

The Medical Services in the Mesopotamian Campaign from 1914 to 1915: A Study in Dysfunctionality

Soundararajan Jagdish

Westergate, West Sussex, UK. Email: 58jagan@gmail.com

Abstract

The near collapse of medical services in the Mesopotamian Campaign of the Great War and the consequent degradation of the effectiveness of the British Indian Army is attributable to disparate factors such as poor pre-war readiness, the indifferent status of military medical officers, obsolescent medical orthodoxy and professional discord. It is debatable whether the medical services were undone by military inadequacies and unwise mission expansion or whether their pre-existing structural deficiencies hastened the breakdown. The proliferation of disease and inadequacies of casualty evacuation denuded the Campaign of its fighting strength and eroded the morale of its troops. The resultant attrition made it near impossible to sustain military effectiveness.

With the aim of obtaining granular detail, this paper scrutinises the integrity and effectiveness of medical support through the lens of unit war diaries and the diaries of senior medical officers from the time of the Campaign's commencement in November 1914 to December 1915 when expeditionary operations were becalmed by the prolonged besiegement of the fighting line at Kut al Amara. The detail obtained from these diaries reveals administrative apathy, bureaucratic quibbling and personality clashes, all of which further compromised the already inadequately resourced medical support to the Campaign. This article also asserts that the persistent failure of the Indian government to comprehend the logistic challenges posed by the climate, terrain and river systems in lower Mesopotamia led to severely compromised medical capability, especially casualty evacuation and medical resupply.

Keywords

Mesopotamia, Great War, India, Medical services, Logistics

Introduction

In 1917, one July afternoon in the House of Commons, the Attorney General Sir Frederick Smith (1872-1930) rose to defend his government following the damning Report of the Mesopotamia Commission, a special parliamentary commission set up to investigate the military debacle in the Mesopotamian Campaign.¹ The public outcry that followed the gruesome revelations of the Campaign's medical inadequacies led to this commission of inquiry being constituted in July 1916, even before the Campaign had ended. Though he dared not dispute the Commission's scathing findings, Smith lamented that the Report was a 'cemetery of reputations'.² Its unsparing criticisms, also directed at high-ranking medical officers, precipitated a national scandal. The preceding Vincent-Bingley Report, delivered to the Government of India (GoI) in June 1916, had also criticised the medical aspects of the Campaign.³

The Mesopotamian Campaign, which lasted for the whole of the Great War (1914-1918), was waged in the Middle East by Allied forces, mostly comprising British Indian Army personnel, against Ottoman forces of the Central Powers. After considerable equivocation, the GoI, already heavily committed to the Western Front, deployed the hastily assembled Indian Expeditionary Force 'D' (IEF 'D') to Mesopotamia in November 1914, ostensibly to secure the oil reserves there. IEF 'D' was the largest of seven expeditionary forces sent by India to different theatres in WW1.

Medical support was largely provided by Indian Medical Service (IMS) personnel and subordinate medical and bearer corps. Though unused to such long-distance operations, the GoI chose to retain overall command and control. Notwithstanding early successes against Ottoman forces, the Campaign was plagued from the outset by a series of misadventures that escalated inexorably. Tactical, logistical and medical deficiencies together with inadequacies of command became evident as the Campaign progressed, forcing the military and administrative control of this flailing campaign to be wrested from the GoI by the War Office (WO) in Britain which eventually directed the Campaign to a successful conclusion.⁴

While historian Mark Harrison ascribes the medical breakdown to governmental parsimony, strategic overreach and operational misjudgement, he has also described elsewhere the recurring imperial and doctrinal upheavals suffered by modern medicine, especially public health, in India.⁵ Hence, a *longue-durée* or long look into the colonial underpinnings of military medicine in India may yield a possibly more nuanced explanation for the breakdown and explain whether medical thinking had sufficiently evolved to enable the IMS to cope with the exacting demands of an overseas expeditionary campaign and the medical consequences of modern industrial warfare.

¹ Mesopotamia Commission. *Report of the Commission Appointed by Act of Parliament to Enquire into the Operations of War in Mesopotamia*, London: HMSO; 1917.

² House of Commons, *House of Commons Debate* (12 July 1917, Volume 95, col 2163).

³ Mesopotamia Commission. *Report*, 1917 (Note 1). Appendix 1: Vincent-Bingley Report. p.133.

⁴ Harrison M. *The Medical War: British Military Medicine in the First World War*. Oxford: Oxford University Press; 2004. p.204.

⁵ Harrison M. *Public Health in British India: Anglo-Indian Preventive Medicine 1859-1914*. Cambridge: Cambridge University Press; 1994.

By blending archival and published primary sources and referring to relevant secondary literature, this paper scrutinises the integrity and effectiveness of medical support from the Campaign's commencement in November 1914 until December 1915 when the expeditionary aspect was nullified by the besiegement of the fighting line at Kut al Amara (Kut for short), along the Tigris River about 100 miles southeast of Baghdad. It examines the war diaries of the medical commanders of two medical units, 2 Combined Field Ambulance (CFA) and 19 Combined Casualty Clearing Hospital (CCCH), which participated in the campaign from the outset and provided the bulk of frontline medical support, and the diaries of Colonel Patrick Hehir IMS (1859-1937), Assistant Director of Medical Services (ADMS), 6th (Poona) Indian Division and Surgeon-General Harold Hathaway (1860-1942), Royal Army Medical Corps (RAMC), Deputy Director Medical Services (DDMS).

These diaries provide an understanding of the political, fiscal and bureaucratic pressures on medical operations and help to deconstruct the medical campaign. The lived experiences of these medical officers, stoically recorded in these diaries, also reveal unexpected tensions between commanders, medical units and administrators. Equally, as the Commission concluded, senior commanders, both military and medical, were blameworthy for secretiveness and the 'misuse of reticence' in alerting their superiors in Britain and India about the worsening medical situation.⁶

The diaries examined belong to the 6th Indian Division subseries within the WO95 series of records held by The National Archives. Additional detail has been obtained from relevant War Diaries of the General Staff at Army Headquarters, India held in the British Library's India Office Records and Private Papers.

The situation in India

The GoI deployed its expeditionary force to Mesopotamia to enable Britain to fulfil her imperial strategy, which was predicated on easily overcoming Ottoman forces, thus rapidly bringing other Central Powers to the negotiating table. Though the GoI, conscious of Indian Muslim sensitivities, was uneasy about engaging a Muslim enemy in a land with many iconic shrines, London's intent prevailed.⁷ The first strategic and tangible aim was to secure the oil reserves at Abadan for the modern oil-hungry Royal Navy which was estimated to need 200 times more oil than in the previous decade.⁸ The second aim, a nebulous one that would lead to grievous miscalculation, was the maintenance and enhancement of British prestige in the region.⁹

Comprising 16th and 18th Brigades, IEF 'D' drew its medical support from assorted sections of 17 British Field Ambulance (BFA), 16 BFA, 19 CCCH, 57 Indian Stationary Hospital (ISH), 9 Indian General Hospital (IGH), elements of 3 British General Hospital

⁶ Mesopotamia Commission. *Report*, 1917 (Note 1). p.75.

⁷ Johnson R. *The Great War and the Middle East*. Oxford: Oxford University Press; 2016. p.133.

⁸ Admiralty. Royal Commission on Fuel and Engines: final report. February 1914. The National Archives (TNA), ADM 265/38.

⁹ India Office. War Diary, Army Headquarters, India, I.E.F. 'D'. 1914. Vol. 2. British Library (BL). India Office Records and Private Papers. IOR/L/MIL/17/5/3224. Appendix 66.

(BGH) and 125, 126 and 127 Indian Field Ambulances, all of which were inspected in Poona, India by Colonel Hehir, recently appointed senior medical officer for IEF 'D'.¹⁰ This appointment was propitious as Hehir, an authority in preventative medicine with considerable field experience, was also fluent in Indian languages. A genial Irishman, he had started out as a dispenser in the Bengal Subordinate Department and literally came up through the ranks, both medically and militarily.¹¹

The pre-war situation with military medical manpower was precarious. Surgeon General Sir Charles Pardey Lukis (1857-1917), Director General IMS, in his report to the GoI in 1912, had warned:

The number of medical officers in military employ is too small to enable mobilisation even on a small scale, without drawing on the civil reserve of the Service. Enquiries made all over India show that only 24 qualified men (all Europeans) are forthcoming for field duty and the qualifications of some of them are not of the class normally required of military medical officers.¹²

With Lukis's warning going unheeded, Hehir was compelled to use less experienced personnel across various skills and trades.¹³ There was no input or guidance forthcoming from the Director Medical Services (DMS) in India, Surgeon General William Babbie RAMC (1859-1920). Babbie, who was DMS from March 1914 to June 1915, was believed to be uninterested in 'sideshows' such as Mesopotamia.¹⁴ Learning not to expect any official assistance, Hehir hastily compiled a field guide, *Field Service Notes for Regimental Medical Officers*, for his inexperienced medical officers, and had it printed and distributed at his own expense.¹⁵ Hehir's counsel in this guide was prescient:

Remember that you are, primarily, the health officer of your unit and secondarily, the medical officer for the treatment of the sick and injured; your highest function is not to treat disease but to take steps to ensure that there will be as little disease as possible on active service.

The Campaign begins

Figure 1 shows a map of Lower Mesopotamia prepared in the Historical Section of the Committee of Imperial Defence in June 1922.

¹⁰ War Office. War Diary, Assistant Director Medical Services (ADMS), 6 Indian Division. TNA. WO 95/5114/1. 26 October 1914.

¹¹ Anon. Sir Patrick Hehir, Major General, I.M.S. *Lancet*. 1937; 229(5932): 1139.

¹² Director General Indian Medical Service, 32, 15 October 1912, Government Central Branch Press, Simla. Dhananjayrao Gadgil Library (DGL). GIPE015938.

¹³ War Office. War Diary, ADMS (Note 10). DAAG No. 4822/1 (AG).

¹⁴ Dunnill MS. Victor Horsley (1857–1916) in World War I. *Journal of Medical Biography*. 2010; 18(4): 186–193.

¹⁵ War Office. War Diary, ADMS (Note 10). Appendix 3 (*Field Service Notes for Regimental Medical Officers*), 31 October 1914.



Figure 1: Lower Mesopotamia. British Library. India Office Records and Private Papers. IOR/L/MIL/17/15/72/2. Open Government Licence.

After entering the Shatt-al-Arab waterway at Fao, south of Basra, on 6 November 1914, IEF ‘D’ rapidly achieved its initial military objective of securing the immense oil refinery of the Anglo-Persian Company at Abadan.¹⁶ However, the shallow Shatt and a sandbar posed a challenge to many of the deep draught ships carrying much of the medical supplies which, consequently, could not be readily disembarked.¹⁷ Already, complex injury patterns resulting from high energy projectiles were threatening to

¹⁶ India Office. War Diary, Army Headquarters, Vol. 2 (Note 9). Appendix 122, p.65.

¹⁷ India Office. War Diary, Army Headquarters, Vol. 2 (Note 9). Appendix 80, p.46.

overwhelm the modest medical assets.¹⁸ Most available boats struggled with the unpredictable tides, high winds and heavy rain, making casualty transport challenging.¹⁹ Without experienced medical storemen, even basic medical necessities such as wound dressings were rapidly depleted.²⁰ This inauspicious combination of complex injuries, dwindling resources and problematic casualty transportation augured testing months ahead.

By mid-November 1914, IEF 'D' had occupied Basra, secured the oilfields and gained a foothold in southern Mesopotamia. In early December 1914, after a protracted battle, the capture of Qurna ensured a secure front with which to protect Britain's strategic interests in lower Mesopotamia.²¹ However, the Force's aspiration of using Basra as a port of disembarkation and casualty evacuation was frustrated by tidal vagaries, sandbars and the riparian challenges of the Shatt-al-Arab and the Tigris.²² General Arthur Barrett (1857-1926), the Force commander, urgently informed the Chief of the General Staff in India about the exact specifications that would permit vessels to navigate the Shatt-al-Arab and also the Tigris and Euphrates above Qurna but elicited no response.²³

Presumably, the lack of suitable flat-bottomed river craft compelled military commanders into ordering all sick and wounded to be carried forward by medical units on the order of march rather than being evacuated rearwards.²⁴ This must have caused consternation in the already congested medical units. Evidence tendered to the Mesopotamia Commission revealed that the General Staff in India had not felt it necessary to provide shallow draught river steamers as it had been believed, mistakenly, that the river course from Basra up to Qurna was navigable by sea-going ships.²⁵

Reorganisation and improvisation

With further military operations planned, Hehir resorted to an *ad hoc* reorganisation of medical units to improve agility and responsiveness. Thus, by merging sections from British and Indian field ambulances, Improvised Casualty Clearing Stations and a

¹⁸ Barber CH, Doyle E. Surgical Survey of the Casualties in Mesopotamia. *The Indian Medical Gazette*. 1915; 50(3): 81–84.

¹⁹ War Office. War Diary, 19 Combined Casualty Clearing Section. TNA. WO 95/5250/1. 21 November 1914.

²⁰ War Office. War Diary, 19 Combined Casualty Clearing Section (Note 19). 5 December 1914.

²¹ India Office. War Diary, Army Headquarters, India. The Operations of the Mesopotamia Expeditionary Force, Force D 1914-18. National Archives of India (NAI). WWI/1438/H.

²² India Office. War Diary, Army Headquarters, India, I.E.F. 'D'. 1914. Vol. 3. BL. IOR/L/MIL/17/5/3225. Appendices 80-82, p.46-47.

²³ India Office. War Diary Army Headquarters, India, I.E.F. 'D'. 1915. Vol. 6. BL. IOR/L/MIL/17/5/3228. Appendix 13-A, Telegram P. No. 3-G, 2 January 1915, p.5-B, 6.

²⁴ Macpherson WG, Mitchell TJ. *History of the Great War based on Official Documents. Medical Services, Vol. 4*. London: HMSO; 1924. p.166.

²⁵ Mesopotamia Commission. *Report*, 1917 (Note 1). Appendix 4, V. p.11.

composite frontline unit, 2 CFA, were created.²⁶ However, the constituent sections of 2 CFA had embarked without sufficient tents and equipment, rendering them operationally ineffective. It transpired that medical units had not been permitted to make demands in excess of the Indian Army field scale of equipment. While some units had expended considerable administrative effort before deployment to obtain additional stores, most units had complied with the ruling.²⁷ For example, 2 CFA was compelled early on, and thereafter at regular intervals, to apply to the Imperial Relief Fund for relief supply to 'maintain and increase the efficiency of the unit'.²⁸ This charitable Fund brought the considerable resources of hundreds of Indian Princes and even the Dalai Lama to the war effort.²⁹ The extent to which charity was used to procure resources that should have been provided by the GoI is remarkable.

By February 1915, medical units were fast accumulating patients following outbreaks of mumps, diarrhoeal disorders and fevers of unknown aetiology. The subsequent weakening of his fighting strength even spurred the General Officer Commanding (GOC) 16th Brigade into demanding, and getting, a special firing picket manned by convalescents.³⁰ Two aspects are significant regarding the emergence of infectious diseases such as typhoid, the first being that these infections were likely contracted in India and became symptomatic in Mesopotamia. The second is the opposition among many Indian soldiers to mandatory vaccination and the political expediency in not forcing the issue such that the vaccination status of many went unrecorded.³¹ Indeed, when smallpox was detected, the belated entreaties for vaccine lymph speak to the low inoculation levels among Indian troops.³²

Barriers to sanitation

It is apparent that the increasing disease burden was beginning to impact upon military capability. From the outset, Hehir expected all units would comply with the comprehensive sanitary precautions, especially water safety, that he had set out.³³ However, his intent was frustrated by the dreaded Indian field equipment scale which delayed, on grounds of non-conformity, the timely arrival of essential sanitary items such as additional water boilers, disinfectant, methylated spirits and extra tents for isolation purposes. Military commanders declined to release engineers to assist medical units with infrastructure needs such as the construction of incinerators to dispose of

²⁶ War Office. War Diary, 2 Combined Field Ambulance CFA, 6 Indian Division. TNA. WO 95/5119/1. 4 February 1915 & 21 February 1915.

²⁷ War Office. War Diary, 2 CFA (Note 26). Appendix 3.

²⁸ War Office. War Diary, 2 CFA (Note 26). 15 December 1914.

²⁹ House of Commons, *House of Commons Debate* (9 September 1914, Volume 66, cc574-8).

³⁰ War Office. War Diary, 2 CFA (Note 26). 1 March 1915.

³¹ Gradmann C, Harrison M, Rasmussen A. Typhoid and the Military in the early 20th Century. *Clinical Infectious Diseases*. 2019; 69(Suppl 5): S385–S387.

³² India Office. War Diary Army Headquarters, India, I.E.F. 'D'. 1915. Vol. 8. BL. IOR/L/MIL/17/5/3230. Diary No. 6314, Appendix 399, 26 March 1915.

³³ War Office. War Diary, 2 CFA (Note 26). 27 February 1915.

excreta. The unit diary of 19 CCCH at Nasiriyah camp plaintively describes their crude incinerator being washed away in a 'sea of mud'.³⁴

Most worryingly, when all Regimental Medical Officers (RMO), assistant and sub-assistant surgeons of smaller formations were summoned to report the extent of disease and progress with sanitary projects, no one turned up save one RMO.³⁵ To Hehir's further chagrin, units were pitching camp in highly infested locations made worse by inadequate ownership of camp hygiene by regimental commanders.³⁶ It was even alleged that the General Staff was inclined to allocate the most unhygienic of sites to the field ambulances.³⁷ This was contrary to explicit Army regulations.³⁸

The relative apathy of medical officers towards ensuring sanitary standards among Indian soldiers may be ascribed to the persistence of a colonial medical discourse that presumed the inevitable susceptibility to disease of an 'uncivilised' native population because of its ignorant practices, thus rendering any preventative intervention futile.³⁹ A second reason for possible indifference may have stemmed from long-standing institutional resentment, arising from perceived loss of prestige, promotion and prospects, by IMS officers against the relatively new Sanitary Branch.⁴⁰

Neglect of health intelligence

The failure to exploit pre-existing health intelligence may have contributed to many missteps. The British delegate to the 1911 International Sanitary Conference, Dr FG Clemow (1863-1928), described protective health strategies for visiting Indian Shia pilgrims. His report, submitted to British Indian administrators in June 1914, included detailed information about health threats, water safety and local riparian geography, especially the Shatt-al-Arab and Basra.⁴¹ He had also presented his work at the 1909 Bombay Medical Congress, attended by Hehir.⁴²

Another example is the neglect of the 1874 treatise of Surgeon General (Retired) George Evatt IMS (1843-1921), lodged with the Army Medical Department, on the 'medico-military topography of the Persian Gulf and Mesopotamia'.⁴³ Furthermore, a 1907 Royal Indian Marines survey had described the idiosyncrasies of the Tigris-

³⁴ War Office. War Diary 19 Combined Casualty Clearing Station (Note 19). Camp Nasiri, 20 February 1914.

³⁵ War Office. War Diary, 2 CFA (Note 26). 5 March 1915.

³⁶ War Office. War Diary, ADMS, 6 Indian Division. TNA. WO 95/5114/2. Appendix 112.

³⁷ Mesopotamia Commission. *Report*, 1917 (Note 1). Appendix 3, Statement of Captain F T Dowling RAMC.

³⁸ Government of India, *Army Regulations, VI, Medical*. Calcutta: Military Department; 1906.

³⁹ Kumar D, Basu RS. *Medical Encounters in British India*. New Delhi: Oxford University Press; 2013. p.13-15.

⁴⁰ Anon. A Forgotten Service Grievance. *Indian Medical Gazette*. 1908; 43(12): 461-462.

⁴¹ Clemow FG. The Shiah Pilgrimage and the Sanitary Defences of Mesopotamia and the Turco-Persian Frontier. *Lancet*. 1916; 188(4850): 289-293.

⁴² Jennings WE (ed). *Transactions of the Bombay Medical Congress*. Bombay: Bennet, Coleman & Co The Times Press; 1909. p.384-391. DGL. GIPE015856.

⁴³ Evatt GJH. Medico-Military Topography of the Persian Gulf and Mesopotamia. *British Medical Journal*. 1916; 2(2922): 919.

Euphrates river system, a phenomenon well-known to British trading companies in Basra for decades.⁴⁴ A disconnect between officialdom and local requirements may explain why the challenges posed by the Tigris remained invisible to far-off imperial dignitaries.⁴⁵

Army Bearer Corps and malnutrition

The health of Army Bearer Corps personnel suffered from repeated requests to carry casualties over marshy and flooded terrain for punishingly long distances, the excessive and unfamiliar workload exacerbating pre-existing nutritional deficiencies. Forced marches in full field service order with extra ammunition to 'harden' them must have been morale-sapping.⁴⁶

This Corps was formed in 1902, drawn mostly from traditional litter bearers belonging to the polyethnic Kahar community, to address long-standing deficiencies in the retrieval and movement of casualties in India.⁴⁷ However, unattractive service conditions gradually led to the Corps' decline such that local 'coolies' (labourers) had to be used during medical manoeuvres in 1913. Their physical and temperamental unsuitability for the role led a concerned Indian press to warn of 'the risk of Indian Field Ambulances being stranded in the field for want of bearers to carry the sick' and urged the authorities to expand the Corps.⁴⁸ Such expansion never occurred. The punishing terrain of lower Mesopotamia proved how costly this was. Even General Sir John Nixon (1857-1921), who assumed overall command of the Force in April 1915, admitted that these hastily recruited bearers were not of the quality that soldiers had a right to expect.⁴⁹

The erratic supply of fresh food compounded existing dietary deficiencies. Attempts to persuade the GoI to increase the ration of fresh vegetables and meat failed.⁵⁰ Dried beans replaced fresh vegetables and the meat and potato ration was drastically reduced. By the end of March 1915, scurvy had emerged in several Indian regiments including 16th and 33rd Cavalries, 104th Rifles, 117th Mahrattas, 120th Infantry and 3rd Sappers and Miners. Vegetarians were especially susceptible because the authorised vegetable ration was insufficient.⁵¹

⁴⁴ Kubicek RV. The role of shallow-draft steamboats in the expansion of the British Empire, 1820–1914. *International Journal of Maritime History*. 1994; 6(1): 85-106.

⁴⁵ Cole CL. Precarious Empires: A Social and Environmental History of Steam Navigation on the Tigris. *Journal of Social History*. 2016; 50(1): 74–101.

⁴⁶ War Office. War Diary, 19 Combined Casualty Clearing Section. TNA. WO 95/5250/2. Appendix 27.

⁴⁷ Milner A. The Army Bearer Corps. *Journal of the Royal Army Medical Corps*. 1906; 6(6): 685–689.

⁴⁸ Anon. The Medical Manoeuvres in India. *Lancet*. 1913; 181(4678): 1193.

⁴⁹ India Office. Report from General Sir J. E. Nixon, K.C.B., Commanding I.E.F. 'D' on the Operations at Dilwar. BL. IOR/L/MIL/17/15/98.

⁵⁰ India Office. War Diary Army Headquarters, Vol. 8. (Note 32). Diary No. 5761, Appendix 298, 19 March 1915.

⁵¹ War Office. War Diary, 2 CFA (Note 26). 22 March 1915.

The battle of Shaiba and medical repatriation

In mid-April 1915, the gruelling battle of Shaiba, waged on boggy flood-prone terrain, resulted in a hard-fought victory for IEF 'D'. Casualties from this engagement further exposed deficiencies in casualty transport, compelling the use of native craft ('bellums') to traverse the water-logged landscape. Shaiba was the hardest test to date especially for the Bearer subdivisions as there were more than 1,000 wounded and nearly 200 dead. Due to delayed evacuation, wounds sustained at Shaiba often turned septic before casualties reached Basra, barely ten miles away. Many of these wounds had been sutured instead of being left open. Even on the Western Front, the valuable clinical precepts of early wound excision and delayed primary closure of contaminated war wounds were just beginning to be appreciated with the aid of wound microbiology.⁵²

Crowded hospitals in Basra struggled to accommodate fresh casualties. Lieutenant Colonel GB Irvine, IMS (b1863), commanding 9 IGH, noted that he had over 700 hospitalised patients already when the battle of Shaiba led to 500 new admissions. Told to expect a further 500 casualties, Irvine tersely noted that there was not even sufficient bedlins.⁵³ Clearly, in order to maintain medical capability, it was imperative that IEF 'D' rapidly repatriated as many as possible of the accumulated serious casualties to India. However, the GoI had not invested in hospital ships for IEF 'D' because the Madras Presidency War Relief Fund offered to convert the SS *Tanda* into the hospital ship *Madras*. Fortuitously, her draught was capable of traversing the Fao sandbar at the mouth of the Shatt-al-Arab.⁵⁴

Between November 1914 and December 1915, despite the *Madras* making monthly trips from Bombay and repatriating 6,000 sick and injured, its deployment failed to ease the hospital congestion. This resulted in unsuitable Government freight transport vessels such as *Thongwa*, *Bankura* and *Torrilla* being used for casualty transport. It would not be until 1916 that a second hospital ship, the *Loyalty*, also donated, became available.⁵⁵ The GoI's intransigence regarding hospital ships and its threat of disciplinary action against those 'making querulous or petulant demands for shipping' invited derision in the medical and nursing press.⁵⁶ Still unable to find hospital ships that could traverse the Fao sandbar, the GoI remained insistent that it had sole control over the matter and even forbade the DDMS from discussing the matter with the Director, Royal Indian Marine.⁵⁷

Even after reaching India, casualties' woes continued. In May 1915, the Colaba Station hospital in Bombay, the sole hospital for returning British casualties, lacked medical personnel, equipment and even basic comforts such as fans. Despite this, the

⁵² War Office. War Diary, 2 CFA (Note 26). 14-15 April 1915.; Manring MM, Hawk A, Calhoun JH, Andersen RC. Treatment of War Wounds: A Historical Review. *Clinical Orthopaedics and Related Research*. 2009; 467(8): 2168-91.

⁵³ War Office. War Diary, 9 Indian General Hospital. TNA. WO 95/5261/1.

⁵⁴ Mesopotamia Commission. *Report*, 1917 (Note 1). Appendix 4, B. p.15.

⁵⁵ Mesopotamia Commission. *Report*, 1917 (Note 1). Appendix 4, B. p.19-27.

⁵⁶ Anon. The Medical Debacle in Mesopotamia. *British Journal of Nursing*. 1917; 59(1527): 1-2.

⁵⁷ India Office. War Diary, Army Headquarters, India, I.E.F. 'D'. 1915. Vol. 14, Part 1. BL, IOR/L/MIL/17/5/3236. Diary No. 21180, Appendix 170, 12 September 1915.

DMS Babbie blithely reassured Delhi and Whitehall that all was well.⁵⁸ Indian casualties faced lengthy and possibly painful train journeys to distant convalescent centres and specialist hospitals in Karachi, Ambala, Meerut and Secunderabad.⁵⁹

Demands of bureaucracy

Unit and war diaries reveal frustration with administrators at the Quarter Master General's department and the Directorate of Medical Services, in Basra and Delhi, who persistently made abstruse demands upon hard-pressed medical commanders even during high-intensity operations. For instance, nominal rolls, daily returns and equipment inventories were repeatedly demanded by multiple agencies. Displaying admirable restraint, Lieutenant Colonel John Hennessy RAMC (1867-1954), commanding 2 CFA, noted, 'this was work that entailed considerable time and labour and with depleted personnel just now, its compliance will interfere with the performance of other duties to the sick.' His unit did not even possess sufficient lanterns to permit him to write at night, and, ironically, even had to indent the Stationery Office at Basra for more forms as they had run out.⁶⁰

These ill-timed strident administrative demands meant that overworked medical officers had to neglect the sick and wounded to satisfy bureaucratic whims. The tensions and frustrations are evident in the aggrieved comments of Captain William Spackman IMS (1889-1975), Regimental Medical Officer, 48th Pioneers, who complained that medical officers who 'slavishly observed field regulations' seemed to be rewarded with field decorations instead of those who immersed themselves in medical care.⁶¹

Changes of command and shifts in ambition

Four months into the Campaign and bolstered by a further Indian division, IEF 'D' was redesignated the 2nd Indian Corps.⁶² Overall command was assumed by General Nixon.⁶³ Medical assets now included 1 CFA and 3 CFA in the 6th Division, 2 CFA and 4 CFA in the 12th Division, 106 Field Ambulance and 131 Indian Cavalry Field Ambulance in Corps Troops, 34 BGH, 9 IGH, 19 CCCH, 57 ISH, 8 Advanced Depot of Medical Stores

⁵⁸ Harrison. *The Medical War*, 2004 (Note 4). p.207.

⁵⁹ Mesopotamia Commission. *Report*, 1917 (Note 1). Appendix 3, Hospital and Convalescent accommodation for Indian troops.

⁶⁰ War Office. War Diary, 2 CFA. TNA. WO 95/5119/2. Appendix 2, 26 June, 7 July & 4 August 1915.

⁶¹ Spackman RA. *The Great War Diaries of Colonel William Spackman*. South Yorkshire: Pen & Sword Military; 2009. p.22.

⁶² India Office. War Diary, Army Headquarters, Vol. 8 (Note 32). Diary No. 5925, Appendix 330, 21 March 1915.

⁶³ India Office. War Diary, Army Headquarters, I.E.F. 'D'. 1915. Vol. 9. BL. IOR/L/MIL/17/5/3231. Diary No. 7263, Appendix 135, 9 April 1915.

and 2 X-Ray Section in the Line of Communication formation.⁶⁴ However, instead of five sections per field ambulance, Hehir had to make do with four.⁶⁵

In May 1915, Nixon ordered the 6th (Poona) Indian Division, now under Major General Charles Townshend (1861-1924) who had replaced the ailing Barrett, to advance north with Baghdad as the new objective. Townshend saw this as a perfect opportunity to further garnish the reputation he had made in Chitral in India in 1895. Varying imperial and military motivations have been ascribed to this unexpected mission expansion. Significantly, in this broadening of intent, both the WO and the GoI acquiesced to the insistent demands of the supremely self-confident and ambitious Nixon and the march on Baghdad was duly authorised.⁶⁶ This was despite the deep reservations of Lord Crewe (1858-1945), Secretary of State for India.⁶⁷

As operations in Europe had reached an uncomfortable *impasse*, it was felt that securing Baghdad, portrayed by Nixon as an easy objective, would certainly enhance imperial prestige which had been severely dented by the Gallipoli Campaign.⁶⁸ Equally, Lord Hardinge (1858-1944), the Viceroy of India, glimpsed an opportunity to exploit the presence of the Indian Army in Mesopotamia to bolster India's imperial and commercial power base.⁶⁹ Hardinge, by warning of the grave consequences to India of defeat in Mesopotamia, swiftly placed the onus on Whitehall to reinforce the Force.⁷⁰

Did key figures planning increasingly ambitious operations pause to assess medical capability? In fact, inspections of medical facilities by dignitaries such as Hardinge appeared to suggest that all was well.⁷¹ While it seems improbable that they did not discern the prevailing deficiencies in medical support, it is also possible that the true situation may not have been clearly presented, the so-called 'misuse of official reticence' as designated by the Mesopotamia Commission. However, it was not that the General Staff in India were unaware, as a telegram clearly warned of the deleterious effect that 'incessant marching, bad feeding and epidemic of disease' was having on the Force.⁷² Townshend, always intent on advancing his career, was least likely temperamentally to permit mere medical problems to stand in his way. About the order to advance on Baghdad he wrote:

⁶⁴ War Office. War Diary, 2 CFA (Note 60). Operation Order 51 by General Sir J E Nixon, 3 May 1915.

⁶⁵ War Office. War Diary, 19 Combined Casualty Clearing Section (Note 46). Appendix 8, 30 March 1915.

⁶⁶ Guinn P. *British Strategy and Politics, 1914 to 1918*. Oxford: Clarendon Press; 1965. p.105.

⁶⁷ India Office. War Diary, Army Headquarters, Vol. 9 (Note 63). Diary No. 8507, Appendix 398, 24 April 1915.

⁶⁸ Cabinet Minutes and Papers. War Council. Alexandretta and Mesopotamia. TNA. CAB 42/2/10. 16 March 1915.

⁶⁹ Goold D. Lord Hardinge and the Mesopotamia Expedition and Inquiry, 1914-1917. *Historical Journal*. 1976; 19(4): 919-945.

⁷⁰ India Office. War Diary, Army Headquarters, Vol 8 (Note 32). Diary No. 4455, Appendix 34, 2 March 1915.

⁷¹ Hardinge C. *My Indian Years, 1910-1916*. London: J Murray; 1948. p.113.

⁷² India Office. War Diary, Army Headquarters, Vol. 8 (Note 32). Diary No. 5456, Telegram P.42, Appendix 263, 15 March 1915.

For nothing would I let anyone have this command now. Whatever the difficulties of the water-boat fighting, the appalling heat and absolutely certain high rate of sunstroke, Sir John [Nixon] has decided that it should be done, and I am therefore determined to carry it through. But no one must interfere with me, of that I am determined.⁷³

A medical rift

Hehir, the senior medical figure in the Force, was unaware of Nixon's intention, upon assuming command, to replace him. Surgeon General Harold Hathaway RAMC was to be DDMS and Hehir was re-designated Assistant Director, Lines of Communication, surely a demotion.^{74 75} Some accounts suggest that Hathaway spurned Hehir's advice during the handover.⁷⁶ Hathaway was preoccupied with regulations and seemed uninterested in the medical planning for forthcoming operations.⁷⁷ Early interactions between the two men suggest a distance and even friction. Whether this arose from institutional tensions between the IMS and the RAMC is not known though it is noteworthy that Hehir, while undergoing staff training in Britain in 1913, appreciated the civility extended to him by his counterparts in the British Army.⁷⁸

Hehir only learnt of the cancellation of his sanitation projects from his deputy who Hathaway chose to inform instead of Hehir.⁷⁹ Hathaway had preferred cost savings over sanitation and his intent was evident in a confidential memo to Hehir.⁸⁰ Hathaway's approach was wholly predicated on minimizing expenditure.⁸¹ Consequently, his often abrupt and ill-timed administrative decisions confused units providing medical support for the Qurna operations by separating them from their clinicians and equipment and halting ongoing casualty evacuation, seemingly because of Hehir's remonstrations about congested units.⁸²

Hathaway's precipitate style also lacked operational awareness. His fixation on tangential issues or on idiosyncratic schemes risked missing the tactical and strategic picture. For example, he would impulsively decide that entire regiments looked unfit and needed a 'change of air' in India or he wanted Hehir to halve his divisional drug indents or that field ambulances needed grouping according to economic convenience rather than operational necessity. Meanwhile, Hehir's requests for reinforcements or

⁷³ Sherson E. *Townshend of Chitral and Kut*. London: William Heinemann; 1928. p.157.

⁷⁴ India Office. War Diary, Army Headquarters, Vol. 9 (Note 63). Diary No. 7565, Appendix 184, 14 April 1915.

⁷⁵ War Office. War Diary, Director of Medical Services TNA. WO 95/4974/3. 9 April 1915.

⁷⁶ Wilcox R. *Battles on the Tigris*. Barnsley: Pen and Sword; 2006. p.76.

⁷⁷ War Office. War Diary, Director of Medical Services. TNA. WO 95/4974/4. 7 May 1915.

⁷⁸ Hehir P. Training of I.M.S. Officers. *Indian Medical Gazette*. 1914; 49(12): 457–462.

⁷⁹ War Office. War Diary, ADMS, 6 Indian Division. TNA. WO 95/5114/4. Appendix 14, Reference water supply and accommodation at Base and Makina Masus.

⁸⁰ War Office. War Diary ADMS (Note 79). Appendix 14, 5 May 1915.

⁸¹ War Office. War Diary, Director of Medical Services, TNA, WO 95/4974/3. Appendix 161.

⁸² War Office. War Diary, ADMS, 6 Indian Division. TNA. WO 95/5114/5. 4 June 1915.

additional casualty transport were being stalled by an increasingly truculent Hathaway.⁸³ Caught between the medical demands for Townshend's advance and Hathaway's implacable style, Hehir was ensnared in an organisational nightmare.

The medical cost of the advance

Meanwhile, buoyed by his success at Qurna, Townshend marched on Amara and secured it without any real opposition. Much enthused by Townshend's success, Nixon now had Nasiriyah and Kut in his vision.

The medical cost of this breakneck advance was heat-related illness throughout the line of march. With stretcher bearers themselves frequently incapacitated by the heat together with the scarcity of drinking water, the plight of the heat casualty was truly pitiable. One unit's diary describes how these victims, in the absence of sufficient stretchers and mules, staggered for miles and fell upon marshy streams to ravenously drink filthy untreated water only to collapse soon afterwards.⁸⁴ Attempts to lessen the heat-related toll included marching early in the morning, discontinuation of fatigues between 10.30 and 17.00 and avoidance of alcohol but were largely ineffective.⁸⁵ Statistics for 1914-15 show that there were 78 admissions per 1,000 for heat injury. It would not be until 1917 that education and meaningful precautions were put in place against heat injury.⁸⁶

By June 1915, war diaries of units such as 2 CFA recorded significant daily admissions with dysentery, malaria and typhus.⁸⁷ Between November 1914 and December 1915, the admission ratio per 1,000 was 109 for dysentery and 152 for malaria. Worryingly, subspecies of anopheline mosquitoes, unknown in India, were identified.⁸⁸ Clinicians labelled cases of enterocolitis with blood and mucus in the stool as dysentery, disregarding the instructions of the Directorate not to diagnose without laboratory evidence.⁸⁹

The already enfeebled stretcher bearers were being struck down by dysentery in such large numbers that wholly unsuitable local dwellings needed to be requisitioned to accommodate the ever-increasing tally of patients. Even filthy mattresses from a captured barge were reused. Units often had to use 'verminous' buildings recently vacated by retreating Ottoman troops among whom typhus was prevalent and medical staff were especially at risk when coming into contact with Ottoman prisoners. In acknowledgement of recent research that emphasised the roles that urine and lice played

⁸³ War Office. War Diary, ADMS (Note 82). Appendix 109, 26 June 1915; and Appendix 68, 18 June 1915.

⁸⁴ War Office. War Diary, 106 CFA. TNA. WO 95/5119/14. 14 May 1915.

⁸⁵ War Office. War Diary, 2 CFA (Note 60). Force Routine Order 890; Routine Order 85.

⁸⁶ Bricknell MC. Heat illness – a review of military experience (Part 1). *Journal of the Royal Army Medical Corps*. 1995; 141(3): 157-166.

⁸⁷ War Office. War Diary, 2 CFA (Note 60). 7 June 1915.

⁸⁸ War Office. War Diary, ADMS, (Note 36). 31 December 1914.

⁸⁹ Buchanan GS. Epidemics of the Eastern Campaigns. *Proceedings of the Royal Society of Medicine*. 1918; 11: 1-30.

in the transmission of typhus the insalubrious buildings were vigorously scrubbed.⁹⁰ Attempts to de-louse items such as mattresses were often frustrated by shortage of disinfectants.⁹¹

Medical personnel too succumbed to disease, exacerbating the fragility of medical staffing. Frequently, units had just one medical officer well enough for duties. Medical personnel, still unfit for active field service after illness, were returned to duty prematurely.⁹² Indian Subordinate Medical Service personnel requiring repatriation were retained in Mesopotamia despite the conditions for recuperation being unsuitable.⁹³

Other non-combatants affected by disease were the 'followers' belonging to the Indian labour units. These personnel, so essential for maintenance of hygiene and for numerous physical and often distasteful tasks, were a disparate group comprising muleteers, sweepers and even jail-recruited labour. The cursory assessment of the medical suitability of these personnel resulted in inappropriate individuals such as elderly men, boys and even women being sent out to Mesopotamia. One study of Indian military labour (Indian Labour and Porter Corps) in Mesopotamia indicates that 337,000 labour personnel were used in the whole Campaign with a commensurate medical burden.⁹⁴ Widespread sickness in these personnel necessitated the employment of local Arab sweepers who, however, refused to do many essential tasks such as cleaning latrines.⁹⁵

Malnutrition

Faced with unpredictable resupply and worsening malnutrition, larger frontline medical formations such as 2 CFA attempted to procure food locally as urgent indents to the Supply & Transport Department were either ignored or required repeated resubmission. However, they had to contend with profiteering local traders and an obdurate Local Purchase Officer (LPO) who refused to authorise such purchases at the going market rate. With an intransigent LPO and no organisational intent to support their victualling needs, 2 CFA sought funds from the Indian Imperial Relief Fund, yet again, for these local purchases. An inordinate amount of administrative effort was required of medical officers merely to obtain milk for their patients.⁹⁶

In June 1915, both 2 CFA and 19 CCCH reiterated the futility of local procurement of fresh fruit and vegetables and warned about the threat of scurvy. An alarmed Major Henry Brown (dates unknown) of 19 CCCH alerted the DDMS about the surge in scurvy in the 4th Mahrattas that saw 300 men admitted over three days. Brown reasoned these undernourished men were overworked, rendering them especially susceptible. With the

⁹⁰ War Office. War Diary, 2 CFA (Note 60). 7 June 1915.

⁹¹ War Office. War Diary, 106 CFA (Note 84). 14 May 1915.

⁹² War Office. War Diary, 2 CFA (Note 60). 19 & 28 June 1915.

⁹³ War Office. War Diary, 2 CFA (Note 60). Memorandum from DDMS, 458/6 Med. 16 July 1915.

⁹⁴ Singha R. *The Coolie's Great War*. London: Oxford University Press; 2020.

⁹⁵ War Office. War Diary, 2 CFA (Note 60). Appendix 2, 30 June 1915.

⁹⁶ War Office. War Diary, 2 CFA (Note 60). 20 June, 29 June & 31 July 1915.

supply of fresh meat and vegetables still remaining inconsistent, medical officers like Brown improvised the best they could.⁹⁷

Later in the Campaign, from May 1916 until 1919, Colonel WH Willcox RAMC (1870-1941), the senior physician to the Force, noted that ‘scurvy was practically limited to Indian troops’. Though he had never worked with Indians previously, Willcox implicated the Indian soldiers’ instinct of saving money for their families to be the cause of their not buying and consuming their field service ration.⁹⁸ Scurvy persisted until 1916 with nearly 12,000 cases occurring in the second half of 1916. Most had to be repatriated as they had become unfit for active field service. Willcox deprecated the ‘false economy’ with rations that he believed had led to this. It has been suggested that Hehir had misgivings about the adequacy of the Indian rations in preventing scurvy though it remains unclear whether he communicated his concerns through the chain of command.⁹⁹ Even novel schemes such as deploying a newly created Madras Gardeners’ Corps to Mesopotamia to grow green vegetables proved ineffective.¹⁰⁰

‘Sickness of the mind’

Meanwhile, Townshend’s intent to advance on Kut was boosted by intelligence reports that indicated Ottoman reinforcements were incomplete. Even as Townshend prepared for this latest advance, he went down with prolonged diarrhoea, vomiting and high fever. He promptly chose to be invalided to India, recuperating in Bombay and later in the salubrious hills of Simla. While recuperating, he decided that his Indian troops were not good enough.¹⁰¹ Had Townshend attempted to gauge the morale of his force, upon returning to Mesopotamia, he would have found it at rock-bottom. Captain Henry Birch Reynardson (1892-1972) of the 1st Oxfordshire and Buckinghamshire Light Infantry noted:

As the weeks passed and the weather got hotter and hotter, sickness increased, not only sickness of body, but a worse and more insidious enemy – sickness of mind; the worst and commonest forms was a sort of hopeless depression when everything and everybody was utterly bad, and life unbearable.

Reynardson was outraged to hear the British government claiming there was an ample supply of fresh vegetables, ice and fans.¹⁰²

⁹⁷ War Office. War Diary, 19 Combined Casualty Clearing Section (Note 46). Appendix 30, 24 June 1915.

⁹⁸ Willcox WH. The Treatment and Management of Diseases due to Deficiency of Diet: Scurvy and Beri-Beri. *British Medical Journal*. 1920; 1(3081): 73-77.

⁹⁹ Hess AF. *Scurvy, Past and Present*. Philadelphia & London: J. B. Lippincott Co; 1920. p.19.

¹⁰⁰ Chowdhury SR. *The First World War, Anticolonialism and Imperial Authority in British India, 1914-1924*. Routledge; 2019. p.27-28.

¹⁰¹ Sherson. *Townshend*, 1928 (Note 73). p.264.

¹⁰² Reynardson HB. *Mesopotamia 1914-15: Extracts from a Regimental Officer’s Diary*. London: A Melrose; 1919. p.163-164.

In August 1915 it was evident that much-needed reinforcements and casualty replacements would be delayed further.¹⁰³ Temporary medical replacements were found to be physically and professionally unsuited for the exigencies of field service.¹⁰⁴ Presumably with a view to conserving force strength, General Nixon through his DDMS, sought to impose stricter conditions on medical officers' ability to repatriate personnel to India.¹⁰⁵ In September 1915, as combat formations resumed their advance north, Hehir busied himself with improvising medical arrangements for the advance and issued a Divisional Order that warned 'every section of the Field Ambulances may be called upon to do exceptionally heavy work'. He also indicated that there would be a significantly reduced sectional allocation of mules and carts for transporting equipment and casualties.¹⁰⁶

Insufficiency of war establishment

In September 1915 the DDMS stated that the prevailing diseases were still malaria and dysentery and that there were nearly 700 hospitalised personnel. He also pointed out that the donor-sponsored Bengal Stationary Hospital which was doing valuable work would soon need GoI funding.¹⁰⁷ The DDMS assumed that he had done what was needed, given the situation in Mesopotamia, when in May 1915 he got the Force Commander Nixon to write to the Chief of General Staff in India to urgently increase the war establishment of personnel and equipment from 500 beds (as per the normal scale) to 1,000 beds. The DMS Babbie claimed that he was unaware of this request and, seemingly oblivious to the dire need, stipulated that the application would need to be made again.¹⁰⁸ Meanwhile, Nixon's hyperbolic rationale for advancing on Baghdad, worryingly, failed to consider the medical situation and the delay with reinforcements.¹⁰⁹ He was urged to exercise restraint and not advance beyond Kut.¹¹⁰

The 6th Division's forces under Townshend overcame well-entrenched Ottoman forces on 28 September 1915 at Es Sinn, seven miles downstream from Kut. This

¹⁰³ India Office. War Diary, Army Headquarters, India, I.E.F. 'D'. 1915. Vol. 13 BL. IOR/L/MIL/17/5/3235. Diary No. 18226, Appendix 275, 16 August 1915.

¹⁰⁴ India Office. War Diary, Army Headquarters, Vol. 14 (Note 57). Diary No. 21396, Appendix 209, 1915.

¹⁰⁵ War Office. War Diary, 2 CFA (Note 60). Appendix 2, Orders and Instructions of DDMS, 671 & 672, 5 August 1915; and 940/6/Med, 16 August 1915.

¹⁰⁶ War Office. War Diary, 2 CFA (Note 60). 6th Divisional Order (Medical) No: 14-17, 20 to 25 September 1915.

¹⁰⁷ India Office. War Diary, Army Headquarters, Vol. 14, Part 1 (Note 57). Diary No. 20306, Appendix 49, 4 September 1915; and Diary No. 20469, Appendix 69.

¹⁰⁸ India Office. War Diary, Army Headquarters, Vol. 14, Part 1 (Note 57). Diary No. 20884, Appendix 129, 23 August 1915.

¹⁰⁹ India Office. War Diary, Army Headquarters, Vol. 14, Part 1 (Note 57). Diary No. 20636, Appendix 90, 30 August 1915.

¹¹⁰ India Office. War Diary, Army Headquarters, Vol. 14, Part 1 (Note 57). Appendix 67, 6 September 1915.

engagement cost over 100 lives and resulted in 1,200 British and Indian casualties.¹¹¹ Hehir directed medical operations from on board the SS *Mejidieh*, ensuring the agility of his sections according to the tempo of fighting. He had the SS *Mosul* converted into a Combined Clearing Hospital that would collect casualties by sailing upstream if required.¹¹²

Some of Hehir's plans disintegrated when the animal carts and water receptacles of the medical units were abruptly commandeered by the GOC to overcome an acute shortage of drinking water on the fighting line. When these carts never returned, casualty retrieval ground to a halt and casualties had to be individually carried by Kahar bearers who rapidly reached breaking point with sheer exhaustion, dehydration and hunger.¹¹³ An undeterred General Townshend briskly declared when responding to enquiries from King George V and the Viceroy of India, 'the sick and wounded are doing very well and will be back in the ranks shortly and the spirit of the troops is splendid'.¹¹⁴

The memorandum of dissent

On 28 September, Townshend occupied Kut, largely unopposed as Ottoman forces had retired to Ctesiphon after their defeat at Es Sinn.¹¹⁵ Hehir now had the opportunity to establish a much-needed medical base at Kut and make medical plans for any future advance. Aware that his forward medical units, lacking suitable river transport to evacuate patients downstream, were weighed down by patients, Hehir began planning mitigation measures as the advance on Baghdad remained a distinct possibility.¹¹⁶ He, reasonably, requested General Head Quarters (GHQ) at Basra for relief hospital sections to take over the care of these hundreds of patients thus freeing his frontline medical units to be able to support the advance. As he did not elicit a response, an anxious Hehir even got Townshend to send a 'clear the line' reminder to the DDMS.

Inexplicably, Hehir's request was denied. After a further intercession by Townshend, GHQ relented. Three sections of 4 Field Ambulance, two sections of 131 Cavalry Field Ambulance, 19 CCCH, 9 Advanced Medical Stores Depot, a 50-bedded section of a BGH, a 100-bedded section of an IGH and 57 ISH had been requested by Hehir that would allow him to consolidate and plan the next phase of the advance.¹¹⁷ Believing that his request had been granted, Hehir was appalled to discover that Hathaway had cancelled these reinforcements. The latter had unquestioningly

¹¹¹ India Office. War Diary, Army Headquarters, India, I.E.F. 'D'. 1915. Vol. 14, Part 2 BL. IOR/L/MIL/17/5/3237. Diary No. 22820, Appendix 422, 29 September 1915.

¹¹² War Office. War Diary, 2 CFA (Note 60). 6th Divisional Order (Medical) No. 17, 25 September 1915.

¹¹³ War Office. War Diary, 2 CFA (Note 60). 29 September 1915.

¹¹⁴ War Office. War Diary, ADMS, 6 Indian Division. TNA. WO 95/5115/3. Appendix 13, Routine Orders, 3 October 1915.

¹¹⁵ India Office. War Diary, Army Headquarters, Vol. 14, Part 2 (Note 111). Diary No. 22921, Appendix 439, 29 September 1915.

¹¹⁶ War Office. War Diary, ADMS (Note 114). 2 October 1915.

¹¹⁷ War Office. War Diary, ADMS (Note 114). 3 October 1915.

acquiesced with Nixon's casual opinion that the minor injuries that he expected from the advance did not warrant medical reinforcements.¹¹⁸

A severely provoked Hehir composed a 'memorandum of dissent' against Hathaway and submitted it to the Deputy Adjutant and Quartermaster General, who agreed to place it before General Nixon.¹¹⁹ ¹²⁰ It is likely that this extraordinary and possibly unprecedented act of dissension by a military medical officer in the middle of a war has escaped scholarly attention. Hehir's high-risk tactics worked, and it was eventually accepted that additional medical assets would be sent to Kut. Ironically, there was no river transport readily available to ferry them over. Hathaway's diary is silent about this astonishing deterioration in relationship between the Campaign's two most senior medical officers.¹²¹

Tragedy at Ctesiphon

Though heavily outnumbered by enemy forces, the 6th Division formed up at Lajj, a few miles from the Ottoman lines at Ctesiphon. The first divisional attack went ahead on 22 November. For the Allies this engagement and subsequent actions at Ctesiphon resulted in the 6th Division sustaining losses of nearly 4,600, denuding its effective strength by 40 per cent, compelling it to withdraw to Aziziyah. Some battalions were reduced to just three effective officers.¹²² A further withdrawal to Omm al Tubal saw the irreparable loss of the few river steamers that were crucial for evacuating the sick and wounded.¹²³ Townshend's victory at Ctesiphon was a hollow one as he had no option but to withdraw his weakened army to the safe citadel of Kut. By doing so, he handed the tactical advantage to the Ottomans who duly laid siege to Kut, effectively ending the hapless initial expeditionary phase of the Campaign. It would take considerable time, military effort and further loss of life before Kut could be relieved and the initiative regained.

The aftermath of the battle of Ctesiphon is a depressing coda to the first phase of the Campaign. Harrowing eyewitness accounts reveal the pitiable state of casualty care and the associated human cost. Sir Arnold Wilson (1884-1940), then a junior political officer, describes his 'supreme agony on how the four field ambulance sections equipped to deal with 400 casualties had to cope that day with almost ten times that number'.¹²⁴ Reynardson saw casualties:

Loaded with three lying and three sitting cases in each, the iron-tyred animal transport carts started their ten-mile journey to the river over rough desert, dry

¹¹⁸ War Office. War Diary, ADMS (Note 114). Appendix 31, 31a, 32.

¹¹⁹ War Office. War Diary, ADMS, 6 Indian Division. TNA. WO 95/5115/4. Appendix 139.

¹²⁰ War Office. War Diary, ADMS (Note 114). Appendix 39.

¹²¹ War Office. War Diary, Director of Medical Services. TNA. WO 95/4975/1. Appendix 5.

¹²² India Office. War Diary. Army Headquarters, India, I.E.F. 'D'. 1915. Vol. 16, Part 2. BL. IOR/L/MIL/17/5/3241. Diary No. 28206, Appendices 490 & 491 22 November 1915; and Telegram S-28435, Appendix 526, 24 November 1915.

¹²³ Macpherson. *Medical Services*, 1924 (Note 24). p.201.

¹²⁴ Talbot A. *Loyalties; Mesopotamia, 1914-1917*. London: Oxford University Press; 1936. p.85-86.

ditches and deep *nullahs* [ditches]. Though the cases were all serious fractured limbs, abdominal wounds, head wounds, there were no mattresses available except as provided by dead bodies ... Some of the wounded, unable to bear the protracted torture, threw themselves off and had to be collected again.¹²⁵

Lieutenant Harry Bishop (1866-1960) with the 66th Punjabis, watching the wounded being transported to Lajj on animal transport carts, wrote: 'the memory of those jolting carts with their grimy battered loads of tortured humanity is one not soon to be forgotten'.¹²⁶ There was nothing but praise for the medical staff themselves with Major EWC Sandes (1880-1973), Royal Engineers saying:

The gallantry and devotion to duty shown by our medical officers on this memorable day [22 November] was beyond all praise. Exposed to shellfire and bullets, they carried on their work with complete disregard of personal danger and worked till they were fit to drop with fatigue in alleviating the sufferings of friend and foe alike.¹²⁷

Captain Bill Spackman (1889-1975), the Regimental Medical Officer, 48th Pioneers described:

... the heart-rending scene in front of the redoubt. My regiment had lost 60 per cent in dead and wounded. In all we had suffered 4,593 casualties out of a force of 10,000. I was the only front line doctor still able to function, I had many casualties of other units to deal with. By early afternoon I had about two hundred lying around the Redoubt and was quite exhausted in trying to cope.

As to the brutal mode of casualty transport, Spackman feared that:

... many with frightful battle wounds would never reach the Field Hospitals alive, much less the Base Hospitals. Many did not get even a change of dressing till they got down to Basra over a week later.¹²⁸

Even after four days, there still were 2,500 wounded awaiting evacuation. After repeated representations to the DDMS, Major Bransbury (1877-1926), the commanding officer of 19 CCCH, was given the use of the *Mosul* and two uncleaned animal transport barges to evacuate 584 casualties, mostly Indian rank and file, many dying in transit.¹²⁹

¹²⁵ Neville JEH, Fuller JFC. *History of the 43rd and 52nd (Oxford and Buckinghamshire) Light Infantry in the Great War*. Aldershot: Gale & Polden; 1938. p.120.

¹²⁶ Bishop HC. *A Kut Prisoner*. London: John Lane, Bodley Head; 1920. p.9.

¹²⁷ Sandes EWC. *In Kut and Captivity with the Sixth Indian Division*. London: John Murray; 1919. p.61-79.

¹²⁸ Spackman WC. Ctesiphon. *Journal of the Royal Army Medical Corps*. 1977; 123(3): 158-164.

¹²⁹ War Office. War Diary, 19 Combined Casualty Clearing Section. TNA. WO 95/5250/3.

Astonishingly, Hathaway's diary recorded the evacuation from Ctesiphon as unremarkable.¹³⁰

Even combatant officers seemed to recognise the dysfunctionality in the higher medical echelons as the diary entry of Captain Cyril Beresford Munday (1888-1956) for September 1915 indicates:

The medical arrangements on that day were a disgrace to any white race. A Surgeon General has great power if he wishes to use it and is a strong man, who is willing to risk the loss of a C.B. for the comfort of his wounded by stating that no operation could come off as the medical arrangements were totally inadequate – what General would not back him up and forward his representation to the Government concerned? No, Surgeon General Halterway [sic], you were evidently brought up by the Administrative branches of the Indian Army amongst whom favouritism is a byword and a strong man is considered an obstructionist likely to revolutionise the sluggish life of that snuggery. Firstly, you thought of yourself and your own advancement, and secondly if ever, the comforts of the wounded men under your care.¹³¹

Though Munday misspelt Hathaway's name and incorrectly assigned him to the IMS, it is remarkable that an individual medical officer attracted such opprobrium.

'A meddling faddist'

Major Markham Carter IMS (1875-1961) was a Presidency surgeon and Professor of Pathology in Bombay when he was recalled to military service. He was placed in medical charge of the *Varela*, a converted hospital ship. Testifying to the Commission, Carter recalled awaiting the arrival of casualties from Ctesiphon and said:

... the *Mejidieh* was brought alongside the *Varela*. When she was about 300 or 400 yards off it looked as if she was festooned with ropes. The stench when she was close was quite definite, and I found that what I mistook for ropes were dried stalactites of human faeces. The patients were so huddled and close together on the ship that they could not perform the offices of Nature clear of the edge of the ship, and the whole of the ship's side was covered with stalactites of human faeces. We found a mass of men huddled up anyhow – some with blankets and some without. They were lying in a pool of dysentery about 30 feet square. They were covered with dysentery and dejecta from head to foot. With regard to the first man I examined, I put my hand into his trousers, and I thought that he had a haemorrhage. His trousers were full almost to his waist with something warm and slimy. I took my hand out, and thought it was blood clot. It was dysentery. The man had a fractured thigh, and his thigh was perforated in five or six places.¹³²

¹³⁰ War Office. War Diary, Director of Medical Services. TNA. WO 95/4975/1/2.

¹³¹ Mundy CB. *My Diary of the Great War*. Dublin: Trinity College Library; 1915. p.50-51.

¹³² Mesopotamia Commission. *Report*, 1917 (Note 1). p.76.

Though Carter, as an experienced senior clinician, had the self-assurance to protest at this intolerable state of affairs, he was rebuked by both Major General Cowper (1860-1932), Deputy Adjutant and Quartermaster-General, and Hathaway. Cowper even called him a 'meddlesome and interfering faddist' and warned him that similar conduct would cause him to lose his medical command and be placed under arrest.¹³³

The retreat to Kut

Indeed, it was fortuitous that the retreating 6th Indian Division reached Kut at all for if the Ottoman forces had decided to press home their tactical and numerical advantage, the ending would have been doubly tragic. Fleeing troops and casualties had to contend with marauding Arab tribesmen as they tried to reach the citadel at Kut where, as described by Major C H Barber IMS (1877-1965):

... we have been struggling to cope with the streams of wounded that have poured in on us in shipload after shipload. How we can expand accommodation for 900 into that of 4,000 is now the problem.¹³⁴

The Division's total dependency on the Tigris for water meant that when pinned down by Ottoman forces, troops had no access to water for as long as 36 hours. Also, Ottoman forces' primacy over the left bank of the Tigris at Ctesiphon meant that no steamers carrying supplies or casualties could have safe passage. Hehir's improvisations with the already threadbare medical infrastructure had predictably floundered against a determined and numerically superior enemy. There were further missteps in the medical response at Ctesiphon such as planning for all walking wounded to be evacuated forward to Baghdad, still very much in enemy hands. Typically, there was no contingency plan. Also, the failure to appoint a medical officer to oversee the embarkation of the wounded at Lajj resulted in a rapid and total breakdown of evacuation.¹³⁵ Captain JSS Martin IMS (1888-1973), a Medical Embarkation Officer at Ctesiphon, despaired of the 'hopeless inadequacy of the medical arrangements during those eight dreadful days'.¹³⁶

The medical failures in the Gallipoli campaign have been attributed to the 'chronic underestimation of the enemy by British strategic decision-makers'.¹³⁷ Similarly, Nixon had boldly dismissed the need for additional hospital ships as he anticipated only 400 casualties at Ctesiphon. His unrealistic casualty estimates confounded meaningful medical planning. In any case, Hehir did not seem part of the military planning process and had to make his own arrangements to gain knowledge of his commander's intent.

¹³³ Barker AJ. *The Neglected War: Mesopotamia, 1914-1918*. London: Faber; 1967. p.137.

¹³⁴ Barber CH. *Besieged in Kut and After*. Edinburgh: William Blackwood & Sons; 1917. p.45-46.

¹³⁵ Macpherson, *Medical Services*, , 1924 (Note 24). p.202.

¹³⁶ Moynihan M. *A Place called Armageddon*. Newton Abbot: David & Charles; 1975. p.163-165.

¹³⁷ Sheffield G. Shaping British and Anzac soldiers' experience of Gallipoli: environmental and medical factors, and the development of trench warfare. *British Journal for Military History*. 2017; 4(1): 23-43.

He also had to tolerate obstacles such as being excluded from sending priority wireless messages to India as General Barrett's orders only allowed the General Staff and the Political Officer such access.¹³⁸

Townshend, initially cautious about the advance on Baghdad because of the poor state of his men and the paucity of river transport, allowed himself to be swayed by his superior's overoptimistic assessment.¹³⁹ Indeed, when discussing the advance on Baghdad, the telegrams exchanged between the protagonists in Mesopotamia, London and Delhi and the subsequent dissembling when testifying to the Mesopotamia Commission reinforce the impression that decisions which would affect thousands of lives were driven more by egotism than careful strategy.¹⁴⁰ The British Tommy's typically pithy sentiment about Ctesiphon was: 'Of the officers, some call it Tesiphon and some calls it Sestiphon, but we calls it Pistupon'.¹⁴¹

Though Ottoman forces sustained significant losses and needed to regroup, their commander, Nureddin Pasha (1873-1932) sensed the opportunity to encircle Townshend's weakened force at Kut. By enforcing an impenetrable blockade of Kut on classical lines of circumvallation rather than engaging in further attacks, Nureddin was able to repel relief efforts and prevent resupply and casualty evacuation. The siege of Kut lasted nearly 150 days.¹⁴² Townshend's eventual surrender in April 1916 and the experiences of prisoners of war feature prominently in primary and secondary literature and will not be considered here. Thousands more lives would be lost in the ill-fated attempts to lift the siege of Kut. Townshend's surrender, a body blow to imperial prestige, hastened the transfer of control of the Campaign from the GoI to the WO.

Conclusion

Why did this litany of woes afflict a long-established medical service? This question poses what, in the physical sciences, is termed the inverse problem, wherein one starts from the results and then estimates the causal factors that produced them.¹⁴³ These factors, considered below, straddle medical, political, imperial and military domains.

There were two pre-existing military dysfunctionalities in pre-war British India, namely the chronic failure of Whitehall to fund the strategic tasks that Britain demanded

¹³⁸ War Office. War Diary, ADMS (Note 10). Appendix 129.

¹³⁹ Millar RW. *Death of an Army: The Siege of Kut, 1915-1916*. Boston: Houghton Mifflin; 1970. p.12.

¹⁴⁰ Moberly FJ. *History of the Great War based on official documents - The campaign in Mesopotamia, 1914-1918*. Vol. 2. London: HMSO; 1924. p.1-33.

¹⁴¹ Rich HH. Ctesiphon – Townshend's Pyrrhic Victory. *Purnell's History of the First World War*. 1970; 3(10): 1165–73.

¹⁴² Erickson EJ. *Ottoman Army Effectiveness in World War I*. Abingdon: Routledge; 2007. p.76-81.

¹⁴³ Vauhkonen M, Tarvainen T, Lähivaara T. Inverse Problems. In: Pohjolainen S. (ed). *Mathematical Modelling*. Switzerland: Springer International; 2016. p.207-227.

of India and the stultifying effect on the Indian Army of cumbersome dual control by the GoI and the WO.¹⁴⁴

Medically-related incongruities included the inadequate status of sanitary medicine and the failure to rationalise healthcare for native troops along modern scientific lines. Sanitary science became a victim of flawed medical dogma arising from a compromise between rival concepts of disease causation based on contagion or environment.¹⁴⁵ A commensurate lack of enthusiasm and consensus among military commanders and colonial officials for implementing sanitary measures resulted in further institutionalised neglect. Despite progress in medical research, especially on malaria and plague, in the immediate pre-war years, there still remained an ingrained suspicion of anything deemed to be new-fangled. Sir Ronald Ross (1857-1932), whose own researches into malaria had suffered as a result of this institutional torpor, raged about the IMS' intellectual inertia in *The Times* saying 'lazy, indifferent, and imbecile scepticism held the ground'.¹⁴⁶ The institutional dread of a rebellion like the one in 1857 meant that native troops were allowed to indulge in their religious and ethnic dietary preferences and prohibitions of procedures such as vaccination.¹⁴⁷ This fear of violating ethnic taboos resulted in the healthcare of native troops continuing to be delivered by their preferred regimental system, widely considered to be inferior to the divisional hospital system.¹⁴⁸

While leaving native troops largely to their own devices may have been politically expedient, it caused various latent disorders and deficiencies in these personnel to be unmasked upon deployment to Mesopotamia's harsh environment. With the emergence of scurvy and beri-beri, the rations of British and Indian units in Mesopotamia became a sensitive issue, the former invariably comprising more meat and vegetables. The Indian Army, well used to accommodating the dietary preferences of diverse communities, floundered in its efforts to adequately feed its native troops.¹⁴⁹ It has been suggested that this 'broad-based egalitarian policy of accommodating as many communities as possible' was designed to enhance recruitment and give a safe and diverse base to the colonial state. In reality, adherence to selective enlistment from the preferred so-called martial races led to substantial pre-war vacancies in the ranks.¹⁵⁰

Prior to the Great War, Indian troops were more accustomed to maintaining internal security, usually involving mountain warfare against tribal insurgents at the frontier. An

¹⁴⁴ Anderson R. Logistics of the Indian Expeditionary Force D in Mesopotamia: 1914–18. In: Roy K (ed). *The Indian Army in the Two World Wars*. Leiden & Boston: Brill; 2012. p.105-143.

¹⁴⁵ Harrison M. Towards a sanitary utopia? Professional visions and public health in India, 1880-1914. *South Asia Research*. 1990; 10(1): 19-40.

¹⁴⁶ Ross R. *The Times*, 28 November 1899.

¹⁴⁷ Bhattacharya N, Pati B, Harrison M. *The Social History of Health and Medicine in Colonial India*. London: Routledge; 2009. p.138-139.

¹⁴⁸ Sehrawat S. 'Prejudices clung to by the natives': Ethnicity in the Indian army and hospitals for sepoys, c.1870s–1890s. In: Pati B, Harrison M (eds). *The Social History of Health and Medicine in Colonial India*. London: Routledge; 2009. p.151-172.

¹⁴⁹ Roy K. From defeat to victory: logistics of the campaign in Mesopotamia, 1914–1918. *First World War Studies*. 2010; 1(1): 35–55.

¹⁵⁰ Roy K. *Brown warriors of the Raj: recruitment and the mechanics of command in the Sepoy Army, 1859-1913*. New Delhi: Manohar Publishers & Distributors; 2008.

expeditionary campaign on distant shores in a medically and militarily challenging environment such as Mesopotamia against a determined enemy with superior numbers and sophisticated weaponry posed an unfamiliar military, medical and logistical challenge. The Indian Army's systemic deficiencies, such as lack of integration of the cadre and the administrative staff, coupled with commanders unaccustomed to including logistics in their operational planning, rapidly proved fatal to the Campaign.¹⁵¹

This complex campaign demanded exquisite attention to preventative medicine and considerable clinical agility from medical officers. Significant pre-existing health and geospatial intelligence went unused. Crucially, both Whitehall and Delhi failed to readily provide shallow draught vessels by not recognising the idiosyncrasies of the Shatt and the Tigris.¹⁵² This blind spot in military calculations had a calamitous effect on medical resupply and evacuation. When most needed, there was no senior medical officer in Delhi to coordinate medical matters as Babbie was away in the Dardanelles. The ADMS 3rd (Lahore) Division, arriving with reinforcements from France, was dismayed by how often the word 'improvised' was being used in relation to medical facilities and rivercraft used to transport casualties.¹⁵³

Complex reasons lay behind the Indian soldier's zeal for serving and even dying in the service of Empire.¹⁵⁴ Many Indian soldiers felt demoralised by a health system that they perceived as denying them the same quality of care as their white counterparts. Their mental wellbeing may have also suffered due to an erroneous medical belief, arising from racialised stigma, that Indian soldiers were not susceptible to mental disturbances.¹⁵⁵ Indian soldiers regarded injuries or illnesses acquired in a campaign as entirely honourable grounds for being sent home. When, in August 1915, General Nixon directed medical officers to stop repatriating casualties, Indian troops saw that as a betrayal of an unwritten time-honoured psychological contract. It was a matter of *izzat* – a complex indigenous belief system allied to prestige and honour.¹⁵⁶

In India, the British relationship with Indian soldiers has been described as a delicate equilibrium with the British procuring valuable but inexpensive manpower and the soldiers benefiting materially and psychologically. However, when deployed to an alien environment, this collaborative equilibrium could be jeopardised unless renegotiated. On the Western Front, the Indian Army's role was to provide manpower until the British Army could muster sufficient personnel. Largely content with their treatment, the Indian

¹⁵¹ Syk A. Command in the Indian Expeditionary Force D: Mesopotamia. 1915-16. In: Roy K (ed). *The Indian Army in the Two World Wars*. Leiden & Boston: Brill; 2012. p.63-103.

¹⁵² Ulrichsen KC. *The Logistics and Politics of the British Campaigns in the Middle East, 1914-22*. London: Palgrave Macmillan; 2011. p.48-50.

¹⁵³ Mesopotamia Commission. *Report, 1917* (Note 1). Vincent-Bingley Commission, Statement of Colonel J M Sloan, p.37.

¹⁵⁴ Imy K. *Faithful fighters: Identity and Power in the British Indian Army*. Stanford, CA: Stanford University Press; 2019. p.10-13.

¹⁵⁵ Buxton H. Imperial Amnesia: Race, Trauma and Indian Troops in the First World War. *Past & Present*. 2018 ;241(1): 221–258; Buxton H. *Disabled Empire: Race, Rehabilitation, and the Politics of healing non-white Colonial Soldiers, 1914-1940*. PhD Dissertation. Rutgers, the State University of New Jersey; 2018.

¹⁵⁶ Gardner N. Morale and Discipline in a Multi-ethnic Army: The Indian Army in Mesopotamia (1914–1917). *The Journal of the Middle East and Africa*. 2013; 4(1): 1–20.

soldiers' *izzat* was satisfied and the collaborative contract maintained.¹⁵⁷ In Mesopotamia, it is likely that additional jeopardy arose from the failure to preserve this equilibrium. Medical and victualling policies played a major role in this.

The animus and the rift between Hehir and Hathaway were certainly ill-timed, inauspicious and professionally dubious. With both remaining publicly silent it is unclear if deeper institutional reasons lay behind the rancour. In any case, they had vastly different personalities and it was always likely that Hathaway, the politically shrewd operative, would have more sway than the science-orientated Hehir.¹⁵⁸

The delay before the medical scandal became publicly known may be attributable to a combination of strict censorship and misplaced reticence and secretiveness on the part of senior commanders. Though the distant Mesopotamian theatre was not as newsworthy as the Western Front, the Northcliffe press, notably the *Daily Mail* and *The Times*, broke the news of the medical breakdown and then lambasted the Government for its incompetence in the matter of the 'Mesopotamia muddle'.¹⁵⁹

The medical services in Mesopotamia bore witness to appalling events but, lacking agency, seemed powerless to effect change. Senior military commanders in Mesopotamia did not encourage a learning culture unlike their counterparts on the Western Front where the army's learning effectiveness was shaped by its pre-war ethos which, in turn, was informed by the values of civil society. Informal methods of learning were actively nurtured thus lending diversity, flexibility and innovation. This organisational culture permitted individuals to influence institutional behaviour.¹⁶⁰

In Mesopotamia, just when the organisational culture needed to be creative, it remained resolutely repressive and unhelpfully centralised. As General Sir George Goringe (1868-1945), who initially commanded the 3rd Indian Army Corps in Mesopotamia, said of the Campaign in his evidence to the Mesopotamia Commission: 'It was believed to be a side show and no man's child'.¹⁶¹ Even Townshend complained, plaintively, of the authorities 'hardly recognising that there is an expedition in Mesopotamia at all'.¹⁶² Administrators, especially in India, seemed to regard this Campaign as no different to the border engagements usually undertaken by the Indian Army. When the WO assumed control of the Campaign in 1916, the new commander General Stanley Maude (1864-1917) used his experiences in France and Gallipoli to overhaul medical and logistical practices leading to substantial improvements across all aspects of medical care and repatriation.¹⁶³

¹⁵⁷ Morton-Jack G. The Indian Army on the Western Front, 1914-1915: A Portrait of Collaboration. *War in History*. 2006; 13(3): 329–362.

¹⁵⁸ van Bergen L. For Soldier and State: Dual Loyalty and World War One. *Medicine, Conflict and Survival*. 2012; 28(4): 317-334.

¹⁵⁹ Sehgal M, Sehrawat S. Scandal in Mesopotamia: Press, empire, and India during the First World War. *Modern Asian Studies*. 2020; 54(5): 1395-1445.

¹⁶⁰ Fox-Godden AE. *Putting Knowledge in Power: Learning and Innovation in the British Army of the First World War*. PhD Thesis. University of Birmingham; 2015.

¹⁶¹ Mesopotamia Commission. *Report*, 1917 (Note 1). Part XI, A, p.96.

¹⁶² Personal letter from General Townshend to Lord Curzon (1858-1925), Lord Privy Seal, 4 September 1915. Papers relating to the Mesopotamia Expedition. BL. Mss Eur F112/163-164.

¹⁶³ Fox-Godden A. Beyond the Western Front: The Practice of Inter-Theatre Learning in the British Army during the First World War. *War in History*. 2016; 23(2): 190–209.

An atavistic pre-war medical establishment in India that had neglected its intellectual capital, structural antipathy towards the sanitary sciences, and benevolent neglect of the health of native soldiers meant that the Campaign would severely test the boundaries and limits of medical practice.¹⁶⁴ As the official history noted: ‘the medical history of the Campaign forcibly demonstrates the losses accruing from neglect and lack of foresight’. The impact of injuries and disease on the medical effectiveness of IEF ‘D’ may be gleaned from the permanent and temporary loss of manpower. Nearly 95 per cent of all casualties were lost to the Campaign for varying lengths of time due to disease or injury. Of the nearly 32,000 Indian troops and followers admitted to medical facilities in 1914-15, only about 17,000 could be returned to active duty with the remainder lost due to death or repatriation.¹⁶⁵ The Campaign could hardly sustain this level of attrition.

It seems likely this first phase of the medical campaign, one which made helpless military doctors ashamed to even look at the dying, was predestined to fail even as the expeditionary force set sail. This unhappy chronicle has no heroes or villains, merely victims of the ‘quibbling of overlings’.¹⁶⁶

¹⁶⁴ Harrison. *Public Health in British India*. (Note 5). p.232-233.

¹⁶⁵ Mitchell TJ, Smith GM. *Casualties and Medical Statistics of the Great War*. HMSO; 1931. p.225-231.

¹⁶⁶ Kipling R. ‘Mesopotamia’. *Morning Post*, 11 July 1917.

Biographical details

Soundararajan Jagdish is an independent researcher and has published on assorted topics in military medical history. He served in the Defence Medical Services and the National Health Service.

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