

Using Primary Sources: Statistics

Primary Source Analysis

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W. G. Macpherson, W. P. Herringham, T. R. Elliot and A. Balfour (eds), *History of the Great War Based on Official Documents. Medical Services: Diseases of the War. Volume 2* (London, 1923), p. 4 [table] and p. 7 [extract].

Extract:

Table III gives a total of 28,533 cases of shell shock reported as battle casualties in France up to the end of 1917. If the number be doubled so as to include those reported as 'sick' and an allowance added for 1918, the total of casualties from nervous disorders would probably be about 80,000, which would include many recurring admissions. (p. 7)

Analysis

Early in the First World War, soldiers began to display symptoms, ranging from mutism and paralysis to nightmares, hallucinations and intrusive memories, for which no organic cause could be found. In February 1915, the psychologist Charles Myers grouped these strange symptoms together as 'shell shock' in an article for the medical journal *The Lancet*. Throughout the war, debates raged as to whether these symptoms were caused by psychological distress or were the outcome of damage to the central nervous system caused by exposure to high-explosive artillery. From the outset, 'shell shock' was a condition characterized by ambiguities and contradictions. This is nowhere more evident than in the shifting terminology that doctors and the military authorities used to describe 'shell shock' and related disorders at different points during the war. There was no agreed terminology until late in 1915, when the Army Council determined that cases should be labelled

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TABLE III.

Record of Shell Shock Cases reported as Battle Casualties in France, not including Contingents from the Dominions.

	Sept. to Dec. 1914.		Jan. to June 1915.		July to Dec. 1915.		Jan. to June 1916.		July to Dec. 1916.		Jan. to June 1917.		July to Dec. 1917.		Total.	
	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.	Offi- cers.	Other Ranks.
Staff Officers ..	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2	—
R.F.C. ..	—	—	—	—	—	—	—	—	1	2	—	4	2	7	3	13
Cavalry ..	—	1	—	3	1	1	3	36	2	18	6	17	1	25	13	101
R.A. ..	—	—	—	2	6	42	22	225	105	948	25	336	59	656	217	2,209
R.E. ..	—	—	—	3	6	30	13	132	17	391	9	68	6	134	51	758
Infantry ..	4	4	6	118	47	1,095	183	3,274	696	13,430	135	2,332	192	2,817	1,263	23,070
A.S.C. ..	—	—	—	3	—	4	—	10	3	48	1	9	2	40	6	114
R.A.M.C. ..	—	—	1	5	3	11	7	43	16	330	1	33	3	63	31	505
A.V.C. ..	—	—	—	—	—	—	—	1	—	1	1	—	—	—	1	2
A.O.C. ..	—	—	—	—	—	—	—	—	—	5	—	—	—	2	—	7
R.N. Division ..	—	—	—	—	—	—	—	2	5	96	1	32	2	27	8	159
Totals ..	4	5	7	134	63	1,183	228	3,723	847	15,291	179	2,831	267	3,771	1,595	26,938
	9		141		1,246		3,951		16,138		3,010		4,038		28,533	

Table III: Record of shell shock cases reported as battle casualties in France, not including contingents from the dominions (p. 4).

‘shell-shock W’ (for ‘wounded’) if the symptoms could be attributed to the results of ‘enemy action’ or ‘shell-shock S’ (for ‘sick’) if they could not. This classification proved unworkable in practice, with military doctors often using the labels in different ways, and in June 1917, the army decided that men should be first labelled ‘Not Yet Diagnosed Nervous’ (NYDN) and only allocated to the ‘W’ or ‘S’ group after further enquiries. This system proved no better, and in September 1918, it was decided to abolish the use of ‘shell-shock W’ in France altogether.¹

The lack of agreement around what caused ‘shell shock’, and how to describe or classify soldiers who experienced these symptoms, generated difficulties for those writing the official medical history of the war in the 1920s. The aim of the *History of the Great War Based on Official Documents* (1915–49), which eventually ran to 109 volumes, was to provide an authoritative, detailed overview of events that could serve as a work of reference but also appeal to the general reader. The series was funded by the Treasury and major military figures were involved in the production of all volumes. Major General Sir William Grant Macpherson (1858–1927), Colonel-Commandant of the Royal Army Medical Corps (RAMC), oversaw the thirteen volumes devoted to the medical services and related matters, including the volume from which this table and extract has been taken. As a genre, official histories are often subject to criticism for their potential and actual promotion of interpretations favourable to the authorities that fund and direct them. However, these charges have not been levelled at the portion of these histories that deal with ‘shell shock’. Rather, this table and extract demonstrate some of the challenges of producing and working with statistical data, as well as the difficulties of arriving at reliable information or workable conclusions around an inherently ambiguous phenomenon.

Table III above records the incidence of shell-shock cases among British troops in France reported as battle casualties (in other words, as ‘shell-shock W’ and its equivalents) until the end of 1917. The extract suggests that it is possible to extrapolate from these figures to estimate the total number of casualties from ‘nervous disorders’ during the war and places this figure at around 80,000. The phrase ‘nervous disorders’ is carefully chosen to avoid controversy over the physical or psychological explanation of ‘shell shock’, which was still a contentious issue in the early 1920s. The flawed process by which the authors arrived at this figure, and the fact that it continues to be repeated even in quite recent scholarship, demonstrates the dangers of an uncritical approach to statistical information.

The official history of the First World War medical services devotes several pages to discussing the problem of statistics. When it was published in 1923, the full statistics were not available, and the compilers were mainly working from the data of particular units at particular times.² They used Ministry of Pensions statistics which listed the total cases of shell shock reported as battle casualties in France up to the end of 1917, doubled these to include those reported as ‘sick’, added an allowance to cover the period

until the end of 1918, and arrived at the figure of 80,000.³ Their methods of calculation are unexplained and therefore unjustified, and did not take account of variations in the incidence of shell shock over different phases of fighting (an influx during battles, for example), for the possibility that there were not equal numbers of 'sick' and 'wounded', or that cases of relapse may have been counted twice or more. Indeed, the fact that the army did not introduce a medical record card system until June 1917, meaning that soldiers could easily get lost in the system, makes the possibility that some men were 'counted twice' quite likely.

These statistics, unreliable at face level, disintegrate when the problematic relation between diagnostic label and symptom in a disorder as ill-defined as 'shell shock' is taken into account. Cardiac irregularities and fits might be treated as somatic conditions by one doctor or as evidence of psychological disturbance by another; head injuries might be labelled shell shock through misunderstanding; 'mentally deficient' men might be put down under the same heading simply to remove them from active service; and doctors might even avoid giving an official diagnosis in order to save the patient from stigma.⁴ There is no way of knowing what symptoms were actually described under official headings. This means the figures for cases of 'shell shock' cannot be approximated with any accuracy at all.

Despite the evident problems with the compilation of these statistics, many of the most respected and often-cited histories of 'shell shock' repeat the '80,000' figure without qualification.⁵ Why? We can only speculate about historians' motives, but there are a few possible explanations. The most generous is that 80,000 is perhaps no worse than any other estimate, and historians want to convey something of the scale of the experience of 'shell shock'. There is no way to fix the problems with the initial collection of data and compilation of statistics – and at least these compilers were open about their methods. This means that if we want to indicate how many men suffered from 'shell shock', we do not really have a better source. It is also probably the case that historians are not immune from the desire to quantify and the (probably unconscious) belief that numbers are somehow more 'reliable' than qualitative evidence, even when they are clearly not 'reliable' in any accepted understanding of the term. What this extended example shows is the importance of not taking statistics at face value, but thinking about how they have been compiled, what claims can reasonably be established on that basis, and how to convey to readers any uncertainties in these claims.

Works cited

Joanna Bourke, *Dismembering the Male: Men's Bodies, Britain and the Great War* (London: Reaktion Books, 1996).

Chris Feudtner, "Minds the Dead Have Ravished": Shell Shock, History, and the Ecology of Disease Systems', *History of Science*, 31 (1993), pp. 377–420.

- Peter Leese, *Shell Shock: Traumatic Neurosis and the British Soldiers of the First World War* (Basingstoke: Palgrave, 2002).
- W. G. Macpherson, W. P. Herringham, T. R. Elliot and A. Balfour (eds), *History of the Great War Based on Official Documents. Medical Services: Diseases of the War, Volume 2* (London: HMSO, 1923).
- T. J. Mitchell and G. M. Smith, *History of the Great War Based on Official Documents. Medical Services: Casualties and Medical Statistics of the Great War* (London: HMSO, 1931).
- Report of the War Office Committee of Enquiry into 'Shell-Shock'* (London: Imperial War Museum, 2004) [1922].
- Ben Shephard, *A War of Nerves: Soldiers and Psychiatrists, 1914–1994* (London: Pimlico, 2002).
- Elaine Showalter, *The Female Malady: Women, Madness and English Culture, 1830–1980* (London: Virago, 1987).
- Allan Young, 'W.H.R. Rivers and the War Neuroses', *Journal of the History of the Behavioral Sciences*, 35:4 (1999), pp. 359–78.

Notes

- 1 *Report of the War Office Committee of Enquiry into 'Shell-Shock'* (London: Imperial War Museum, 2004) [1922], p. 119; Peter Leese, *Shell Shock: Traumatic Neurosis and the British Soldiers of the First World War* (Basingstoke: Palgrave, 2002), p. 53; Ben Shephard, *A War of Nerves: Soldiers and Psychiatrists, 1914–1994* (London: Pimlico, 2002), pp. 28–9.
- 2 The original scheme for the compilation of a full set of medical statistics was eventually recast because of insurmountable practical and (mainly) financial difficulties. See T. J. Mitchell and G. M. Smith, *History of the Great War Based on Official Documents. Medical Services: Casualties and Medical Statistics of the Great War* (London: HMSO, 1931), pp. x–xiii.
- 3 W. G. Macpherson, W. P. Herringham, T. R. Elliot and A. Balfour (eds), *History of the Great War Based on Official Documents. Medical Services: Diseases of the War, Volume 2* (London: HMSO, 1923), pp. 1–7.
- 4 These examples are taken from Peter Leese's discussion of the problems of statistics. Leese, *Shell Shock*, p. 53.
- 5 Elaine Showalter, *The Female Malady: Women, Madness and English Culture, 1830–1980* (London: Virago, 1987), p. 168; Chris Feudtner, '“Minds the Dead Have Ravished”: Shell Shock, History, and the Ecology of Disease Systems', *History of Science*, 31 (1993), p. 377; Joanna Bourke, *Dismembering the Male: Men's Bodies, Britain and the Great War* (London: Reaktion Books, 1996), p. 109; Allan Young, 'W.H.R. Rivers and the War Neuroses', *Journal of the History of the Behavioral Sciences*, 35:4 (1999), p. 359.

Further reading

Mary Elisabeth Cox, 'Statistics', *Bloomsbury History: Theory & Method* (digital subscription-only database).

Pat Hudson and Mina Ishizu, *History by Numbers: An Introduction to Quantitative Approaches*, 2nd edn (London: Bloomsbury, 2016).

Tracey Loughran, *Shell-Shock and Medical Culture in First World War Britain* (Cambridge: Cambridge University Press, 2017).

Michael Roper, *The Secret Battle: Emotional Survival in the Great War* (Manchester: Manchester University Press, 2009).

David Spiegelhalter, *The Art of Statistics: Learning from Data* (London: Pelican, 2019).