspective, which is iconic in the understanding of mind–body dualism, has hindered the resolution of complex systemic public health problems. Their complexity necessitates the interweaving of diverse dimensions from the natural and social sciences. The 'hard' and 'soft' sciences denote the hierarchy of disciplines and, consequently, the approach adopted towards them in professional education and among the practitioners. Removing the hierarchy of sciences in the knowledge ecosystem and compartmentalized understanding poses the need for evolving a unifying theory. The Centre has risen to the task of proposing critical holism as a framework for public health.

5 Critical holism as a public health theory

Critical Holism (CH) has been argued as a Public Health theory that underscores the wholeness of the complex systems of population health (Priya, 2021). Dr Ritu Priya diagnoses the fragmented nature of public health and argues that addressing the prevalent issues in all their complexity requires a theoretical framework of CH. Introducing the Critical Holist approach, she traces its history as a term coined by Vincent Tucker for health (Pieterse, 2002) and Ulrich for ecological thinking (Ulrich, 1993). This approach merges individual and public health holism, offering a solution to

[6] *Short documentary on Centre of Social Medicine and Community Health – YouTube*, 2023. https://www.youtube.com/watch?v=4kCl7yb2t9A

the reductionism of conventional biomedicine and the dominant approach to Health Systems Development. It's a theoretical framework that envisions interdisciplinary and transdisciplinary approaches to generate a people-empowering knowledge base for population health, considering health as a balance across diverse factors and processes. Embracing a value-critical systems approach, it amplifies marginalized voices, addresses power imbalances, and argues for the political economy of health and healthcare, combined with a politics of knowledge, for creating Critical Holism (Priya, 2021). The marginalized and underserved sections of society should be central to public health interventions, with the democratization of the health system. Although the health service system in India, with its pluralistic approach, has value, we need to reflect on whether we should adopt traditionalism in its pure form or critically examine traditional systems and contextualise them for contemporary times in ways that are sustainable and empowering for people.

Given power dynamics within the systems of indigenous and traditional medicines, there are concerns about the loss of indigenous wisdom and cultural heritage in the hands of external forces and privileged caste groups. To address these issues, a balance must be struck between preserving tradition and adapting it for a more equitable society. This may involve harmonious coexistence between indigenous knowledge and traditional medicine, as well as Western medical systems, with an inclination towards holistic ideas. A holistic perspective on health systems development, informed by traditionalism and local context, is crucial for achieving this balance and fostering diversity, protection, and the democratization of knowledge (Priya & Kurian, 2018). Fostering diversity and democratization of knowledge and critical thinking in public health is the central dimension of critical holism.

6 Conclusion

In conclusion, the CSMCH journey at JNU has not only pioneered but also challenged conventional public health norms. Consequently, social scientists in public health integrated fairly well at the Centre. However, in other public health institutions, social sciences are still marginal in the country. Within the social sciences, economics and management studies dominate over other disciplines. Even so, there is a strong field of Medical Anthropology and Sociology that addresses public health issues. Political Science is recognized as a contributor to policy studies, and social psychology is used in health perception and behavior studies. The post-positivist thinker recommends deconstructing the idea of a hierarchical system of knowledge, and that is what is being suggested for the discipline of public health. Priya and Chikersal (2013) suggested that public health cadres should be organised into three sub-cadre systems in the Indian context, integrating diverse expertise to make the health system function effectively. The three sub-cadres they suggested were the Biomedical Public Health sub-cadre, the Public Health Management sub-cadre, and the Social Determinants sub-cadre. This stems from the centre's own structure and the advantages it offers.

The Centre was founded as an innovative concept within a social sciences school, aiming to bridge the gap between biomedical knowledge and the social sciences, as well as between top-down and bottom-up perspectives. This approach, referred to as a "New Grammar of Public Health," aimed to integrate indigenously produced knowledge into the Indian healthcare system, utilizing technology in a thoughtful and critical manner rather than uncritically adopting international models and prescriptions for health systems and public health issues. Although the idea seems unquestionable, it was not without contentious debate and proved difficult to put into practice, given the dominant positivist paradigm. Building on the concepts essential for the application of New Public Health and addressing the present dilemmas of contemporary public health, there is a felt need for an overarching theoretical framework. Critical holism has been proposed as a response to the civilizational challenges that humankind currently faces, including environmental threats to the planet and socio-political threats to democratic societies.

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