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Sociology and Medicine Interactions and Emerging Disciplines

Abstract

This brief essay places the work of Professor Siri Hettige in the context of understanding of social origins of health and disease. The origin of the term 'social medicine' dates to the French Revolution in 1848, which called for the medical profession to integrate knowledge in medical issues, population health, social factors and public policies. During this period, similar views were expressed elsewhere e.g. in Germany by Virchow's famous statement that "medicine is a social science, and politics nothing but medicine on a grand scale". In the early 20th century, another wave of social medicine originated in South America, a key figure being Salvador Allende. As the Minister of Health, he introduced these concepts to model the health services in Chile and later elected as the President. He was assassinated in a CIA sponsored military coup in 1973. In contrast, the early British and US traditions focused on a model where priority was on applying sociology in relation to individual behaviors. It was later that social structural determinants of health and diseases were addressed e.g. the Black Report of 1980. The US followed different trends, attempting to integrate concepts of the two disciplines (i.e. sociology in medicine) and studying the sociology of medicine (e.g. explaining health-seeking behaviors) and more recently, social epidemiology and politics of health. Professor Hettige's extensive work covers almost all the above topics, trends and developments. His research publications and writings in the lay press have stimulated much discussion and contributed to socio-political changes in Sri Lanka. His name will be remembered as a pioneer in the field where sociology intersects with health in Sri Lanka and even in Asia.

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Sociology and Medicine: Interactions and Emerging Disciplines

The lifetime work of Professor Hettige illustrates an academic who is at the forefront of understanding social origins of our existence and advocating for social change. His numerous writings on topics related to social dimensions of health, often ignited boring discussions to higher intellectual plane. He has been bold enough to tread a fresh path for sociology in Sri Lanka and address some of the issues related to health from a sociological lens. In this brief essay to felicitate him, I trace some of the threads in knowledge on social origins of health and disease around the world and in relation to areas of interest.

Early European traditions

The origin of the term 'social medicine' dates to the French Revolution in 1848, when Dr. Jules Guérin used the term in *Gazette Médicale de Paris(Hobson, 1949)* In his writings, he urged the French medical profession to integrate knowledge in medical issues, population health, social factors and public policies and to develop a framework for a discipline called 'social medicine'.

Similar views were prevalent in Germany and a group a group of medical doctors that included Rudolph Virchow and S Neumann promoted health care reform that gave prominence to social factors that influence health. Virchow was a pathologist who used empirical data to support the argument that social conditions were vitally important to explain and control an outbreak of a typhus epidemic in the Upper Silesia region of Prussia. His report, produced in 1848, is considered as a classic in the history of social medicine and he is credited with the statement that "medicine is a social science, and politics nothing but medicine on a grand scale" (Rosen & George, 1947). During this stage, the concept that medicine is a social science grew in Germany. Three principles of social medicine were outlined: firstly that the "health of the people is a matter of direct social concern", second that "social and economic conditions have an important effect on health and disease and that these relations must be subjected to scientific investigation" and third that "steps must be taken to promote health and to combat disease, and that the measures involved in such action must be social as well as medical" (Rosen & George, 1947).

In England too, there were several who described the link between poverty, deprivation, occupations and illness. These include Kay's description of the plight of cotton workers (1832), Turner Thackrah's work showing

harmful effects of child labour (1832), and Gaskell's book on the adverse impact of steam-based industries on health (1834) (Rosen & George, 1947). In 1845 "The Condition of the Working Class in England" a book written in German by philosopher Friedrich Engels described the four-fold high mortality from among working classes from infections such as smallpox, measles, scarlet fever and whooping cough, compared to the countryside. The book influenced Karl Marx and had a profound influence on English public policies when it was translated to English in 1885. These trends in Social Medicine in Europe laid the foundation to many medical schools having it as a discipline even to the present era (Dusek & Bates, 2003). Furthermore, they contributed to the birth of social medicine, which attempted to understand the social forces influencing health (Stonington & Holmes, 2006) . This was cross fertilized by the advent of social science as a discipline pioneered by Émile Durkheim (French 1858 –1917). He used concepts such as social control and integration to explain different rates of suicides in Protestants and Catholics. After the revolution in 1910, researchers in Soviet Russian too attempted to identify causes of inequalities in health and explore effects of social class, urbanization, occupational groups, culture and family on health (Porter, 2002). The methods used were mainly quantitative analyses across social class and means of production.

The fields of interests have progressively extended, and contemporary social medicine encompasses several areas of study: analyses of factors that influence cultural and social aspects in the relationship between patients and health professionals; explaining patients' beliefs, practices, and experiences; the culture of health professionals and institutions; and describing or analyzing the forces that shape population health, which aer known as the social determinants of disease.

Developments in South America

The next wave of intellectual development in social medicine was seen in South America, due to the migration of several academics from Europe to Chile and other parts of South America. An example is the prominent German pathologist, Max Westenhofer, who worked at the medical school of the University of Chile, and influenced a generation of students, including Salvador Allende. In a book titled La Realidad Médico-Social Chilena (The Chilean Medico-Social Reality) published in 1939 Allende conceptualized illness "as a disturbance of the individual fostered by deprived social conditions". As Minister of Health of Chile in 1939, he explained health in the context of underdevelopment and presented an analysis that showed relationships between social structure, disease, and illness. As part of the solution the national health service was established in Chile that widened access to health care by the needy. He was elected as president in 1970 but

was assassinated in a military coup in 1973 that brought a brutal dictatorship to power. However, the ideas and thinking behind social medicine continued to spread in the region (e.g. in Nicaragua and Ecuador), partly due to charismatic leaders such as Che Guevara. He called for "a corps of physicians and other health workers who understood the social origins of illness and the need for social change to improve health conditions" (Waitzkin, Iriart, Estrada, & Lamadrid, 2001). Another luminary during 1970s was Juan César García at the Pan American Health Organization (PAHO) from 1966 to 1984. He had a profound impact on developments in social medicine and wrote extensively on social sciences in medicine and medical education, social class determinants of health outcomes, and racial discrimination. Unfortunately, most of the publications originating in South America are in Spanish, and therefore not accessible to many Anglophonic countries. The strong tradition of social medicine continues to this day in Latin America and have been a stimulus for social reforms in countries such as Venezuela and Ecuador.

Developments in the UK

In contrast to the concepts of social medicine in South American, the British and US traditions focused on a model where primacy was for "changing individual behavior rather than addressing the social structural determinants of health and disease" (Porter, 2006). The trends in Britain further highlight the evolution of methodologies. In the 1940s it began to be dominated by quantitative analyses (especially due to the work of Prof Thomas McKeown, Professor of Social Medicine in Birmingham University) and analyses based on social structures. This trend was so strong that by 1960s social medicine became indistinguishable from social epidemiology, a feature reflected in the titles of the British Journal of Social Medicine. Founded in 1947, the journal underwent a name change to British Journal of Preventive and Social Medicine in 1953, and finally to Journal of Epidemiology and Community Health in 1979. Mid-1950s saw the advent of social behavior as a determinant of illness and the social characteristics of a community undergoing social change and psycho-neurotic disease. Another landmark in this approach was in 1980 when the Report of the Working Group on Inequalities in Health was published. The analyses were quantitative and on social structures. Also known as the Black Report (after chairman Sir Douglas Black, President of the Royal College of Physicians) its conclusions were controversial: the widening inequalities in health outcomes cannot be attributed to a failings health system alone, but to other social inequalities influencing health: income, social class, education, housing, diet, employment, and conditions of work (Scott-Samuel, 1986).

More recently, the recognition of social factors in health have gathered further momentum with the work of Sir Michael Marmot (e.g. by the publication of book on Social Determinant of Health) and the launch of the WHOs report of the Commission on Social Determinants of Health (2008). The Report's famous statement "social injustice is killing people on a grand scale" continues to reverberate in social and academic forums. An explanatory model used to explain social structuring of disease is the role played by varying degrees of chronic stress due to social stratification and discrimination, leading to chronic diseases through a neuro-humoral pathway.

Developments in the US

Early 20th century saw the birth of medical sociology in the US, an academic discipline which studied social causes and consequences of health and illness but also used sociological theories and methods in its study of health and medical practice (Cockerham & Ritchey, 1997). Described by Charles Mclntire in 1894, medical sociology was initially identified with social work, health education and public health, especially after the publication 1902 by Elizabeth Blackwell titled Medical Sociology which was a collection of essays on social work and public health (Hollingshead, 1973). Eight years later, James P. Warbasse published a book Medical Sociology, which advocated health education as a primary focus. However, the scare of communism (known as McCarthyism) in the early 1950s, led to the weakening of the American social medicine movement (Han, Bae, Kim & Choi, 2017) . The subsequent path in the US was complicated and seem to move towards medical sociology and social epidemiology.

In 1957 two distinct areas of medical sociology was described: the sociology of medicine and sociology in medicine (Straus, 1957). Sociology **in** medicine consists of collaborative work that integrates concepts, techniques and personnel from many disciplines and observed most often in schools of medicine and schools of public health. In contrast, sociology **of** medicine functions more in departments of sociology and studies factors such as health seeking behaviors, organizational structure, rituals, and behavior in medical systems.

After the Second World War and in parallel to above developments, US public health practice increasingly adopted a biomedical model of disease and prevention through management of individual risk factors. This approach was partly due to a behaviorist model of clinical epidemiology and its development in the newly established independent schools for public health (Brandt & Gardner, 2000). They gave emphasis to individual risk factors and hid the broader social and environmental explanations of causality. This decline of traditional epidemiology (which emphasized prevention and need at a population level, based its understanding on cultural and historical

context, and focused on structural top-down interventions) and the advancement of modern epidemiology (with its emphasis on biomedical sciences, context-free, individual oriented interventions) has been described in many ways. As Neil Pearce, a well-recognized epidemiologist pointed out, "traditional epidemiology has become unfashionable and is treated somewhat disparagingly in modem epidemiology texts, which have rewritten the history of epidemiology in their own image". He goes on to give examples as to how the literature and textbooks have consistently attempted to downplay the explanatory power of social factors (Pearce, 1996) .

A re-recognition of the social roots of public health is seen with the development of social epidemiology as a discipline in the USA (Honjo, 2004). Defined as "the branch of epidemiology that studies the social distribution and social determinants of states of health" the movement was led by Ichiro Kawachi and Lisa Berkman (both from Harvard's School of Public Health) who in 2000, co-edited the first textbook on Social Epidemiology. This was an oblique acceptance of Durkheim's statement that a 'group thinks, feels and acts entirely differently from the way its members would if they were isolated". The characteristics that influences a group contrasts to those affecting individuals and include concepts such as social cohesion and social capital (Berkman, Kawachi & Glymour, 2014) . Social cohesion is the extent that groups in a society are connected (i.e. presence of social bonds with little conflicts) and have solidarity with each other. A cohesive society shows mutual moral support and has a stock of social capital, defined as structures (e.g. norms of reciprocity and levels of trust between persons) that are resources for individuals and promote collective action. However, there concepts are not without their critics (Muntaner, Lynch & Smith, 2000) .

Alternative paths

In contrast to the mainstream disciplines of medical sociology and social medicine, several researchers who have used other approaches and expounded the importance of broader social structures such as political systems, socio-economic relationships, and ideologies in influencing health outcomes. Examples include a dedicated advocacy and pressure group named Politics of Health Group in the UK which explores "political causes and consequences of health and ill health" and seeks to promote health as a "central concern of politics so that public policy and social interventions focus on improving health" (Politics of Health Group, 2005). Dennis Raphael from York University in Toronto, Canada and Vincent Navarro from the Johns Hopkins University US, have both written extensively on the importance of politics, political systems and political economy on health (Navarro, 2008; Navarro, 2004; Raphael, 2015). Nancy Krieger from Harvard is another eminent researcher who has proposed embodiment as a concept to describe

how political systems, discrimination and priorities shape population health and the magnitude of health inequities (Beckfield & Krieger, 2009) .

Asia and Sri Lanka

This brings us to the situation of social medicine and medical sociology in Asia and Sri Lanka. India has several universities with Departments of Preventive and Social Medicine, but the curricula appear to emphasize public health and community medicine, rather than social medicine and medical sociology. In South Korea, the term social medicine is rarely used but many of its subject matters are included in preventive medicine (Han, Bae, Kim & Choi, 2017). Other countries in Asia do not seem to have an intellectual thrust in these areas. In this respect, Professor Hettige has pioneered an academic field that intersects sociology and health in and Asia. He approached the study of several health-related issues from a sociologist's perspective, contributing to the development of an ever-increasing body of knowledge. His numerous research papers and books highlighted topics that are relevant to health and sociology: the issues and challenges faced by youth, the psychosocial impact of migration, urban health, social impacts of economic policies, and behavioral patterns in alcohol consumption.

Professor Hettige's pioneering work, described elsewhere in this volume, has stimulated interests among many generations of students who have continued to research and publish in these areas. It has also had a positive impact on the knowledge base in the health sciences. Though social medicine and medical sociology are yet to be recognized disciplines in the universities of Sri Lanka, social work has gained recognition and degree programs area now available. His work resonated with initiatives in the health sector such as the attempts in the 1990s to develop medical sociology in the Faculty of Medicine by Professor Nalaka Mendis. Though this initiative was not successful, the Colombo Medical Faculty's new curriculum launched in 1995 based on a bio-psycho social model enabled topics related to medical sociology to be included through a dedicated Behavioral Sciences Stream (BSS) that ran through the 5-year teaching program. This achieved a further boost when in 2016 the Faculty established a Department of Medical Humanities. With the convening of a Global Commission on Social Determinants of Health by the WHO, the topics of health inequities and social determinants became areas of interest to the Ministry of Health. A focal point was appointed, and several activities held to promote inter-sectoral action. The chairman of the WHOs Report on Social Determinants of Health, Prof Sir Michael Marmot visited Sri Lanka twice and stimulated considerable interest in the academia, encouraging several research projects and its introduction to postgraduate curricula. More recently, the Sustainable Development Goals has given the academia another opportunity to take forward the agenda of the

fields that intersect sociology and medicine. It is in this context that one has to appreciate the work of Professor Siri Hettige, a pioneer brave enough to tread a poorly chartered academic path in Sri Lanka, and perhaps even in Asia.

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