



Access your free copy online at: www.history.org.uk/go/historian20

6



A shared history

The Anglo-Saxons

HANNIE -

New approaches to local history

2 The Historian – Historical Association

editorial

Welcome to this special sample edition of *The Historian*. We have gathered here just a few of the fascinating articles and features that have been published in the quarterly editions in recent months. Deciding what to select was not an easy task as there are a wide range of styles, topics and historical periods covered in the different editions – and that is why *The Historian* is such an interesting journal. Sometimes the editions are strongly themed and at other times loosely so; we have well-known academics writing for it and historians of many different backgrounds and expertise. In some of the editions that I have guest edited we've had articles by established historians who want to try out a few ideas around the edges of their usual field of writing, and *The Historian* allows them that intellectual freedom while also upholding high standards or rigorous debate and research.

The Historian is different from the other journals of the HA in that it is not there to help support a profession, it is simply a journal for those that love history and love reading about it. That means that its subscribers come from many walks of life – although many are also from academic institutions who want something meaty to get their intellect around, while still having time to relax and not always having to assess the article. Therefore, many of the articles can and do support wider subject knowledge for those who work in teaching, lecturing and heritage, as well as those studying history. The themed content is initiated by the editorial board, by the HA membership and by current affairs so it provides a varied amount of subject content.

In this special edition we have selected articles that could take some of the topics you might feel familiar with but where the authors have provided them with new levels of interpretation and analysis. Mick Crumplin is a noted surgeon and an historian; he has been an advisor to television programmes and films and is an expert on the history of medicine and warfare. In his article 'Losing sight of the glory: five centuries of combat surgery' he explores the relationship between medicine and conflict. He analyses how medical developments have increased survival rates of those injured in battle but also how wars have enabled and empowered medical professionals to initiate and develop new techniques and procedures, sometimes through risky methods and with questionable success rates.

The second feature article covers a very different theme from the past, yet one with some current-day resonance. 'Black Death to global pandemic; London then and now' is written by Christine Merie-Fox who is an expert on medieval London and is currently based in a Dutch university. In this article she explores some of the responses to the pandemic and how London survived and organised itself. I was particularly struck with the section that deals with the impact the pandemic had on children, who were often left as orphans. Fortunately, there is not a huge similarity with Britain today but I do wonder if it might have some relevance for other places in the world.

The final article in this pull-out edition is one from our Real Lives series. This is a regular feature that explores the real life of someone not well known to history, and it is an opportunity for local history stories and often independent researchers to get some of their valuable work out into the public. The story presented here is that of Flora Sandes, a British nurse who ended up serving in the Serbian army during the First World War, thereby breaking more than one of the usual stereotypes of women at that time. Other regular features of *The Historian* include My Favourite History Place and In the News articles that again provide snippets of history to be brought to life and historical places to be explored.

As part of *The Historian* editorial board I believe that it is an incredible journal for supporting history and scholarship; and as an historian I think it is an incredible journal for allowing me to indulge my passion for learning. We hope that you enjoy it as well.

Paula Kitching A member of *The Historian* Editorial Board

Losing sight of the glory: five centuries of combat surgery

Michael Crumplin traces developments in surgery that can be directly attributed to changes in the conduct of war.

ittle doubt exists that war accelerates and innovates medical care. Today, our armed services can rely upon sound medical treatment if they are sick or wounded, with survival rates of above 90%. This was rarely the case until there was much publicity during the Crimean campaigns in the war against Russia (1853-56). For the first time, during the Franco-Prussian conflict (1870-71), industrialised warfare killed more men than disease, deprivation and climate. This article focuses on some key moments of surgical innovation, or acceleration, over five centuries of warfare.

During the Middle Ages most combat involved hand-to-hand, tough physical contact with injuries inflicted by blunt weapons, or those that caused slicing or piercing wounds.

The advent of the longbow introduced a formidable weapon. Showers of arrows shod with barbed or bodkin points caused painful or lethal damage. An arrow shot at 10-75 metres from a long bow with a 120-150 pound draw weight, could penetrate most steel plate or chain mail. Arrow wounds were painful but not necessarily fatal, unless the shaft struck vital organs.

At the Battle of Shrewsbury, in July 1403, during the rebellion led by Henry 'Hotspur' and Owain Glyndŵyr against Henry IV's army, there was a fine example of surgical innovation. The battle led to the death of Hotspur, who had a fatal arrow strike in the face. Likewise, the future Henry V raised his visor and was struck by an arrow in his left face. The arrow was deeply embedded in the prince's cheek bone. The wooden shaft was removed but The 'Wound Man'



the retained hollowed-out iron arrow point remained. John Bradmore, a gifted surgeon and metal worker, transiently imprisoned for counterfeiting coins, was summoned to Kenilworth to manage the royal injury. He first stretched up the wound with a probe made of linenwrapped pith of old elder. He then had a blacksmith make an instrument, which had two adjacent long thin iron leaves. Between the leaves, a long shaft with a screw at the top end was inserted. As the screw turned, it parted the leaves slightly at the tip of the instrument. This was inserted into the embedded arrow head. As the screw turned, it advanced the rod, expanded the tips in the arrow tip and drew out the missile. The prince's wound was dressed with moist bread, honey, barley and turpentine. The future victor

of Azincourt survived.

Following the 100 year's war, the country was embroiled in the Wars of the Roses (1455-87). At Bosworth Field, the Plantagenet dynasty ended with the death of Richard III. His scoliosis (lateral spine curvature) was well compensated for since it was braced by his body armour. He came close to despatching his adversary, Henry Tudor, having first killed Tudor's standard bearer. Richard III's corpse, so recently discovered suggests that he was unhorsed, lost his helmet and then killed by a sword or pole-axe blow to the occipital (back) region of his skull. The final coup de grâce was by a sword being plunged down into the base of his skull.

Wounds were dressed and fractures splinted by surgeons, bone setters or camp followers.

As Europe moved into the early sixteenth century, around 150 years after the burgeoning use of gunpowder, surgeons had to face an increasing number of severe, mangled and contaminated wounds. Now, limbs had to be removed far more frequently. Two sixteenth century German wood cuts show a lack of control of haemorrhage during amputation. In one image, there are cautery irons in a brazier and in the other there is a free gush of arterial blood from the victim's limb vessels into a tub. So uncontrolled bleeding was a serious challenge requiring address.

In 1537, during the siege of Turin a mercenary and very able French surgeon, Ambroise Paré, made headway in controlling haemorrhage, with two influential discoveries. He eschewed the use of the cautery to control bleeding and introduced fine ligatures to tie off injured blood vessels. During the mid-seventeenth century, the civil war loomed to darken Britain's countryside. An important figure at this time was the experienced royalist surgeon, Richard Wiseman. He was characterised by his integrity and, unusually for the time, was a selfeffacing, compassionate and thoughtful practitioner.

Whilst serving in the Dutch Navy and the Royalist Army, he recorded an informative series of detailed case histories of battle-injured men and produced an illustrated book on the treatment of wounds. He was a champion of early amputation, when indicated, and was regarded as a 'clean' surgeon. At the Restoration, he was elevated to the post of Serjeant-Surgeon to the King.

Scotland has always been a generous provider of medical and surgical practitioners for the British Army care. The first 'Father of British Army Medicine', Sir James Pringle, a Scot, who understood the fundamental issues of keeping an army healthy, was succeeded by another surgical giant, the renowned Scots anatomist, researcher, teacher and surgeon, John Hunter, Britain's 'Father of Scientific Surgery'. He had been promoted Surgeon General to the British Army (1790–93).

Although he had limited field military experience, during the Seven Years War, he did introduce some important basic principles for army medicine, which were part-implemented during the 23-year war against Republican and Imperial France. He dictated that all medical appointments to the army should be made by none other than the Army Medical Board. Also, he ordered that physicians should serve briefly as junior surgeons, that all newly qualified medical men should initially attend a hospital (as they do today) and that the more dextrous surgeons should be employed in a hospital, rather than as a regimental surgeon.

The wars against France and Napoleon (1792–1815) cost our nation dearly, both financially and in manpower. Britain lost 2.5% of its population – a greater proportional loss than World War I. Possessing a burgeoning and strong Royal Navy, Britain was rarely able to field large land forces.

During these campaigns, only one in five soldiers died as a result of combat trauma, the rest perished from disease. A wide spectrum of disease reflected the broad geographical spread of military campaigns.

It was in the late eighteenth and early nineteenth centuries that military medicine was kick-started. How were German woodcut showing cautery irons during amputation



young surgical aspirants trained? Medical students served indentured apprenticeships with a surgeon, physician or apothecary for around five years. Then, for two years, the student would attend courses of lectures, while walking the wards as a student, dresser, or houseman. Anatomy courses were most important to surgeons, but there was a persistent shortage of cadavers in the country, which led to the reprehensible but inevitable practice of grave-robbing.

After six to seven years, if successful at an oral examination, the student would receive a membership diploma from a surgical college. He could then apply to join the armed forces as a hospital mate or regimental assistant surgeon. The British Army, by 1815, had around 1,250 medical men on its books, for an army of maximum size of around 300,000 and the Navy had about 1,400 surgeons for a force half the size of the army. The reason for this discrepancy was that most ships had to have one to five medical staff on board.

The regimental surgeon had two assistants, a wagon, an orderly and hampers to carry enough material for about 250 patients. He purchased his own instruments and horse. Hospital tents and stretchers were supplied, but often the battalion hospital would be in a requisitioned building.

In combat, the junior surgeon of the battalion would go into line, with dressings, water and pocket instruments. The senior surgeon would set up a temporary field dressing station, whose location had to be known by the unit. The tasks of a combat surgeon were to control bleeding, dress and tidy up wounds, give water and comfort and then remove casualties from the fighting. Transport in the Army Medical Department (AMD) was rudimentary as there few dedicated stretcher bearers.

What types of wounds were inflicted? Firstly there were those large injuries caused by artillery fire. These strikes were often fatal. The only way that a man could survive a cannon ball strike was if the missile hit a limb or inflicted a tangential strike on the torso.

Most injuries suffered by men who presented alive to a surgeon were caused by smooth bore, flintlock, muzzle-loading firearms. These weapons inflicted lower kinetic energy impacts than modern weaponry. So, at longer ranges the energy of musket balls was soon dispersed. The only effective way to cause the maximum damage to the enemy was to delay firing until close range. At about 20 metres, the impact force of a musket ball was about 200 joules, which was twice the force required to fracture a thigh bone. There was a large variety of injuries caused by spherical or deformed lead missiles, which often carried portions of filthy clothing into the wound.

Missile wounds were explored digitally and the missile and debris extracted with fine bullet forceps.

Bayonet wounds were rare but penetrating injuries caused by lances were inflicted by cavalry. These wounds carried a risk of deep penetration by the long reach of a lance. Sabres inflicted slicing wounds, and cavalry troopers



themselves risked fractures from falling off or being pinioned by their mounts.

Waterloo virtually ended the long war against Bonaparte. The four-day campaign resulted in around 50,000 wounded men – a considerable workload for just over 1,000 surgeons. The logistical challenge lay in the packed density of the injured who were strewn about among 6,000 equine casualties, leaving so many men bleeding to death unattended.

Britain, despite the lack of such organisation, produced some able surgeons, who had gained significant experience in the Peninsular campaigns (1808–14). One such was George Guthrie. Of Celtic descent, Guthrie was reputed to have operated on 20,000 casualties in Iberia. After Waterloo, he performed the first successful operation of disarticulation at the hip joint on a French soldier, who survived. He published widely, gave gratis lectures to aspiring military surgeons and served three times as president of the Royal College of Surgeons of England.

His many achievements in battlefield surgery included efficient control of haemorrhage, the design of longer, more effective lower limb splints and an interest in chest wounds.

For any surgeon on or off the field, limb amputation and disarticulation were the two greatest challenges. Fully awake, the patient was sat up and restrained and a screw tourniquet was applied above the site of surgery. The most frequent method of amputation was the rapid circular or 'guillotine' method. The surgeon swept his curved amputation knife several times around the limb to cut through the soft tissues, which were then protected whilst the bone was divided. Arteries, not veins, were delicately picked up and tied with silk or linen ligatures, which were left long to be pulled off after a week or more.

The closure was performed using sutures or adhesive tapes. The wound was dressed then, a linen bandage was rolled around the stump.

The improved technique creeping into the surgeon's repertoire was the flap method of amputation. This allowed better healing over the cut bone end, which required decent soft tissue cover. The overall cavalry commander of the Allied cavalry at Waterloo, Henry Paget, Lord Uxbridge, underwent a flapped amputation, with successful healing.

An accomplished military commander, the Duke of Wellington might well be considered the best 'doctor' in the British and Allied armies. As a rule, he supplied his army adequately and his ability to avoid excessively costly combat was circumspect. By 1814, Britain had fielded one of the most experienced and able armies along with its medical department.

Sadly, any limited surgical progress after 1815, failed to materialise 40 years later in the Crimean War. This was a disastrous conflict, which unearthed the stark reality of how poor planning, logistics and inter-departmental chaos could scupper an effective fighting force.

Around 16,000 deaths from disease occurred in the British army, principally from bowel disorders such as diarrhoea, dysentery and Asiatic cholera. Britain lost around 4,500 men from battle wounds. Considering surgery and its outcomes, one significant benefit arose for the wounded during this war – the use of general anaesthesia. During the Battle of the Alma, in September 1854, chloroform was fairly liberally employed and with no evident anaesthetic deaths. Many soldiers underwent amputation using the flap operation, which ensured better primary healing.

After the war the highest award for bravery was introduced for the armed services – the Victoria Cross. The first medical VC was awarded to Surgeon James Mouat of the 6th Dragoons, who tended a casualty after the charge of the Light Brigade.

During the Boer conflict, Britain now had RAMC stretcher bearers and improved transport for the wounded; eg, hospital trains. Radiology and bacteriology were employed during this conflict, both of which aided surgical treatments. However, the surgeons now had to deal with high velocity injuries. The surgical results were generally fairly acceptable due to the clean dry veldt and mobile warfare.

In 1914, at the outbreak of the Great War, vast medical resources were required. About ten million men died in the British, Commonwealth, Italian, German and Austrian armies over the four years. This was a static, industrial and dirty war, with most casualties receiving wounds or death from explosion, hot shrapnel, or from the bullets fired from thousands of German heavy machine guns. The wounds consisted of ripped flesh, muscle and bone and were often heavily contaminated with dirty clothing and soil impregnated with diverse bacteria. This caused many cases of gas gangrene and multi-bacterial tissue infection (necrotising fasciitis).

So, in this escalating war, what were the significant developments in surgery for the millions of casualties that intermittently flooded the medical units? First, there was the recently formed RAMC and thousands of professional and volunteer nurses. There soon evolved a defined evacuation trail for the wounded from the trenches. At the front-line regimental aid post the battalion medical officer would help retrieve the casualties, assess and dress wounds, splint fractures and give analgesics. A label was fixed to each patient to record wounds, his condition and current therapy. There were now, up to 32 stretcher bearers per battalion, who would get the casualty to the advanced and main dressing stations. Here, wounds could be further treated. Transport was then arranged by horse or motorised ambulance convoys to the casualty clearing station (CCS), five to ten miles behind the front line.

Around 65 numbered CCSs were first designed to give basic first line surgery; that is, amputations, setting fractures and wound management. Later, many units soon became individually specialised surgical units: eg, for thigh fractures, abdominal or head wounds.

From the CCS the patient would go to a base hospital on the Channel coast, travelling by hospital train or motor ambulance. Here they received, if needed, further surgery or other therapies and recuperation. Thousands would die here, but survivors would then be repatriated to Britain.

From 1916, there was increased specialisation of surgery. One of the most important advances was the improved management of soft-tissue injury. Highenergy-transfer missiles created large wound cavities. As the missile exited, these cavities collapsed creating much unseen deep tissue injury. Many bacteria flourished in the dead or dying tissues, leading to overwhelming sepsis and threat to limb and life. Early closure of such wounds was catastrophic.

The excision of devitalised parts needed to be thorough, leaving large gaping wounds which were lined by healthy tissue. This still remains one of The cataclysmic situation after Waterloo, 18 June 1815 Author's Collection

the most important principles of combat surgery.

In 1914, the mortality from compound fractures of the femur reached about 80%. Careful immobilisation of the damaged leg in a Thomas splint frame, coupled with removal of devitalised muscle, led to a dramatic fall in the mortality - to less than 10%. Bearers were trained to apply the life-saving Thomas splints in the dark, since many had to be applied at night. However, not all measures to preserve limbs were successful. There were around a quarter of a million amputees, pioneering the work at Roehampton House, which ultimately contained 900 beds. Today many war fractures are managed with internal metal fixation.

Improved survival after head injury was due to several factors. Firstly, the introduction of the Brodie helmet in 1915. Although not the best design, it saved many lives. Another factor was the assiduous attention paid to head wounds by an American surgeon, Harvey Cushing. He came over to France voluntarily in 1915 then again with the American Expeditionary Force in 1917. After opening the skull, painstaking removal of foreign or dead material and irrigation proved to be of benefit to many patients.

One of the greatest pioneers in war medicine was Sir Harold Gillies. He was a New Zealand ear, nose and throat surgeon, who observed that many soldiers with terrible facial damage were receiving little help to reconstruct their faces and jaws. After working in Aldershot, he moved to a dedicated unit at St Mary's Hospital at Sidcup. Gillies co-ordinated surgical teams and meticulously planned, operated and recorded his cases. He recruited an anaesthetist called Ivan McGill who produced a single endotracheal tube technique of anaesthesia. This was a crucial invention as it obviated the need for bulky anaesthetic face masks, which obscured the operative field. Nurses, orderlies, artists, prosthesis technicians all supported the patients, who were not infrequently shunned by society. Surgeons learned to move flaps and grafts, so shifting tissues with a good blood supply from one part of the body to another.

Plastic surgery was not the only surgical speciality to emerge in this war. Abdominal wounds were frequently fatal with catastrophic haemorrhage on the battlefield. Sir Cuthbert Wallace and Sir Gordon Gordon-Taylor logged hundreds of cases who had survived and pioneered early laparotomy and gut repair with sometimes removal of damaged bowel and then joining bowel ends together (anastomosis). The first survivor in the



But there were other sinister threats to soldiers at the front – poison gas and thermal warfare. Following the first gas attack in 1915, around 90,000 men of all nations died and 1.2 million casualties resulted from gas warfare.

Following this costly global war, a pandemic of Spanish 'flu resulted in the deaths of around 50 million people. Worse still, only 21 years after the Great War, a more costly Second World War commenced. During this conflict, two great assets were realised – the introduction of antibiotics, and blood transfusion. Over the following century, much more was to be learnt, as the design of terrible weapons evolved.

Modern outcomes of battle surgery rest as an impressive accolade to surgeons who have struggled through success and failure over centuries to achieve such results. This coupled with the sufferings of millions of our armed forces testify to a story often forgotten by many historians of our nation's conflicts.

Michael Crumplin is a retired surgeon, author, historian and curator and archivist at the Royal College of Surgeons of England. His interest lies in the human aspect of conflict, particularly in the period of the wars against France and Napoleon (1793-1815).

A tangential cannon strike on the chest. The soldier survived Courtesy of the Army Medical Services museum



Deputy Inspector George Guthrie Courtesy of the Royal College of Surgeons of England)



Black Death to global pandemic: London then and now

Christine Merie Fox compares the impact of the Black Death on fourteenth-century London with our present-day experience.



Plague victims showing symptoms being blessed, from a late 14th-century manuscript Omne Bonum by James le Palmer Niday Picture Library / Alamy Stock Photo

In 1347, a terrifying disease was carving a path from the East into Northern Africa and Europe. Its entry point into Europe was the south of Italy, via merchant ships from the Black Sea. The disease quickly spread north wiping out entire villages, and devastating cities and towns along its path. This indiscriminate disease took the lives of both men and women, young and old, rich and poor.

By September 1348, the Black Death had reached England, most likely via the small port of Melcombe in Dorset. Not long after, it had made its way to the thriving metropolis of London. It was unwittingly borne, through the roads and villages of southern England, by carters and clergy, knights and merchants, while ships loaded with cargos of contagion sailed up the Thames to London's docks. Medieval London was one of the largest, wealthiest cities in Europe and the major English trading port. Much like today's London businessmen, who negotiate the world's economy virtually, medieval London merchants were also major players in international commerce. They bought and sold a variety of foreign and domestic goods from Italian and Flemish merchants such as fine cloths and silks, wine, spices, leather goods, armour, and weaponry from across Europe, Northern Africa, and the Near East.

Epidemic diseases were not new to fourteenth-century London. In fact, London in the 1340s had been hit by a series of epidemics and the city had responded quickly by enacting trading regulations to supress any misconduct. In many ways these lesser outbreaks acted as a dress rehearsal for what was to come. However, nothing could prepare the city for the devastation we now call the Black Death. It has been estimated that, over the course of eighteen months,

this indiscriminate disease killed over half of London's population of around 60,000 people, a death toll far greater than that among the general population of England and Europe, where only around 30% succumbed. In the face of such disaster, how did the city cope during this onslaught, and how did it recover?

Administrative resilience

London is fortunate to have a rich catalogue of surviving records that reveal remarkable resilience. Despite the swiftness of this disease and its destructive nature, the city continued to cope effectively with many of its administrative duties.

Fourteenth-century London had a unique and complex political system. It was made up of 24 aldermen elected by householders in the wards. Collectively, with an elected mayor, the aldermen formed the city's government, assisted by a body of civil servants such as the city's recorder and chamberlain. In a well-orchestrated political waltz, these governing officials presided over a number of courts across the city that dealt with a large administrative and judicial burden. Their routine business included trade regulations, land disputes, rental agreements and sales, the enrolment of wills, Triumphant Death chases Londoners from their city, but country folk (right), fearful of disease, drive them back. The picture is the title artwork from a seventeenth century pamphlet *A Rod for Run-awayes*, by Thomas Dekker, on the effects of the plague on London. Science History Images / Alamy Stock Photo



custody of orphans and their inheritances, felonies and homicide, petty crimes and offenses, and city and royal taxes. Between the years 1348 and 1349, the city officials did their best to continue these services but this was often a challenge. At least a third of the elected aldermen and numerous other civic officials perished during the plague years. However, the city did respond quickly and was able to replace these men within a month or two, even at the height of the plague in the winter of 1348 and early spring of 1349.¹

In the fourteenth-century, the Court of Husting, the city's primary court that dealt with property, normally met four to eight times a month and the city tried to maintain business as usual. During the crisis the court still managed to meet on average five times a month, quite a feat considering the ruthlessness of this disease.² One of the tasks of the Court of Husting was to enrol wills, and its persistence in this duty not only sheds light on the mortality rate but on the efficiency of city officials in challenging times. It has been estimated that the number of wills enrolled was at least nineteen times higher during the plague years than in an average year in the late fourteenth-century. For instance, from

November 1348 to the end of July1349, a total of 392 wills were proved and enrolled. In a pre-plague year the number was about 20. The men who served as chamberlain – Thomas de Maryns 1336-49 and Thomas de Waldene 1349-59 - and mayor - John Lovekyn 1348 and Walter Turke 1349 - were constant in their duties during the crisis. While Thomas de Maryns succumbed to the plague in the spring of 1349, there is a sense of relief to see the other names appear in later documents, as they contributed, both politically and financially to the rebuilding and restoration of the city.3 It is difficult to say, knowing what we now know about the spread of the disease, whether we should admire these city officials for their fortitude, or pity them for their ignorance.

Corpses and coffins

Much like today's funeral directors and morgues, the central concern of the medieval city was the burial of the dead. It was a concern born out of fear for the physical health of the living and also from anxiety for the spiritual wellbeing of the dead. Consequently, several large pieces of land were purchased to the north, south and east of the city for the burial

of plague victims. Recent excavations reveal that, despite the pressure, some care was still attempted in the burial of the bodies. Many of the dead were still provided with the dignity of a coffin and with normal burial rituals. Nevertheless, there are also signs of haste and a city struggling to cope with the vast numbers of people dying at the peak of the infection, such as the burial pits full of disarticulated bodies. An inscription on the wall of the Charterhouse in West Smithfield tells of the great pestilence which swept across the country and into London 'so wasting the people, that scarce the tenth person of all sortes was left aliue'. The city's churchyards, it elaborates, were unable to cope and new burial grounds had to be opened, one of which later became the site of the Charterhouse.4 Six hundred years later, it remains as a haunting reminder of past devastation.

Dirty streets and derelict buildings

Although medical knowledge has advanced beyond all recognition, we have all recently had to adjust to the

Burying plague victims



questions and uncertainties that come hand-in-hand with novel infections such as Covid-19. This was even more true for our medieval forebears as they struggled to understand what was happening around them. Nevertheless, it was clear to the medieval city officials that cleanliness played a role in its vulnerability to the plague. London's streets were littered with animal and human excrement along with household and shop waste. The city's essential workers, the scavengers (rubbish collectors) and rakers, who assisted the scavenger by raking the rubbish out of the gutters, were employed by each ward to clean and remove the rubbish from the city's streets. Frequently, they were found disposing of their waste in neither a friendly nor legal manner; often they cast their dung and foul-smelling rubbish into the city's fresh water supplies, or in neighbouring wards.⁵ In response to the polluted streets, city officials in the 1350s organised periodic city-wide spring cleaning, and purchased a handful of carts to assist the scavengers and rakers in their duties. They also instituted a system of regular rubbish collections, allocating certain days of the week when people could throw their filth out of their homes, ready for removal from the city. These policies lasted for several generations and thus late-fourteenth and earlyfifteenth century London saw modest sanitation improvements including the city's first sanitary officer, a Sergeant of the Channel, elected in 1385, who was charged with the upkeep and cleanliness of the city's streets.

The Black Death also had a substantial and long-lasting effect on the city's buildings.⁶ Between the autumn of 1348 and spring of 1349, there are very few reports of building works or legal complaints in the city records.

Thus, either from neglect, an inability to hire skilled or affordable craftsmen, or simply by abandonment due to death, many of the city's buildings, shops, and homes became vacant or fell into disrepair. Some of these properties lay empty for years, while others were taken over by neighbours and migrants, seizing the opportunity to expand their homes or businesses, and taking advantage of the confusion over property titles. Complaints about the illegal occupations of properties more than doubled between 1349 and 1352. As empty buildings became too dilapidated for use, they were often left to collapse into the streets or into other people's property and were eventually taken down.7 Prior to the Black Death people had been living cheek by jowl but the removal of these buildings created much needed open space. Some of these lots lay empty for years while others were used to build more spacious shops and houses.8 Current social distancing policies have also affected the city's infrastructure. Building projects have come to a halt, displacing workers, while buildings lie vacant and unfinished. It will be interesting to see how this sector recuperates after social distancing policies begin to loosen.

The economy turned on its head

Price increases and profiteering are issues that often occur when a population is in crisis. While today it is pet food, hand sanitiser and toilet paper, during the Black Death it was wine, meat, and shoes. In June 1349, Edward III, after hearing numerous complaints from his nobles and bishops, issued the Ordinance of Labourers, which dictated that payments were to stay at the level they had been in 1346, under

threat of substantial fines or prison. Although these measures appear to have helped reduce wage inflation, they did not necessarily help in reducing the cost of goods. In response to this problem, the medieval city officials established strict regulations on food prices and essential goods. Nevertheless, there were still offenders, such as a handful of cordwainers (shoemakers) who continued to overcharge for their products. The set price for shoes during this period was 6d a pair; the equivalent of one day's work for a skilled medieval tradesman, or roughly £19 today. Some cordwainers were charging 8d (£25) to 9d (£28) a pair, a 30-50% increase in price.9 The city officials swiftly dealt with these reprobates. Some were forced to pay hefty fines, while repeat offenders found themselves in prison.

While the city had at least some success in limiting the cost of food and essentials, poor weather and the stalled production of goods due to a reduction in the labour force eventually drove prices up. The 1351 Statutes of Labourers aimed to maintain both wages and prices at pre-plague levels, but was more effective in the former of its ambitions. It also forced workers into longer contracts that prevented them from leaving to seek better working conditions and higher-paying jobs. These workers would only receive their pay at the end of the contract period and thus forcing many to live on credit. With prices continuing to rise, many lower-income labours would have found themselves in desperate times. Survivors had to wait a good twenty years after the plague before things began to change. Back-to-back successful harvests helped bring down the cost of food, while wages gradually increased, leaving more money for fresh foods and expensive manufactured goods.10 From the last quarter of the fourteenth-century to the early sixteenth-century, England enjoyed a generally healthier and wealthier population. Nevertheless, these improvements were not universal. The high demand for labour in the medieval city created a new understanding of poverty. Distinctions were made between the 'deserving poor', widows, children, sick, maimed or old, and the 'underserving poor', those who were able-bodied but chose not to work. Those unwilling to work were excluded from charity and either thrown in the stocks or driven out of town.

Rural migrants and urban women

By the mid-fourteenth century, manorial lords were already struggling to enforce



traditional constraints on unfree tenants who wished to be mobile. Men and women left their villages of birth and flocked to cities, particularly London, in search of better-paid jobs. These migrants benefited greatly from London's depopulation after the plague. While girls, wives and widows had long played a role within the medieval London economy, their roles were mostly within a domestic household: cleaning, cooking, brewing, and looking after small children. However, after the Black Death, women not only had access to more craft opportunities in London, they were also tacitly accepted into many of the medieval city trades and guilds. The city so needed labour that many employers were increasingly willing to overlook the fact that those workers were wearing skirts. The depopulation of London also had an impact on young women, as the pressing need to train new workers led to more girls being apprenticed and entering the workforce.

Widows had long enjoyed a certain amount of financial autonomy but found themselves in an even better position once the crisis had passed. They were encouraged, if not required, to train their deceased husband's apprentices thus continuing and running the family business. Women also worked outside the household, often participating in the sale of food, particularly on the streets as hucksters. They could also be found running alehouses and inns, and were active within the clothing trade making woollen cloth and working imported silk into tassels, braids, and embroidery. Nevertheless, this so called 'Golden Age' of women was short lived. By the midsixteenth century, when the population

had risen and exceeded pre-plague levels, women were being forced out of the workforce and replaced by men. Similarities can be made with women who had stepped up to fill the roles vacated by brothers and husbands during the world wars, but then were expected to make way when male workers returned.

The children left behind

The devastating mortality not only left behind bereaved widows, but also children. What is striking about this period was not the number of orphaned children, but the rather large inheritances left to them as numerous relatives succumbed to the Black Death, leaving substantial fortunes to their only surviving heir. Guardianship of a wealthy orphan was most often allocated in the will of the father, and often divided between the person who had direct oversight and care of the child, and those who had oversight of their inheritance. While many children remained with their mother, she was not officially considered their guardian unless appointed by the deceased husband in his will. If children were not left in the care of their mother, they were often placed in the homes of close relatives or family relations. Siblings were kept together whenever possible, but sometimes a separation could not be avoided. The oversight of a wealthy orphan's inheritance was usually allocated to a respectable and equally wealthy merchant friend or acquaintance who would take an oath to protect the child's inheritance, and often oversee their education. Aldermen were a natural choice for guardianship and the city records show that many had

taken this responsibility very seriously. However, after the Black Death, this process appears to have become more complicated due to the increased wealth of the city's orphans. Legally, guardians had access to the orphan's inheritance which could be used for profit, and then handed back to them when they came of age roughly between 13-14 years old for girls and 21 for boys. After the Black Death, children were in great demand, either to fill the hole left in grieving families, to augment the domestic labour force, or for the wealth that came with their guardianship. While many orphans were lucky enough to find the care of a loving family, some guardians could not resist the temptations placed before them. More orphans than ever before were kidnapped, married off unsuitably without consent, or lost their inheritance through the exploitation and mismanagement of those assigned to protect them. These abuses continued to appear in the records for two and a half decades until the city created new clauses in the oaths of the mayor, aldermen, Chamberlain and the Common Sergeant (the spokesman for the orphans) to protect the rights of orphans. At the same time, they created a more complex inheritance scheme to help prevent the exploitation of orphans and their wealth.¹¹ One striking point about medieval London was that unlike many cities on the continent, London did not need an orphanage until the sixteenth-century. Children played a valuable role within a medieval household and Londoners were more than happy to welcome them into their family units.

Priests and parishes in the frontline

One parallel that can be drawn between the coronavirus pandemic and the Black Death is with NHS staff and medieval priests, who came face-to-face with death every day, offering solace to those who had lost family members and those at the end of life. This placed them in the front line of the battle with the pestilence and, like today's key workers and NHS staff, many paid the price. At around 42–45%, the mortality rate for priests in England and Europe was far greater than that of the general population.

In an attempt to slow down the pandemic, bishops across England were urging congregations to attend religious services regularly and to offer prayers in repentance for their sins. Shortages of priests, due to death and sometimes abandonment, left many parishes in need of prayers, guidance and community. The unceremonious burial of many of the plague victims prompted a growing concern that everyone should be assured a decent burial and personal salvation. Together with the great loss of clergy, this led to a steep increase in the membership and foundation of parish religious fraternities in the years after the crisis. For instance, there were only five known fraternities in the city before 1349. Yet, in 1349-50 another five were formed and between 1350 and 1400 a further 74 were created. It is clear that survivors of the plague were trying to find a sense of community and the parish fraternity was their solution. In return for a small membership fee, fraternity members were ensured help during times of need, a decent burial with attendance by fraternity brethren, and prayers after death. These fraternities varied in size, some containing a handful of members who maintained a candle in a specific church in memory of its members, alive or dead, while others were much larger, capable of hiring their own chaplain who was paid to say daily prayers for members. A parish fraternity was, in essence, a poor man's chantry, with chantries also in the latter half of the fourteenth-century seeing an increase in investment. However, a parish fraternity was much more accessible to the general population, especially women, and provided more to its community than prayers. They celebrated feasts together, hired one another, and helped each other out in times of need. Thus, the parish fraternity helped fill the void created by the loss of larger family units and offered a village of people within the town on whom members could depend. One of the remarkable things that has come out of the coronavirus pandemic is a global sense of togetherness. Social media, often considered one of the vices of modern society, has now helped bring communities together during isolation. Facebook, Instagram, and Twitter are, perhaps, the parish fraternities of the modern day, offering members community and companionship during our own time of need.

Conclusions

This overview of how the city of London coped during and after the Black Death provides insights, but it also raises questions about how London will navigate through our own troubling times. With the luxury of hindsight, it is clear that medieval city officials may have made the wrong decision in trying to continue business as usually, rather than imposing some form of social distancing. Governments today have taken a very different approach, locking down their citizens, in the hope of reducing the rate of infection, and thus valuing their lives above the economy, much like the city did during later plagues in the sixteenth and seventeenth-century. It is unclear how our own story will unfold in the weeks, months and years to come.

The 20 years following the Black Death was a daunting time for those living through it, as they tried to understand what was short-term, transitory, or permanent change. While the medieval government imposed oppressive financial measures on wages and the price of goods, our government has made huge efforts to protect the incomes of ordinary people. It will be interesting to see how our city moves forward once these measures have been lifted. Will people go back to work as they once did, or will more people be working from home? Will our appreciation of green space and awareness of the challenges faced by those currently confined to flats, result in improved designs for community living and open spaces? Will we still want to help our neighbours and local businesses? Finally, will our newfound appreciation for key workers and NHS staff translate into better wages and working conditions?

It is difficult to tell how London will recover from COVID-19. Nevertheless, it is clear from the past there will be short-term problems and long-term changes. However, there are numerous opportunities, just as there were in the medieval period, to create greener urban spaces, cleaner air, and deeper community networks. We must seize these opportunities with both hands...that is, after we thoroughly wash them.

Suggested reading

Sloane, B. (2011) *The Black Death in London*, The History Press: Stroud.

Carlin, M., and Joel T. Rosenthal, J. T., eds (2017) *Medieval London Collected Papers of Caroline M. Barron*, Medieval Institute Publications.

Barron, C. M., (2004) *London in the Later Middle Ages*, Oxford University Press: Oxford

Dyer, C., (2002) *Making a Living in the Middle Ages: the people of Britain 850-1520*, Yale University Press: New Haven and London.

REFERENCES

- ¹ Most of the historical analysis of the medieval city of London comes from Barron, C. M., (2004) London in the Later Middle Ages, Oxford University Press: Oxford; and Carlin, M., and Joel T. Rosenthal, J. T., eds (2017) Medieval London Collected Papers of Caroline M. Barron, Medieval Institute Publications.
- ² The statistical data relating to London and the Black Death comes from
- Sloane, B. (2011) The Black Death in London, The History Press: Stroud, p. 88.
 Sharpe, R.R., (1889-1911) Calendar of Letter Books... of the City of London 1275-1448 Book A to K, London; Thomas, A. H., (1926) Calendared Plea and Memoranda Rolls of the City of London: volume 1, 1323-1364, Roll A 6: 1349-50, London; and Thomas, A. H., (1932) Calendar of Plea and Memoranda Rolls 1381-1412, London.
- Stow, J., ed. Kingsford, C. L., (1908) Survey of London, vol. II, London, pp. 81-82.
 Thomas, A. H., (1926) Calendared Plea and Memoranda Rolls of the City of
- London: volume 1, 1323-1364, Roll A 6: 1349-50 and 1381-1412, London. ⁶ Keene, D., (1984) 'A new study of London before the Great Fire', *Urban*
- History Yearbook, vol.11, Cambridge University Press: Cambridge, p. 18.
 Chew, H. M., and Kellaway, W., eds. (1973) London Assizes of Nuisance 1301-1431, London Record Society, pp. 100-104; Thomas, A. H., (1926) Calendared Plea and Memoranda Rolls of the City of London: volume 1, 1323-1364, Roll A 6: 1349-50.
- ⁸ Schofield, J., (2003) *Medieval London Houses*, Yale University Press: New Haven and London, p. 71.
- ⁹ Thomas, A. H., (1926) Calendared Plea and Memoranda Rolls of the City of London: volume 1, 1323-1364, Roll A 6: 1349-50. For the currency conversion see The National Archive's Currency Converter.
- ¹⁰ The economic analysis in this article comes from Dyer, C., (2002) Making a Living in the Middle Ages: the people of Britain 850-1520, Yale University Press: New Haven and London, pp. 271-97.
- ¹¹ Sykes, A., (2020) London's Court of Orphans, forthcoming PhD dissertation, Royal Holloway University of London.

Dr Christine Merie Fox is a post-doctoral researcher, currently living in Utrecht, Netherlands, who specialises in medieval and early modern London and Westminster. Her PhD from the University of London focused on the *Almshouse of Henry VII* and has published several articles from this work. She has also published a book in collaboration with Timothy Hales on the *History of Bassishaw Ward c.1200-c.1600*. Her current research interests focus on the material culture of medieval and early modern London's medical practitioners, drawing comparisons with those in the Low Countries.

Real lives

Flora Sandes

Paula Kitching explores the story of Flora Sandes, a woman determined to make her contribution to the war effort.

n 1914, Flora Sandes was 38 years of age when war was declared. She was born in Yorkshire but had lived in a number of places as her father, a rector, was moved to different locations. When the war started she was living with her family in Surrey and was keen to stop being a secretary and volunteer as a nurse. She had spent a number of years training with the First Aid Nursing Yeomanry (FANY). Although the FANY were not attached in any official capacity to the military they had been founded by a former captain and they were organised along military lines, wore a uniform and were trained in horsemanship and military drill. The purpose of a FANY was to be a battlefield medic who could 'ride into a combat zone and rescue and treat the injured'.

With no formal medical qualifications, Sandes was rejected as a nurse and instead she joined a St John's Ambulance unit organised by an American nurse. The unit was sent to Serbia in August 1914 to help with those injured (civilian as well as military) in the Austro-Hungarian offensive in the country. Sandes then joined the Serbian Red Cross and worked in an ambulance for the Second Infantry Regiment of the Serbian Army.

As the Austrian forces advanced in 1915 all British personnel were told to leave the area by the British authorities, but Sandes refused and instead made her way with various Serbian units towards the Front.

The Serbian military were forced into a retreat through Albania, by which time any other female nurses had left or been killed, Sandes was told that she could do little now as a nurse so was instead given the option of enrolling into the Serbian Forces or trying to return to the UK.

Throughout her life Sandes had been interested in activities that at that time were considered to be masculine pursuits, such as riding, archery and driving fast cars. She had also expressed her desire to be a soldier, and now her opportunity had arrived. She was enrolled as a private but rose to a Corporal.

In 1916 she took part in hand-tohand fighting during which she was injured by a grenade blast. For this she Flora Sandes selling programmes at the war exhibition at Burlington House, London, in aid of the British Red Cross. Library of Congress, Prints and Photographs Division



was promoted to Sergeant Major and received the Order of the Karodorde's star – the highest decoration in the Serbian military. Her injury took her away from the frontline and she spent the rest of the war running a Serbian military hospital. At the end of the war she was commissioned as an officer, becoming a captain before she left the army in 1922.

In 1927 Sandes married Yuri Yudenitch who had also been an officer in the Serbian forces.

Many of her experiences are recorded in her own works including 'An English woman in the Serbian Army' which she had published in 1916 to raise money for was Serbian army. She lectured around the world about her experiences. When the Germans invaded Yugoslavia in 1941, both she and her husband were mobilised once more, but they were not able to do anything before the Germans took complete control. After a short time in internment Yudenitch became ill and died in September 1941.

After the war Sandes settled in Suffolk and she died in 1956.

Flora Sandes was the first British women to serve officially in an army in a frontline combat role, albeit in a foreign army.

Delve deeper with The Historian magazine

The perfect support material for teachers and students



The Historian magazine offers the perfect support material for teachers. It's an opportunity to learn more about those bits of history you need a greater subject knowledge for teaching, just have an interest in or to support your A-level and GCSE students with their studies. It's an ideal tool for encouraging anyone to read more widely around the subject.

Each edition of *The Historian* is themed and offers in-depth yet accessible articles from specialists in their field, as exemplified by the articles in this insert.

Past editions include:

War

This edition looks at war as an expression of a society, where the character and nature of armies, as well as the remembrance of events, can be considered a product of the culture and society from which they arise. *Contributors include Michael Crumplin, Professor Charles Esdaile and Dr Frances Houghton.*



İSTORIAN

HISTORIAN

The Anglo-Saxons

Bringing together some of the latest research and archaeological discoveries, this edition explores the society, politics and religion of Anglo-Saxon England. It also examines fresh methodologies such as the study of landscape, material culture and the importance of women within the period.

Contributors include Professor Michael Wood, Professor Barbara Yorke and Dr Rory Naismith.

The End of Empire

This edition turns to consider how empires come to an end, and to discover where new thinking can help us to better understand the dynamics of empire and their demise. Contributors include Dr Amrita Shodhan, Dr Daniel Steinbach and Professor Matthew Restall.



The Anglo-Saxons

The End of Empire

Revolution

The Russian Revolution of October/ November 1917 changed the lives of millions of Russians but also led to changes across Europe and the rest of the world for decades to come. Those 'ten days that shook the world' are the inspiration for this edition, which explores some of the most famous



European revolutions prior to 1920. Contributors include Professor Malcolm Crook, Dr Simon Constantine and Professor Sarah Badcock.

Hidden stories of a centenary

With the centenary of the end of the First World War in recent memory, this issue explores some the stories perhaps overlooked in the grand narratives of the war and tells the stories of the men and women who were not always the 'typical' Tommy. *Contributors include Kiran Sahota and Paula Kitching*.



Forthcoming themed editions include:

- Migration
- Ancient civilisations
- Architecture and the natural landscape
- The 1920s and 1930s: a new world order



For as little as £33 you can add a year's subscription to *The Historian* to your existing membership, including quarterly print copies and access to the full digital archive. You can also access a number of topic-focused articles from *The Historian* through the HA Student Zone with corporate membership.

Find out more or subscribe by calling 0300 100 0223 or emailing membership@history.org.uk

View a selection of open access editions at:

www.history.org.uk/go/historian20



Make the past your present HA membership: the perfect gift for history-loving colleagues

Historian membership is a unique parting gift for any colleague with a love of or interest in history, and can help turn a classroom passion into a fruitful hobby for those retiring. Many HA historian members are past teachers or have some link to the world of education. By giving membership, you can help them stay in touch with the history community. Celebrate this exciting time for your co-worker with a thoughtful parting gift.

Your lucky recipient will receive:

- a yearly subscription to The Historian magazine
- a personalised gift card with space for your own message
- updates through HA News magazine and e-newsletters
- free online webinars with expert academic historians
- a welcome pack including the latest edition of your chosen journal and other goodies
- free access to over 300 local branch events including talks, walks and visits

Gift membership starts from as little as £40.50 Call: **0300 100 0223** Visit: **www.history.org.uk/go/givehistory**