

‘Medic!’ An Insight into Scottish Field Surgeons, Physicians, and Medical Provision during the Thirty Years’ War, 1618-1648

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THE THIRTY YEARS’ WAR (1618-48) is a subject with a venerable and expansive history. In a brief study such as this, focused on only one small aspect of the war – medical provision – there is no space to rehearse the historiography of it.¹ That said, there were related conflicts that certainly had a bearing on the provision of medical care to Scottish regiments in the Thirty Years’ War, even those which started decades before 1618. The Dutch, who had been in revolt against their Spanish Habsburg overlords since 1568, had been reinforced by the formation of the Scots Brigade, first established in 1572.² When Frederick V of the Palatinate and his wife Elizabeth Stuart struggled to retain their possessions in the Holy Roman Empire in 1620, King James deployed a Scottish regiment drawn from this brigade directly into Bohemia with the intention of aiding his daughter and her family.³ It formed the first wave of some 50,000 Scots who would participate in the Thirty Years’ War in the anti-Habsburg armies alone.⁴ Recent scholarship confirms the scale of the intended levies, the placement of regiments, and the command structures deployed to control them in particular armies at given times.⁵ We also now see investigations into the role and correspondence of common soldiers and women in a welcome move away from the simple aggrandisement of the

1 Some important works include: Parker 1997; Wolke, Larsson, and Vilstrand 2006; Wilson 2009.

2 *Scots Brigade*. i, xii

3 Polišínský 2001, 109-16.

4 Murdoch 2001, 19.

5 Murdoch and Grosjean 2014.

higher officers and noblemen.⁶ Many soldiers would die of disease before even reaching the battlefield, or else be killed in combat when they got there. And, of course, in war there were other casualties: the sick, the wounded, the maimed, and those left mourning. What has not yet been researched is what medical provision, if any, the Scottish soldiery might expect as they went to war. Who would see to their wounds or tend to their illness, or were they to be left to their own devices in such matters? John Lynn argues that women 'provided the primary nursing' of the injured in the early modern period, although the basis for this claim is vague.⁷ Lady Ann Halkett (née Murray), a Scot, is reputed to have acted as a surgeon in the Royal Army at various battles during the British Civil Wars, and certainly had some medical training.⁸ But in truth, references to women assuming the role of field-surgeons are rare. This leaves us looking elsewhere in trying to determine who cared for the sick and wounded of the Scottish regiments. For that, it should be considered how advanced or otherwise Scotland was in terms of medical provision. Similar questions of the countries into whose service these regiments were sent must also be asked. Having done so, it may be possible to draw some conclusions on the medical care the soldiery might expect, depending on the location in which they served.

The history of medical practitioners and the evolution of their craft in Scotland is well known, even if the military aspects are sometimes neglected. The Barber Surgeons of Edinburgh were formally incorporated as a Craft Guild of Edinburgh in 1505 (ratified in 1506) and would eventually morph into the Royal College of Surgeons.⁹ These were the men who, in addition to cutting hair and beards, were in a possession of sharp bladed instruments, and were thus well-equipped for rudimentary surgery such as blood-letting and all forms of amputation.¹⁰ These surgeons did not attend university to learn their trade but instead served a practical apprenticeship lasting up to four years. Later, the Edinburgh Guild would be joined by the Royal College of Physicians and Surgeons of Glasgow, founded by Peter Lowe, author of one of the most famous early modern tracts on surgery.¹¹ First published in 1597, *The Whole Course of Chirurgerie* ran to numerous editions and remained the standard textbook for many medical practitioners in Britain until well into the 1650s. The establishment of the various royal colleges in Edinburgh and Glasgow, coupled with those learning the craft and science of medicine

6 Grosjean, Murdoch, and Talbott 2015, 76-101; Talbott 2007, 102-27.

7 Lynn 2008, 123.

8 Whaley 2011, 146-47.

9 McHarg 1997, xxiv. Introduction by Helen Dingwall.

10 For their role beyond Scotland, see Lindemann 1999, 219

11 Donaldson 2014, 170-79.

overseas – as Lowe had done – meant that Scotland was relatively well-served with practitioners compared to other countries. This would prove useful during the numerous wars of the seventeenth century, which drew Scottish auxiliary forces to Europe, and particularly into Scandinavian service. This was vital because, compared to Scotland, England, or France (where Lowe learned his trade), Scandinavian medicine was in a somewhat more primitive state.

Christian III of Denmark-Norway opened a Faculty of Medicine in the University of Copenhagen in 1537. However, it was not until 1620 that one was also established in neighbouring Sweden, at Uppsala, even though elementary medicine was being taught there before that date.¹² Moreover, anatomical theatres were not built in Copenhagen before 1643 and in Uppsala before 1662, respectively.¹³ That said, surgeons were recognised as an occupation, and a guild was formally established for them in Sweden in 1571 by Johan III.¹⁴ Despite this, medical provision remained rudimentary. Olaus Magnus observed that, during the reign of Gustav Vasa (1523-60), there were seldom any trained medical practitioners in Sweden other than field-barbers and herbalists.¹⁵ Indeed, even on his deathbed, it is said that Gustav Vasa was unable to be attended by any physician or doctor at all.¹⁶ In the early 1600s, during the reign of Karl IX (1604-11), there were apparently still only three doctors to be found in the emerging metropolis of Stockholm.¹⁷ As Sweden grew into her 'Age of Greatness', more came: thirteen arrived in the reign of Gustav II Adolf (1612-32) and seventeen more came during the reign of his daughter, Queen Christina (1632-54).¹⁸ The reason for their coming was two-fold; firstly, it was by this point recognised that the need for improving medical care among the general population had to be catered for. Secondly, Sweden's rise as a European power resulted from an expansionist policy that led her into a state of near-constant conflict with her neighbours. War brought massive military recruitment, and with each campaign came numerous casualties. The authorities in Sweden realised that something had to be done to cater to the vast numbers of wounded soldiers in the field and the subsequently invalided veterans returning home.

The need for medical provision in the military had actually been

12 Kock 1970, 263, 285.

13 Israel 1999, 42.

14 Kock 1957, 114; 1970, 263.

15 Magnus 1555 [1998], ii, 634; iii, 824-25. Magnus also contended that 'wise physicians' were seen only in very small numbers across the whole of Scandinavia, adding, curiously, that this was largely due to the waywardness of the patients.

16 Kock 1970, 263.

17 Lennmalm 1910, 1.

18 Ibid.

previously recognised in Sweden. In the 1520s, Gustav Vasa wanted barber-surgeons to be attached to each unit of 200 men or above, but he appears neither to have specified how many nor which qualifications, if any, were needed by them. Thus individual skills varied greatly. By the 1550s, Olaus Magnus found such practitioners to be in plentiful supply 'for the simple reason that the people hardly let a day or hour go by without fighting'.¹⁹ Erik XIV certainly valued returning veterans and prioritised their care once they returned to Sweden.²⁰ However, it was not until 1613, under Gustav II Adolf, that it was decided that each Swedish infantry regiment should contain one regimental barber and four journeymen barbers. Set Matsson describes them as generally originating from Germany – with only limited training – whilst others insist on the predominance of Dutch medical professionals among them.²¹ Matsson also argues that despite the presence of these men within the regiments, it was not until 1686 that an examination of competence became a requirement. Nevertheless, Gustav Adolf instigated improvements to health care and insisted on the establishment of hospitals in every Swedish province in 1624, although this took time to implement.²² It was a similar story for the provision of care for wounded Swedes returning home, with a dedicated veterans' hospital planned as early as 1622, but which did not open until 1640.²³ Nevertheless, during Gustav Adolf's reign, medical practitioners arrived in Sweden in increasing numbers, continuing the open-door policy encouraged by his father Karl IX.

Among the cohort of doctors arriving in Sweden in the early 1600s, James Robertson of Struan is worthy of note.²⁴ Robertson possibly arrived as part of the 1612 levy of General Sir James Spens of Wormiston, which brought over several thousand Scots to Sweden in July that year.²⁵ Though the specific timing of Robertson's arrival is uncertain, it is clear that he received an appointment as court physician to Gustav II Adolf by 1614 and would later go on to build important apothecary practices in both Stockholm and Riga.²⁶ If the supposition that Robertson had arrived as a military physician

19 Magnus 1555 [1998], iii, 827.

20 Petersson 2014, 187-88. I thank the peer reviewer for bringing this article to my attention.

21 Matsson 2007. Online at <http://www.popularhistoria.se/artiklar/slagfaltets-kirurgi> consulted 17 March 2016. See also Israel 1999, 43.

22 Kock 1970, 267.

23 Petersson 2014, 185, 190-98.

24 'Her Majestie's medical doctor' Robertson was first noted among the four medical men who brought a case against a Dr Singer, effectively forcing him from the realm, after the latter published a tract attacking them. See *Svenska Riksrådets Protokoll*, vi, 236 (Riksråd minute, 31 May 1636).

25 Grosjean 2003, 35-36. This departure date would certainly fit with the tidying up of some of Robertson's affairs in Apr. 1612, after the death of his father. See NRS, GD 172/1693-1694.

26 Levertin, Schimmelp-Fenning, and Ahlberg 1910, i, 27-28; Forsstrand 1925.

is true, there is little evidence that he had anything to do with the army once appointed to the court. Rather, medical provision largely remained with the barber-surgeons, although the understanding of what this profession was allowed to practice varied greatly across Europe.²⁷

While the barber-surgeons in the field had long understood the injuries caused by cuts and puncture wounds, a new problem resulted from the introduction of gunpowder.²⁸ Not only were there the obvious and usually fatal wounds of cannon balls and grapeshot, but even apparently survivable musket and pistol-shots caused problems. The extraction of projectiles proved troublesome and often the preference of leaving them in place was chosen as the least dangerous option.²⁹ Regardless of any decision to do with the extraction of projectiles, the cleaning of foreign matter introduced into the body along with them, such as the wadding from the shot, also proved problematic. It was the consideration of gunshot wounds and their ancillary problems that eminent scholars of military surgery, writing in the nineteenth century, pointed to as the spark for influential changes in the practice of battlefield surgery.³⁰ In so doing, scholars such as Sir George Ballingall quoted directly from the military memoir of Colonel Robert Monro, the famous Scottish soldier-scholar of both Danish and Swedish service during the 'Thirty Years' War'.³¹ This conflict saw Sweden at war in the Holy Roman Empire for some 20 years (1628-48), though in truth, Sweden found herself in continual warfare with her neighbours before and after these dates. Scottish troops were active in these Swedish campaigns since at least 1572 and the arrival of a substantial levy under Archibald Ruthven.³² Given the perilous condition of available medical care in the Scandinavian armies as described above, when Scottish troops entered Swedish or Danish service, they effectively had to be self-reliant in the care of their wounds and illnesses. We are fortunate to have evidence for this assertion.

In his memoir, Robert Monro claimed that there was not a noble family in Scotland that was not 'expert and well taught in dressing and healing the wounds of the body, a knowledge very necessary for men of our profession, that oft times are lost for want of a good cure'.³³ This, Monro insisted, resulted from Scottish nobles following the example of monarchs like James IV of

27 Lindemann 1999, 219.

28 *Ibid.*, 113.

29 For example, Alexander Leslie retained a bullet in his ankle bone for the last thirty years of his life after it was deemed too dangerous to extract. See Murdoch and Grosjean 2014, 58.

30 See the various tracts concerning the care of gunshot wounds discussed in Lindemann 1999, 113.

31 Ballingall 1833, 7-8.

32 Murdoch and Grosjean 2014, 26.

33 Monro 1637, i, 89.

Scotland, who loved to discourse with physicians and surgeons and was himself proficient at healing wounds. This claim suggests that wherever they served, the Scots were capable of providing their own rudimentary medical care. But, surprisingly, there was a formalised expectation among the units that this care would go beyond the life-skills brought to the field by well-read officers.

If Gustav Vasa's desire for specific quotas of barber-surgeons proved more of a wish than a reality, such provision found more concrete implementation elsewhere. The records of the Scots-Dutch Brigade tell us that a surgeon's presence was already an expectation of these units from the late-sixteenth century. For example, Captain William Waddel's commission from 1588 was explicit that among the 130 infantrymen he was expected to raise for Dutch service, a surgeon was to be among their number.³⁴ This insistence was standard, as evidenced in the commission for the 200 men of Colonel Bartholomew Balfour's unit and most subsequent levies which resupplied the Dutch army out of Scotland.³⁵ Yet for all its prestige, the Scots-Dutch Brigade was neither the only, nor the largest of the Scottish military formations operating on the Continent in the seventeenth century, especially once the Thirty Years' War broke out.

In November 1626, Christian IV appealed directly to his blood-nephew, Charles I, to raise two regiments of Scottish soldiers to replace his losses from the battle of Lütter-am-Bamberg.³⁶ By March 1627, patents had been issued for the raising of 9,000 Scots to be levied in three regiments: one under Robert Maxwell, Earl of Nithsdale, another under Alexander Lindsay, Lord Spynie, and a third to be commanded by Baron Murckle.³⁷ These troops joined some 3,000 Scots raised by Donald Mackay, who were originally intended for service elsewhere but had been diverted into Danish service. Among the ranks of these men, we can identify a number of field surgeons, even though the numbers recorded are lower than one might expect. For example, although we can name seven surgeons in Donald Mackay's regiment, we can only identify one in Lord Spynie's and none in either Nithsdale's or Murckle's regiments.³⁸ That does not mean they were not there, but we are left in a quandary as to whether all the regiments contained surgeons or not – a fact exacerbated by the lack of muster-rolls for the Danish army in this period.

34 *Scots Brigade*, i, 82-83 (Commission for Captain William Waddel, 20 Jun., 1588).

35 *Ibid.*, 84-85 (Commission for Colonel Barth. Balfour, 26 Jun., 1588).

36 NA, SP 75/7, f. 235.

37 Murdoch and Grosjean 2014, 43-45.

38 In Mackay's we find serving as surgeons: John Richardson, Donald Bain, John Hay, John Coull, William Welsh, Robert Foratt, and Alexander Robertson. Riis 1988, ii, 121-32. The surgeon in Lord Spynie's regiment was a Master Robert. *Ibid.*, i, 220.

Despite this, Monro was explicit about the care taken by Christian IV in providing for the wounded when the regiment landed on the island of Fyn in Denmark. Having seen some considerable action and being forced to retreat out of Jutland, the Danish king established a reception area to receive the 150 sick and wounded men of the regiment and provided 'skillful Chirurgicalians' to attend them (again, suggesting their own surgeons were not with them).³⁹ In later comments about his Swedish service, Monro twice mentioned that after a battle, as the dead were being buried, the wounded were withdrawn to suitable places where surgeons were appointed to care for them.⁴⁰ In both cases, the inference is that the surgeons did not form part of the army in the field as one might suppose, but were located away from it so they could treat the soldiers in the aftermath of a battle rather than during it. In a Scottish context, there was a legal precedent for this. Only two months before her abdication in 1567, Mary Queen of Scots had granted the Edinburgh Surgeons permanent exemption from bearing arms; in return they agreed to treat the wounded from behind the lines.⁴¹ If Monro's experience was normal, and the surgeons were not near the combat zone, some credence might be conceded to Lynn's claim that female camp-followers provided primary nursing for the wounded, though why fellow soldiers and male camp-followers did not do likewise still awaits a fuller explanation. Evidence is certainly required, given Monro's claim that medical knowledge among the soldiery was quite common, begging the question as to why they would not administer first aid to their comrades?

Given the array of wounds inflicted, it should come as no surprise that the field surgeons could not always cure the wounded, and many men were lost despite their best efforts.⁴² During the Siege of Stralsund in 1628, Monro was wounded in the knee and found that no surgeon in the town would operate on it without a guarantee he would not go lame, so he opted to leave the bullet in the knee and travel to Copenhagen for more 'agreeable treatment'.⁴³ The significance of Monro's journey is that it once again raises questions about available medical provision. Bearing in mind that this is a regiment recorded as containing seven surgeons, Monro seemed to imply on this occasion that it was local surgeons he was relying on rather than those appointed to serve his unit.

39 Monro 1637, i, 33

40 *Ibid.*, ii, 65, 71.

41 McHarg 1997, xxvi-xxvii.

42 Monro 1637, ii, 149-50.

43 Monro 1637, i, 75. For details of the siege and the Scottish role within it, see Murdoch and Grosjean 2014, 47-50. That was not a particularly onerous journey for Monro to make. Others travelled much, much further. One Scottish soldier, wounded in Muscovy in 1617, travelled all the way home to Edinburgh to get suitable treatment. See McHarg 1997, xxvii.

While Monro had the luxury to travel some distance for treatment, others were not so lucky. He provides numerous examples of injury and amputation in the field, but he also does us a great service in shedding light on the distinctions made between sick and wounded men. This allows us insight into the call for two sorts of medical men within the regiments: university-trained doctors (physicians) and the practically-trained barber surgeons.⁴⁴ The former were to deal with infections, disease, and seasonal viruses, while the latter attended to traumatic injuries. The requirement for both forms of medical men within the European armies – and the numbers of each to be appointed – varied from country to country. For example, in 1629, the *Code Michaud* stipulated that, in France, every regiment and military fortress was to be provided with both a surgeon and a physician, though this was apparently seldom the case in practice.⁴⁵ Sometimes, the two roles could be invested in a single person. Alexander Balcanquhall petitioned to be appointed to the rank of Surgeon-General to the Scots-Dutch Brigade in 1618 after the death of the previous incumbent, Mr Robert Beton.⁴⁶ In his application, Balcanquhall is explicit that Beton had fulfilled the role of both doctor and Surgeon-General to the Scottish regiments. Whether the role was always held by one man in the Dutch Republic is yet to be determined, but the establishment of the rank is beyond contention. A Surgeon-General was also appointed to the Scottish contingent sent to Christian IV in the 1620s in the person of *Generalfeltskær* (Surgeon-General) Alexander Hume.⁴⁷ However, when Alexander Leslie, Earl of Leven, led his soldiers into England in 1644, he had among his general staff officers both a 'Physitian General' and a 'Cherorgon General'.⁴⁸ That these men appeared in the list of staff officers gives some indication as to the importance and recognition the medical men had attained in the military by the mid-seventeenth century, though that had not always been the case. One way we can demonstrate this is by looking to the rates of pay allocated to the medical staff and comparing this with the pay awarded to other soldiers and officers.

From the records of the Scots-Dutch Brigade in the 1570s, we know that a military surgeon could expect to receive 12 guilders per month (24 English shillings or £1:04:00 Sterling). This was the same rate of pay as a drummer and a clerk. For comparison, the captain of the regiment received 90 guilders (£9) and the lieutenant 45 guilders.⁴⁹ In terms of parity of pay, things had improved

44 Monro 1637, i, 33.

45 Brockliss and Jones 1997, 253.

46 *Scots Brigade*, i, 292-94.

47 Riis 1988, ii, 112.

48 NA, SP 41/2.

49 *Scots Brigade*, i, 46, 20n2.

considerably for the surgeons by the 1620s, even if there was some fluctuation in exchange rates and comparative value of currency. Whereas a captain had once been paid seven-and-a-half times more than a surgeon in the 1570s, by the time the Earl of Morton levied his regiment for action in France in 1627, the captain only received four times as much. In this case, the captain received £12 sterling per month while the surgeon received £3 in wages.⁵⁰ Indeed, there was now almost uniformity of pay with an ensign who previously might have expected three times the rate of pay to a surgeon but now merely received sixpence more per day. Even the apprentice barber-surgeons sent out with Morton were on an exact parity of pay with the surgeon himself, indicating the increase in value placed upon their services.

One of the reasons for the improved pay rates commanded by the surgeons can be found in the increasing opportunities available to them in the first half of the seventeenth century. Not only could they look to remain at home or serve abroad in the army, but there was a need for good surgeons aboard English and Dutch naval and merchant ships, as these two powers sought territorial and commercial expansion across the globe. Jonathan Israel specifically points to the 1630s as a point of significant wage increases for any skilled person taking ship from the Dutch Republic in either the naval or private company fleets.⁵¹ By 1652, this saw the surgeons' monthly pay still holding at 30 guilders (£3 sterling), but this made him the highest paid officer on board the ship alongside the captain and the pilot, although he had to maintain his medical chest from this.⁵² At the same time, a drummer in the army received only a maximum of 10 guilders (£1 sterling) – a third of the pay of a surgeon where there had once been parity.

With this in mind, an investigation into the notarial records of Rotterdam sought to establish whether Scottish surgeons were drawn to the Dutch Republic during the period of rapid wage increase indicated by Israel. Although chaotically arranged, the archives quickly revealed that Scottish surgeons were indeed active in and around the city, and those identified to date appear in the notarial record base only from 1630 onwards. For example, Mr William Lawson from Edinburgh served as a surgeon and empowered Robert Dony (a.k.a. Donij) to collect 56 guilders from the admiralty which he owed his countryman, presumably for accommodation at the aptly named

50 *Earl of Stirling's Register*, i, 201 (Rates of Pay, 22 Aug. 1627). The surgeon got paid 2 shillings while the captains were paid 8 shillings.

51 Israel 1995, 352.

52 Boxer 1965, 337-42 (Appendix II, Salary scales). One Jan Schot (John Scott) took out a debt of 160 guilders from Hercules Cruijs for the fitting out of his medical chest after taking up his position as a surgeon in the Dutch Fleet in 1643. See RCA, ONA 422, 158/204 and 159/206.

lodging 'The Cross of St. Andrew'.⁵³ Within months, another Scottish surgeon, Mr William Hamilton, could be found making a similar power of attorney in relation to the collection of his wages from the admiralty.⁵⁴ Within days of Hamilton's declaration, Joris With (George White) had arrived from France to take up his post as a surgeon in the Scottish regiment of Colonel William Brog.⁵⁵ From his notarial declaration, we gain insight into his year-long training at Paris, his eight-month service in Grenoble as a surgeon's apprentice, and his subsequent move to the Scots-Dutch Brigade. Other Scottish surgeons followed. Surgeon Cornelius Bruce, 'een Schot' and resident of the IJsselmonde district, left a declaration in 1636 stating that he owed Ifgen Raemsen (Ramsay?), widow of Andrew Forrat, 100 guilders.⁵⁶ That this cluster of Scottish surgeons arrived in Rotterdam for civilian, military, and naval service within the period scholars equate to the hike in rates of pay appears to confirm the Dutch Republic as a destination of choice for medical practitioners. But their records also show that there were costs associated with these jobs, both in seeking out accommodation and in equipping themselves for their medical roles.

As noted above, the expectation was that surgeons had to stock and maintain their own medical chest. In 1627, the Earl of Morton's surgeon invested no less than £10 sterling as an initial outlay.⁵⁷ Obviously, depletion of materials would depend on usage, which would surely vary depending on sickness and battle casualties. But over time, we can see that maintaining the chest over several years could cost as much as the original investment. Upon the death of her husband, the widow of William Welch reminded his former commander, Donald Mackay, that not only was he still owing £272 for her husband's back pay, but also £20 sterling for 'the outfitting of his box of remedies'.⁵⁸ Welch had been in Danish and Swedish service for around seven years by the time of his death. Therefore, the £20 seems entirely appropriate for this length of service. Moreover, from the wage claimed by his widow, and given the uncertainty of Welch's actual date of death, £272 sterling over a seven-year period (ca. 2,555 days) would equate to 2.1 shillings per day (compared to 2 shillings for Morton's surgeons). This neatly highlights a parity of salary for those leaving for the Danish and French campaigns of 1627, even though there was clearly tardiness in actually receiving it. In Sweden, rates of pay were again similar with surgeons receiving 12 riksdaler per month (£3

53 RCA, ONA 192, 268/374. See also ONA 192, 24/29.

54 RCA, ONA 193, 17/26. See also ONA 201, 168/225.

55 RCA, ONA 93, 193/309. See also ONA 321, 76/179.

56 RCA, ONA 111, 167/313.

57 *Earl of Stirling's Register*, i, 201 (Rates of Pay, 22 Aug. 1627).

58 Riis 1988, ii, 132.

sterling), which again equates to the basic rate of 2 shillings per day outlined as the standard rate of pay for surgeons in Swedish service in 1621.⁵⁹ However, muster-rolls of various Scottish regiments reveal that, by 1630, the actual amount being paid out to barber-surgeons had declined to only 4 riksdaler per month (£1 sterling), or a third of the wages on offer to surgeons in Dutch service.⁶⁰ This was matched by a general decline in wages across the infantry regiments.⁶¹ This dramatic change in the remuneration available to surgeons in Sweden, especially contrasted with better rates of pay elsewhere, may hold the key to other anomalies to medical provision thrown up by the muster-rolls held in Krigsarkiv (the Swedish military archives).

By the time of the Swedish entry into the Thirty Years' War, not only were Swedish-based barber-surgeons getting considerably less pay than their Dutch-based counterparts, but it is also clear that many units were devoid of any surgeons at all.⁶² In 1630, some Scottish regiments, such as those of John Meldrum and James Seton, certainly had the full quota of surgeons expected.⁶³ Similarly, Mackay's regiment (now called Monro's) certainly had four surgeons in the summer of 1632.⁶⁴ However, the majority of regiments sampled from the muster-rolls held in Stockholm's military archives had few medical practitioners and it seems to have been a matter of luck as to which regiments retained barber-surgeons. For example, Robert Leslie and Alexander Leslie's regiments both contained only a single barber-surgeon each in 1630, as did two German regiments scrutinised for comparative purposes.⁶⁵ Colonel Spens' regiment of Scots was apparently devoid of any surgeons at all.⁶⁶ Moreover, no Surgeon-General or Physician-General accompanying

59 This was stated in the Swedish 'Articles of War' of 1621, published in English as *The Swedish Discipline*, 76-77.

60 KrA, MR 1630/37 f. 6; KrA, MR 1630/23, ff. 271, 307. Meldrum records both 'lending' and 'monthly pay' in two distinct columns. He appears to have recorded the two sums in the wrong columns. In *The Swedish Discipline*, 79-78, an explanation is given for 'lending' (*Lehung*), equating to an advance in wages, but also a different rate of pay for garrison versus field service. In this case, the advance seems appropriate. Michael Roberts believes this *Lehung* only applied to mercenary units, but scrutiny of Axel Oxenstierna's papers show that it was used for indigenous Swedish troops as well. See Roberts 1958, ii, 217-18. I thank Professor Maria Sjöberg and Dr Björn Asker for discussing this particular set of documents with me.

61 Roberts 1958, ii, 218.

62 KrA, Karl Viggo Key Samlingen. Colonel Robert Cunningham's Regiment, Muster Roll, Sep. 1633; KrA, MR 1634/12, f.77.

63 KrA, MR 1630/23, f.271; MR 1630/23, f.335.

64 KrA, MR 1632/28, f.115. Major John Sinclair's company and Staff officers list on f.128.

65 KrA, MR 1630/23, f.347; MR 1630/34, f.69. Captain Harry Ramsay's company. The two German regiments reviewed were Colonel Frederik von Rosen's (KrA, MR 1630/29, f.192) and Colonel Ernst Dönhoff's (MR 1630/29, f.263). In both cases, the barber-surgeons received 4 riksdaler for the month.

66 KrA, MR 1632/28, ff.390-404.

the Scottish regiments in Sweden has yet been identified, even in the two predominantly Scottish formations of the Swedish campaigns: the Hamilton Army of 1631-3 or Alexander Leslie's 'Army of the Weser' operating between 1636 and 1639. The reasons for the dearth of medical men can be attributed to a number of factors, including the previously mentioned disparity of pay available in other theatres of the war and beyond. Other issues, such as the high attrition rates among the expeditionary forces, may also reveal the inability of the medical profession to keep up with demand for their services overseas.

That being said, scholars should not believe that the commanders did not care about the health and well-being of their men. Indeed, the opposite appears to be true. Established military hospitals were a relatively new phenomenon at this juncture.⁶⁷ In Scotland, the impact of the Thirty Years' War led Colonel Robert Monro to raise funds in 1634 to build a hospital in Scotland for the care of returning soldiers, such as earlier envisaged for Swedes by Gustav II Adolf.⁶⁸ From the wording of his patent, it is clear that this venture was meant to support the 'old and lame' veterans, and to be funded by a voluntary donation from the officers of the men concerned. This consideration for the sick and injured continued once Alexander Leslie returned to Scotland to form the Army of the Covenant in 1639. His *Articles of War* (republished several times between 1639 and 1644) were drawn in-part from the earlier Swedish 'Articles of War' of 1621, authorised by Gustav Adolf.⁶⁹ Leslie's hugely significant change was to place the care of sick men as article number one, replacing the first Swedish article which simply prohibited the use of witchcraft and enchanting within the army.⁷⁰ Nowhere in the Swedish articles is the care of sick or wounded soldiers prioritised in this way. It was also in this same period that Leslie insisted on the deployment of both a Surgeon-General and a Physician-General into his expeditionary army in England. This reflected earlier practice from the Scots-Dutch Brigade rather than from the Swedish army in which Leslie had once served. Perhaps these two factors – Leslie's 'Article One' and the two medical positions on the General Staff – together indicate a different set of priorities between the one-time common soldier turned field marshal, Alexander Leslie, and the umquhile king of Sweden whom he had formerly served.

67 Brockliss and Jones 1997, 253-54. The hospital was staffed by four physicians, three master-surgeons, three journeymen-surgeons, five apprentice-surgeons, and two apothecaries.

68 Robert Monro wished to see to the needs of wounded soldiers based on the voluntary contribution of the officers to go towards the establishment of a veterans' hospital. For the hospital, see *Register of the Privy Council*, v, 349.

69 *The Swedish Discipline*.

70 Leslie 1643 and 1644, 2.

Conclusion

This brief survey has established a number of important points in relation to the provision of medical care during the Thirty Years' War. Even before the war had started, there was an expectation in Scottish units that expeditionary forces should be accompanied by a suitable cohort of medical men. By the end of the sixteenth century, Scotland could train and educate both surgeons and physicians in sufficient numbers to supply her armies, and draw on countrymen trained abroad to support them. Although initially paid at the lower end of the pay scale, the period through until 1630 saw more equitable arrangements for the barber-surgeons serving in Sweden, the Dutch Republic, or France. Their rise in status can be measured through their increased remuneration and parity of pay with higher officers over time. That said, increasing opportunities in military, naval, and private civilian companies, especially in the Dutch Republic, appears to have impeded the ability of the Scottish regiments in other armies to attract or maintain sufficient medical care within their companies. The higher wages in Dutch service after 1630 may, therefore, have accounted for the lack of comprehensive medical provision for those in Swedish service who served in the German theatre. Whether directly attributable to the Dutch wage-hike or not, a shortage of surgeons led to the pooling of the medical cohort into areas which can best be described as rudimentary field hospitals behind the front lines. When discussing medical provision to Scottish regiments, we therefore have to be very specific about the exact place, time, and context in which they operated. Factors such as the availability of suitably trained men and the money available to fund them must be contextualised alongside the desires, abilities and opportunities open to the medical practitioners concerned. Such factors greatly affected the balance of surgeons to soldiers, as well as the rank the surgeons and physicians could reach in the different belligerent armies throughout the conflict. Regardless of their best efforts, in too many cases the work of the medical practitioner was simply not enough to stem the terrible rates of attrition seen throughout the many theatres of the Thirty Years' War.

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