COMMENT

John B Grant and public health in India

SHIRISH N KAVADI

Abstract

From 1939 to 1945, John Black Grant a Rockefeller Foundation officer and former Professor of Public Health at the Peking Union Medical College served as the Director of the All Institute of Hygiene and Public Health, Calcutta. Grant's India tenure is important for his efforts to ameliorate the condition of public health in India. Much has been written about Grant's contribution to transforming public health in China but his work in India has not received sufficient attention. This article acquaints readers with some of his more noteworthy ideas and endeavours to remodel the colonial public health and medical system. His views on Indian public health may also be viewed as a critique of the colonial health system.

John B Grant and public health in India

From 1939 to 1945, John Black Grant (1890-1962), a Rockefeller Foundation (RF) officer and former Professor of Public Health at the Peking Union Medical College (PUMC) served as the Director of the All Institute of Hygiene and Public Health (AIIHPH), Calcutta. Founded in 1932 with RF aid, its aim was to offer university standard training and research in public health. However, over the years it was seen to have deviated from its original goal and experienced an overall decline. Grant was sent to reorganise AIIHPH. Grant was as much a doer as a thinker who transferred his ideas to specific programmes and then implemented them to demonstrate their utility (1). He noted provision of healthcare required personnel and facilities; their efficient distribution; and the financial resources to regulate the quality and quantity of the first two. The three ideas central to his approach and work were: regionalisation of the organisation and administration of health services; community healthcare oriented medical education; and health services as part of the community development process to ensure efficient and effective health care delivery (1). This would ensure

Author: **Shirish N Kavadi** (shirish.kavadi@gmail.com), Independent Researcher and Visiting Faculty, Symbiosis School for Liberal Arts, Pune, Maharashtra 411 014 INDIA.

To cite: Kavadi SN. John B Grant and public health in India. *Indian J Med Ethics*. Published online on March 21, 2019. DOI: 10.20529IJME.2019.010.

Manuscript Editor: Vijayaprasad Gopichandran

Peer Reviewer: Jayanta Bhattacharya
© Indian Journal of Medical Ethics 2019

better coordination of health services; require the setting up of field practice areas; and the provision of integrated preventive and curative care through community health centres. Grant implemented these principles in his work in China with a fair degree of success.

Grant located the AllHPH's problems within the broader public health issues confronting the country. He disapproved of the Indian Medical Service (IMS) mindset which he claimed was devoid of any sense of innovation and experimentation; was critical of health administration in India; and, censured the colonial public health system (2,3). He prodded the Bengal Government to restructure the province's public health administration. As a member of the Health Survey and Development Committee (1943-46), which was also known as the Bhore Committee, Grant introduced its members international trends in public health and simultaneously attempted to demonstrate the practical application of some of his public health principles and practices at the AIIHPH's Singur rural health unit. It is these endeavours that this article describes.

Grant's role in transforming public health in China has been written about (4-9) and although a few have described his work in India (2,3,5,9), it has not received sufficient attention. This article acquaints readers with some of Grant's more noteworthy ideas and endeavours to remodel the colonial public health and medical system of which he was extremely critical. The article does not offer a critique of his ideas and work which must be viewed in the context of two broad processes: the emerging nationalist critique of colonial public health from the 1920s, and the simultaneous internationalisation of India's health that began with the Rockefeller Foundation's inauguration of public health programmes in India during this period.

John B Grant: Background

Grant was born in China to Canadian missionary parents. He received his medical training at the Johns Hopkins Medical School where he was influenced by the ideas of his teacher Sir Arthur Newsholme, who viewed disease as an indicator of social and economic disorder and emphasised state responsibility for health. In 1921, Grant arrived in China as the RF representative and to teach at the PUMC. Grant considered the PUMC curriculum irrelevant to the real needs of China. He set up a Department of Public Health and Preventive

Medicine with a rural health demonstration area. According to Seipp, Grant "pioneered in the creation of a new modality for practice, research, and teaching—the demonstration health center" envisaged as a "university-administered social laboratory to serve as a controlled environment for teaching purposes" and as an "organisational core of a regionalist system" of community healthcare (1). Grant proposed to train practitioners who would be family physicians, advisers in hygiene and preventive medicine and also participants in organised community health service. Grant believed that the organisation of medicine was inseparable from the social and economic organisation of the community in which it was located and functioned, and argued for State medicine (4-7,8).

Grant was part of James Yen's Ting Hsien or Mass Education Movement (1923-37) an experiment inspired by a philosophy of rural reconstruction aimed at the promotion of public health, agriculture and citizenship. Mao Zedong, then a volunteer in this movement, would later draw upon his experience to develop his scheme of bare foot doctors. Many of Grant's students attracted to public health careers became part of the New Life Movement, launched in 1934 by Chang Kai Shek's Nationalist Government (4-7). Grant's iconoclastic views, at variance with the prevailing thinking in the RF, earned him the appellation the 'Rockefeller Bolshevik' (5,9).

Public health trends in India: 1919-1945

Grant's is an important voice in the discourse on public health during this time, and his work in India should be viewed in that context. The period between the two world wars marked the beginning of significant changes in Indian public health: The Government of India Act, 1919, which decentralised public health and medical education to the provinces; the nationalist critique of public health in India; and, the RF entry into Indian public health inaugurated a new chapter in the internationalisation of health and medicine in India. Lt Col Walter King, a former sanitary commissioner of Madras, had lamented that in India, "education by practical demonstration of sanitary works for the community has been grossly neglected in the rural areas." (10). The RF's public health approach was anchored in demonstration and education to promote preventive care through disease control campaigns and rural health units focused on preventive health, sanitation, health education, and community participation (2,11).

From the late nineteenth century, Roger Jeffery writes, "medical nationalists played a distinct role in the promotion of critical response to the medical policy of the raj." They addressed the issue of Indianisation of the IMS, demanding the restructuring and reorganisation of the medical service itself rather than restricting it to merely a demand for posts in the IMS (12,13) The momentum picked up in the period between the two world wars and there emerged a discourse on "National Health" involving the Indian elite, social reformers and modernisers, that included a demand

for state medicine and recognition of health as a "right of national citizenship." (14,15) Presidential addresses, discussions and resolutions passed at various provincial and all India medical conferences, the Medical Section of the Indian Science Congress, schemes proposed by the Indian Medical Association, University Convocation addresses, articles, editorials, commentaries, letters to the editor in the Indian Medical Gazette, The Indian Review, Calcutta Medical Journal, and Science and Culture testify to a robust academic and political discussion on health.

In 1938, the Indian National Congress constituted the National Planning Committee (NPC) "to plan for the future of an Indian nation governed by an Indian state." (14). Its Health Sub Committee was chaired by Lt Col Santok Singh Sokhey, IMS, Director of the Haffkine Institute in Bombay and one of the earliest Rockefeller Fellows with communist sympathies. Its Report according to Jeffrey was, "remarkably far sighted" and "a classic document in the history of models of health care" (12); while Amrith observes it was "nothing less than reconceptualisation of what it meant to speak of "India's health." (14). Sokhey's interim report to the NPC argued for organising medicine as a State activity and the provision of free medical aid of all types to the people. The Report also underlined the need to train students in the social and economic implications of the science of medicine (16). NPC resolutions on the Report recommended an integrated system of preventive and curative medicine under state control, community participation, creation of rural health workers, and social and health insurance for health workers. (17). Sokhey's report was consulted by the Bhore Committee during the course of its own deliberations.

Grant's assessment of public health in India

Through tours and surveys Grant assessed public health conditions in India ascertaining the personnel market; the demand for the provincial cadre; capacities of local facilities to supply the need; and, study facilities in medical colleges for teaching of microbiology, chemistry, and hygiene. He predicted a remarkable increase in the demand for trained public health personnel that would result from political considerations and the general development of Indian society (18). Electoral considerations would push elected governments and legislators to undertake welfare and health programmes while India's level of general development required extension of accessible medical care to rural communities; but "The health administrations are unprepared in either methods or trained personnel to undertake this efficiently."(19) An additional difficulty, according to Grant, was that few doctors had the necessary technical standards that could make any material difference in the provision of medical care. Also, the absence of demonstrated administrative methods based upon very low per capita costs for extending medical protection to the individual villager constituted a problem. Even

if health schemes employed subordinate personnel, supervisory staff with training of Diploma in Public Health standard would be required (19).

identified several major political administrative obstacles to effective all India public health: a predominantly environmental public health administration; lack of adequate standards for "social" activities of public health; regional and provincial disparities despite a strong centralised government; recruitment of health personnel in government departments on a communal basis; the transfer of power to the provinces in which, Grant commented, "novices without administrative experience had come to occupy major posts in the provincial administrations giving a certain amateurishness to the functioning of these governments"; and inelasticity in financial control which had yet to be transferred to provincial and local authorities (19). To address "India's lack of health" Grant suggested four lines of action: "Consolidated Public Health Acts; scientific training and supervision of the social services; better central and provincial planning; and, the training of an adequate number of doctors, nurses and health visitors." (20)

Reorganising the AIIHPH

In reorganising the AIIHPH, Grant focused on curriculum reform and academic standards. Low academic status, incomplete organisation, inadequate personnel, lack of practice facilities, underdeveloped teaching and research, deficient finance and scientific-administrative control over the institute were its major defects (21). Grant's objective was to give India a university grade institution for the training of medical officers and to develop the Institute's influence on public health in India by preparing it to impart true graduate medical education with public health content and perspective, based on global developments in the discipline (22). He recommended discarding the obsolete curriculum (23), but was against blind copying of western methods and models and for developing medical instruction based upon local needs and requirements.

Grant perceived the teaching and research at AIIHPH as being irrelevant to the Indian situation. He felt it had to redirect focus to Indian health problems; provide the country with leads which could be adapted to local utilisation; coordinate its programme with other existing all-India and provincial institutes; develop methods to disseminate knowledge to the villagers within the limits of existing economic practicability; and conduct the necessary experiments to develop these methods as a major non-teaching activity for the application of existing preventive knowledge (24). The emphasis was less on preventive teaching and more on a clinical focus. This was because AIIHPH was dependent on faculty from the Calcutta School of Tropical Medicine, who, too pre-occupied with their own work,

were unable to undertake public health research or guide AIIHPH students in field investigations.

Grant highlighted the gaps between intra-mural and extra-mural or pre-field and field work; between first-hand knowledge of teaching faculty and the country's problems for which they were training students; and public health nursing and effective public health work. The Institute was deficient in community practice fields that provided opportunities for demonstration, research, and self-participative instruction essential for successful teaching in public health. These could be available only where administrative methods had successfully ensured public health was brought efficiently to the individual within the general economic means of that community. If AIIPH experimented with such methods and trained individuals in their administration, then that would give the all India perspective and reach it lacked. In the absence of field areas, opportunities for research in the institute were virtually non-existent. The institute lacked instructors for investigations in public health; departments of physiological hygiene and industrial health; adequate initiation of sanitary engineering and personnel or facilities in all fields of microbiology. Instruction in public health chemistry required learning laboratory techniques that the student would never have the opportunity of using, as they were better suited for chemical analysts (24).

The Health Survey and Development Committee

The Health Survey and Development Committee was constituted in 1943 under the chairmanship of Sir Joseph Bhore, a retired Indian member of the Indian Civil Service and former Health Secretary, to conduct a broad survey of the prevailing field of medical relief and public health, and to make recommendations for post-war reconstruction and development. When Grant was invited to join the Bhore Committee he considered it opportune, for he viewed the Committee as denoting "a landmark in the evolution of public health in India." (25) Grant brought to bear upon the Committee his own academic training, his Chinese experience, political orientation, international exposure and engagement with Indian public health. His endeavour was to bring about radical changes in the thinking and practice of public health in India; enlighten officials in India about international trends in public health and to remedy the weaknesses of past committees instituted to look into agriculture, healthcare, etc that had failed to bring about any progress. These committees had ignored international trends, as a result of which their recommendations had fallen short and the reports had remained unimplemented (26). He convinced committee members of the need to appraise surveys and evaluations of the existing situation in the respective fields in India against international trends and ensured that "Most memoranda required by the sub-committees to educate themselves on international trends in their fields would be drafted in the first instance at the Institute." (27)

The Bhore Report, 1946, highlighted four basic principles for improving the Indian health system: regionalisation of health services; team work amongst health professionals; the combining of curative and preventive care, and lastly, community participation in basic healthcare. Carl Taylor commenting on the Bhore Committee noted that "Very fundamental was the beginning of the formulation of the concept of comprehensive care as an integrated whole with deliberate combining of curative and preventive functions."(28) Its specific recommendations were: a) a hospital based health service from where all services, promotive, preventive, curative and rehabilitative would flow; b) a system of referral services from lower to higher level units for complete healthcare and adequate supervision; c)the abolition of the licentiate doctor course and production of only one type of doctors called 'basic' doctors with five years of professional training; and, d) a sound training in "community" medicine for the "basic" doctor. The discussion that follows describes some of the activities Grant undertook to direct and shape these principles and recommendations of the Bhore Committee.

Reorganisation of public health in Bengal

Grant attributed India's backwardness in healthcare to the obsolete nature of the system of both general and health administration and the latter's lack of uniformity across provinces. Some provincial governments exercised great control over medical care and public heath, while in other provinces the responsibility was with local self government bodies with little co-ordination between the two. In Bengal, where the municipalities received no financial contribution from the provincial government, local bodies were virtually autonomous in management of the public health service. Grant noted these were primary factors contributing to the poor state of public health in the province. He considered it unwise for the provincial governments to relinquish control of health administration so completely before local development of a public health consciousness (29). Grant proposed administrative reforms in Bengal to precede those to be undertaken at an all India level so as to demonstrate their efficacy to the Bhore Committee. Grant believed that public health in Bengal would improve materially if the medical and health services undertook the following measures: provincialisation of services required to establish an efficient administration with its resultant education of the public; demonstration of techniques of successful administration within the economic limitations of Bengal; and initiating refresher courses for teaching successfully demonstrated techniques of administration (29). When Bengal provincialised hospitals, Grant hoped it "will prove the entering wedge for the more needed provincialisation of the public health services." (30) He managed to persuade the Governor to appoint an Enquiry Commission to examine administrative machinery in Bengal, an essential condition for reforming public health administration (31).

Singur health unit

The Singur health unit, a five-year collaboration (1939-1943) between the Government of Bengal and the RF, was established as a demonstration rural unit used by the AIIHPH for training its students and providing investigative facilities for the faculty (1,11). In 1943, Grant reorganised it to include both preventive and curative aspects of health under one administration. The programme would be larger than that of a standard health unit and would include various field studies to be carried on under the direction of AIIHPH for student training; and be applied principally to the investigation of special problems related to school health, nutrition and rural water standards. Also included was training of subordinate staff, namely teachers, midwives and village workers, in the encouragement of the self-help principle. Grant hoped to develop the Singur unit as an all India experimental and demonstration unit for public health administration and medical relief (32). The Health Unit was to a) determine and demonstrate methods of public health administration which would bring in affordable essential medical protection to the rural population; b) integrate curative and preventive medical efforts in order to maximise results whenever several branches of health could function at a desirable level of efficiency; and c) create awareness and a sense of responsibility amongst people about health. This demonstration of successful methods of health administration in rural areas was considered important to the future development of the national health programme particularly since Singur could then become the field training centre for the health personnel of Bengal, and through AIIHPH for all-India public health personnel. Village Health Committees were constituted in 50 of the 68 villages with each committee consisting of five members elected by the villagers. It was demonstrated that these members could be trained effectively to carry out specific functions such as sanitation, epidemic control, vital statistics, maternal and child health under the supervision of health centre staff (33).

Another proposal the members of the Bhore Committee deliberated upon was that of training a social or basic physician. This involved introducing one single grade by abolishing the licentiate course with a view to standardising the quality of healthcare between urban and rural areas, and integrating creative and preventive services. Grant prepared

the note to train this "basic" doctor (34), in which he recommended revision of the undergraduate medical education curriculum which included medical colleges establishing full-time teaching departments of public health and social medicine and reorienting their class and hospital teaching to provide themselves with adequate controlled community facilities in public health. Community health organisations or field practice areas fully organised and equipped for practical training were essential to the teaching of preventive medicine. The medical college would control the community field and its administration in the hands of the teachers of hygiene. This was to be comparable to hospital teaching by clinical teachers who controlled the curative standards. There were to be two communities, urban and rural. The rural community was to be established first in India because of her preponderant agricultural population. Students would be trained to undertake their public health responsibilities at the primary centre. There were dissenting voices in the Committee which were not convinced that the basic doctor was likely to work in rural areas which lacked infrastructure and facilities that doctors drawn from urban areas would consider essential for a regular family life. They did not believe that the abolition of the licentiate course and emphasis on quality was practical, considering India's quantitative needs for doctors at the time.

Grant's contribution

Grant's contribution to the Bhore Report was acknowledged by KCKE Raja, the Secretary of the Committee, in a letter stating, "Yours has been the most stimulating influence in relation to the health programme put out by the Committee and, were it not for the help which you and your colleagues in the Hygiene Institute gave, I am sure that work of the Committee would have been considerably handicapped." (35) International advisers to the Committee (36)¹ appreciated Grant's contribution with Henry Sigerist, the well-known Swiss-American medical historian, observing, "He is equally liked by British and Indians and has their full confidence. He is brilliant public health man of wide experience, an excellent teacher and administrator, who very tactfully succeeded in inspiring and steering the committee. The best and most progressive recommendations of the committee are his, and added "...it is guite remarkable what changes can be wrought by the impact of a vigorous personality if the individual in question is also possessed of knowledge of his subject and an understanding of the people with whom he is dealing."(37) Sir Weldon Dalrymple-Champneys, a physician and leading figure in Britain's public health service, expressed his appreciation through verse:

Till some of us began to wonder

How to stop India going under

To stop the rot, as all seemed scared By the immensity of the task

.....

Certain that they had put a poser
Too big for even a bulldozer
But on one memorable day
One Grant J.B., showed us the way
In which new life could be infused
Into a village quite unused
To water pure or sanitation
By stimulus and explanation
New hope sprang upwards in our breasts. (38)

The various approving references to the Singur health unit in the Bhore Report are an additional indicator of Grant's influence on its recommendations. The Bhore Report, describing its approach to rural healthcare, noted,

The active support of the people is sought to be secured through the establishment of health committees in every village and through the stimulation of local effect for the improvement of environmental sanitation, control of infectious diseases and other purposes. A wide programme of health education, covering all sections of the population is also proposed for promoting the growth of such public support (39: Foreword).

That it was at least partly inspired by Grant's work is evident, when the Bhore Report stated that the Soviet-style health committees, as at Singur, were a desirable model for India and observed, "We understand that this method has been tried in Singur with a considerable measure of success." (40)

Concluding remarks

Grant returned to the RF office in New York in 1945 and served in different capacities before being sent, in 1953, to Puerto Rico to advise the Government on organising their health system. In Grant's assessment, Puerto Rico had sufficient resources for a comprehensive regionalised system of healthcare, including personnel training, for a demonstration of his basic principles (3). He applied his essential principles of regionalisation; integration of curative and preventive care; training medical professionals in community healthcare; and health services as part of community development to create a four-tier health system: primary care at the local and municipal level; area-based hospitals as referral centers; tertiary healthcare at regional and sub-regional hospitals; and, at the apex the Puerto Rico Medical Centre that provided highly specialised hospital care for such illnesses as cancer. He also taught preventive medicine at the University of Puerto Rico till he passed away in 1962

Grant experimented with his ideas of regionalised communitybased integrated healthcare systems in China, India and Puerto Rico. In India, he exercised much of his influence through the Bhore Committee. Among those who were stimulated by Grant's ideas was Carl E Taylor, an American medical doctor, who like Grant came from a family of medical missionaries but who worked in India. Taylor commenting on Grant's contribution to the Bhore Committee observed:

One of the most innovative ideas delineated in the Report which was so far ahead of its time...was the idea of village health workers. The experience on which the proposed pattern was based had been tested in the Singur teaching center of the All India Institute of Hygiene and Public Health... Grant had brought with him from China to ... the All India Institute of Hygiene the basic notion of community workers. (28)

Taylor, from 1961 to 1974, organised a preventive health field study in the village of Narangwal in Ludhiana, where he trained village women as family health workers (41). These women, under the supervision of a physician and a nurse, visited homes to provide nutrition education, family planning information and prenatal care. Taylor demonstrated that villagers could be recruited and trained to deliver basic healthcare in poor communities and was the precursor and inspiration for other successful community-based health interventions such as the Comprehensive Rural Health Project, Jamkhed. Taylor was involved in formulating the Alma Ata Declaration that recognised primary healthcare as a universal right.

Grant's ideas need to be revisited today, with the Indian public health system in crisis and medical care increasingly privatised and inaccessible to poor rural communities.

Funding statement

The article draws upon previous research for which, funding was received from the Rockefeller Foundation and the Rockefeller Archive Center, New York.

Previous and related publications

Some portions of the present article appear in two previous publications cited in References 2 and 3 below and in the following unpublished document:

Kavadi SN. The Bhore Committee, International Advisers and John Grant. Available from:_http://independent.academia.edu/ShirishKavadi/ http://www.researchgate.net/profile/Shirish_Kavadi/publications

References

- 1. Seipp C, Ed. Health care for the community. Selected papers of Dr. John B Grant. Baltimore: The Johns Hopkins Press. 1963.
- Kavadi S N. The Rockefeller Foundation and public health in colonial India 1916-1945. A Narrative History, Mumbai/Pune: The Foundation for Research in Community Health. 1999
- 3. Kavadi S. 'Clear stream of reason... lost its way into the dreary desert sand of dead habit: The story of The All India Institute of Hygiene and Public Health, 1922-1945' in: Dasgupta U, Ed. Science and Modern India. An Institutional History, 1784-1947. New Delhi: Pearson. 2010: 623-65
- 4. Yip KC. Health and society in China: Public health education for the community, 1912-1937, *Soc Sci Med.* 1982;16(12):1197-1205.
- 5. Litsios S. John Black Grant a 20th century public health giant. *Perspect Biol Med*. 2011 Autumn;54(4):532-49.
- Bu L. From public health to state medicine: John B. Grant and China's health profession Harvard Asia Quarterly. 2012 Dec;14(4):8-15.

- Bu L. Grant John B. Public health and state medicine. In: Bridie A, Bullock M, Eds: Medical transitions in twentieth-century China. Bloomington: Indiana University Press. 2014.
- 8. Grant J B. State medicine A logical policy for China. *International Health Board. Collected Papers*, V; 1928.
- Farley J. John Black Grant: The Rockefeller Bolshevik. Acadia University Alumni Bulletin, 74: 1990:10-12.
- Colonel King on Sanitation in India. *Indian Med Gaz*. 1923 Sep: 58(9):429-30.
- Kavadi SN. Rockefeller Public Health in Colonial India, in Winterbottom A, Tesfaye F, Editors. Histories of Medicine and Healing in the Indian Ocean World. Vol 2, Palgrave Series in Indian Ocean World Studies. New York: Palgrave Macmillan; 2016:63-88.
- 12. Jeffery R. Doctors and Congress: The Role of Medical Men and Medical Politics in Indian Nationalism', in. Sheppardson M, Simmons C, Editors. *The Indian National Congress and the political economy of India:* 1885-1985, London, Gower;1987:160-73.
- Arnold D. Colonial medicine in transition: Medical research in India, 1910-14. South Asia Research. 1994;14 (1):10-35.
- Amrith S. Political culture of health in India: A historical perspective. Econ Pol Wkly, 2007 Jan 13; 42(2):114-21.
- Chakrabarti P. Signs of the times: Medicine and nationhood in British India. Osiris 2009; 24:188-211.
- Sokhey SS. A brief report of the Health Sub-Committee of the National Planning Committee. June 1939, B G Kher Papers, Folder No.24, Nehru Museum and Memorial Library, New Delhi.
- Resolutions of the National Planning Committee on the Report of the Sub-Committee on National Health: An Extract: FRCH Newsletter: Special Issue on Bhore Committee. 1990; 4(1-2): 18-9.
- Grant JB to Cotter. Sept 2,1939, RG1.1, S464 India, Box 6 F40. Rockefeller Archive Center.
- Grant JB. Officer's Diaries. Tour of India, August 1939. RG 12.1, Box 20. Rockefeller Archive Center.
- Grant J B. The Health of India, Oxford Pamphlets of Indian Affairs Series. Bombay: Humphrey Milford;1943.
- 21. Grant JB. to Sawyer, Dec 17, 1938, RG 1.1, S464 India, Box 6, F39. Rockefeller Archive Center.
- Grant JB. Memorandum, July 30, 1938, RG 1.1, S464 India, Box 6, F39. Rockefeller Archive Center.
- Grant JB. Officers' Diaries, November 1940. RG 12.1 Box 20. Rockefeller Archive Center.
- 24. Grant JB. Realities in the situation of AllHPH. Sept 1939, RG 1.1, S 464, Box 6 F 40. Rockefeller Archive Center.
- Grant JB to Balfour, October 9, 1943, RG 2, 1943, Series 464, Box 257, Folder 1771. Rockefeller Archive Center.
- Grant JB. Officers' Diaries, Dec 1943, RG 12.1, Box 20. Rockefeller Archive Center.
- 27. Grant JB. Memo to Balfour-Oct 29, 1943, RG 2, Series 464, Box 257, Folder 1771. Rockefeller Archive Center.
- Taylor C. Comment on Contributions of the Bhore Committee Plan to the Health Services of India. ICSSR Committee on Health and Medical Services, Mimeograph Paper (nd)
- 29. Transcript Interview-Casey-Grant, Feb 17, 1944, RG 12.1 JBG Diary, Feb 1944, Box 20.
- Grant JB. Officers' Diaries, Nov/Dec 1944, RG 12.1, Box 20. Rockefeller Archive Center.
- 31. Grant JB. Officers' Diaries, Feb 29, 1944, RG 12.1, Box 20. Rockefeller Archive Center.
- 32. Minutes, Scientific Director Meeting, October 26-27, 1944, RG1.1, S464, India, Box 12, F 92.
- 33. Grant JB. Memo on Reorganization of Singur, March 1943, RG 2, Series 464, Box 257, Folder 1771, Rockefeller Archive Center.
- 34. Grant JB. Training of the basic doctor in India. RG 2, S464, Box 306, F2067. Rockefeller Archive Center.
- 35. Raja KCKE to Grant JB. February 23, 1946, RG 2, S 464, Box 344, F 2333, Rockefeller Archive Center.
- Murthy P, Sarin A, Jain S. International advisers to the Bhore Committee: Perceptions and visions for healthcare, Econ Pol Wkly. 48(10): 71-7.
- 37. Report on India, Henry Sigerist Papers, Series II Box 35, Folder 74, Yale University Library, New Haven.
- 38. Sir Weldon Dalrymple-Champneys Papers, GC/139/F 10, CMAC,

- Wellcome Library
- 39. Government of India. Report of the Health Survey and Development Committee. 1946: IV:vi.
- 40. Government of India. Report of the Health Survey and
- Development Committee. 1946: II:44.
- 41. Taylor-Ide D, Taylor CE. *Just and lasting change. When communities own their futures*. Baltimore: Johns Hopkins University Press; 2002:126-39.