

Hurst Rehabilitated: the treatment of functional motor disorders by Arthur Hurst during the First World War

Edgar Jones¹, Jon Stone²

History & Humanities



Abstract

Arthur Hurst was a British First World War physician, best known for his films of shell shock, 'War Neuroses'. He has often been portrayed an innovative pioneer of somewhat mysterious 'suggestion' techniques for functional motor disorders but also as an ambitious clinician who exaggerated the effectiveness of his treatments and failed to address psychological factors.

His use of suggestion, persuasion and re-education together with occupational therapy, for chronic or severe cases of shell shock stirred controversy at the time because of the dramatic nature of some of his treatment responses and lack of outcome data. In part, this was a turf war between neurologists and psychiatrists for a dominant therapeutic model. A re-evaluation of his publications and new research into soldiers treated at Seale Hayne in Devon show that Hurst pioneered multidisciplinary and empathetic treatments for functional motor disorders with good short-term outcomes, though insufficient data survives to assess longer term outcomes.

Correspondence to:

Edgar Jones
Department of
Psychological Medicine
Institute of Psychiatry
Psychology & Neuroscience
King's College London
Weston Education Centre
London SE 9RJ
UK

Email:

edgar.jones@kcl.ac.uk

Keywords: war Neuroses, psychotherapy, shell-shock, hysteria

Financial and Competing Interests: No conflict of interests declared

Introduction

A discussion of shell shock, whether in books, neurology journals and especially television documentaries, is rarely complete without reference to a twenty six minute film, *War Neuroses*, by the physician Arthur Hurst, who worked at Netley in Hampshire and Seale Hayne in Devon (Figure 1). Both in medical papers and in this pioneering movie, he made dramatic therapeutic claims. The film showed servicemen, mostly with functional motor disorders receiving treatment with miraculous results: limbs were cured, and fixed contractures removed often at a single sitting. Hurst's methods and claims of successful treatment have been both feted and doubted ever since by clinicians, historians and television and radio programme makers. In a semi-fictional BBC Radio 4 radio series, *Home Front*, and a BBC TV documentary, Hurst was portrayed as a secretive and deceptive purveyor of temporary symptom removal, in contrast to those who might seek to understand the psychological processes of injured soldiers.¹ These debates have often mirrored arguments about whether psychological or physical therapies are most appropriate for functional motor disorders. Concerns have also been expressed about the veracity of some of the footage and a lack of follow up data.

Figure 1 Arthur Hurst (1879–1944)



¹Professor of the History of Medicine and Psychiatry, Department of Psychological Medicine, Institute of Psychiatry, Psychology & Neuroscience, King's College London, Weston Education Centre, London SE 9RJ, UK; ²Professor of Neurology, Centre for Clinical Brain Sciences, University of Edinburgh, Royal Infirmary, Edinburgh EH16 4SB, UK

The rationale for a re-evaluation of Hurst

In the last 15 years there has been a renaissance of clinical and research interest in functional neurological disorder (FND). Some of the treatment initiatives that have developed over this time bear resemblance to those employed by Hurst and other First World War physicians.² These include a diagnosis based on positive physical signs, rather than a diagnosis of exclusion, and education of the patient about the condition with reference to the nervous system as well as psychological processes. Hurst also championed the use of physiotherapy in a context of re-education, arguably a cognitive behavioural approach, which he combined with occupational therapy in the context of multidisciplinary inpatient rehabilitation. These treatment modalities appear to offer promise for functional neurological disorders in recent randomised trials.^{3,4}

In 1918, the Medical Research Committee had supplied Hurst with 'skilled clerical assistance in tracing and recording the after histories of functional neurological cases' treated at Seale Hayne.⁵ Yet, no follow up study was published, and any data that had been collected has not survived. As a result, unless an archive of Hurst's cases is discovered, it is unlikely that a definitive outcome study will ever be conducted. However, various attempts have been made to trace the histories of Hurst's patients. In this paper we consider outcome data from his 'in house' journal, Seale Hayne Neurological Studies (SHNS), and new case studies researched by Raymond Bartlett and Richard Whiteaway, in preparation for a centenary re-examination of Hurst's work at Seale Hayne.

Within the context of new contemporary approaches, we seek to reassess the treatments offered by Hurst to servicemen with shell shock characterised by functional movement disorders (FMD). This paper explores whether he and other neurologists were exaggerating cures, simply removing symptoms without treating the cause, as suggested by military psychiatrists, or whether Hurst and others had gained new insights into these disorders and their treatment that had a meaningful impact on patient care.

The treatment techniques of Hurst – education and suggestion

Hurst included shots of soldiers before and after treatment in his film *War Neuroses* to demonstrate recovery. He also included extended sequences of rehabilitation, including graduated exercise, occupation therapy in the form of farming and basketwork, while earlier footage shot at Netley showed physical manipulation and the use of hypnosis to resolve tics.⁷ In his academic papers, especially in SHNS, written after the end of the war, Hurst described the key ingredients of the treatment regime: 'our method begins with a full explanation of the cause of the symptoms in a language suited to the patient's intelligence and degree of education, followed by persuasion and re-education, combined in most cases with manipulation, which doubtless acts to some extent by suggestion'.⁸ The explanation had specific content as Hurst wrote, 'during the whole course of treatment he [the soldier patient] is engaged in conversation and the

meaning of each successive step is shown and explained'.⁹ For example, Private M, who had experienced a paralysed leg for nearly two years, wrote in his diary for 20 February 1918 that 'foot examined, Major Hurst showed me how to move it. I can now walk like a drunken man. All I now require is practice and confidence'. His subsequent recovery was maintained at the point of publication in July 1918.¹⁰

The role of suggestion in the therapeutic process was highlighted in the 1944 edition of Hurst's *Medical Diseases of War*: 'directly the patient is admitted, the sister encourages him to believe that he will be cured as soon as the doctor has time to see him.... The medical officer... tells him as a matter of course that he will be cured the next day. The patient is made to understand that any treatment he has already received has prepared the way, so that nothing now remains but a properly directed effort on his part for a complete recovery to take place'.¹¹

In a presentation to the Royal Society of Medicine in March 1918, Hurst added that they had only used 'such aids to suggestion as electricity and etherisation in exceptional cases, being convinced that it is greatly to the advantage of the patient that he should co-operate intelligently in his own cure... Our method can be shortly described as vigorous persuasion with the aid of manipulation'.¹² William Johnson, who had been Hurst's chief clinical assistant in neurology at Guy's Hospital before the war, was an author of the chapter on war neuroses in the official *Medical History of the War* (1923) and had been supplied by Hurst with statistical data.^{13,14} Johnson wrote, 'in the cases marked by tremors special measures were needed'. An 'atmosphere of cure' was established in wards and a new patient shown 'other men rapidly recovering from conditions similar to his own'.¹⁵ Having identified suggestion as the key therapeutic agent, Johnson argued that 'the personality of the medical officer is always of greater importance than the particular method. The more convincing the medical officer, the less often should he have to resort to such devices for reinforcing his suggestion as the practice of light hypnosis or application of mild currents of faradism.... For complete treatment, the strong "suggestion" of recovery must merge into persuasion and this finally into methods of re-education, which must include psychic as well as physical measures'.

The idea of using suggestion to treat FMD was not new. Whilst Charcot had observed that functional movement disorders could be both produced and removed under hypnosis, it was his pupil, Babinski, who argued that such symptoms could be effectively treated by targeted suggestion. In a paper delivered to the Neurological Society in Paris in 1901, he sought, although failed, to replace the term 'hysteria' by 'pithiatism' meaning curable by persuasion.¹⁷ Hurst owed an intellectual debt to Babinski. In 1907 as a Radcliffe Fellow, he had studied in Paris and there, twice a week, attended Babinski's outpatient clinic at La Pitié Hospital. 'I have ever since been profoundly grateful,' Hurst subsequently wrote, 'for the insight he gave me in the causes, recognition and treatment of hysteria'.¹⁸ Babinski's ideas had informed the



Figure 2 Stills from the film *War Neuroses* demonstrating recovery of Percy Meek (top row) and Private Pudmore (bottom row). The film also focused on the importance of occupational therapy such as basketwork and work on Seale Hayne farm. Hurst is the medical officer examining Meek's right ankle

setting up of a network of military neurological centres in 1915.¹⁹ They were crystallised in his 1917 book, *Hysteria or Pithiatism and Reflex Nervous Disorders in the Neurology of War*, written with Jules Froment which was translated into English in the following year.²⁰ Other clinicians including Gustave Roussy and Jules Boisseau in Salins-les-Bains and Clovis Vincent in Tours developed similar treatment centres to Hurst with many features in common with Seale Hayne: isolation from other hospitals, a picturesque location distant from the battlefields and a charismatic senior clinician.

The treatment techniques of Hurst – rehabilitation

In his film and writings Hurst was explicit that treatment did not end with improvement or removal of the motor symptom. Indeed, he emphasised that in chronic cases further rehabilitation was necessary. For example, someone with longstanding 'hysterical' paraplegia needed to be 'made to walk, perform exercises whilst lying and sitting, and swing his legs... for at least a quarter of an hour three times a day. Exercise on a rowing machine or tricycle is also useful'.²¹ In SHNS, physical therapies were described in detail, including the graded use of physiotherapy to restore movement and balance, a practice that mirrors treatment recommendations made in the last ten years by experienced practitioners.² Speech and language therapy for acquired functional stuttering was described using long treatment sessions combined with breathing and education classes run by Hurst's wife.

Occupational therapy was a core feature of treatment at Seale Hayne. Some patients worked on the farm, and took part in basket making, drawing, painting and making clay models (Figure 2). Others were clerks or assisted with the production of Hurst's medical journal. *War Neuroses* depicts group exercises as well as a military enactment, the 'Battle of Seale Hayne'. Lieutenant Rupert Lee, an officer patient, had trained at the Slade School of Art and was admitted with tremor and anxiety. He commented, 'I liked Hurst very much

and was able to help him by organising and conducting an orchestra and running a model making workshop and generally organising things for patients to do'.²² After discharge, Lee had a successful career as an artist although continued to experience nightmares for the rest of his life. Hurst was not alone in developing rehabilitation programmes. Frederick Mott, author of the term 'atmosphere of cure', introduced carpentry classes, choral singing, social events and turned the Maudsley Hospital grounds into a market garden with a poultry house to supplement the War Office diet.²³

Psychological therapy was also practised at Seale Hayne under Hurst. Dr RG Gordon, a physician who subsequently practised as a neurologist took a particular interest in psychotherapy noting, 'there are certain of these cases which prove abnormally resistant to the ordinary methods of persuasion and suggestion, and in these a straightening out of the mental attitude may be of great assistance'.²⁴ Hurst took the view, not that emotional symptoms were unimportant, but that removal of the symptom, where possible, gave the best start to treatment: 'better results are obtained by attacking the physical accompaniment of the emotions first, instead of trying to deal with the actual emotional origin whilst the tremor is still present... in numerous cases the cure of the physical symptoms has resulted in immediate recovery from very trying psychical symptoms, which have thus required no direct treatment at all'. Hurst was not oblivious to the 'horrors of war' and wrote of enduring psychological symptoms, such as nightmares and intrusive memories, which today are recognised as components of posttraumatic stress disorder.

The case against Hurst – implausible treatment outcomes?

Following a visit to Seale Hayne in September 1918, Lieutenant JB Hall, a doctor in the Royal Army Medical Corps, reported rapid cures: 'men unable to use their legs walked about the lawn in two hours, speechless men shouted in

five minutes, stammerers who couldn't get a word out in five minutes, read a column aloud in the same time, after one to three hours treatment'.²⁵ William London who visited in 1919 for the War Pensions Gazette reported that a service patient who had been mute and paralysed in both legs for two years was restored to full function in 'about an hour and a half'.²⁶

Writing in the *Lancet* for August 1918, Hurst and his deputy, JLM Symns, declared, 'we are now disappointed if complete recovery does not occur within 24 hours of commencing treatment, even in cases which have been in other hospitals for over a year'.²⁷ In Hurst's film, inter titles described Private Richards with an abnormal gait at 2pm and 'cured' by 3pm, whilst Private Bradshaw, who had suffered from functional paraplegia for eighteen months, was 'cured after a quarter of an hour's suggestion and re-education'.²⁸ In March 1918 at a meeting of the Royal Society of Medicine in which he had screened War Neuroses, Hurst offered a more guarded prognosis suggesting that 'about 50% of the patients could return to military duty; at the time of discharge the other half were fit to earn their living in ordinary civil life'.²⁹ Nevertheless, Hurst and Symns were positive about outcomes: 'we do not know of a single man invalided [discharged] from our Neurological Centre who has relapsed'.³⁰

At the time, psychiatrists experienced in the treatment of shell shock were sceptical of these claims. On conducting a review of Hurst's practice, Charles Myers, Consulting Psychologist to the British Expeditionary Force, concluded that he lacked clinical understanding and recommended that Captain RG Gordon, who had worked in the specialist shell shock hospital at Maghull, be transferred to Seale Hayne to give weekly lectures on psychological medicine.^{31,32} Further, letters from psychiatrists to medical journals cast doubt on his work. In August 1918, Thomas Lumsden writing to the *Lancet*, suggested that the chronicity observed in other hospitals called into question the permanence of the cures claimed by Hurst, and called for follow up studies to be undertaken at six and twelve months.³³ Subsequently, Maurice Wright challenged the value of rapid methods arguing that they led to 'very frequent relapses'.³⁴ In the *British Medical Journal*, John Tippet added, 'I worked in four different "shell-shock" hospitals, and relapsed Seale Hayne patients were admitted to all of them, and were generally found to have no insight into their condition'.³⁵

The case against Hurst – fake footage

Perhaps most damaging evidence in recent years was the discovery that at least one of scenes in War Neuroses contained a subterfuge. The scene of Sergeant Bissett hobbling with two sticks allegedly filmed in September 1917 has an identical group of nurses and column of smoke emerging from a chimney to an 'almost recovered' shot from November 1917, suggesting that they had in fact recreated the soldier's disability for the camera.³⁶ Indeed, the third shot of Bissett purportedly six weeks later as 'cured' may have been filmed slightly later in the day. Given the logistical challenge of transporting heavy equipment from London, it is possible that all the filming at Netley was undertaken on

or immediately after 23 January 1918, the date recorded in an intertitle and in SHNS.³⁷

The case for Hurst – new outcome data

The bold treatment claims made by Hurst in the film were, in fact, moderated by his publications and case reports in SHNS. By 1918, experience had taught him that FMD was a relapsing disorder, especially if symptoms had been long lasting: '[relapse] is more common the longer symptoms have lasted, but the liability to relapse is greatly reduced if the patient is given open air work and kept under observation at the hospital where he was cured for a few weeks before returning to duty'.³⁸ He recommended discharging service patients with long standing symptoms from the army as the risk of relapse was too high. The cases in SHNS provide evidence of short-term treatment effects, at least from the time of admission to discharge. Although they are not a random sample and plausibly biased towards success, 37 cases of functional motor disorder were reported, nearly all with rapid recovery, after a median duration of 230 days of symptoms. For twenty of these where a period of follow up was recorded, the median duration was 90 days (range two weeks to four months). In all cases the outcome was recorded as either recovered or with residual symptoms but able to work on the farm attached to Seale Hayne. In another 17 cases clinical information is provided about a rapid recovery without information about longer term outcome, in many cases because publication occurred shortly after treatment. Recent research into an additional nine former patients, mostly with functional movement disorder, found that all returned to sustained civilian employment, although two were said to remain 'nervy'.³⁹

The best documented example of a successful cure was Percy Meek, who Hurst selected to play a key role in the film War Neuroses. With a functional paralysis and mute, Meek had been invalided to Netley where William McDougall failed to restore him to full function.⁴⁰ In autumn 1916, Arthur Hurst took charge of his treatment. In December, suggestion with the aid of an intralaryngeal electrode and light etherisation enabled Meek to whisper replies to questions. Hurst later recorded that 'on November 22nd, 1917 for no obvious reason he had a headache and became excited in the evening. His memory began to return during the night and he talked incessantly. The next day he realised the deficiencies in his speech and wished to have them corrected. When told a word he now repeated it correctly and remembered it and began to form proper sentences... [Meek] lost his voice once more on the 27th but it returned on passing the sound again. This time he felt something snap in his head and immediately afterwards he talked quite normally and his memory of his home and his past life flowed back'.⁴¹ Not until his transfer to Seale Hayne in April 1918 was Meek able to move his arms and legs normally, over two years after his transfer to the UK. In November 1918, Hurst reported that Meek had made a complete recovery with a steady gait and no contracture of the fingers.⁴² On discharge from the army, Meek resumed his trade of basket maker and returned to Snettisham, near King's Lynn, with no recorded recurrence of his symptoms.

Gunner George Bollands was another documented success. He had served in the North Riding Garrison Artillery and may have experienced Zeppelin raids on Hartlepool. Admitted to Netley in December 1917 with tremor of his limbs, Hurst transferred him to Seale Hayne where on the third day of his admission 'he was seen in a private room, and the arms manipulated until there was complete muscular relaxation. Verbal suggestion was given at the same time. After fifteen minutes the coarse tremor had disappeared.' A 'slight fine tremor of the outstretched hands' remained but Bollands was able to drink normally.⁴³ Although he remained anxious after leaving the armed forces, Bollands married in 1921, had a family and set up a successful catering business, being a noted supporter of local charities.

However, other shell-shocked patients relapsed, including Sapper Chamberlain, who had been admitted to Seale Hayne in December 1918. At his medical board in February 1919, Hurst wrote, 'he is now very much better,' while the medical notes recorded 'sleeps well, has no pains and is fit for civil employment'.⁴⁴ Yet the cure was not sustained. Three months later, having left the army, Chamberlain reported 'constant pain in limbs, tremor of hands, poor sleep'. This pattern of symptoms was found at three further medical boards, the last held in October 1922 when Chamberlain's pension was stabilised for life at 15% to 19%. Other patients of Hurst relapsed after discharge but subsequently made a good recovery. Private Wilson May was referred to Seale Hayne with hysterical vomiting following gassing in May 1918. His service record stated that he was 'cured in a few days and had no further trouble'. Discharged in January 1919, May broke down six months later with neurasthenia and was admitted to hospital in February 1920.⁴⁵ A year later, however, he was described as well and he pursued a successful career as a headmaster.

In the post war period, RG Gordon, who had transferred to Seale Hayne at Myers' suggestion, served on war pension boards where he assessed veterans with claims for shell shock. Knowing where the soldier had been treated, he wrote, 'the general impression... is that at the same time all neurological centres have had marked success but at the same time all have had decided failures and some more than others. I have not seen any gross hysterical cases recurring or being replaced by others... those who have been treated by hypnosis and nothing else relapse very much more readily than do those who have had some form of mental analysis.'⁴⁶ Although the government had initially been generous in the award of war pensions, an economic slump in 1920 and the need to cut expenditure saw a concerted attempt to reduce or withdraw financial benefits from veterans.⁴⁷ Because pensions were based on symptom severity, it is possible that some relapses were conditioned by hardship, representing an attempt to retain an award.

Contemporary studies of FND patients show that more than half remain symptomatic at follow up with high levels of other physical and psychological comorbidity, whilst a relapsing course is also common. Hurst believed that wartime FND

was more susceptible to his treatments than cases seen in civilian life, where he hypothesised that there were greater pre-existing vulnerabilities that interfered with recovery. Hurst plausibly benefited from carrying out treatments at the end of the war when patients, no longer faced with a return to the front, were motivated by the prospect of a return to civilian employment.

The technique of suggestion employed by Hurst was not infallible as he himself discovered when attempting to treat a patient with a functional movement disorder in 1939. He sought to demonstrate the method to a group of medical students, taking the patient behind a screen. Dr J MacGregor recalled that they could hear Hurst's narrative: 'lie down and relax, your muscles are not going to work, they won't twitch, you're getting better, lie down, relax, everything's going to be well, You won't have any more twitching'.⁴⁸ Later, as the man was brought back on a stretcher with spasmodic movements in his arms, Hurst had to admit, 'I'm afraid I haven't been entirely successful.' Hurst said, 'I'm a little out of practice, but I'll come back tomorrow, and we'll cure him,' but the case was not presented again.

Rivalry between neurology and psychiatry

Shell shock became a high-profile disorder because of its military importance and the fact that it attracted the attention of the public, press and politicians. The contagious nature of the illness was recognised and, if uncontrolled, had the capacity to undermine the fighting strength of the British Army. Hence, a doctor who found an effective treatment could establish a therapeutic reputation of value in the post war period. At first, concussion or toxins were hypothesised as causal agents, suggesting that neurologists or neuropathologists were the appropriate physicians.⁴⁹ By summer 1916, clinical experience had taught that most cases of shell shock did not have a basis in structural pathology and were classified as a form of war neurosis with referral to a psychiatrist or medically qualified psychologist. Nevertheless, neurologists retained their interest and shell shocked servicemen continued to be treated in departments of neurology such as National Hospital for Nervous Diseases in Queen Square, London. There, for example, Lewis Yealland adopted a range of interventions including walking exercises, re-education, suggestion, faradic currents, complete rest, isolation, encouragement and a change of surroundings to treat functional symptoms.⁵⁰ Although he was criticised for the use of electricity, Yealland wrote, 'it must be remembered that faradism employed without suggestion and persistence in otherwise intractable cases will fail to produce recovery.'⁵¹ His approach attracted criticism from Myers and others who believed that suggestion without insight into unconscious processes was a short cut unlikely to lead to a permanent cure.⁵²

Hurst came to the issue of shell shock at a mid-point in the war when the rivalry between the two medical specialties was established. Returning to the UK from a public health role in Salonika, he was deployed to the neurology wards at the Radcliffe Infirmary in Oxford. Major William McDougall, in charge of the equivalent department at the Royal Victoria

Hospital, Netley, wished to return to Oxford, so the two agreed to exchange jobs. As a physician with an established neurological practice, Hurst's natural allies in the debate about the nature and treatment of shell shock included Gordon Holmes, Consulting Neurologist to the British Expeditionary Force.⁵³ Holmes and Myers had engaged in an acrimonious dispute over the appropriate treatment for shell shock in France, so it was not surprising that the latter was critical of Hurst's approach. At a special clinical meeting on war neuroses held by the British Medical Association in April 1919, Holmes revealed his hostility to psychological approaches to treating shell shock, arguing that outcomes 'were not satisfactory' such that there were 36,000 cases still 'awaiting re-education'. He attributed 'the failures of the psychoanalysts and hypnotists' to treat war neuroses 'to the fact that men had been treated by medical officers who were not nerve specialists and who were unacquainted with the measures so successfully employed before the war.'⁵⁴ In response, H Crichton Miller suggested that Holmes approved only of 'organic neurologists,' which may have implied criticism of Hurst and his multidisciplinary treatments.⁵⁵

As late as 1943, the echoes of these neurological and psychiatric spats were still playing out in the letters' pages of the British Medical Journal. W Ronald Fairbairn, an Edinburgh psychiatrist and psychoanalyst who developed object relations theory, published a paper on war neuroses highlighting issues such as regression to an infantile emotional level and the way that relations with superior officers may be mirrored by parental relationships.⁵⁶ Hurst ridiculed Fairbairn's 'fantastic beliefs' that soldiers might be attempting to 'restore emotionally the intrauterine state of security which was so rudely disturbed by the experience of birth' and pointed out that 'explanation, persuasion and re-education' had continued to work well as a psychotherapy during the recent siege of Tobruk.⁵⁷ Fairbairn retorted that such a treatment was 'not really a psychotherapy at all.' Hurst, given the final reply, agreed, 'perhaps it wasn't, but it was certainly very successful', quoting other long term follow up studies of similar treatments.⁵⁸ A contemporaneous dispute arose between Royal Air Force doctors over the value of the administrative label, 'lack of moral fibre', employed to discipline aircrew who refused to fly without evidence of a recognised illness. The psychiatrists, led by Robert Gillespie, opposed use of the term and sought to understand breakdown, whilst, CP Symonds, a neurologist, conducted research into tour lengths designed to reduce its incidence.⁵⁹ Sadly, Hurst left no record of his views on this protracted dispute.

Stereotypical contrasts between the unfeeling neurologist apparently only interested in symptom removal with the empathic psychiatrist seeking to get to the traumatic root of the problem makes for a compelling media narrative. However, it is clear from Hurst's publications that he took an interest in the psychological state and treatment of the servicemen in his charge. He displayed a lifelong hostility to Freudian psychoanalysis and believed that the attribution of wartime distress to sexual causes could harm those treated in this manner. He was also no stranger to a strict relationship with his patients, hardly surprising given the time

and military context, but at the same time valued psychiatric contribution to his treatments. He made only one concession to Freud: 'the unburdening of the soul, the only healthy part of Freud's teaching, is nothing new as it has been used from time immemorial... for helping the distressed in mind.'⁶⁰

Modern multidisciplinary treatment

Re-education with suggestion became established techniques for treating functional movement disorders in the 1920s and 1930s and were used again during the Second World War. In the post 1945 period, these approaches fell from favour in part because the development of anxiolytic medication and the increasing dominance of psychological aetiological models and therapies based primarily around Freud's conversion hypothesis.

In the last 15 years a new multidisciplinary approach to FMD once again asks the physician, like Hurst, to make a positive diagnosis, explain how physical signs indicate the potential for reversibility and integrates patients' understanding in further treatment.⁴ Physiotherapy² and occupational therapy⁶¹ have also assumed prominence in treatment with components very similar to those practiced by Hurst. Psychological therapy is not marginalised, but as with Hurst's practice, forms one of many interventions that are potentially suitable depending on the patient's needs, their stage of rehabilitation and their symptoms. Modern treatment approaches do not emphasise the need for a rapid cure, although these undoubtedly still sometimes occur, even after long duration symptoms.^{62,63} Perhaps Hurst himself would not have suggested that things would be so easy in civilian life. Those who have suggested that Hurst was secretive in his approach may have thought that there was more to his treatment than he recorded. From a modern perspective, however, his description of explanation and focus on physical symptoms rings true as an approach that could have produced the outcomes that he reported, especially in a military setting at the end of the First World War.

Conclusion

The absence of robust clinical evidence, notably long term, follow up data, means that it is unlikely that the dispute about the effectiveness of Hurst's methods will ever be answered definitively. We can be certain, however, that he was one of the foremost pioneers of multidisciplinary treatment for functional movement disorders. He was not the originator of education and suggestion techniques or of multidisciplinary treatment but his practice produced a series of documented recoveries as well as failures. Hurst was not always measured in his accounts of treatment and he worked at a time when psychiatric models were about to dominate for the next 80 years. Modern reinterpretations of his treatments as a crude and temporary physical approach rather than an empathetic psychological therapy are not reflected in the reality of the historical data. That Hurst's therapeutic model is again being explored and applied in an updated form offers testimony to his innovative and entrepreneurial approach. ①

References

- 1 <https://www.bbc.co.uk/programmes/profiles/1jCpprmXj6ZK9qWMD174C2H/dr-arthur-hurst> (accessed 5 March 2020).
- 2 Nielsen G, Stone J, Matthews A et al. Physiotherapy for functional motor disorders: a consensus statement. *J. Neurol. Neurosurg. Psychiatry* 2015; 86 (10), 1113–1119.
- 3 Nielsen G, Buszewicz M, Stevenson F et al. Randomised feasibility study of physiotherapy for patients with functional motor symptoms. *J. Neurol. Neurosurg. Psychiatry* 2017; 88(6), 484–90.
- 4 Espay AJ, Aybek A, Carson A, et al. Current Concepts in Diagnosis and Treatment of Functional Neurological Disorders. *JAMA Neurol.* 2018; 75(9), 1132.
- 5 Anonymous. *Fourth Annual Report of the Medical Research Committee 1917-1918*. HMSO, London, 1918; 63, The National Archives (TNA), FD2/4.
- 6 Powell JM. Shock troupe: medical film and the performance of 'shell shock' for the British nation at war. *Soc. Hist. Med.* 2017; 30, 323–345, 333.
- 7 Jones E. War Neuroses and Arthur Hurst: a pioneering medical film about the treatment of psychiatric battle casualties. *J. Hist. Med. Allied Sci.* 2012; 67, 345-373, 365–368.
- 8 Hurst AF. *Hysterical contractures*. *Seale-Hayne Neurological Studies* 1919; 2 (5), 244–264, 261.
- 9 Hurst AF. Symns JLM, The rapid cure of hysterical symptoms in soldiers. *Seale Hayne Neurological Studies* 1918; 1 (1), 27–42, 30.
- 10 Hurst AF. Hysterical hiccough. *Seale Hayne Neurological Studies* 1918; 1 (2), 71–77, 74.
- 11 Hurst AF. *Medical Diseases of War*. Edward Arnold, London, 1944; 41–42.
- 12 Hurst AF. Cinematograph demonstration of war neuroses. *Proc. R. Soc. Med.*, 1918; 11, 39–42, 40.
- 13 Hurst AF. *A Twentieth Century Physician, Being the Reminiscences of Sir Arthur Hurst*. Edward Arnold, London, 1949; 120.
- 14 Hurst A. War neuroses. *Br. Med. J.* 1 1943; 299.
- 15 Johnson W, Rows RG. Neurasthenia and war neuroses. In MacPherson WG, Herringham WP, Elliott TR, Balfour A, (eds), *Medical Services: diseases of the war*, HMSO, London, 1923; 2–67, 36, 35.
- 16 Deeley Q. Hypnosis as therapy for functional neurologic disorders. In Hallett M, Stone J and Carson A, (eds), *Handbook of Clinical Neurology, Volume 139, Functional Neurological Disorders*, Elsevier, Amsterdam, 2016; 585–95, 588–89.
- 17 Babinski J. Définition de l'hystérie, *Revue Neurologique* 9 1901; 1074–1080.
- 18 Hurst AF. *A Twentieth Century Physician, Being the Reminiscences of Sir Arthur Hurst*, Edward Arnold, London, 1949; 103.
- 19 Thomas GM. *Treating the Trauma of the Great War, Soldiers, Civilians and Psychiatry in France, 1914–1940*. University of Louisiana, Baton Rouge, 2009; 27, 38.
- 20 Babinski J, Froment J. *Hysteria or Pithiatism and Reflex Nervous Disorders in the Neurology of War [1917]*. Translated by J.D. Rolleston, University of London Press, London, 1918.
- 21 Hurst AF. *Medical Diseases of War*, Edward Arnold, London, 1940; 16.
- 22 Lt. Rupert Lee, the "war strained" artist inspired at Seale-Hayne Military Hospital to help others, a descriptive panel at the Seale Hayne Centenary Exhibition, provided by Raymond Bartlett.
- 23 Jones E. 'An atmosphere of cure': Frederick Mott, shell shock and the Maudsley. *Hist. Psychiatry* 2014; 25, 412–21.
- 24 Gordon RG. The mental factor in the neuroses of war. *Seale Hayne Neurological Studies* 1918; 1(2), 81–87, 82.
- 25 Hall JB. Nervous mimicry of disease, A visit to Seale Hayne Hospital, Newton Abbott, *War Pensions Gazette* 1918; 17, 218.
- 26 London WS. Seale Hayne Military Hospital, The wonders of neurology, *War Pensions Gazette* 1919; 27, 335–36, 335.
- 27 Hurst AH, Symns JLM. The Rapid Cure of Hysterical Symptoms in Soldiers, *Lancet*, 1918; 192 (4953), 139–141, 140.
- 28 Jones E. Filming Trauma, *The Psychologist*, 2015, 28 (5), 424–426.
- 29 Hurst AF. Royal Society of Medicine, Section of Neurology, *Lancet* 1918; 191 (4934); 437–439, 439.
- 30 Hurst AF, Symns JLM. The treatment of war neuroses, *Lancet* 1918; 192 (4958), 341–42, 341.
- 31 Hurst AF. *A Twentieth Century Physician, Being the Reminiscences of Sir Arthur Hurst*, Edward Arnold, London, 1949; 152
- 32 Myers CS. *Shell Shock in France 1914–18, Based on a War Diary*, Cambridge University Press, Cambridge, 1940; 122–127.
- 33 Lumsden T. Treatment of war neuroses. *Lancet* 1918; 192 (4955), 219.
- 34 Wright MB. Treatment of psychological casualties during war, *Br. Med. J.* 2, 1939; 615–617, 615.
- 35 Tippet JA. Psychological casualties in war, *Br. Med. J.* 2 1939; (4109), 742.
- 36 Jones E. War Neuroses and Arthur Hurst: a pioneering medical film about the treatment of psychiatric battle casualties, *J. Hist. Med. Allied Sci.* 2012; 67, 345–373, 365.
- 37 Hurst AF, Symns JLM. The rapid cure of hysterical symptoms in soldiers, *Seale Hayne Neurological Studies*, 1918; 1(1), 27–42, 34.
- 38 Hurst AF. *Medical Diseases of War*, Edward Arnold, London, 1944; 6–7.
- 39 Personal communication from Raymond Bartlett and Tim Whiteaway, 14 June 2018.
- 40 McDougall W. *An Outline of Abnormal Psychology*, Methuen, London, 1926; 289–292.
- 41 Hurst AF. A case note of Percy Meek, 1918, Devon Record Office, 1262M/OLD/113/68.
- 42 Hurst AF. Amnesia and stupor, *Seale Hayne Neurological Studies* 1918; 1 (2), 91–95.
- 43 Hurst AF, Symns JLM. The rapid cure of hysterical symptoms in soldiers, *Seale Hayne Neurological Studies* 1918; 1(1), 27–42, 37.

- 44 War pension file for Private George Chamberlain, Hurst AF, Medical Board, 1 February 1919; TNA, PIN26/2639.
- 45 Sapper Wilson May, War Pension file for hysterical vomiting, TNA, PIN26/9691.
- 46 Gordon RG. The after-treatment of war neuroses with special consideration of the question of pensions, *Seale Hayne Neurological Studies* 1920; 6, 308–12, 309.
- 47 Cohen D. *The War come home, Disabled veterans in Britain and Germany, 1914–1939*, University of California Press, Berkeley, 2001; 29–44.
- 48 Interview of Dr J. MacGregor by Ben Shephard, 14 July 1990, quoted in B. Shephard, 'Pitiless Psychology': the role of prevention in British military psychiatry in the Second World War. *Hist. Psychiatry* 1999; 10, 491–542, 459.
- 49 Mott FW. The effects of high explosives upon the central nervous system, *Lancet*, 1916; 187 (4824), 331–38, 331.
- 50 Linden S. Jones E, Lees A, Shell shock at Queen's Square: Lewis Yealland a hundred years on, *Brain*, 2013; 136 (6), 1976–1988.
- 51 Yealland LR. *Hysterical Disorders of Warfare*, Macmillan, London, 1918; 3.
- 52 Myers CS. The justifiability of therapeutic lying, *Lancet* 1919; 194 (5026), 1213–1214.
- 53 Jones E, Wessely S. Battle for the Mind: The First World War and the birth of military psychiatry, *Lancet* 2014; 384 (9955), 1708–14, 1711.
- 54 Anonymous. British Medical Association: special clinical meeting, section of medicine, War neuroses, *Lancet*, 1919; 193 (4991), 709–11, 711.
- 55 Crichton Miller H. War Neuroses, *Lancet* 1919; 193 (4992) 766.
- 56 Fairbairn WRD. War neuroses: their nature and significance, *Br. Med. J.* 1 1943; (4284), 183–86.
- 57 Hurst A. War Neuroses, *Br. Med. J.* 1 1943; (4287), 299.
- 58 Hurst A. War Neuroses, *Br. Med. J.* 1 1943; (4292), 459.
- 59 Jones E. "LMF": the use of psychiatric stigma in the Royal Air Force during the Second World War, *J Milit. Hist.*, 2006; 70, 439–58.
- 60 Hurst AF. *Medical Diseases of War*, Edward Arnold, London, 1944; 75.
- 61 Nicholson C. Edwards MJ, Carson AJ, et al. Occupational therapy consensus recommendations for functional neurological disorder, *J. Neurol. Neurosurg. Psychiatry*. 2020. doi/10.1136/jnnp-2019-322281
- 63 Stone J, Hoeritzauer I, Brown K, et al. Therapeutic sedation for functional (psychogenic) neurological symptoms, *J Psychosom Res.* 2014; 76, 165–1681.