

## HEALTH CARE AND THE BRITISH NAVY, 1689 - 1713

# **HEALTH CARE AND THE BRITISH NAVY**

**1689 - 1713**

By

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## **ABSTRACT**

This study examines the health care system which existed for the men of the British Navy between the years 1689 and 1713. The first half of this work considers the administrative side of the health care system, including both government offices and health care personnel. The second half presents the way in which the system actually functioned, with an emphasis on the rates of morbidity and mortality as they appear in a sample of ship's muster books. The majority of the conclusions reached in the course of this work are based upon unpublished primary sources held in various libraries in London, England.



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Throughout this work, spelling and punctuation in quotations remains as it was found in the original. January first is taken as the beginning of the new year, but otherwise dates follow the Julian Calendar (O.S.), unless otherwise specified. Although the creating of the Kingdom of Great Britain did not occur until 1707, for uniformity, the term “Britain” and “British” will be used throughout to describe the geographic area of England, Scotland and Wales, and the royal government which oversaw the conduct of the wars.

## ABBREVIATIONS

The following abbreviations have been used in the citations at the foot of pages:

BL	British Library, London
<i>C.S.P.C.</i>	Calender of State Papers Colonial - America and West Indies
<i>C.S.P.D.</i>	Calender of State Papers Domestic
<i>C.T.P.</i>	Calender of Treasury Papers
NNML	National Naval Museum Library, Greenwich
PRO	Public Record Office, Kew

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For the number of seamen in time of war who die of shipwreck, capture, famine, fire, or sword, are but inconsiderable in respect of such as are destroyed by the ship diseases and by the usual maladies of intemperate climates.

- *James Lind* -

## INTRODUCTION

The Royal Navy of England in the late seventeenth and early eighteenth centuries was a world unto itself. Sailors in the Royal Navy were governed by the laws of the Admiralty; their dress, language and customs set them apart from their fellow Englishmen. Each ship in the fleet was a self-contained community with each man fulfilling a specialized task. The British government, both in London and in the various colonial capitals, recognized that these men of the sea played an essential role in national defense, a role which could *not* be filled by a landsman. Sailors were valuable and there never seemed to be enough of them around. Keeping sailors alive became a priority of the government. When the Navy emerged from the stagnant period of early Stuart administration a special royal commission, the Commission for Sick and Wounded Seamen and the Exchange of Prisoners of War<sup>1</sup>, also known as the Sick and Hurt Board, was established in 1653 to deal with the casualties in the First Dutch War.<sup>2</sup> Thereafter, the Commission was dissolved at the end of each conflict and re-formed at the beginning of the next.

The government, in co-operation with the Barber and Surgeon's Company of London, selected qualified surgeons to go to sea with the fleet to care for the men both while at sea and when the fleet docked in a foreign port. The candidates were examined in surgery by a committee of members from the Barber and Surgeon's Company. After 1709, they were also examined in

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<sup>1</sup>Hereafter referred to as the Commission for Sick and Wounded Seamen.

<sup>2</sup>J.J. Keevil, *Medicine and the Navy* Vol.II (Edinburgh: E.& S. Livingston, Ltd., 1958), p. 20.

physic by medical men who were members of the Commission for Sick and Wounded Seamen. These examinations occurred prior to the surgeon receiving his warrant making him a warrant officer (that is, a non-commissioned officer) and then serving at sea. Each was equipt with a chest of instruments and a chest of medicines and charged with the lives of the crew. These were qualified medical men who chose to practice at sea. Nevertheless, many military and maritime historians of the Stuart period write indiscriminately of the tremendous losses suffered by the Royal Navy. Marcus Rediker claims that “almost half of all those pressed [into service] in the seventeenth and eighteenth centuries died at sea,”<sup>3</sup> although he offers no proof for this statement. Ruth Bourne, one of the earliest historians of the late Stuart period, states that the life expectancy of a sailor with the West Indian fleet was three years.<sup>4</sup> She too lacks statistical proof for her statement. In an effort to illustrate the tremendous hardships that the British Navy faced in the late seventeenth and early eighteenth centuries, these historians have made statements regarding the high rate of mortality in the Navy for which they do not provide evidence. This work will show that the mortality level was, in fact, far lower and that the manning problems faced by the Navy were not caused exclusively by loss of life but were the result of a number of factors.

Thus, an historical myth has been fostered that members of the Royal Navy spent much of their time at sea attending funerals. This myth was begun by the sailor’s own contemporaries. Edward Ward, a London innkeeper published a book in 1708 entitled, *The Wooden World Dissected*, in which he gives a vivid characterization of the members of the Navy. Of the surgeon

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<sup>3</sup>Marcus Rediker, *Between the Devil and the Deep Blue Sea*. reprint (New York: Cambridge University Press, 1990), p.33

<sup>4</sup>Ruth Bourne, *Queen Anne’s Navy in the West Indies* (New Haven. Yale University Press, 1939), p.125

he had to say, “the Mystery of his Art and Science, consists in a long List of Fustian Words and Phrases, whose true sense he is more puzzl’d to lay open than to anatomize the Body of a fat Capon...but, betwixt you and me, the Slaughter-house on *Tower Hill*, would scarce grant him their Journey-man’s wages.”<sup>5</sup> Although N.A.M. Rodger, the historian of the Georgian Navy, does not believe that this work, or that of the Georgian novelist Tobias Smollett, deserve to be used as credible evidence,<sup>6</sup> this contemporary description of a sea-surgeon is a useful indicator of public perception of the hazards of service in the Navy. Tobias Smollett, who served at sea as a surgeon’s mate in the Mediterranean under Admiral Vernon in the early 1740’s, told of his experiences in a semi-autobiographical novel entitled *The Adventures of Roderick Random*.<sup>7</sup> His portrait of the conditions at sea in the eighteenth century British Navy is the most vivid of all contemporary accounts:

when I followed him [second surgeon’s mate] with the medicines into the sick birth or hospital, and observed the situation of the patients, I was much less surprised that people should die on board, than that any person should recover. Here I saw about fifty miserable distempered wretches, suspended in rows so huddled one upon another, that not more than fourteen inches space was allotted for each...and deprived of the light of the day as well as of fresh air; breathed nothing but a noisom atmosphere of the morbid steams exhaling from their own excrements and diseased bodies, devoured with vermin hatched in the filth that surrounded them.<sup>8</sup>

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<sup>5</sup>A Lover of Mathematics [Edward Ward], *The Wooden World Dissected* 2<sup>nd</sup> edition (London: by H. Meere, 1708), pp.60-61.

<sup>6</sup>N.A.M. Rodger, *The Wooden World* (London: Collins: 1986), p.14.

<sup>7</sup>For Smollett’s sea service see: *Cambridge Guide to Literature in English*. Ian Ousbey, editor. (New York: Cambridge University Press, 1992), 929.

<sup>8</sup>Tobias Smollett, *The Adventures of Roderick Random* 1748 (London: Oxford University Press, 1952), pp.189-90.



To this can be added the description of a contemporary of Edward Ward who took the pseudonym of Barnaby Slush and claimed to be a sea cook aboard H.M.S. *Lyme*. He has this to say in 1709 of life at sea in the Navy: “if sickness, or some malicious Bullet, or more malicious *Sea-Goddess*, chance to throw him [the sailor] under the Hands of the *Surgeon*; there loose corns even of half a Years gleaning, are at once swept away by the kind Hand that Cures them.”<sup>9</sup>

The preceding quotations are depictions portraying health care in the Royal Navy in its worst light, and some historians have reiterated this bleak view in keeping with the historiographical emphasis upon high naval mortality. Maurice Bear Gordon, in the standard account of naval medicine during the American Revolution, comments at length on the archaic standard of medicine and states that: “Pus was expected from every wound and the doctor was scarcely ever disappointed.”<sup>10</sup> John Ehrman, in his definitive work on William III’s Navy, cites a fourfold cause of the exceptionally high mortality rate: the experimental naval architecture; chaotic naval administration; the rudimentary level of medical science; and the fact that sophisticated techniques of food preservation were unknown. Naval surgeons are not exempt from blame: “[they] were probably not much worse than those ashore, but their methods had to be

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<sup>9</sup>Barnaby Slush, *The Navy Royal: Or a Sea-Cook Turn'd Projector* (London: for B. Bragg, 1709), p.5. It is unclear whether the phrase “there loose corns” is a misprint for “their loose coins” or whether this phrase had a contemporary meaning which is lost today. The Oxford English Dictionary sheds no light on alternate meanings of the word “corn” which could apply to this phrase. What is clear is that Slush is critical of the number of young men who died at the hands of the surgeon.

<sup>10</sup>Maurice Gordon, *Naval and Maritime Medicine During the American Revolution* (Ventnor, N.J.: Ventnor Publishers, 1978), p.58.

drastic and their ignorance was considerable.”<sup>11</sup>

There are some positive discussions of the role that the sea surgeon played in the Royal Navy. Michael Lewis, in his survey of the British Navy, had this to say of the contribution that the surgeon made to the life of a ship: “The belief in the ‘expert’ is deep-seated in man, and the simpler the man the deeper the belief. The presence of a surgeon on board...[and] the existence of a medicine chest, even if empty, was a strong morale-maker, and a great deal better than nothing.”<sup>12</sup> The psychological impact of the presence of a surgeon is one which has been often overlooked in standard military history texts. However, it is not difficult to understand the comfort that a qualified surgeon would bring to the crew of a ship that was designed to engage in battles with the enemy in foreign seas which harboured strange and new contagions.

N.A.M. Rodger’s work *The Wooden World* is concerned with the Georgian Navy; however, some of his comments regarding health care are useful. He includes a positive assessment of the state of health care in a section of the work devoted to victualing and health. He states that although there existed a contemporary terror of a posting in the West Indies, the overall mortality rate within the Navy was low. He cites the case of British men-of-war in the West Indies in the 1740s which had a mortality rate of six per cent which, “by eighteenth century standards...was not a disastrously high death rate.”<sup>13</sup> The remainder of the section is concerned with medical advances made within the Navy during the later eighteenth-century, and his overall

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<sup>11</sup>John Ehrman, *The Navy in the War of William III, 1689-1697* (Cambridge: University Press, 1953), p.125.

<sup>12</sup>Michael Lewis, *The Navy of Britain - A History of Navy Life and Policy* (London: Cresset Press, 1954), p.187.

<sup>13</sup>N.A.M. Rodger, *The Wooden World*, p.99.

conclusion is favourable.

Another positive work is that of J.J. Keevil. In his three-volume work, *Medicine and the Navy, 1200-1900*, he devotes much of the second volume, 1649-1714, to the health care system of 1689-1714. This has become the quintessential work on medicine and the Navy, and is only now being challenged. His discussion of the bureaucracy of medical care is invaluable and he provides biographical sketches of many of the prominent published sea-surgeons and physicians of the period. The greatest shortcoming of the work is the near total absence of the ordinary seaman. Other than an appearance in casualty figures, the men who manned the ships, their treatment when ill, and their chances of survival are not part of Keevil's study. His assessment of the quality of care at sea is much more positive than that of military historians. He is not as generous with his assessment of the administration of health care. He makes the judgement that, "the failure to obtain fresh provisions at every opportunity can be accounted for only on the grounds of economy. It was in fact cheaper to replace seamen than to replace stale victuals."<sup>14</sup> This criticism is harsh, particularly in light of the many letters and orders which clearly show that the Commission for Victualing worked tirelessly to provide good quality victuals for the men.<sup>15</sup> They were not always successful, but credit must be given for the attempt. In point of fact, contemporaries do not appear to believe that it was easier to replace seamen than victuals; quite the reverse was true.

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<sup>14</sup> J.J. Keevil, *Medicine and the Navy* II, p.209.

<sup>15</sup>J.D. Alsop and K.R. Dick, "The Origin of Public Tendering for Royal Navy Provisions, 1699-1720" in, *The Mariner's Mirror*, 80.4 (November 1994).

This article is concerned with the way in which the Commission for Victualing used advertisements in the *London Gazette* to contract with men who could provide high quality foodstuffs for the Navy.

This study is a more detailed consideration of the work begun by J.J. Keevil. In producing a survey of British naval medicine, Keevil was forced to introduce all aspects of naval medicine. This work will concentrate on the health care *system*: its creation, the theoretical way in which it was designed to work in theory and the reality of how the system affected the lives of the seamen of the Royal Navy. This study is based upon a careful consideration of primary documents, the majority of which are in manuscript form, whereas Keevil relied heavily upon printed material.

Did employment in the late Stuart Royal Navy mean almost certain death? The muster books and incomplete medical records of the period employed below appear to say no. The government made a concerted effort to provide care for the men who served in the Navy. They provided qualified surgeons, and later some physicians. Hospital ships were recognized to be an important contingent in the fleet. Hospitals were built at many of the English ports where the sick and wounded were most likely to be set ashore, and where there were no hospitals sick quarters were arranged so that the sick could be cared for by local inhabitants at the government's expense. The Navy also made arrangements with the three major charitable hospitals in London — Bethlem, St. Bartholomew's and St. Thomas' — to provide care for the more seriously ill, the mentally ill, or those in need of surgery. In addition, hospitals were built at foreign stations (in particular Lisbon and Jamaica). Finally, Greenwich Hospital was designed by Sir Christopher Wren in 1692, at the bidding of Queen Mary following the deadly Battle of La Hogue. Completed in 1702, the Hospital served as a monument to the late Queen and as a safe haven for many crippled sailors.

From 1689 to 1713 England was nearly constantly at war. The Nine Years War, or the War of English Succession (1689-1697) saw the Royal Navy deployed in the English Channel, off

the coast of Ireland, in the Mediterranean and protecting shipping routes between England, the West Indies and the North American colonies. During the War of Spanish Succession (1702-1713) the fleet was again deployed in the aforementioned theaters of operation. The Admiralty and other administrative offices of central government learned from the first nine years of warfare and applied that knowledge to the second, eleven-year conflict. The government attempted to provide a basic level of health care for the men of the Navy, both those who sailed the seas and those who laboured in the dockyards, so as to ensure that the defense of the realm would not be compromised due to a shortage of qualified manpower. The men and women who provided that health care worked with the knowledge and technology available to them to try to treat the sick and wounded. The state created a system reminiscent of feudal paternalism by establishing commissions and founding hospitals to care for those men who fell ill or were injured while in service. The motivation of the state may have been self-serving; nevertheless, the attitude of supporting those in the Navy succeeded in keeping the ships manned and creating the force which would, in the eighteenth century, unquestionably rule the waves.

One important, though vastly underused, source which was consulted in the course of the research for this work is the muster books of the Navy. These books were kept by the captain and purser of each ship in the Navy as a record of the victuals expended.<sup>16</sup> There are thousands of these books and as it was impossible to examine each of them, a sample was taken. A list was compiled from various government sources of the name, rate and complement of the ships of the fleet. Based upon this list a second list was compiled consisting of a sample of 10% of the number of ships in each rate; it was the muster books for these ships which were examined in this

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<sup>16</sup>N.A.M. Rodger, *The Wooden World*, p.88.

study. In addition, all the muster books for all of the hospital ships were studied. Not all of the books survive. In fact, all of the books from the first half of the alphabet are missing, and the books for any given ship are usually not complete for the entire period of service. The books from thirty-eight ships were examined, out of a Navy of some 500 vessels, great and small, and they will form the basis of any comments regarding statistical rates in the Navy.

Another underused source which was used to learn more about the men who served as surgeons in the Royal Navy was the Surgeon's Warrants which are held in the Public Record Office. Created by the Navy Board, when a surgeon or surgeon's mate was qualified to served in the Navy, these warrants are unbound, handwritten and organized alphabetically. The majority of the surviving warrants are for surgeon's mates, rather than surgeons. Although all letters of the alphabet are represented (unlike the muster books) it is impossible to estimate how many of the total number of warrants which were issued by the Navy Office have survived. There are more than 800 warrants for the period 1700 to 1714 and these have been used to make statements about the men who served at sea as surgeons and surgeon's mates.

During the eighteenth century the publication of newspapers expanded. All issues of the London Gazette, the official organ of the state and a major source of published information were read for 1689 to 1713 for information pertaining to the landing of sick and wounded seamen. Other newspapers which have survived and were printed during the period in question were also consulted, although the information they provided was less useful.

Finally, much of the primary source information used in this work consists of correspondence between various parties. Some of this has been printed in assorted calenders and collected by the Historical Manuscript Commission; however the majority of the correspondence

remains in manuscript form in the British Library, the National Naval Museum Library, and the Public Record Office.

This work is divided into two sections. The first will consider the way in which the health care system was established and how, in theory, it was to function. The focus is on the administrative side of the system, the facilities used by the administrators and the personnel who manned the system. The second half of the study concentrates on how the system worked in reality. This includes a statistical analysis of the morbidity and mortality rates in the Royal Navy during the Nine Years War and the War of Spanish Succession, a discussion of the problems faced by the Commission for Sick and Wounded when trying to accommodate the men who were set on shore for the recovery of their health and, finally, the provisions made by the state for the care of disabled seamen. The consideration of mortality does not include those men who died in when their ship was lost during a storm. There were thirty-four ships which were sunk during storms between 1689 and 1713; eight of those were lost in the Great Storm of 1703. These losses due to an act of God have been omitted since the focus of this study is on health care. In the course of these chapters it will be proven that the health care system established by the state was successful in treating the sick and wounded men of the Navy, keeping the fleets healthy and making arrangements for those who were disabled in service. This work refutes the claims by many historians that the manning problem faced by the British state during both the Nine Years War and the War of Spanish Succession was caused by the high rate of mortality in the Navy. It will be shown that there were other causes for the manning problem and that the quality, and quantity, of health care available to *all* men who served the state at sea was more than adequate to answer to the needs of the Royal Navy.

## CHAPTER ONE

### ADMINISTRATIVE STRUCTURE

The Navy of the late seventeenth century was the product of over one hundred years of development. Henry VII built England's first Navy and he instituted many of the primitive forms of the governing bodies which controlled William III's Navy. As John Brewer has emphasized in his work on the 'fiscal- military' state of the eighteenth-century, "the Glorious Revolution embroiled England in the struggle with Louis XIV and inaugurated a quarter century of war with France. There was no more powerful stimulus to administrative growth....The fiscal and military departments burgeoned and new offices were established administered by committees or 'boards'."<sup>1</sup> The administration of the Navy became professionalized as never before. A trend of state centralization emerges in the late seventeenth and early eighteenth centuries. The state is involved in the feeding and care of the men in the Navy. The Commission for Sick and Wounded Seamen may have been a temporary body during this period, but the state invested it with the authority to ensure that the sick and wounded received proper care. With centralization came a similar movement towards standardization in the Navy,<sup>2</sup> and the move to have the Commission for Sick and Wounded control the outfitting of hospitals ships.

The Navy was divided into two major departments: the Admiralty, which controlled the deployment and regulation of the fleet, and the Navy Board, which was concerned with the

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<sup>1</sup>John Brewer, *The Sinews of Power - War, Money and the English State, 1688-1783*. (London: Routledge, 1989, 1994), p.65.

<sup>2</sup>This will be examined in Chapter Three.



physical stores of the fleet. The Commission for Sick and Wounded was under the direction of the Admiralty. This Commission was responsible for the health care of all men who served in the Royal Navy and served as the link between the state and the sick and wounded seamen. The Commissioners were the hands of the government, ensuring that the sick and wounded were cared for.

The attitude of the state towards the health of her seamen developed over time, in much the same way as the administrative structure did. In fact, an increased awareness of the problems of the health of seamen was reflected in the increase in size of the administrative body which would oversee such matters. The need for this sort of body became evident during the health care crisis faced by Henry VIII, when there was no official political body which would be responsible for the care of the sick. In 1545 there was an outbreak of plague in the fleet. The sick were kept on board their ships so that they could continue to work in some capacity and to decrease the opportunity the men had for running away from their ships. There was no administrative body which could organize the care and treatment of sick and wounded seamen.<sup>3</sup> During the conflicts of the next century, the state would come to increase the size of the government department responsible for the welfare of the sick and wounded, although it did not become a permanent body until after the War of Spanish Succession. Nevertheless, the continued existence of an administrative body devoted to the welfare of the sick and wounded illustrates the commitment of the government to the care of the men who served in the Navy.

The First Commission of Sick and Wounded was established on September 29, 1653. It

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<sup>3</sup>M. Oppenheim, *A History of the Administration of the Royal Navy 1896* (London: The Shoe String Press, 1961), pp.76-77.

consisted of four Commissioners who received £150 a year each, and fifteen subordinate officers or agents.<sup>4</sup> The initial appointees were all of members of Parliament. Their responsibilities included overseeing the relief of sick and wounded men and that they returned to their ships; the relief of naval widows and orphans; the pensions granted from the Chest at Chatham; and they acted as the liaison between the citizens of the port towns who quartered sick and wounded sailors and the Treasury, which was consistently in arrears in the payments due to those private citizens.<sup>5</sup> The Second Commission for Sick and Wounded was established to deal with the casualties of the Second Dutch War,<sup>6</sup> while the Third Commission served during the Third Dutch War.<sup>7</sup> The Admiralty divided the coast of England into various sectors and assigned a Commissioner to a specific section of the coastline. These divisions carried over from the Second to the Third Dutch War. It was the Commissioner's duty to travel to their assigned section of the coast when they heard reports of an engagement near there. They were to have arrived at the port in time to organize the disbursement of the sick and wounded among the public or into hospitals.<sup>8</sup> Each Commission was dissolved following the declaration of peace, only to be reestablished after the declaration of war. In some cases, certain Commissioners served on more than one Commission; three of the members of the Third Commission had served on the Second

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<sup>4</sup>M. Oppenheim, *A History of the Administration of the Royal Navy*, p.322.

<sup>5</sup>J.J. Keevil, *Medicine and the Navy* II, pp.20-21.

<sup>6</sup>*Ibid.*, p.96.

<sup>7</sup>*Ibid.*, p.122.

<sup>8</sup>*Ibid.*, pp.96-97.

Commission for Sick and Wounded Seamen.<sup>9</sup> The government was drawing on the expertise gained during their previous years of service to ensure that the Commission functioned efficiently.

These same Commissioners were responsible for both health care and the care of prisoners of war. Prisoners taken by the British were quartered at the discretion of the Commission and the maintenance of their health was part of their duties. Any complaints about the treatment of Naval prisoners of war in foreign countries were sent to the Commissioners, who would then pass the information on to a member of the Council of State. Even though the Navy was composed of sailors who were not English, the Commission was concerned with the treatment of all men who served in the Royal Navy, regardless of their nationality. As the title implies, the Commission was also responsible for the exchange of prisoners. The Commissioners, in consultation with the Council of State, would select the prisoners to be exchanged and arrange for transportation and the payment of ransom. These tasks alone were enough to keep the Commission busy. They were, however, added to the responsibility of the care of the sick and wounded men of the Navy.

The Fourth Commission for Sick and Wounded was appointed 11 July 1689; however the British Navy had already engaged the French in battle. The Battle of Bantry Bay occurred on 1 May, 1689, six days before the official declaration of war. The British suffered heavy casualties, 96 killed and 250 wounded, but there was as yet no agency to deal with the wounded.<sup>10</sup> The men had to fend for themselves as best they could.<sup>11</sup> The *London Gazette* announced on Monday July 22, 1689, "These are to give notice to whom it may concern, That His Majesty having been

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<sup>9</sup>J.J. Keevil, *Medicine and the Navy II*, p.122.

<sup>10</sup>Ibid., p.171.

<sup>11</sup>Ibid., p.170.

graciously pleased to appoint Commissioners for Sick and Wounded Seamen and Mariners, and others employ'd in Their Majesties Service at Sea; and for Ordering Prisoners of War.”<sup>12</sup> The members of the Commission were Thomas Addison, Edward Leigh, John Starky, and Anthony Sheppard.<sup>13</sup> None of these men had any medical experience. They were each paid a salary of £300 per annum. The instructions issued to the Commissioners set out their duties. They were to take stock of the hospitals in England and determine which of them would be capable of housing sick and wounded seamen. They were then to ensure that the sick and wounded were transferred to such hospitals as could accommodate them as soon after being set on shore as possible. If no bed was available in a hospital, the Commissioners were to locate lodgings for the men amongst the inhabitants of the port town the men were landed at. They were responsible for the relics of men killed at sea. The Commissioners were instructed to “consider the Condition of the Widows Children & Impotent Parents of such as shall be slain in his Ma<sup>ties</sup> Service at Sea.” To those who applied, they were to bestow a one time monetary gift (not to exceed ten pounds) to “demonstrate the Kings Sence of their Suffering Condition.” The Commissioners were to organize a surgeon to visit the sick men once they were set on shore and the Commissioners themselves were to visit port towns in which sick and wounded seamen were being housed. If it was clear that the men would not recover in quarters then the Commissioners were to arrange for the men to be transported to London, in order that they might be treated at St. Bartholomew’s Hospital or St. Thomas’ Hospital. Finally, the Commissioners were to ensure that any sailor who died of his illness or wounds on shore received a decent Christian burial, in a coffin, although the funeral was

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<sup>12</sup>*London Gazette*, no.2472, Thursday July 18 to Monday July 22, 1689, p.2.

<sup>13</sup>J.J. Keevil, *Medicine and the Navy* II, p.189.

not to exceed the cost of ten shillings.<sup>14</sup> These instructions make it clear that the Commissioners were responsible for every aspect of the care of the sick and wounded once the men were set on shore, and they also had a responsibility to those who remained behind when a man died. The Commissioners for Sick and Wounded Seamen were the governing portion of a health care system designed to facilitate the recovery of the sick and wounded of the Navy, and to support those who suffered the loss of their main source of income when a sailor died in service.

The Treasury was not extravagant in its allotment of funds for the advancement of this system. In 1689, the Navy Board specified that the sick and wounded could only be landed at the ports of Bristol, Plymouth, Portsmouth and Whitehaven, in an effort to economize. These ports were chosen since the majority of naval engagements were concentrated in the Channel and the Mediterranean. There was a hospital at Plymouth in 1689 for the use of the Navy;<sup>15</sup> however in other ports the Commissioners had to rely on the generosity of the local inhabitants to house the sick and wounded. The Commission would pay one shilling per day to landladies who took in sick men and *2s. 4d.* to hospitals per capita.<sup>16</sup>

At the end of 1690, the Navy Board decided that the Commission needed the advice of a medical man on how to improve the care of the sick. They approached Dr. Richard Lower, one of the most distinguished physicians of the time, “to propose in writeing in what manner he thinks it wilbe best to have that business [of the sick and wounded] managed & what Phisitians , Chyrurgeons, & Apothecarys to imploy at the several Ports and the Sallerys to be allowed

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<sup>14</sup>BL Add. Ms. 28748, ff.10-68.

<sup>15</sup>John Ehrman, *The Navy in the War of William III*, p.126.

<sup>16</sup>Ibid., pp.190-91.

them.”<sup>17</sup> His report included a recommendation that permanent hospitals be established at the ports where seamen were most often set on shore after being discharged from their ships due to illness or wounds. The following year the Navy Board had temporary hospitals established at the Principal Ports and Deal, and a second hospital was opened briefly at Plymouth.<sup>18</sup> By 1696, sick and wounded men were being landed at “Deptford, Gravesend, Rochester, Deal, Margate, Ramsgate, Sandwich, Dover, Rye, Gosport, Southampton, Weymouth, Dartmouth, Bideford, Plymouth, Falmouth, Pembroke, Liverpool, Newcastle, Hull, Yarmouth and Harwich.”<sup>19</sup> The Commission had to have agents to see to the care of the sick in all of these places.

With peace came the inevitable need to decrease the size of the government in order to reduce the country’s debt. The Treaty of Ryswick, signed in September 1697, ended the Nine Years War and the need for many of the government agencies, like the Commission for Sick and Wounded Seamen. The Commission continued to oversee the care of the men who were wounded or fell ill in the latter days of the war; however, by an order of the Privy Council dated June 23, 1698, the Commission for Sick and Wounded was dissolved. In its place, the Council created a Commission of the Registrar.<sup>20</sup> This new office was modeled on the French system introduced by Cardinal Richelieu, intended to increase the number of men who volunteered for service. By the Register Act of 1696, British seamen who registered with the Navy Office would

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<sup>17</sup>PRO ADM/3/5, f.22.

<sup>18</sup>J.J. Keevil, *Medicine and the Navy* II, p.194.

<sup>19</sup>Ibid., p.195.

<sup>20</sup>*C.T.P., 1697-1702* Joseph Redington, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1974), p.174.

receive special privileges, not extended to those men who did not register. The state promised that in return for the seamen's service the government would ensure that,

some competent Provision should bee made that Seamen who by Age Woundes or other Accidents shall become disabled for future Service att Sea and shall not bee in a Condition to maintayne themselves comfortably may not fall under Hardshippes and Miseries may be supported at the publick Charge and that the Children of such disabled Seamen and alsoe the Widdowes and Children of such Seamen as shall happen to bee slaine killed or drowned in Sea Service may in some reeasonable manner be provided for and educated.<sup>21</sup>

The registered men were also guaranteed a place in Greenwich Hospital, once it was completed.

The state assured the men that they would be assigned a place in the hospital in the order in which their names appeared in the Registrar's books in order to guard against preferential treatment.

This was an attempt to resolve the manning problems that had plagued the Navy during the Nine Years War<sup>22</sup>. After the founding of this new Commission of the Registrar, the seamen of Britain were to present themselves at their office in order that their names could be added to the books.

The Commission was also responsible for the care of the sick and wounded. The Admiralty issued *Instructions for the Guidance and Government of the Com<sup>rs</sup> of the Register in providing for and taking care of the Sick and Wounded Seamen & others sett on shore from his Ma<sup>ty</sup> Shippes for Cure*.<sup>23</sup> These *Instructions* are an extended and more detailed version of those issued to the Fourth Commission for Sick and Wounded Seamen.<sup>24</sup>

According to the *Instructions*, the Commissioners of the Registrar were to report to the

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<sup>21</sup>7 & 8 Guil III.c.21. *Statutes of the Realm* VII (London: Dawsons, 1963), 98-102.

<sup>22</sup>J.J. Keevil, *Medicine and the Navy* II, p.205.

<sup>23</sup>NNML ADM/E/5, ff.1-22.

<sup>24</sup>See Appendix A for the *Instructions*.

Lords of the Admiralty on a regular basis. This illustrates the continued move towards a ← centralized bureaucracy. The *Instructions* are interesting, as they show the state attempting to retain a basic level of health care for the men of the Navy with the least amount of expenditure. Instructions 1, 2, 4 and 11 are concerned with minimizing the number of ports men could be landed at, the number of surgeons and physicians employed at these ports, and ensuring that the Commissioners restricted all extraordinary expenditure.<sup>25</sup> However, there was still a concern that the men be well cared for. Instruction 10 informed the Commissioners of an order given to the captains of the ships in the Navy, that no man was to be set on shore without his personal effects.<sup>26</sup> Since the men were to have their clothing with them, Instruction 11 set out that the Commissioners were not to supply clothing to the men set on shore unless “they are not otherwise to be had, and there shall be a necessity to furnish them therewith for their preservation, in which Case (& no other) they may supply them with such Shirts, Drawers, Shoes, Stockings and the like.”<sup>27</sup> They were to be supplied as cheaply as possible, and the bill was to be sent to the captain of the ship the man belonged to so that it could be deducted from the sick man’s wages. Many of the instructions (specifically numbers 3, 7, 15, and 19) are orders that the Commissioners familiarize themselves with the methods used by the previous Commission when placing men in civilian quarters, when sending men to the London hospitals, when returning men to their ships after they have recovered their health, and for paying the accounts for men set down in

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<sup>25</sup>NNML ADM/E/5, ff.1-4; f.11.

<sup>26</sup>Ibid., ff.10-11.

<sup>27</sup>Ibid., f.11.



unauthorized ports.<sup>28</sup> This is an attempt to provide continuity between the Fourth Commission for Sick and Wounded Seamen and the Commission of the Registrar. Finally, there is an obvious concern on the part of the Lords of the Admiralty, that the accounts of this Commission be rigorously attended to. Instructions 8, 9, 13, and 18 are about the records which were to be kept and checked by the Commission so that every penny of the government's money could be accounted for.<sup>29</sup> There are no records that the Treasury was dissatisfied with the accounting methods of the previous Commission, and so these instructions may have been designed so that the proper accounting continued. Despite the overall tone of economy throughout these *Instructions*, the care of the sick and wounded does not appear to have been compromised. The state was committed to providing health care to those who had fallen ill or sustained injuries while in service. The Commission of the Registrar did not last long. The watermen of Britain did not flock to the Navy Office to register their names. Within a year of the establishment of the Commission of the Registrar the Admiralty informed the Navy Board that the Board was to assume control of the medical affairs of the Navy. The Register Act remained on the books until 1710 when it was repealed, and after that all seamen could be considered for a place at Greenwich Hospital, each case decided on its individual merits.<sup>30</sup>

Within six weeks of the declaration of war in 1702, the Fifth Commission for Sick and Wounded Seamen was appointed. For the first time, this Commission included medical men along with Members of Parliament. The Commissioners were: Colonel Henry Lee, Mr. Philip Herbert,

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<sup>28</sup>NNML ADM/E/5, ff.2-3; ff.5-7; ff.14-16; ff.19-20.

<sup>29</sup>Ibid., ff.8-10; ff.12-13; ff.18-19.

<sup>30</sup>J.J. Keevil, *Medicine and the Navy* II, p.206.

Dr. William Herard, D.C.L. (he was a distinguished botanist), Dr. Richard Adams, M.D. Oxon, and Dr. Charles Morley, who was at the time of his appointment a physician with the fleet under the command of Admiral George Rooke in the Mediterranean.<sup>31</sup> The membership of this Commission changed quite frequently during the course of the war. Dr. Sherard resigned from the Commission after only one year, having been offered the post of English consul at Smyrna; he was replaced by Dr. James Drake M.D., F.R.C.P., F.R.S., a Scotsman who was suspended twice during his tenure as Commissioner for his political views. Dr. Charles Morley was replaced by James Chase, M.P. for Marlow, in June 1706 for personal reasons.<sup>32</sup>

In addition to the Commissioners, there were many nameless men who served the Commission for Sick and Wounded Seamen. These agents, stationed at many of the port towns, arranged for the men to be placed in quarters or in a hospital, arranged for the visitation of the surgeon and/or the physician, and visited the sick and wounded in their jurisdiction daily (according to Instruction 6 as listed in the *Instructions* given to the Commission of the Registrar<sup>33</sup>) in order to supervise the care of the men. They were also responsible for keeping the accounts for their area. These agents were the representatives of the Commissioners who could not always be in the port towns. They are very rarely named in any of the correspondence, and yet they were the front line government officials of the health care system. The agents would not have always been burdened with work from the sick and wounded, and so some of the agents of the Commission for Sick and Wounded Seamen were the local agents of the Commission of the

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<sup>31</sup>J.J. Keevil, *Medicine and the Navy* II, p.235.

<sup>32</sup>Ibid.

<sup>33</sup>NNML ADM/E/5, f.5.

Victualing. It is unclear whether these were local men, hired by the Commission or whether they were men sent from London by the Commission. Nevertheless, they performed an invaluable service, being present whenever any sick or wounded man was set on shore and ensuring that he was cared for.

The responsibilities of the Fifth Commission were much the same as those of the Fourth Commission. This Commission did have the added responsibility, beginning in 1703, of providing the supplies for the hospital ships which accompanied the fleet. They assumed this responsibility from the Barber and Surgeon's Company,<sup>34</sup> in an attempt to make the outfitting of these ships more uniform. The Barber and Surgeon's Company gladly relinquished their right to outfit hospital ships since the payment from the Treasury was so often in arrears.<sup>35</sup> In 1709 the medical members of the Commission were given the added responsibility of examining prospective surgeons in physic.<sup>36</sup> By 1713 the Commission had made itself indispensable and so, following the signing of the Treaty of Utrecht the Commission was not dissolved, as it had been in the past following the declaration of peace, but rather it was reduced to two members.<sup>37</sup>

The offices of the Commission were in the City of London. From this central location the Commissioners attempted to organize and run a health care system. Their primary concern was the care of men once the fleets returned from their cruises to home waters. This meant removing the sick and wounded from the ships and arranging medical attention on shore. The Commission

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<sup>34</sup>J.J. Keevil, *Medicine and the Navy* II, p.240.

<sup>35</sup>*Ibid.*, p.256.

<sup>36</sup>*Ibid.*, p.268. This development will be discussed in detail in Chapter Three.

<sup>37</sup>*Ibid.*, p.242.

was usually alerted to the eminent arrival of the fleet. For example, a letter was sent to the Commission from the Admiralty Office, dated October 7, 1702: "The Fleete being suddenly expected from Cadiz, the Council to his Royal highnesse [Prince George, Lord High Admiral of England] think it necessary that you bee acquainted therewith, that you may bee timely providing at the Principall Ports, for such sick Men as may bee brought home with them."<sup>38</sup> There is no indication that the members of the Fourth or Fifth Commission were assigned a specific section of coastline to monitor. When the fleet was due the Commissioners would dispatch one or two of its members, in the case of the Fifth Commission they frequently included one of the medical men, to assist their agents who were permanently stationed at the major ports. The Commissioners would supervise the arrival of the sick and insure that quarters were found for the men.<sup>39</sup> The agents, with the help of the Commissioners, would also arrange for a surgeon to visit the sick and wounded. Since the Commission was responsible for paying all charges incurred while the sailors were treated, they were often in contact with the Treasury.

Parliament periodically designated specific funds for the work of the Commission for Sick and Wounded. It was never enough. The Commission spent a great deal of time petitioning the Lords of the Treasury for more money. The Commission for Sick and Wounded Seamen had the difficult task of providing quarters for the sick landed at the various port towns without the ready money to pay the quarterers. The quarterers, like everyone else who provided goods or services to the state during the Nine Years War, had to wait for their bill to be paid in course, that is in the order in which the debt was incurred. This system caused the Lords of the Treasury to fall years

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<sup>38</sup>NMML ADM/E/1, f.72.

<sup>39</sup>The accommodation made will be discussed in Chapter Two.

behind in their payments to citizens who had quartered the sick and wounded in good faith. The only recourse that many of the quarterers had was to refuse to open their doors. This usually caused the Lords of the Treasury to allocate specific funds for the payment of arrears owed to quarterers.<sup>40</sup>

Although there was an intricate relationship between the Commission of Sick and Wounded and the Treasury, the care of the sick and wounded never stopped due to lack of funds. Either the Commissioners or the Lords of the Treasury found some money somewhere when the creditors were at the door. During the Nine years War the Treasury had difficulty paying the majority of the state's debts and implemented a system of paying in course. Quite often that could take years. The situation of the quarterers at the ports is a case in point. Nevertheless, the citizens in these port towns were very patient with the government and they continued to care for the sick and wounded until the debt was at least a year or two old. For many of these quarterers, the inability of the government to pay its debts would have caused them serious hardship. It was only when they threatened to close their doors to the sailors that the Treasury took action to ensure that the care of the sick and wounded continued in place.

The Commission for Sick and Wounded Seamen was a government agency designed for the sole purpose of overseeing the health care needs of the Royal Navy. These needs were many and varied. By the end of the War of Spanish Succession the Commission was involved in the examination of surgeons to serve in the fleet; the organization of quarters and hospital beds in the port towns; the arrangement of surgeons and/or physicians to visit the sick; the payment of bills

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<sup>40</sup>This problematic situation will be discussed further in Chapter Five.

owed to quarterers and hospitals; the disbursement of pensions and monetary gifts to the disabled seamen and the relics of deceased sailors. This was in addition to their duties with regards to prisoners of war. The system was not perfect. Bills were left unpaid for months due to lack of funds and there were abuses in the civilian quarters; however, the health care system appears to have answered the medical needs of the majority of the men of the Royal Navy. Most of the men who served as Commissioners were not medical men but they were committed to the recovery of the sailors set on shore. When a difficulty arose the Commissioners wrote letters and memoranda, visited with the party in question in person, and made their presence felt in the port towns when sick and wounded were set on shore. The Commission continued to develop throughout the course of the two wars, becoming more professional, until it became a permanent part of the government structure.

## CHAPTER TWO

### HEALTH CARE FACILITIES

The Commission for Sick and Wounded Seamen had to provide places for the sick and wounded men to recover and convalesce. Hospitals, of one sort or another, were established in London, at the home ports, at sea and at the various bases held by the British abroad. The Commissioners used some established hospitals, such as St. Thomas' and St. Bartholomew's in London, or they built their own, such as Greenwich Hospital or the port hospitals. In every case, there were surgeons, and in some cases also a physician, who visited the sick and wounded. On the whole, it would appear that the men received a high level of care, especially in comparison with the level of treatment received by the majority of the civilian population. It was in the best interest of the government and, therefore, the Commissioners, that these men regain their health and strength so that they could be sent to sea again.

This chapter will consider the various health care facilities — those in London, the home ports, hospital ships and hospitals overseas — utilized by the Commissioners to house the sick and wounded seamen until the time of their recovery or discharge. The hospitals in London were used the least frequently, although they were the closest to the offices of the Commissioners. Only chronic cases were worthy of the expense of transporting men to London. It was in the quarters and hospitals in the home ports that most men were treated. Hospital ships were commissioned during both the Nine Years War and the War of Spanish Succession, although it does not appear that their full potential was realized. Finally, hospitals were established at various

ports overseas so that the sick and wounded could be landed there and receive care at the expense of the state. Each type of health care facility was used during these twenty-five years of crisis. Each provided a specific type of care with the goal being to return the men to their ships.

## London

The Commissioners for Sick and Wounded had a very tenuous relationship with two of the oldest hospitals in the City: St. Thomas' Hospital, founded in the early twelfth century by the monks at the Priory of St. Mary Overy, and renamed St. Thomas' in 1173 after the murder of St. Thomas Becket; and St. Bartholomew's Hospital, founded in 1123 and which is the oldest hospital in London.<sup>1</sup> The constitutions of the two hospitals established their mandates as the care of the sick poor of the City of London. An agreement between the hospitals and the government allowed that soldiers and sailors might have the use of any empty beds. St. Thomas' had renovated and expanded the hospital buildings so that, by June 1695, it held 260 beds.<sup>2</sup> Those not being used by the sick poor of London were open to the use of those naval patients sent to London from the home ports. The Commission for Sick and Wounded paid two pence a day for the sick men's care. This included the cost of visitation by the hospital staff, food and space in a bed. An extra ten shillings was paid to the hospital if the man died and no one came to claim the body. This money was to be used to provide a coffin and pay for the expenses of a funeral. In addition to providing beds for those who required long-term medical attention, St. Thomas' also

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<sup>1</sup>E.M. McInnes, *St. Thomas's Hospital* (London: George Allen Unwin Ltd., 1963), p.15.

<sup>2</sup>*Ibid.*, pp.63-64.



performed amputations and provided wooden legs for the Navy.<sup>3</sup> When necessary, these amputations were conducted against the patient's will: the minutes of the Commission show that on July 14, 1705, they resolved that one Samuel Stasly, "be sent to St. Thomas's Hospitall he haveing been formerly there but unwilling to suffer an amputation."<sup>4</sup> He was returned so that the procedure could be performed. Amputation was the only treatment available to physicians and surgeons in the era prior to the 1860s, when Joseph Lister developed the antiseptic system. The formation of poisons such as gangrene, which took hold in a wound which had not been sufficiently cauterized, was more dangerous than the surgery necessary for the amputation of the shattered or diseased limb.

The account book for St. Thomas' hospital for the period between March 1689 and June 1693 survives in the British Library. The book lists the name of the patient, the date they were admitted, the date they were discharged, the number of days that they spent at the hospital, the amount of money owed to the hospital by the Commission for the care of the sailor, and the name of the ship which they were removed from. An examination of this book reveals that the hospital was contributing a great deal to the health care system that sick and wounded sailors found themselves in. The hospital received patients on Thursdays, when "the proper Officers attended to take in the Poor," as the hospital Board reminded the Commission for Sick and Wounded in 1698.<sup>5</sup> In July of 1690, the hospital received 192 men. On one day alone, July 10, they received

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<sup>3</sup>In December, 1710, the Steward of St. Thomas' hospital sent a bill to the Commissioners for Sick and Wounded for £8.2.8 for wooden legs which had been provided between March and November of that year. (PRO ADM/99/10, unfoliated.)

<sup>4</sup>PRO ADM/99/6, unfoliated.

<sup>5</sup>PRO ADM/99/1, unfoliated.

105 men (it was a Thursday).<sup>6</sup> During this month sailors occupied 74% of the hospital's available beds. This was the month after the Battle at Beachy Head and the number of sick and wounded men landed immediately following that battle was very high. In a case like this, the hospitals in London had to make do as best they could in order to find accommodation for as many men (in this case both English and Dutch sailors) as possible. There was a limit to the generosity of this charity.

By the end of the Nine Years War, the Boards of the two hospitals, St. Bartholomew's and St. Thomas', believed that the privilege of sending the sick and wounded to London had been abused. The Governors of St. Bartholomew's sent the Clerk and Steward of the hospital to wait on the Commissioners for Sick and Wounded Seamen. They informed the Commissioners that the hospital had, "during y<sup>e</sup> exigency of the warr taken in 2500 Semen and Soldiers they had not used to receive any in time of Peace, that they were considerably in Debt and had not roome for any more, and therefore desired that no more might be sent."<sup>7</sup> It would appear that this request was respected. The comment regarding the debt that the hospital had incurred during the course of the war signifies that the two pence per day that the Commission paid to the hospital was insufficient to meet the expenditures of treating the sick seamen. The Board of St. Thomas' wrote to the Commission to complain that the sick who were sent to London had not spent long enough in port quarters or they were too ill to be transported, and died soon after arriving in London.<sup>8</sup> In response the Commission "resolv'd to Order their Officers at y<sup>e</sup> out Ports to send

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<sup>6</sup>BL Harl. 6190, ff.8-17.

<sup>7</sup>PRO ADM/99/1, unfoliated.

<sup>8</sup>Ibid.

no Sick or Hurt Persons hither till their Months were up except on extraordinary occasions.”<sup>9</sup> In this way, the Commission attempted to repair the relationship that it had with the London hospitals.

This relationship appears to have continued along the same lines during the War of Spanish Succession. In December of 1704, the Commission for Sick and Wounded was forced to write to the Stewards of St. Thomas’s and St. Bartholomew’s hospitals to ask that they “use their utmost endeavor, that the Sick & Wounded Seamen lately sent up from the Out Ports may be admitted into the s<sup>d</sup> Hospitals before the Holy-Days”.<sup>10</sup> It seems evident that the primary concern of the Commission was to see that the men they were responsible for were well cared for during the winter months. It was a difficult relationship which existed between the hospitals, with their mandate to treat the sick poor of London, and the Commissioners for Sick and Wounded, who needed to find a place where those sailors who needed care for long periods of time could be treated. Many letters were sent back and forth and the Stewards of the two hospitals often visited with the Commissioners in order to make their position clearer.

Seamen were also sent to London’s Bethlem Hospital, the city’s facility for caring for the mentally incompetent. Men who had been put off their ships because they were ‘distracted’ or had tried to injure or kill themselves were sent there. By 1676 the hospital had room to care for 250 patients, however, it would seem that very few sailors were ever sent. In July 1703, the Governor of Bethlem informed the Commission for Sick and Wounded that the hospital could

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<sup>9</sup>PRO ADM/99/1, unfoliated.

<sup>10</sup>PRO ADM/99/5, unfoliated.

receive the two seamen who were being cared for at Deal.<sup>11</sup> In January 1706, a letter was written to the Governor of the hospital inquiring whether there was a place for a seaman who was “in a very distracted Conditon” at Rochester.<sup>12</sup> There is no indication that these men were ever released. This is another example of the use made, by the Commission for Sick and Wounded, of the established resources available to them in London. They simply did not have the budget to erect new hospitals to cater to the needs of the sick and wounded of the Navy and so, they were forced to rely upon institutions already in existence. The Commissioners knew that at these three Hospitals the sick, wounded and deranged would received the best care in the country. St. Bartholomew’s and St. Thomas’s Hospitals were the two major teaching hospitals in the country and, as such, they retained some of the best physicians and surgeons in London on their staffs. Until such a time as naval hospitals could be constructed without removing necessary funds from a war budget, the Commissioners for Sick and Wounded Seamen were forced to rely upon the generosity of the Governors of these three London hospitals for the care of the most seriously sick and wounded seamen.

### **Home Ports - Civilian Quarters**

The Commissioners for Sick and Wounded Seamen were faced with a very difficult problem when the fleet returned to England. There was the necessity of landing the sick and wounded so that they could receive treatment, however, there were no hospitals at the home ports

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<sup>11</sup>PRO ADM/99/2, unfoliated.

<sup>12</sup>PRO ADM/99/6, unfoliated.

to put them into.<sup>13</sup> In the past, the government had relied upon the generosity of the inhabitants of the port towns to take in the sick and wounded and to care for them until such a time as they recovered and could return to their ships or they could be removed to the hospitals in London. It was expensive to keep the sailors in quarters in comparison with hospitals. The quarterers themselves received one shilling per man per day, but the Navy was also responsible for paying the local physician or surgeon who received six shillings and eight pence per treatment.<sup>14</sup> This is to be compared with the two pence per day that was paid to the London hospitals, which included the services of the hospital staff.<sup>15</sup> The quarterers did receive an extra six pence per day for twelve days if they were housing someone with smallpox. The money was for the employment of a nurse to care for the sailor over the twelve days.<sup>16</sup> As early as 1672, during the Third Dutch War, the Navy Board recognized that having the sick and wounded cared for in quarters was not the most efficient method of promoting their cure. The instructions to the Third Commission for Sick and Wounded stressed the need to allocate the sick and wounded to various hospitals instead of keeping them in quarters, “thereby to ease his Majesty’s charge.”<sup>17</sup> The Fourth Commission for Sick and Wounded received similar instructions. They were “to take Account what Sick and

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<sup>13</sup>There was a hospital at Plymouth during this period. However, there is very little information about what kind of hospital it was. Even the *Commissioners for Sick and Wounded* ignored its existence in their attempt to have the government establish hospitals at some of the home ports in the spring of 1703.

<sup>14</sup>J.J. Keevil, *Medicine and the Navy* II, p.191.

<sup>15</sup>BL, Harl. Ms. 6190.

<sup>16</sup>J.J. Keevil, *Medicine and the Navy* II, p.191.

<sup>17</sup>*Ibid.*, p.122.

Wounded Men the Hospitalls of England can accomodate” and the men were to be sent to the most accessible one “Immediately after being sett on Shoar.”<sup>18</sup> There is an urgency about these instructions that the sick and wounded be placed in charitable institutions with the greatest possible haste after their being landed in England. There were problems with civilian quarters, other than the expense to the state. They were virtually impossible to regulate, which led to abuses by landlords and ladies, and to the sailors themselves leaving their quarters in order to escape from further duty on board one of their Majesties’ ships. Nevertheless, these quarters were a vital part of the naval health care system.

The facilities that were used as civilian quarters were generally inns or alehouses. It is possible that some men were quartered in private homes. The greatest advantage of these quarters was their proximity to the shore. It would appear from the various records that the captains of ships were unconcerned with what port they put their men down in. The Navy Board attempted to specify which ports could be used as landing places for the sick and wounded but this does not appear to have been very successful. In 1689, at the beginning of the Nine Years War, the Commissioners informed the commanders of the vessels in the fleet that men could only be landed at Portsmouth, Plymouth, Bristol and Whitehaven.<sup>19</sup> However, by 1696, men were being landed at every major port on the coastline.<sup>20</sup> There was simply not enough money in the Treasury to build permanent hospitals at all of these ports. The Navy Board considered that the erection of permanent hospitals was an unnecessary expense, as the Treasury would have to

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<sup>18</sup>J.J. Keevil, *Medicine and the Navy* II, p.190.

<sup>19</sup>Ibid.

<sup>20</sup>For the complete list of ports where men were landed, see page 17.

continue to pay for the maintenance of the hospitals once the war was over.<sup>21</sup> By paying landlords and ladies to care for the sick and wounded men, the state was spared the expense of the construction of new hospitals, the hiring of staff, and the maintenance of the building. The men were housed in existing buildings where they would be given a bed, food and medical attention at the expense of the state. It could also be argued that the landing of sick and wounded seamen at any given port, supported the economy of that port. The longer the sick and wounded remained in the town, the more money came in from the government, not only for those who were providing quarters but also for the medical men in the area. Some of the sailors themselves would have had money to spend on better food and drink. The economy would not benefit immediately from the care of sick and wounded seamen, but only after the Treasury had paid the arrears owed in the port towns. These men and women provided a most necessary service by housing the sick and wounded. The state could not have provided the level of health care that they did if it had not been for the willingness of these individuals, the majority of whom are nameless 'quarterers', to care for the men of the Navy.

Nevertheless, the Commissioners for Sick and Wounded Seamen and the Admiralty were not satisfied that quarterers were the very best option. They preferred the alternative of housing the sick in naval hospitals. The question of erecting new hospitals was not broached during the Nine Years War. It was not until the War of Spanish Succession that the Commissioners for Sick and Wounded approached the Navy Board with the request that the government pay for the construction of naval hospitals at the major ports. In order to present their case, the Commissioners prepared a report entitled "The Mischeifs of Town Quarters." This report

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<sup>21</sup>J.J. Keevil, *Medicine and the Navy* II, p.248.

detailed the difficulties encountered by the Commissioners when they quartered men in inns and private homes:

- 1<sup>st</sup> The Want of Quarters when Men are Land<sup>d</sup> in Bad weather and in great Numbers at y<sup>e</sup> Same time.
2. The Impossibility of a constant & necessary attendance of y<sup>e</sup> Phisitian and Surgeon where the Quarters Extend 3 or 4 Miles in Length as in some Ports they doe.
3. The Negligence in Quarters in not administering Medicines Prescribed.
4. The Quartering of two or Three in one roome and often on one Bed of different and Sometimes Infectious distempers.
5. The disorders that attend Publique Houses.
6. The forgeing of Wills by the Landladys to the prejudice of next relations.
7. The Unwholesome Liquors which occasion Relapses.
8. The Running from Quarters.
9. The continuing in Quarters unnecessarily by the connivance and contrivance of the Quarters for their own Interest.
10. Seamen coming on Shore for pretend<sup>d</sup> Sickness.
11. The Sick in Town Quarters Infections to the inhabitants of the Town and Garrisons where they reside.<sup>22</sup>

The Commissioners were complaining of two main problems: those regarding the recovery of the sick men set on shore, and those regarding the ability to control the landlords and ladies who took sick seamen into their residences. The first four items relate to the difficulties of health care in the quartering system. Since there was no infra-structure to supervise the care of the men, the Commissioners were forced to rely on the honesty and good intentions of the quarterers. Items three and four relate specifically to this. This report makes plain that there were cases where men did not receive their medication as prescribed by the local physician. There must have been reports of quarterers who, in an attempt to make as much money as possible, placed as many men as possible in each room, often putting more than one man in each bed. This type of greed is only natural; however, the Commissioners were making it plain that it was next to impossible for them

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<sup>22</sup>PRO ADM/99/2, unfoliated.



to keep it from happening, in the present system. The first two items were also the result of a lack of infra-structure. Since there was no central location where the sick men could be housed, when men were landed it was a case of going house to house to try to find quarters. The local medical men, physicians and surgeons, were also required to travel great distances in order to treat all of the men in their given area. The Commissioners maintained that this was a hardship on both the medical practitioners and the patients, as many of them would want for attention due to the distances that the doctors had to travel. The final seven items relate to the lack of control that the Commissioners had over the quarterers. Most of them are self-explanatory, relating to the obvious problems of quartering men in public houses. Item six, the forging of wills, became an important issue in the eighteenth century. The forging of a will became a capital offence by Statute 2 George II, c.25. This was the result of concern over forged seamen's wills, in which the bulk of the sailors' property would be left to the landlord or lady.<sup>23</sup> Item eight, the running from quarters, was a concern for both the Commissioners for Sick and Wounded and the members of the Admiralty. There was great difficulty in manning the Navy during both conflicts, and the majority of men lost to the service had simply 'run-away' from their ship. One of the most common methods of 'running' was for the men to leave sick quarters as soon as they were able so that they would not have to return to their ship. The Commissioners were sure that it would be possible to reduce the number of men who ran from their sick quarters if hospitals, with locked doors, walls and guards, were used to house the sick rather than public houses where there was no one to control the movement of the sailors. The final item once again shows the concern that the Commissioners had for the inhabitants and naval personnel in the port towns. The Navy was

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<sup>23</sup>I thank Dr. J.D. Alsop for bringing this to my attention.

incurring unnecessary risk of infection or epidemic by continuing to house the men in civilian quarters rather than building hospitals. The Commissioners were heard and, in 1704, the first port hospitals were opened.

In May 1704, the Lord High Admiral, Prince George, wrote to the Commission for Sick and Wounded to inform them that a hospital had been built at Rochester and was now ready for the reception of sick and wounded sailors. The Commissioners were to ensure that the sick were set down on shore as close to Rochester as possible and that those men in sick quarters at other port towns in the area were to be transported to the hospital at Rochester.<sup>24</sup> In September the hospital at Deal was ready for sick seamen.<sup>25</sup>

The Commissioners were concerned not only for the physical well-being of the sick and wounded set on shore, but also for their spiritual health. In July 1704, the Commissioners proposed to the Lord High Admiral that a clergyman be retained at those ports that had a hospital. They suggested an annual salary of £20 and listed his duties, “[to] read Prayers every Morning in the s<sup>d</sup> Hospitalls & Preach Once upon every Sunday & to Visit the Men in their Sickness.”<sup>26</sup> These clergymen could comfort the sick and dying as well as visit with those who were recovering. The Commission may also have thought that the presence of the clergy would decrease the level of drunkenness which was one of the problems that followed the seamen from their town quarters to the hospitals. As will be seen in the section on hospitals built by the Commission in foreign ports, their concern for the spiritual health of the seamen is also evident

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<sup>24</sup>NMML ADM/E/2, f.57r.

<sup>25</sup>PRO ADM/99/3, unfoliated.

<sup>26</sup>PRO ADM/99/3, unfoliated.

there.

The Commissioners for Sick and Wounded Seamen did their utmost to see that the sick and wounded recovered once they were set on shore. They were hampered by the lack of funds and the tendency of men to run from their sick quarters. The records of the Admiralty and the Commission for Sick and Wounded give no indication of the rate of death or recovery at the sick quarters. The hospitals did relieve some of the problems of quarters, specifically, they could ensure that the men were returned to the fleet once they recovered their health. Those who did not recover quickly were sent to London as soon as they could be safely transported. Those who were wounded and no longer fit for service would be discharged and continue to be cared for at the sick quarters or they could be sent to one of the London hospitals and then fill a pensioner's place at Greenwich Hospital if they chose to do so . The Commissioners relentlessly petitioned the Treasury for funds to pay the quarterers. They were conscious of the service these men and women were performing for the state and necessity of that service. This is also apparent in the Commission's attempts at keeping the infectious seamen away from the town. For the most part, this arrangement seems to have worked well.

### **Hospital Ships**

During both conflicts the Admiralty recognized the value of commissioning a small number of ships designated as hospital ships. It is important to note that these ships were *designated* as hospital ships and not *designed* as hospital ships. Hospitals ships were first sent to sea with the fleet in 1665, during the Second Dutch War (1665-67).<sup>27</sup> Table 2.1 shows the

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<sup>27</sup>J.J. Keevil, *Medicine and the Navy II*, p.84.

Table 2.1

<b>Hospital Ships</b>			
<i>Ship's Name</i>	<i>Complement</i>	<i>Guns</i>	<i>Date(s) of Commission</i>
Bristol	40	20	1692 - 1693 1696 - 1697
Concord	45	23	1692 - 1693
London Merchant	45	22	1692 - 1693 1696
Siam (Syam)	45	22	1693 1696 - 1697
Society	45	22	1692 - 1693 1696 - 1697
Antelope	70	—	1706 - 1709
Delicia	65	—	1710 - 1713
Jefferys	60	—	1704 - 1709
Leake	70	—	1708 - 1712
Martha	70	—	1707 - 1711
Mathews	60	—	1706 - 1709
Pembroke	60	—	1709 - 1713
Princess Ann	70	—	1704 - 1708
Smyrna Factor	50	—	1705 - 1710

hospital ships which appear on the annual Navy List.<sup>28</sup> This is not a complete list of all of the hospital ships which went to sea with the fleet. The names of other hospital ships appear on the warrants of surgeons and surgeon's mates as the ships to which they were to report. In November and December of 1708, and February 1709, three surgeon's mates were assigned to

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<sup>28</sup>BL Add. Ms. 9336, ff.147-302r.

the *Arundell* hospital ship.<sup>29</sup> In September and early October of 1711, one surgeon and four surgeon's mates were assigned to the *Canada* hospital ship, also referred to as the *Canada Galley* hospital ship.<sup>30</sup> Two surgeon's mates were assigned to the *Sarah and Betty* hospital ship in April and May of 1702.<sup>31</sup> Robert Sherwood was assigned to the *St. Lewis* hospital ship on June 4, 1701,<sup>32</sup> and Joseph Pursell served as surgeon on the *Suffolk* hag boat, which was being used as a hospital ship.<sup>33</sup> It is impossible to determine how many other ships, like the *Suffolk*, which were designed as hag boats or store ships were used as hospital ships. Moreover, since the official list of ships of the Royal Navy is incomplete, it is impossible to determine how many hospital ships were in use at any given time. Nevertheless, it is clear that the Admiralty recognized the value of these specialty vessels and there appears to have been a concerted effort to ensure that the fleet, particularly those squadrons that were cruising in foreign waters, were accompanied by a hospital ship.

Since the hospital ships were not designed for that purpose they often served many different functions in the fleet. For the most part, they were hired *merchant men* (a class of ship) which were converted to hospital ships by building more bunks below deck and carrying a larger than normal medical crew. When they were not being used to house the sick, they were often used as transports or store ships. In August of 1692, Admiral Russell, who was at that time at St.

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<sup>29</sup>PRO ADM/106/2953II, 2954I, 2961.

<sup>30</sup>PRO ADM/106/2953I, 2956, 2957I, 2961.

<sup>31</sup>PRO ADM/106/2961.

<sup>32</sup>PRO ADM/106/2963I.

<sup>33</sup>PRO ADM/106/2961.

Helena, wrote to the Secretary of State, the Earl of Nottingham, that he “had taken the soldiers out of the four shipp design’d for the West Indies, and placed them in three of our hospitall shipp, which God bee thanked wee have had noe occasion for this summer.”<sup>34</sup> Since these ships were able to serve more than one purpose they were useful to the fleet and, perhaps, this ensured their continued commission even when the Navy was cutting back on spending following the end of each war.

There are no documents from the period which detail the workings of a hospital ship. The earliest published information is contained in *Regulations and Instructions Relating to His Majesty’s Service at Sea*, published in 1731. Part IV of the *Regulations* relates to hospital ships.<sup>35</sup> Article I states that the sick were to be treated on the Gun Deck and infections cases were to be separated from the rest by a canvas sheet.<sup>36</sup> Article II specified the crew, and article IV explained how those men who had recovered were to be returned to their ships.<sup>37</sup> Article III is directed at the captain, and instructed him to ensure that the men who were being cured received only the best of the victuals in the ship and ordered him to obtain fresh provisions at every opportunity.<sup>38</sup> It is clear that these *Regulations* were formulated with the speedy recovery of the sick and wounded in mind. It is likely that similar orders would have been issued during both the

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<sup>34</sup>Historical Manuscript Commission, *Manuscripts of Allan George Finch* Vol.III, Francis Bickley, editor. (London: H.M.S.O., 1957), pp.361-2.

<sup>35</sup>See Appendix B for the full text.

<sup>36</sup>*Regulations and Instructions relating to His Majesty’s Service at Sea* Established by His Majesty in Council. (London: 1731), p.137.

<sup>37</sup>*Regulations and Instructions...*, p.138.

<sup>38</sup>*Ibid.*

Nine Years War and the War of Spanish Succession.

Prior to 1703, the Barber and Surgeon's Company was responsible for fitting out hospital ships.<sup>39</sup> They arranged for the supply not only of surgical instruments and medicines but also of bedding, linen, bandages and other such necessities. In October of 1703, an order from the Navy Board stated that, "Hospital Ships [were] To be fitted for the Future by the Com<sup>rs</sup> for Sick and Wounded & Charge of the Medicines &c. [etc.] defray'd by that Commission."<sup>40</sup> To ensure the quality of the medicines provided for the hospital ships, the Lord High Admiral wrote to the Commission for Sick and Wounded Seamen in January of 1704, to inform them that "the Chyrurgions Chests furnished to the hospitall Ships, which are appointed to attend the Fleete should be viewed & inspected by you at the Apothecary's Hall."<sup>41</sup> This same procedure was in place for the inspection of the surgeon's chests that were placed on all other ships of the fleet. The true value of the hospital ship to the Navy was the level of security these ships afforded. Once the sick were placed into these floating hospitals they could receive the care they needed without being removed from the fleet. This ensured that once the men were well, they would be returned to their ships. It is for this reason that hospital ships continued to accompany the fleet even after hospitals were established at overseas stations. Nevertheless, the number of hospital ships with the fleet at any given time were unequal to the task of caring for so many sick and wounded, especially in foreign seas where the seamen contracted new and virulent illnesses. The best solution was to put the men ashore into hospitals, regulated (and guarded) by the Navy.

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<sup>39</sup>J.J. Keevil. *Medicine and the Navy* II, p.240.

<sup>40</sup>BL Add. Ms. 9333, f.33r.

<sup>41</sup>NMML ADM/E/2, f.11.

## Hospitals at Overseas Stations

When the fleet was cruising in the Mediterranean or the West Indies there was a very real need for hospitals where the sick and wounded could receive treatment. The British government was forced to establish hospitals in these two theaters for two separate reasons. Hospitals were necessary at Lisbon and Port Mahon because it was impossible to quarter the sailors with the inhabitants of these port towns, as they did in England, due to language and cultural differences and the magnitude of the task of overseeing the care of the sick and wounded if they were quartered with the local people. In the West Indies, it was the sheer numbers of men who required care that prompted the establishment of hospitals at Jamaica and Barbados. Extensive discussion preceded the establishment of these hospitals; the initial cost to build a permanent structure or renovate an existing one, and the continued cost of providing a medical staff, victuals and medications had to be carefully considered. The turning point in most debates came when the area in question developed into a British base of operation. There was a need to tend to the sick from the fleet, in addition to those who remained at the ports, working in the dock yards or at a victualing depot. This section will concentrate on the hospitals at Jamaica and Lisbon as being indicative of the concerns and problems that faced the hospitals in the West Indies and in the Mediterranean.

As early as July 1692, Sir Francis Wheeler, then commander of the West Indian Squadron, wrote to the Earl of Nottingham of the need of hospitals on one or more of the West Indian islands:



One of my pressing propositions to you is relating to hospitals, and if it is true, what we hear from all hands along the coast, all will be little enough to keep the men alive, since in the West country they do not fail of averring that the plague is at Barbados, which will make a terrible havoc among new men. Pray God the news may not be true or else there is little sign of doing any service in those countries.<sup>42</sup>

By 1695 there were two hospitals on the island of Jamaica, one at Spanish Town (the capital) and one at Kingston. In that year, as the Governor, Sir William Beetson, reported to Sir John Trenchard, the President of the Board of Trade and Plantations, the island raised £800 for the support of the sick and wounded. Initially, the majority of the patients at the two hospitals were soldiers who had fallen ill when they had been landed at the island. The health care system at Jamaica was unlike that in England. Beetson continues, “[the £800] happens well to maintain the sick at the two hospitals...where all possible care is taken of them. Those that are anything well, though weak, are quartered at free cost among the people.”<sup>43</sup> Since the inhabitants of the island were supporting the care of the sick at the hospitals themselves, they were willing to take those who were convalescing into their homes to care for them. Mortality continued to be high, as the Governor reported, “there are about 62 dead here and 150 dead at Kingston since their arrival. The seamen are also very sickly and the Commodore had landed many of them at Kingston.”<sup>44</sup> The two hospitals did provide a place where the sick could receive treatment from a surgeon, and it allowed for the contagious diseases to be isolated from the fleet.

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<sup>42</sup>*C.S.P.D., 1 November 1691 - End of 1692* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.392.

<sup>43</sup>*C.S.P.C., January 1693 - 14 May 1696*, p.574.

<sup>44</sup>*Ibid.*

The hospital at Lisbon was established once the British fleet began to regularly winter near that port. The 1703 Methuen Treaty with Portugal guaranteed the British a wintering base in close proximity to Gibraltar.<sup>45</sup> The hospital was opened in 1706. In order to save money, rather than send a full staff to the hospital, as was done at Jamaica, the Lord High Admiral sent orders to the commander in chief in the Mediterranean that: “when they [the captains of the ships in the squadron] doe send any considerable numbers of their Men Sick on Shoar there [at Lisbon] they doe appoint their Surgeons to goe with them to assist in the said Hospitall dureing the time the ships lye at Lisbonne.”<sup>46</sup> The hospital at Lisbon did have one thing that the hospital at Jamaica does not appear to have had — female nurses. On July 29, 1706, the Lord High Admiral agreed that female nurses could be sent to work in the hospital at Lisbon. They were paid five shillings per week and they were given their room and board. Mary Howley, Ann Robinson, Jane West, Eleanor Page, and Elizabeth Broddy were chosen, by the Commissioners for Sick and Wounded Seamen, to travel to Lisbon.<sup>47</sup> In the fall three more women were selected by the Commissioners — Mary Wharry, Jane Shaw and Hannah Pocock.<sup>48</sup> These courageous women traveled from London to Lisbon to serve their country in a foreign hospital. Nothing more about these women appears in the official Admiralty records. For now, they are only names, but it is to be hoped that there is more information about their lives which has yet to be found.

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<sup>45</sup>Paul Kennedy, *The Rise and Fall of British Naval Mastery* 3<sup>rd</sup> edition. (London: Fontana Press, 1991), p.101.

<sup>46</sup>NMML, ADM/E/3, f.64a.

<sup>47</sup>PRO ADM/99/7, f.63.

<sup>48</sup>Ibid., unfoliated. Pagination has stopped prior to this entry.

The hospital at Lisbon also took patients from among those men who worked for the Commission for Victualing at their yard at Lisbon. The Lord High Admiral wrote to the Commissioners for Sick and Wounded Seamen in August 1706 to inform them that:

upon what has been represented to Mee by the Commiss<sup>rs</sup> for Victualling her Majesties Navy, I think it will be a great Encouragement to the Men employed in their works at Lisbone & for the good of her Majesties Service to lett them have the benefitt of the hospitall there, when Sicke....All such Coopers, Labourers, Boatscrew & others employed in her Majesties Victualling Service there...[shall] be taken care of during their Sickness, in the same Manner as the Seamen of her Majesties Ships which are sett Ashoare there.<sup>49</sup>

There was a need to keep these dock workers alive as much as there was to keep the sailors alive. This availability of medical care might also have served as an incentive for those who were considering serving at the dockyard in Lisbon. Most dockyards in England had a hospital attached to it. Most port hospitals were built near the dockyard and the workers in the various yards would have access to medical care, just as the sailors did.

As with the port hospitals in England, the Commissioners felt that there should be someone at the hospital in Lisbon who could tend to the spiritual needs of the men. In January of 1708, the Commissioners recommended to the Lord High Admiral that a chaplain be sent to Lisbon. He was to receive a salary of £50 per annum in addition to his room and board.<sup>50</sup> This concern for the spiritual health of the men in foreign ports reinforces the desire on the part of the Commission, and therefore the government, to provide everything possible to ensure the recovery of the seamen.

Once the hospital was established, the Apothecary's Hall approached the Commission for

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<sup>49</sup>NMML, ADM/E/3, f.66.

<sup>50</sup>PRO ADM/99/8, unfoliated.

Sick and Wounded with a proposal to stock medicines at the hospital at Lisbon in order that, “the Surgeon of y<sup>e</sup> Ships & the Hosp<sup>l</sup> may be Supply<sup>d</sup> as occasion shall offer & not forced to have their Medicines from those ill hands they now have ‘em from.”<sup>51</sup> It is unclear whether the medicines the physicians and surgeons were forced to purchase at Lisbon were truly below the standard set by the Apothecary’s Hall or whether they were simply too expensive. It is clear that the British base was to supply all the needs of the fleet while it was cruising in the Mediterranean.

In October of 1712, with the War of Spanish Succession drawing to a close, the Admiralty began decreasing its expenditure. One of the first things to be closed were the two hospitals at Jamaica and Lisbon. The order was given on September 30, for “discharging our Officers [those of the Commission for Sick and Wounded] at Jamaica [and] Lisbon.”<sup>52</sup> The medicine chests of both hospitals were to be brought back to England while the beds and linen from the hospital at Lisbon was to be delivered to the garrison of Gibraltar, for which the agent was to receive payment.<sup>53</sup> With the declaration of peace the hospitals were no longer considered to be necessary. However, once hostilities began again in the West Indies a new hospital was built in Jamaica to care for the sick and wounded of the fleet.

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<sup>51</sup>PRO ADM/99/7, unfoliated.

<sup>52</sup>PRO ADM/99/11, unfoliated.

<sup>53</sup>Ibid.

## **Conclusion**

The aforesaid four levels of care were all important to how the British sailor was treated for his illness or wound. It was possible for one man to experience care at each type of hospital. The varied locations and the attention to detail on the part of the Commissioners for Sick and Wounded reinforces the view of their commitment to nursing back to health and strength those men who had fallen ill or had been wounded. The Navy needed these men to regain their health so that they could return to their ships. The Commissioners realized that the best way to treat the sick sailor was to remove him from his ship as quickly as possible. This allowed him to receive better care than he might have on his own ship and it halted the spread of contagious diseases that might quickly spread through a ship and decimate its crew. The best place for these men was on shore but, when that was not possible, the hospital ship was the next best location. Each type of care was vital in the recovery of as many men as possible. It is impossible to estimate the numbers of men who were served by each of the four levels. The sources for the hospitals in London are quite complete; however, the same cannot be said for the records from the various port towns, the hospital ships or the hospitals at overseas stations. Regardless of how many men were cared for in these facilities, it is enough to say that the government's concern for the men of the Navy was shown in the various types of facilities that were provided to promote their recovery.

## CHAPTER THREE

### HEALTH CARE PROVIDERS

Very little is known about the men and women who served the state as health care providers. They have left almost no recoverable record of their lives. The medical journals which they were required to keep have been long since destroyed. Only the very few published by some of the physicians and surgeons survive, and these can be used to paint a picture of the role that they played in shipboard life. Many of the questions regarding these medical men and women must remain unanswered simply for the lack of sources. Were these sea- surgeons the best of the medical profession of the early eighteenth century, or were they the men who could not establish a profitable practice in London or their home towns? If these were mediocre surgeons and physicians, how did that affect the medical conditions within the fleet? These questions are impossible to answer definitively; however it is possible to draw some conclusions from the sources that do survive. While some of the surgeon's warrants survive, it is impossible to estimate how many of the total number issued are extant. The published accounts of the exploits of sea-surgeons and physicians were intended for the education of young sea-surgeons and physicians, and the cases studies included by the authors offer a glimpse into medical care at sea. While they went to the sea for as many reasons as there were surgeons, they all shared the difficult experience of trying to practice medicine in the British Navy. From the scraps of information that are in a number of sources, a picture of the life of the sea-surgeon can be drawn.

This chapter will draw upon various sources in an attempt to recreate the lives of surgeons and their mates, with reference to their education, appointments and advancements, their status on

board their ship, the conditions in which they worked and the level of mortality among them. Surgeons and surgeon's mates will be considered separately as their experiences were very different. Some mates went on to become surgeons; however, many did not and the singularity of their situations deserve separate treatment. It is evident that both the surgeons and their mates were well-educated men who were frequently examined by the Barber and Surgeon's Company. They did not always work in isolation; some published medical texts make reference to consultation amongst the surgeons in the fleet, and so they were able to share their personal experiences and learn from each other. The low mortality rate<sup>1</sup> is a testimony to the expertise of the surgeons and their mates.

## Surgeons

Much of what is known about the surgeons who served at sea comes from their warrants.<sup>2</sup> Thirty-four warrants include the service record of the surgeon or surgeon's mate being examined. John Goodall was examined in January 1702, and qualified as a master surgeon on a second-rate ship. A handwritten note at the bottom of his printed warrant form states that he had "been near

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<sup>1</sup>This will be discussed further in Chapter Four.

<sup>2</sup>These warrants are held at the Public Record Office in London. 842 have survived for the period 1700-1714. They are arranged alphabetically, by the surgeon's last name, and judging from the number of warrants for some letters (there are 136 "B" warrants and only 63 warrants for the letters "S" through "Z") this is only a fraction of all warrants produced by the Navy Office. Nevertheless, there is a wealth of information in the small sample that has survived. The warrants begin in 1700, although there is some information of the service record of a handful of men who were surgeons prior to that date. All service information was handwritten at the bottom of the printed forms.

Twelve years in y<sup>e</sup> service mate & surgeon.”<sup>3</sup> Jasper Holcome, in April 1701, only qualified as a surgeon’s mate in a fourth-rate, despite the fact that he had “been Surgeon of a Merchant Man in y<sup>e</sup> W. Indies.”<sup>4</sup> It would appear that his ability as a surgeon was not at the level required to be a surgeon in the Royal Navy. Some of the men have a record of the many ships that they served on. John Philborough qualified as a surgeon in a sixth-rate ship in May 1702, but prior to that he had “served Surgeons Mate of y<sup>e</sup> Birstoll, Rupert Coronion, Anglesey & Scarborough near Six years.”<sup>5</sup> The experience of these men, prior to their examinations in the early 1700s, would have influenced their rank and posting.

Twenty-seven warrants detail the training of the surgeon prior to their being examined for their warrant. Of that twenty-seven, eleven men had been apprenticed to surgeons who had some connection with the Navy. William Clark “served this time to M<sup>r</sup> John Laky surgeon of y<sup>e</sup> hospitall at Plymouth,”<sup>6</sup> while Edward Hammond “served about ffour yeares to one M<sup>r</sup> Joseph Smalwood Surgeon at Deptford, who has been a Surgeon in y<sup>e</sup> Navy all y<sup>e</sup> late Warr [referring to the Nine Years War],” and George Hammond “served ffive years to M<sup>r</sup> Sam<sup>l</sup> Harris late Surgeon of y<sup>e</sup> Sick & Wounded at Deal.”<sup>7</sup> The remaining sixteen served their apprenticeships with surgeons throughout England and Scotland. George Bowser, “served his time to M<sup>r</sup> Elton

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<sup>3</sup>PRO ADM/106/2956, unfoliated.

<sup>4</sup>PRO ADM/106/2958, unfoliated.

<sup>5</sup>PRO ADM/106/2961, unfoliated.

<sup>6</sup>PRO ADM/106/2954I, unfoliated.

<sup>7</sup>PRO ADM/106/2958, unfoliated.



Surgeon of St. Thomas's hospitall,"<sup>8</sup> William Horsley "served his time in Yorke,"<sup>9</sup> while John Conningham, John Kennaday, and John Ogleby all served their time in Edinburgh.<sup>10</sup> There does appear to have been an effort made to issue warrants only to men who had served most of their apprenticeship. The one exception, in all of the warrants, is Samuel Huggins who had "Served about Two years & a half to one M<sup>r</sup> Hunt at Lizard in the County of Cornwall Noe other Surgeons Mate attending in y<sup>e</sup> Office."<sup>11</sup> The men who went to sea as surgeons or surgeon's mates were qualified men who had completed the greater part of their training. This means that, unlike other mates on board the ship who were serving their apprenticeship at sea,<sup>12</sup> the surgeon's mates were within a year or two of finishing their apprenticeship and so had received the majority of their training before they entered their ships. This was important because a surgeon's first mate could find himself promoted to full surgeon upon the death of the surgeon of the ship. These men had to be ready to fill that role.

The surgeons who served with the Navy were examined by the Barber and Surgeon's Company of London. The Barber and Surgeon's Company was able to generate revenue from the examinations they performed for the Navy. Men who wished to serve in the Navy as surgeons had to belong to the Company. Surgeons from London would have already paid their fees and would have been members of the Company. Men from outside of London would have had to pay

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<sup>8</sup>PRO ADM/106/2953I, unfoliated.

<sup>9</sup>PRO ADM/106/2957, unfoliated.

<sup>10</sup>PRO ADM/106/2954, 2959, 2960, unfoliated.

<sup>11</sup>PRO ADM/106/2958, unfoliated.

<sup>12</sup>N.A.M. Rodger, *The Wooden World*, pp.24-26.

a fee to become foreign brothers. This fee varied from man to man, but it was usually around £6.6s. This was not necessarily paid in cash prior to the examination. It could be credited to the surgeon's account to be paid when he received his pay from his ship.<sup>13</sup> The only record of an examination is in the novel *The Adventures of Roderick Random*, by Tobias Smollett, and it would appear to be plausible. N.A.M. Rodger, in his introduction to *The Wooden World*, disparages the use by historians of contemporary writers like Smollett. He does grant that Smollett knew something about the Navy but goes on to say that "he remains a poor, or rather an over-rich, substitute for documentary evidence. In picaresque novels a man is not upon oath, and I regard the attempt to guess...which of Smollett's incidents may be taken as faithfully reflecting sea life, as more amusing than useful for the historian."<sup>14</sup> In the case of the portion of the story which describes the examination, it is difficult to see what Smollett could have gained by exaggerating or embellishing the episode. Since it is the only extant account of a surgeon's mate's exam it is useful to see what Smollett records. Random is questioned about his origins, to whom he served his apprenticeship, and then he is examined on his knowledge of both physic and surgery. This examination devolves into an argument amongst the examiners about whether or not a wound to the intestine is mortal, at which point Random is asked to leave the examination hall.<sup>15</sup> This was an oral examination and no demonstration of the surgeon's technique was required. If the examiners found the surgeon qualified, they gave him a form which designated what rate ship he could practice on, the Navy board gave him his warrant and then assigned him

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<sup>13</sup>J.J. Keevil, *Medicine and the Navy II*, p.257.

<sup>14</sup>N.A.M. Rodger, *The Wooden World*, p.14.

<sup>15</sup>Tobias Smollett, *The Adventures of Roderick Random*, pp.111-113.

to a ship.<sup>16</sup> In 1709 a further examination was required before a surgeon could received his warrant; it was ordered that the candidate be examined in surgery by the Barber and Surgeon's Company and in physic by the medical members of the Commission for Sick and Wounded Seamen.<sup>17</sup> This led to the printing of the second form, which proved that the surgeon had been examined in matters of physic. Since none of the members of the Fourth Commission for Sick and Wounded were medical men, they utilized the existing body of the Barber and Surgeon's Company to assist in the selecting of qualified men to serve as surgeons and surgeon's mates at sea. It was not until members of the Commission were also medical men that the Commissioners themselves became involved in the examination process.

It was possible for the surgeons and their mates to advance through the ranks. Since the surgeons were paid two pence out of each sailor's wage per month as payment for medical treatment, the larger the crew the more money the surgeon made. It was, therefore, the goal of the surgeons to qualify to practice on a first-rate ship, which would have a complement of approximately 750 men. Those who intended to stay in the service could be examined by the Barber and Surgeon's Company upon their return from sea in order to improve their rating. James Pemble "served ffive years to one M<sup>r</sup> Henry Wishers Surgeon in Chatham," before he was examined by the Barber and Surgeon's Company in May 1701. They found him qualified to serve as a surgeon's mate on a fourth-rate ship and his first posting, that same month, was to the *Kingfisher*, a fourth-rate ship. In October, he was transferred to the *Dreadnought*, another fourth-rate ship. He was examined again in March, 1705 and was able to upgrade his

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<sup>16</sup>See Appendix C for an example of the printed forms used.

<sup>17</sup>J.J. Keevil, *Medicine and the Navy* II, p.268.

qualifications to that of surgeon's first mate on a third-rate ship. The day after his examination he was posted to a third-rate ship, the *Cumberland*. In January 1708, he was examined a third time and qualified as a surgeon on a fifth-rate ship. His posting was the *Experiment*, a fifth-rate ship. Pemble qualified as a surgeon on a third-rate ship in April 1709, however, there must not have been an opening in a third-rate ship as he was posted to the *Salisbury Prize*, a fourth-rate ship. Although he qualified as a surgeon in 1709, he was not examined in physic by the Commissioners of Sick and Wounded until February 1711. He passed the examination for a surgeon of a third-rate ship and the following month was posted to such a ship, the *Chichester*. In June, 1712, his final recorded posting was to the *Poole*, a fifth-rate ship.<sup>18</sup> This is just one example of many that illustrate that mobility through the ranks was possible for a surgeon who was willing to be examined at every possibility. Unfortunately, the warrants only record those examinations which were passed successfully, they do not record the failures. It is unknown whether the surgeon or mate might repeat an examination if they had failed it in the past, or whether failure barred the surgeon or mate from further promotion. For every example of a man who advanced through the ranks there is one of a man whose service record show that he remained at one level of qualification for the majority of his career. Thomas Browne qualified as a surgeon's mate on a first-rate ship in February 1702. Later that month he was posted to the *Britannia*, a first-rate ship; July 1702 he was posted to the *Shrewsbury*, a third-rate ship; February 1703 he was posted to the *Antelope* hospital ship; April of that year he was posted to the *Jefferys* hospital ship; March 1704 he was posted to the *Warspight*, another third-rate ship.<sup>19</sup> It is impossible to determine

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<sup>18</sup>PRO ADM/106/2961, unfoliated.

<sup>19</sup>PRO ADM/106/2953I, unfoliated.

whether Browne was happy as a surgeon's mate and had no desire to become the surgeon of a ship himself, or whether he was unable to pass the examination that would have allowed for him to be promoted. The reason for his continuing at the same rank for so many years is a question that will remain unanswered.

The surgeon was a warrant officer. The warrant officers held a very tenuous place in the community of the ship. These men "were specialists, craftsmen responsible to the captain for their own departments, but also in a measure confined to them. In the time-honoured English fashion, the experts were kept in their place".<sup>20</sup> Unless the surgeon had a prior relationship with the captain, it is unlikely that he would have socialized with the commissioned officers of the ship. He moved in more humble circles. His companions were the other warrant officers of the ship: the purser, the gunner, the boatswain, the carpenter and the chaplain, if there was one on board. The surgeon played no role in the running of the ship. He did not belong to a particular watch, nor did he have to leave the comfort of his hammock when "all hands" was piped.<sup>21</sup> This isolated him from the other members of the crew, who worked to keep the ship afloat. What the surgeon did have in common with the other members of the crew was his position under the law of the Navy. Surgeons, and their mates, were court martialled just as any other member of the crew. John Oakely qualified as a master surgeon on a fourth-rate ship in January 1702. A note on the bottom of his warrant stated that he "was Tryd & Rendered incapable by Court Martiall for Speaking reflecting words of y<sup>e</sup> Government."<sup>22</sup>

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<sup>20</sup>N.A.M. Rodger, *The Wooden World*, p.20.

<sup>21</sup>Ibid., p.40.

<sup>22</sup>PRO ADM/106/2960, unfoliated.

In most cases, the surgeon would have his own cabin down in the lower decks of the ship.<sup>23</sup> In this cabin he kept his chest of instruments and the chest of medicines. During a sea fight the surgeon remained in the lower decks of the ship treating the wounded. The wounded were handed down to the orlop deck which, on a first-rate ship was below the last gun deck.<sup>24</sup> Since this deck was below the water level it was relatively safe from enemy fire; however the surgeon, and his patients, were not protected from other hazards of a sea fight, such as the ship catching fire. Richard Wiseman published an account of the various cases he had seen while he served as “One of His majesties Serjeant-Chirurgeons” from the time of the English Civil War through to the First Dutch War. In this work he related the case of a man who was put down into the hold with “his Arm extremely shatter’d”. Wiseman states that:

This man’s Arm I ought to have cut off presently, but a sudden cry that our ship was on fire, put me in such disorder, that I rather thought of saving my self, than dressing my Patients. I hastily clapt a dressing upon his Wound, and rouled it up, leaving his Arm in his other hand to support it, and endeavoured to get up out of the Hold as the others did; I verily believing I should never dress him, or any of them more.<sup>25</sup>

When Wiseman returned to the patient he refused to have his arm amputated and insisted that Wiseman treat it. Wiseman did so and, in eight weeks, it healed, although the patient never regained full mobility.<sup>26</sup> The surgeon faced some of the same dangers as the men who armed the guns and sailed the ship without being able to protect himself. In the midst of the noise and the

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<sup>23</sup>N.A.M. Rodger, *The Wooden World*, p.66.

<sup>24</sup>J.J. Keevil, *Medicine and the Navy* II, facing p.161.

<sup>25</sup>Richard Wiseman, *A Treatise of Wounds* (London: By E. Flesher and J. Maccock, 1679), p.41.

<sup>26</sup>*Ibid.*, p.47.

smoke he was expected to treat the wounded men handed down to him. Standing in a pool of blood, surrounded by the screams of the hurt and dying, he had to perform surgery and dress wounds, with restricted light and air, in the hold of a rocking ship.

Surgeons were paid for their work in various ways. At the beginning of the Nine Years War a surgeon's salary was set at £2.10.0 per month, for all rates. This was doubled in 1694 to £5 per month plus allowances, such as the surgeon's two pences (garnished from the sailor's monthly wages) and his free gift.<sup>27</sup> Each man on a Royal Naval vessel paid two pence per month to the surgeon as payment for any treatment they received while at sea. The free gift was paid to the surgeon when he received his warrant.

The amount of the free gift was dependent upon the size of the ship the surgeon was to serve in. This money was to be used for the purchase of goods to fill his medicine chest. The amount of the gift and the cost of outfitting a medicine chest were vastly different. In 1694, in order to encourage surgeons to join the Navy, the Admiralty ordered that the amount of the free gift be increased as follows, shown in Table 3.1.<sup>28</sup> Despite the increase there was still difficulty for the families of the surgeons, especially if they died at sea. In July 1698, Jane Fox petitioned the government stating that she was the "widow of Bryan Fox late surgeon of the *Sussex*, [and that] her husband was cast away with Sir Francis Wheeler. [She] was forced to pay £118, since his death, for his chest of medicines. She ha[d] a child and a mother-in-law to provide for."<sup>29</sup> The

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<sup>27</sup>J.J. Keevil, *Medicine and the Navy* II., p.278.

<sup>28</sup>Ibid., p.284.

<sup>29</sup>*C.S.P.D., 1 January - 21 December 1698* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.356.

Table 3.1

<b>Surgeon's Free Gifts</b>	
<i>Ship's Rate</i>	<i>Free Gift (£.s.d.)</i>
1	30.0.0
2	26.5.0
3	18.15.0
4	12.15.0
5	9.15.0
6	8.5.0

figure that she included in her petition may not have been the expense of one medical chest. In fact, it is unlikely that it would have cost any surgeon that much money to stock his chest. In September 1668, the Barber and Surgeon's Company reported to the Navy Office that the cost of outfitting a medical chest was not more than £50, and that was for a first or second-rate ship.<sup>30</sup> In August 1703, the Society of Apothecaries of London was granted the right to prepare the medical chests so that they would have an uniform composition. They charged between £80 and £90 for the chests.<sup>31</sup> It therefore seems unlikely that Bryan Fox spent £118 on his medical chest. Regardless of the sum, this initial outlay of money caused considerable economic stress on the surgeons who were fitting out to go to sea.

The financial difficulty faced by widows like Jane Fox and the families of sea-surgeons continued during the War of Spanish Succession. With the cost of stocking a medical chest at the Apothecary's Hall so high, well in excess of the Free Gift, the surgeons of the Navy petitioned the

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<sup>30</sup>J.J. Keevil, *Medicine and the Navy II.*, p.111.

<sup>31</sup>*Ibid.*, p.273.



Navy Board to change the system. The surgeons complained of the financial hardship placed upon them and their families while trying to outfit a medical chest intended for the Queen's service. The Navy Board refused the suggestions made by the surgeons and instead tendered their own suggestions to the Admiralty which would have made the financial situation of sea-surgeons even worse. The Admiralty did not pursue the matter further, due to lack of funds within the Navy.<sup>32</sup> Sea-surgeons continued to face economic hardship when they stocked their medical chests.

The surgeon's responsibilities once he got to sea were fairly straightforward. The only surviving written account of what was expected of a surgeon during the period in question appears on the warrants themselves. Their instructions were, "to Officiate in all Things proper to the Duty of your place as becometh you, during her [the ship's] present Intended Voyage, and to be Obedient unto such commands as You shall from time to time received from your Captain, or other Superior Officer in his Absence"<sup>33</sup> The Royal Naval Fighting Instructions from the period do not contain the specifications of the responsibilities of the officers of the ship. The earliest ← surviving published account of the responsibilities of a sea surgeon are contained in the *Regulations and Instructions Relating to His Majesty's Service at Sea*, published in 1731.<sup>34</sup> This provides a very thorough account of what the job of a surgeon entailed. It is unlikely that these responsibilities had changed much over the previous half century. The Admiralty was always concerned with the problem of embezzlement, and so Regulation IV was an attempt to decrease

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<sup>32</sup>J.J. Keevil, *Medicine and the Navy* II, pp.273-274.

<sup>33</sup>PRO ADM/106/2952, unfoliated.

<sup>34</sup>See Appendix B for the instructions relating to sea surgeons.

the misappropriation of materials which were intended for the use of the sick and wounded.<sup>35</sup> Regulation V established the amount of care that the surgeon should have been providing.<sup>36</sup> It is possible that this regulation was the result of complaints from sailors regarding the level of care they received or it may have been an attempt on the part of the Admiralty to ensure that the surgeons were caring for the sick despite their limited supervision. The surgeon of 1731 was faced with the same difficulty as the surgeon of 1689 — that is the lack of training in the field of physic. Regulation VI, ordering the surgeon to consult the squadron physician (if there was one) in difficult cases,<sup>37</sup> shows that the ship's surgeon continued to treat cases as a physician as well as cases of surgery. The captain was ultimately responsible for all of the members of his crew. It was the surgeon's duty to keep the captain informed of the number of sick men on board and the nature of their distemper. Regulation VII places the onus of reporting this information with the surgeon.<sup>38</sup> It was to be a daily report, with emphasis on the infectious nature of any of the sick so that an epidemic on board might be avoided by the speedy removal or separation of the infected men from the ship. Regulation IX stressed the fact that the surgeon's place, during a sea battle, was in the hold of the ship.<sup>39</sup> This was the eighteenth century sick-bay. Not only was the surgeon to remain in the hold but he was to be well prepared prior to the commencement of battle to care for the wounded that were passed down to him and his mates. It is unclear where the preceding

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<sup>35</sup>*Regulations and Instructions Relating to His Majesty's Service at Sea*, p.130.


<sup>36</sup>*Ibid.*

<sup>37</sup>*Ibid.*

<sup>38</sup>*Ibid.*, p.131.

<sup>39</sup>*Ibid.*

regulations had their origin. Regulation XI, regarding the necessity that every sea-surgeon keep and submit a journal,<sup>40</sup> originated during the War of Spanish Succession. In November 1704, the Admiralty issued the order to surgeons that they were “To Send their Journals of Diseases to the Com<sup>rs</sup> for Sick and Wounded Seamen and their Journals of Wounds to the Masters and Wardens of the Company of Barber Surgeons.”<sup>41</sup> None of these journals have survived. In addition to the regulations regarding the responsibilities of the surgeon, there were also “Rules for the Cure of Sick or Hurt Seamen on board their own Ships.”<sup>42</sup> These instructions related to the setting aside a space between the decks for the sick to lie in; the appointment, by the captain, of members of the ship’s company to care for the men at night; instructions for the cooper to make buckets with covers for the sick and for the carpenter to make splits and cradles for those with fractures; and the order that the ship was to carry fishing gear so that the crew might provide fresh fish for the sick.<sup>43</sup> From these instructions it is clear that every man on the ship was involved, in some way, in the care of the sick and hurt. It was, after all, in their interest that their sick comrades recover so that they could return to their jobs in the running of the ship.

The type of medicine practiced by these sea-surgeons would be unknown to modern  scholars if it was not for the published accounts of the activities of a small portion of surgeons. The works they published were prescriptive in nature, and the intended audience was young surgeons and their mates. It is quite likely that some of these books may have been packed away

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<sup>40</sup>*Regulations and Instructions...*, p.132.

<sup>41</sup>BL. Add Ms 9333, f.55r.

<sup>42</sup>*Regulations and Instructions...*, p.54.

<sup>43</sup>*Ibid.*, pp.54-55.

in sea chests to assist the surgeon when he was faced with a difficult case and yet isolated at that particular moment from anyone to whom he could go to for advice. The earliest of these, that was directed specifically at sea surgeons, is *The Surgions Mate, or A Treatise Discouring [Discovering] faithfully and plainely the due contents of the Surgions Chest*, written by John Woodall and published in 1617. Woodall recognized that much of the surgery performed on a ship was amputation. He gave this advice:

let the discreet Surgeon be euer [ever] prepared for it [amputation], and to that end let the Dismembering-saw be alwaies in a readinesse, well filed, and cleane kept in oyle clouts [cloths] to saue [save] it from rust, let it also haue [have] two blades wel filed ere you put it into your chest, for that one tooth in a saw may breake. If you be constrained to use your Saw, first let your Patient be well informed of the eminent danger of death by the vse thereof...Let him prepare his Soule as a readie Sacrifice to the Lord...and forget thou not also thy dutie in that kinde, to craue [crave] mercie and help from the Almighty, and that heartily. For it is no small presumption to Dismember the Image of God...

When both the surgeon and the patient were ready, both spiritually and physically, Woodall advised the surgeon to:

place the patient on the mentioned forme [a table] with one strong man set behind him, and another to stand before him, bestriding his thigh close to his body, compassing strongly with both his hands the member which is to bee taken off, and holding it exceeding fast some two fingers aboue [above] the place where you intend to take it away, and let another hold vp [up] his foote...All these necessaries as is said made ready to the work, in the name of the Almighty, the sharp instruments being as neere as you can hidden from the eyes of the patient the two ministers or helpers also being ready, and hauing [having] hold on the member...take your dismembering knife, and with a steady hand and good speed, cut off flesh, sinewes and all to the bone round about the member, which done, take a smaller incision knife and diuide [divide] the panickle called the *periosteon*, from the bone, it is a tough thin skinne, couering [covering] all the bones of the body, also thrust your said incision knife betwixt your fossels or bones, cutting away whatsoever is to be found there.<sup>44</sup>

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<sup>44</sup>John Woodall, *The Surgions Mate, or A Treatise Discouering faithfully and plainely the due contents of the Surgions Chest* (Londno: By Edward Griffin, 1617), pp.172-74.

It is unlikely, in the heat of battle, when much of this type of surgery was performed, that the surgeon would have enough men to hold the patient in the manner described by Woodall. Nor would the surgeon have the space to ensure that his instruments were hidden from the eyes of his patient. It is interesting to note that Woodall intended that sea-surgeons attempt to provide the same quality of care as would be expected from surgeons on land. In an age of sterilization and antiseptic conditions this practice seems horrific. However, rather than judging this method of surgery with what has become standard practice in the late twentieth century, it would be better to judge this surgery based upon whether it did what it was intended to — save lives. If that becomes the basis of judgement, then it is possible to say that this type of surgery was successful. The sea-surgeons quickly recognized that they could save more lives through amputation than they could by attempting to treat the wound or injury. If the shattered or torn limb was left to heal, more often than not it would become infected and by the time the infection was recognized by the surgeon the poison would have spread throughout the body of the patient. It was better to remove the damaged limb and then treat the surgical incisions. Other surgeons who wrote of their experiences demonstrated how successful their surgical practices could be, even in the face of horrendous conditions.

It is useful to consider another case study from Richard Wiseman's work *A Treatise of Wounds*, in the context of other examples of instructive literature designed for the sea-surgeon.

In a section entitled "Of Symptomes of Gun-shot," he relates this case:

In a Sea-fight an *Irish* Mariner having discharged his Gun which was hony-combed, and loaded is suddainly again, whilst he was ramming in a Carthage, the powder took fire, and shot the Rammer out of his hand, it did tear the palm of his hand, and some of his Thumb and Fingers : The wound was not considerable, but it extinguished both Sence and Motion of the Member. I drest him up with our

common digestive, of which at such a time we had great quantity ready...there being then no time for bleeding; But after the fight I let him bleed, and the next day or two Purg'd him, and Fomented and Embrocated him...and did all that we Chirurgions of the Squadron through fitting, but without success; one night lying a-sleep in his Hamock, he was awakened by the wet he felt, and got up to a Candle, and found the dressing upon his hand all bloody, as also his belly whereon it lay : I was called, taking off his dressings, found the palm of his hand and fingers gnawed by Ratts, they had eaten through his oyl'd clothes, and had knaw'd his hand more if he had not wakened from the trickling of his blood....he was a young man and otherwise of a strong Constitution, and out of hopes of reward for his lost Arm, he hastened away to *Madrid*, and at his return had more use of it.<sup>45</sup>

Rats were, and still are, a fact of life on many ships. This case illustrates the various elements that these eighteenth century surgeons had to contend with apart from performing surgery and post-operative care. By including this particular case, Wiseman was making surgeons aware of the unique problems of surgery at sea.

James Yonge was also a sea-surgeon. He served as a surgeon's mate on board the *Montague* as part of Lord Sandwich's fleet when it attacked Algiers in 1661. He eventually was hired as the surgeon at the naval hospital at Plymouth.<sup>46</sup> In 1679, he published *Currus Triumphalis, è Terebinthô. Or an account of the many admirable vertues of Oleum Terebinthine*, which contains some of his case studies with regard to his use of *oleum terebinthine*, or oil of turpentine. He advocated the use of turpentine as a cauterizing agent to replace the hot irons in general use at the time. In his book are various case studies which Yonge provides as testimony of the value of using turpentine. The following is one example:

I was sent for to a *Dutch* Seaman, who being gotten drunk, threw himself into his Cabbin with all his Cloaths on : it unlickily fell out, that he had in his Pocket a sharp-pointed Knife, such as they usually carry, and that it lay in so ill a posture,

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<sup>45</sup>Richard Wiseman, *A Treatise of Wounds*, pp.69-70.

<sup>46</sup>J.J. Keevil, *Medicine and the Navy* II, p.127.

that the weight of his body forced the point through sheath and cloaths, and run up above three inches (entering about the middle of the Thigh) obliquely towards his buttocks, so that the point might be an inch and half directly in from the skin, under which it lay; I drew it out, and found no part of it broken off; the Man complained of great pain, and there flowed much blood : I then injected the warm Oil of *Turpentine*, and put up above half-way, a thin *Flamula* dip'd in the same : then rouled him up, drawing also about ten ounces of blood from the Arm. The man slept well all night; and after two days, I using nothing but a Pledget and a Plaister on the Orifice, the Solution being all united, I let him walk about. <sup>47</sup>

Not only does this case illustrate the dangers of drunkenness, it also offers an innovative alternative to the standard practice of surgery. Part of Yonge's argument for the use of turpentine was based upon the fact that during the heat of a sea-fight it was not possible for the surgeon to ensure that the irons were the correct temperature for them to cauterize the wound properly.<sup>48</sup> However, as with many innovations, this one treatise did not change the school of thought and sea- surgeons continued, for the most part, to use the hot irons.<sup>49</sup>

The year that the Nine Years War began, Hugh Ryder published *Practical Chirurgery : Being a Methodical Account of divers Eminent Observations, Cases, and Cures*. As with the other works mentioned in this chapter, Ryder provided case studies taken from his own experience to help the surgeon in his practice. He relates how he had to deal with a sailor who was so unlucky as to be left on deck when their ship was boarded by the enemy. This man called for quarter but one of the boarding party struck the man in the head with his cutlass. It took the sailor two tries to remove the sword from his skull and he then fell unconscious onto the deck.

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<sup>47</sup>James Yonge, *Currus Triumphalis, è Terebinthô. Or an account of the many admirable vertues of Oleum Terebinthine* (London: By J. Martyn, 1679), pp.72-73.

<sup>48</sup>Ibid., p.14.

<sup>49</sup>J.J. Keevil, *Medicine and the Navy* II., p.156.

Once the attack was over, and the enemy removed from the ship, the wounded man crawled into the hold where Ryder was treating casualties. Not realizing the extent of the man's injuries, Ryder treated him last. He describes how that when, eventually he looked closer at the wound he discovered that it was "about five inches [in length] and full of a white Matter, which spued out, I could not conceive Digestion could be so soon procured, viz. in the space of two hours; I therefore concluded it to be the substance of the Brain, and so it proved; for with my *Spatula* I removed from the surface of the Wound about a spoonful of the *Cerebrum*, the Hair being removed from the sides of the [sic] Wound." Incredibly, the man lived but he did suffer brain damage. Ryder reported that, "I saw this Person several times, and several years after, in *Southwark*, and observed in him a very great depravation, and but little right Use of his Senses".<sup>50</sup> This case was certainly unusual; however, Ryder defended its inclusion in the work by stating, "I have the more freely set down this Cure, to encourage other Surgeons, that they should not despair of dressing any Man though never so dangerously wounded, but use his best Endeavour and Means, leaving the Success to God, who often gives a Miraculous Blessing, even when our greatest Reason fails us."<sup>51</sup> It must have been very difficult for those surgeons who recognized their own limitations, but Ryder, and quite possibly many others, did what he could for each man presented to him and left the rest to God.

These are just a few examples of the types of cases presented to the sea-surgeon. Their inclusion in published works testifies to their universal nature. The authors must have expected

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<sup>50</sup>Hugh Ryder, *Practical Chirurgery : Being a Methodical Account of divers Eminent Observations, Cases, and Cures* (London: For John Taylor, 1689), pp.2-4.

<sup>51</sup>*Ibid.*, p.4.



that their readers would have need of their knowledge. These cases illustrate that the sea-surgeon had to be both knowledgeable and versatile in his practice of surgery. In addition to that, as if that was not enough, he also had to have an intimate understanding of physic. The books which were probably the most useful to surgeons unfamiliar with physic were written by William Cockburn, who had served as physician to the blue squadron during the Nine Years War.<sup>52</sup> His first book was entitled, *An Account of the Nature, Causes, Symptoms and Cure of the Distempers That are incident to Seafaring People. With Observations on the Diet of Seamen in His Majesty's Navy*. There were nineteen cases studies included in this book, covering fever, ague, scurvy, diarrhea, venereal disease and quinsy. It is useful to consider one of Cockburn's cases in detail as an example of the types of cases of physic that the sea-surgeons would have faced in the normal course of their duties.

*Isaac Pett* was taken ill, on board his Majesties Ship the *Elizabeth*, with a heaviness in his head, pain in his bones and thorax, want of appetite, and a sudden weakness; his Pulse was depress'd, and slower by 8 or 10 strokes in a minute; about 30 hours after his Pulse was more free and quick, he had a great drought, and his tongue was very rough.

From this, Cockburn diagnosed a fever. He was not more specific than that.

'Twill be evident, that because this disease proceeds always, with us at least, from an *interruption of perspiration*, and because the mass of blood is corrupted and vitiated, by the quantity of the steams thus detain'd, that the genuin and natural way of curing this, is by evacuation, either according to the quantity of the detained moles; or at least in such a proportion, as may set the parts of the blood at greater liberty.

His Pulse beating but about ten strokes less than naturally, I order'd twelve ounces of blood to be taken away, and prescrib'd him six grains of *Tartarum Emeticum* next morning; that there might be no conveyance of any thing from the stomach, that might confirm the cohesion of the stagnating parts, but might even break and

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<sup>52</sup>J.J. Keevil, *Medicine and the Navy* II., p.180.

divide those that were already in a stagnating condition; for the reasons to be mention'd hereafter. Having thus been let blood in one day about ten a clock in the morning, and next day his Vomit working very well; about four a clock in the afternoon of that next day, his Pulse was at least ten or twelve strokes higher than naturally and therefore he took a dose of the following Powder, to retain that growing motion about the evening....

All the while he drunk as much Barley water, sharpened with Vinegar, as he pleas'd, in pursuance of this design; and after three days when his Powders were done, I presecrib'd him that which follows to be taken the next morning....It purg'd him some eight or ten times very gently; he slept very well that night, and got rid of his Fever : but that he might recover his strength the better he eat nothing for three days but Burgoo, Water-gruel, and the like, and drunk six ounces of the *Decoutum amarum alterans* every morning for that time; all which he did with the desired success.<sup>53</sup>

Cockburn's treatment was based upon the theory of the humors, which states that there are four humors (blood, phlegm, black bile and yellow bile) that regulate the body. An imbalance in one of the humors causes sickness.<sup>54</sup> Once the theory of the humors is understood, the treatment recommended by Cockburn becomes understandable. Cockburn was attempting to bring the levels of the four humors back into harmony through bleeding and purging. Since it is likely that this patient was suffering from a simple fever, it was probably the bed rest (or, in this case, hammock rest) and the prescription for plenty of liquids which went further to cure him than did the bleeding, purging, and various coactions that Cockburn administered to him.

Of all the case studies that Cockburn published, only one ended unhappily. In his second book *A Continuation of the Account of The Nature, Causes, Symptoms and Cure of the*

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<sup>53</sup>W.C., *An Account of the Nature, Causes, Symptoms and Cure of the Distempers That are incident to Seafaring People. With Observations on the Diet of Seamen in His Majesty's Navy* (London: For Hugh Newman, 1696), pp.90-100.

<sup>54</sup>For a detailed description of the four humors and their effect on the well being of the human body consult Peter Lowe's *A Discourse on the VWhole Art of Chyrurgery*. London: by R. Hodgkinsonne, 1654.

*Distempers That are incident to Seafaring People*, Cockburn relates the case of a Dutch Captain of the *Amsterdam* who fell ill with a fever and pains throughout his whole body. Cockburn prescribed a similar treatment to that transcribed above. However, the captain, in Cockburn's opinion, did not follow the prescription to the letter and so he died. Cockburn absolved himself from any responsibility in the man's death by insisting that if the Captain had followed the prescribed treatment, he would have lived.<sup>55</sup>

Many of the successful cases Cockburn relates are of seamen he treated with his own unique medicines. He does not give the recipe for these medicines but he did make them available to medical men, and to the Navy, for a small price. In his first book, Cockburn relates how he used one of his secret prescriptions to cure a man of gonorrhœa. Cockburn was sensitive enough to conceal the man's identity:

K— B— of the — was troubled with a pain in his Yard, after an impure copulation; which very soon appear'd in a running, and that but very small, at first; but increas'd daily, and was of a green colour, he had an *chaude Pisse, une chorde*, and the erection was painful.

He complain'd of it to me when at Sea and I cured him of the Gonorrhœa, and its Appendicies, in a fortnight, without taking one grain of Mercury, Mercurial Preparations, Turpentine, Decoctions of Woods, Injections, and other Medicins, that are generally prescribed with all the uncertainty imaginable.<sup>56</sup>

Fortunately for the surgeon reading this account, the Navy Board believed that Cockburn's medicines would be of use to the entire Royal Navy. In 1702, an order was issued that Cockburn

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<sup>55</sup>William Cockburn, *A Continuation of the Account of The Nature, Causes, Symptoms and Cure of the Distempers That are incident to Seafaring People* (London: For Hugh Newman, 1697), p.26.

<sup>56</sup>W.C., *An Account...*, p.164.

was to be approached in order to obtain a quantity of his medication for curing the flux.<sup>57</sup> The following year the request was repeated. This time, it was Sir Cloudesly Shovell who initiated the inquiry; however, members of the Admiralty were not convinced that the medicines worked. The Admiralty Office wrote to the Commissioners for Sick and Wounded to inform them that:

Application being made by S<sup>r</sup> Cloudesly Shovell, that the Shipps of his Squadron may bee furnished with Doct<sup>r</sup> Cockburne's Medicine against the Flux : And his Royal highnesse being not willing to put the Government to the charge thereof, till such time as he can be satisfied of the reall vertue of the sayd Medicine, in that particular Distember, I am comanded by his highnesse to signify his Directions to You, that when Doctor Cockburne applyes himselfe to you, you doe examine into the qualifications of his sayd Medicine, and Report Yo<sup>r</sup> Opinion of the same.<sup>58</sup>

Apparently, the Admiralty was satisfied with the curative powers of Dr. Cockburn's medicine. Admiral Shovell certainly was. In 1706, at his request, the Admiralty wrote to the Commissioners for Sick and Wounded to inform them:

Whereas Request hath been made by S<sup>r</sup> Cloudesly Shovell that there may be putt on board each of the hospitall Ships fitting out for Service in the Main Fleete Abroad this Yeaere, Such a Quantity of Doctor Cockburn's Medicine for Cureing the fflux, as hath formerly been putt onboard four Ships of the fourth Rate, you are therefore hereby required and directed, to informe yourselfe of the Quantitie of the said Medicines from the Navy Board, & cause the same to be forthwith done accordingly; And You are to cause Doctor Cockburne to be paid for his said Medicines according to the Rates he has formerly received, the which the Principall Officers & Commissioners of the Navy will alsoe inform you.<sup>59</sup>

Again, it would seem that the medicine was sent and that the surgeons on the hospital ships experienced some success in administering it. There are no surviving complaints that the medication was not effective in curing the flux. In fact, in June 1710, the minutes of the

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<sup>57</sup>BL. Add Ms 9333, f.17r.

<sup>58</sup>NMML ADM/E/1, f.258.

<sup>59</sup>NMML ADM/E/3, f.28.

Commission for Sick and Wounded note that they received a letter from the Admiralty forwarding to them a certificate of the surgeon and the surgeon's mate of the *Revenge*, testifying to the value of Cockburn's medicine.<sup>60</sup> Since Cockburn did not provide the recipe for his medicines (they were never published so that the Navy would have to buy them ready made from him) it is impossible to surmise their effect on the flux, or venereal disease. One thing is certain, his three books describing his methods of treating various ailments which he encountered at sea would have been priceless to those surgeons who found themselves afloat and being called upon to treat unfamiliar diseases.

Just how dangerous was it to be a surgeon in the Royal Navy? If danger is measured by the number of men who died in the service, then statistically, being a surgeon was not a particularly dangerous job. By using the sample muster books it is possible to determine mortality among surgeons. In the thirty-eight ships surveyed, only four surgeons died while in service.<sup>61</sup> It is impossible to determine whether the surgeons died from age, disease or wounds inflicted during a sea battle. As we shall see, that is a relatively low rate compared with the mortality rate among the sailors and other specified personnel. The mortality rate depended heavily upon where the ship was deployed, with ships cruising in the West Indies suffering the highest mortality rates throughout the entire crew, including the warrant and commissioned officers.

The surgeon had one of the most important jobs on any ship — that of keeping the ship manned so that it could continue its cruise. The number of men who were well enough to perform their tasks determined the success, or failure (which often meant the loss of the ship and

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<sup>60</sup>PRO ADM/99/10, unfoliated

<sup>61</sup>PRO ADM/36/2885, f.254r; 36/3124, f.360r; 36/3808, f.81r; 36/4249, f.249r.

much of the crew) of that vessel. The sea-surgeon was the first line of care in the fight to keep the men healthy. In many cases, he was hampered in his work by his own lack of knowledge or the elementary nature of his instruments and medicines. This did not keep surgeons from working to save as many lives as they could. The success of the British Navy in both the Nine Years War and the War of Spanish Succession is, in part, attributable to the efforts of the sea-surgeons.

### Surgeon's Mates

Surgeon's mates were junior warrant officers who were assigned to ships to assist the surgeon. Since some of the ships of the Royal Navy could have a complement of over 750 men, the Admiralty permitted surgeons to have assistants. The larger the ship, the more mates were assigned. Table 3.2 shows the number of mates that the Admiralty allowed in each rate in 1692.<sup>62</sup>

Table 3.2

Surgeon's Mates					
Rate	1	2	3	4	5
Number of sur. mates	5	4	2	2	1

There were no mates assigned to sixth-rate ships because of their small complement. Despite the large number of surgeon's mates in the Navy, there is relatively little information about them. Something can be said about them from their surviving warrants; however, there is very little legislation pertaining to them, and they did not write books of instruction for other surgeon's mates. Some went to sea to finish their apprenticeship under the guidance of a surgeon; some would have finished their apprenticeship but would lack the experience to be assigned to a ship of

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<sup>62</sup>J.J., Keevil, *Medicine and the Navy II.*, p.281.

their own, and so they would serve a short period of time as a mate. There was always a need for surgeon's mates. They were poorly paid and they performed the 'hands on' medicine, administering medication to the men who were suffering from contagious diseases. There does not appear to have been an overly high mortality rate among surgeon's mates. It is, therefore, only possible to speculate on what caused the shortage of men.

By examining the warrants, it is possible to create a generalized picture of the surgeon's mates. The majority of the warrants, 75%, are those of surgeon's mates. The mates were examined in the same fashion as surgeons were, with the exception that the 1709 Admiralty order regarding an examination in physic did not apply to them. Many mates did not advance further than that rank: 49% of the surgeon's mate's warrants show that the mate was only posted to one ship.<sup>63</sup> It is impossible to determine the fate of these men. They may have died in service, become ill and been discharged from their ship, run from their ship or found employment elsewhere. There were other mates, 30% from the warrants, who served as mates in more than one ship.<sup>64</sup> These men were transferred from ship to ship, sometimes improving their rating within the rank of surgeon's mate, but never advancing farther than that. The more enterprising men were examined by the Company of Barber and Surgeon's year after year in order to better their position. One such man was John Colhoun. In January 1708, he was examined by the Company of Barber and Surgeon's and qualified as a surgeon's second mate on a third-rate ship. He was assigned to the *Torbay*, a third-rate ship. He transferred to another third-rate ship, the *Kent*, in March of that year. In June, he returned to the Company to be examined and he qualified as a surgeon's first

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<sup>63</sup>PRO ADM/106/2952-2963, unfoliated.

<sup>64</sup>Ibid.

mate on a third-rate ship. The day after his examination he was posted to the *Kinsale*, a third-rate ship. In April 1711, Colhoun was posted to yet another third-rate ship, the *Lancaster*. In July of that year he was examined by the Company for the last time, and qualified as a surgeon on a fifth-rate ship. Within days he was posted to the *Hare*, a fifth-rate ship, and the last ship listed on his warrant was the *Mermaid*, a fifth-rate ship to which he was posted in March, 1719.<sup>65</sup> It took three years for Calhoun to move from mate to surgeon. The average from the eighty-six warrants of men who furthered themselves in this fashion is 3.2 years.<sup>66</sup> This is just one example of how a surgeon's mate could advance through the ranks until he was the surgeon of a ship, which entitled him to the two pences of the crew.

For surgeon's mates it appears that there was another method of obtaining a warrant. Some mates were examined at port towns by a surgical representative of the Commission for Sick and Wounded Seamen. Their warrants are the same as other surgeons and mates. Of the 842 warrants there are twenty-seven that list the location of the examination to be somewhere other than London. Twelve examinations were at Gosport,<sup>67</sup> ten were given at Plymouth,<sup>68</sup> three at Chatham,<sup>69</sup> and one each at Harwich<sup>70</sup> and an unnamed port.<sup>71</sup> These men represent only 4% of

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<sup>65</sup>PRO ADM/106/2954, unfoliated.

<sup>66</sup>PRO ADM/106/2952-2963, unfoliated.

<sup>67</sup>PRO ADM/106/2957; 2959; 2960; 2961; 2962, unfoliated.

<sup>68</sup>Ibid.

<sup>69</sup>PRO ADM/106/2958; 2960; 2961, unfoliated.

<sup>70</sup>PRO ADM/106/2962, unfoliated.

<sup>71</sup>PRO ADM/106/2060, unfoliated.



all the surviving warrants, and none of them qualified as a surgeon. The Barber and Surgeon's Company was not pleased that these examinations were occurring outside of London. The Company held the right to examine surgeon's and mates and they intended to keep it.<sup>72</sup> The Governors of the Company maintained that the examinations at the ports were not as rigorous as those given in London and requested that the Navy order that they cease.<sup>73</sup> This request by the Governors of the Company may have been prompted by a letter written by the Commander of the *Greyhound*, a fifth-rate ship. He was writing, at the request of his surgeon, to complain of one David Colt. The letter states that Colt was "a young boy" and knew "nothing of the business" of surgery. He also informed the Commissioners that Colt was "examined at Harwich by M<sup>r</sup> Langley Surgeon of the Sick and Wounded there...and for a Certificate of his being qualified was a bribe of nine or ten Guines given."<sup>74</sup> Colt did not serve on another naval vessel, at least in a medical capacity, and the examination at the ports continued. It is unclear why these examinations were not given by the Company, but it is possible, based upon the small number of warrants which were issued in this manner, that there were extraordinary circumstances involved.

The desire to move up through the ranks was probably motivated by the meager pay allotted to surgeon's mates. From 1689 until 1703 all surgeon's mates were paid thirty shillings per month. The low wages may have been partially responsible for the chronic shortage of mates. This was recognized in 1703 when the Lord High Admiral, Prince George, submitted an Order in Council that surgeon's mates should have their wages raised. The order read:

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<sup>72</sup>J.J. Keevil, *Medicine and the Navy* II., p.261.

<sup>73</sup>PRO ADM/106/2954, unfoliated.

<sup>74</sup>PRO ADM/106/2954, unfoliated.

The Small Encouragement to Surgeons Mates having made it difficult to get any that will Serve on board the Fleet, and those that come into the Service, being but indifferently skilled in their possession, I cannot but think it Necessary, that the Allowance should be increased in order to induce Men of Skill to Offer themselves to those Employments which are so Necessary for the Preservation, and Recovery of the Health of the Seamen of England, I do therefore humbly propose to give her Orders that the first Mate in any of her Majesty's Ships be allowed 50<sup>s</sup> p[er] Month, & the 2<sup>d</sup> Mates 40<sup>sh</sup> but that the rest be continued at 30<sup>s</sup> as they now are...<sup>75</sup>

It is unclear whether this raise caused more men, or better qualified men, to join the Navy as surgeon's mates. It is possible that the increased wages for first and second mates would encourage men to stay in the Navy in order that they might obtain these higher ranks.

The exact duties of the surgeon's mate are unclear. The 1731 *Regulations and Instructions*<sup>76</sup> mention surgeon's mates twice, in Regulation V and Regulation IX. As per Regulation V, the surgeon was to "distribute his Mates and Assistants" among the sick and wounded so that the men would receive the attention they required.<sup>77</sup> This did not mean that the mate performed the job of a nurse. In a section of the *Regulations and Instructions* entitled "Rules for the Cure of Sick or Hurt Seamen on board their own Ship", Article II states that the captain was "to appoint some of the Ship's Company to attend and serve the sick Men Night and Day by Turns, and to keep the Place clean."<sup>78</sup> In accordance with Article IX, the mate was to be with the surgeon in the hold of the ship during an engagement.<sup>79</sup> Since the mates had completed

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<sup>75</sup>NMML CLU/5, f.163.

<sup>76</sup>See Appendix B.

<sup>77</sup>*Regulations and Instructions...*, p.130.

<sup>78</sup>*Ibid.*, p.54.

<sup>79</sup>*Ibid.*, p.131.

much of their training prior to joining the Navy they may have been responsible for dressing some of the less serious wounds. The mates would also have assisted the surgeon with amputations, which required a number of men to hold the patient still during the procedure. It is evident that these mates were not servants, expected simply to take order from the surgeons but medical men who could treat some cases on their own.

Based upon the thirty-eight sample muster books, it is apparent that the mortality rate among surgeon's mates was low: twenty-one mates are listed as discharged dead,<sup>80</sup> however, fourteen of those men were discharged from the *Smyrna Factor* hospital ship in 1702.<sup>81</sup> It appears that it was no more dangerous to serve as a surgeon's mate at sea than it was to serve as a surgeon. It was service on land which often proved deadly.

There was a high rate of mortality among those mates who served in overseas hospitals. In September 1702, the Commission for Sick and Wounded received a letter from Mr. William Bells who was the master surgeon at the hospital at Jamaica. He wrote "that the Surgeons Mates are all dead and that they Can gett none their to Officiate in that Employment." The Commission referred the matter to the Navy Board.<sup>82</sup> It is likely that more were sent and it was not until December 1708, that the Commission received another letter from Jamaica reporting that all the surgeon's mates, including one Mr. Pennillick, who was to be dismissed in May of that year for

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<sup>80</sup>PRO ADM/36/2999, f.156r; 36/3079, f.301r, f.302r; 36/3080, f.438r; 36/3124, f.351r, f.360r; 36/3259, f.285r; 36/3355, f.231r; 36/3602, f.583r; 36/3736, f.365r; 36/3737, f.109r, f.115r; 36/3740, f.109r, f.110r; 36/3741, f.135r; 36/3804, f.70r, f.345r, f.494r; 36/3808, f.81r; 36/3871, f.242r; 36/4143, f.261r; 36/4144, f.284r; 36/4145, f.4r; 36/4249, f.257r; 36/4381, f.376r, f.384r, f.386r; 36/4382, f.368r; 36/4432, f.392r.

<sup>81</sup>PRO ADM/36/3737, f.109r, f.115r.

<sup>82</sup>PRO ADM/99/2, unfoliated.

drunkenness,<sup>83</sup> were dead.<sup>84</sup> The situation appears to have been better at the other overseas hospitals, those at Lisbon and Port Mahon, as there is no surviving correspondence specifying mates being sent to replace men who had died. This does not mean that it did not happen. Those dead mates could have been replaced by men taken from ships that called in at that port. The commander of the fleet had the power to reassign both surgeons and surgeon's mates if they were needed elsewhere.

### Conclusion

It is not the intention of this chapter to judge the quality of the medicine practiced by these surgeons and their mates. This chapter has attempted to present some of the men who filled the ranks as medical officers. One facet of these men which cannot be ignored is their motivation for going to sea. A sense of patriotic duty can be largely discounted during this period.<sup>85</sup> Some may have been seeking adventure, others (perhaps the vast majority) may have gone to sea because they could not practice medicine on land. They were not handsomely paid and the social position they held within the community of the ship was not very high. These two factors may have kept the truly talented surgeons from joining the Navy. However, it must also be stated that the British Treasury was stretched to the limit during these conflicts simply trying to pay the men and the debts incurred during the two wars. They could not offer to pay the surgeons any more money;

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<sup>83</sup>PRO ADM/99/8, unfoliated.

<sup>84</sup>PRO ADM/99/9, unfoliated.

<sup>85</sup>This statement is based upon the conclusions reached by Linda Colley in *Britons - Forging the Nation, 1707-1837*, (New Haven: Yale University Press, 1992).

less than ideal conditions, their knowledge of medicine was rudimentary, and these men were probably not the best surgeons in Britain; nevertheless, the Admiralty, Navy Board and Commissioners for Sick and Wounded attempted to ensure that only trained men went to sea so that the sick and wounded men could receive a certain level of care. This is further evidence of a movement towards standardization within the British state. The state used the Admiralty, Navy Board and Commission for Sick and Wounded Seamen to regulate the quality of medicine practiced at sea. Whether the state was successful in sending qualified surgeons to sea will be determined in the next chapter. Suffice it to say, that men continued to volunteer their services to the state and they were, in part, responsible for keeping the Royal Navy manned and taking the fight to the French at sea.

## CHAPTER FOUR

### MORBIDITY, MORTALITY AND PRIMARY CARE ABOARD SHIP

Thus far, this work has presented the institutions and personnel which were developed to care for the sick and wounded of the Navy. This chapter, and those that follow, will consider how these institutions and personnel functioned in reality. In the previous chapter the danger of going to sea as a surgeon or a surgeon's mate was examined. This chapter will concentrate on the danger posed by enlisting in the Navy for the able and ordinary seamen, and the means of caring for the sick and wounded aboard their own ship.

Historians, such as Ruth Bourne, John Ehrman, and Marcus Rediker,<sup>1</sup> appear to have taken for granted the fact that the majority of British seamen during the Nine Years War and the War of Spanish Succession died at sea. They all blame the very real manning problems experienced by the state during these two wars on the high mortality rate in the fleet.<sup>2</sup> However, they do nothing to explore what would appear to be a key point in the naval strategy of these conflicts. It would be impossible after any consideration of the sources to make such a statement. The muster books consulted for this work clearly show that the Royal Navy experienced very low mortality in all the ranks. The medical situation in the West Indies was unique to that theater of operation, and will be commented upon separately. The muster books also show that the real

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<sup>1</sup>See the Introduction for the historiographical views of these writers.

<sup>2</sup>Ruth Bourne, *Queen Anne's Navy in the West Indies*, p.125.

John Ehrman, *The Navy in the War of William III*, p.125.

Marcus Rediker, *Between the Devil and the Deep Blue Sea*, p.33.

cause of the manning problem was the high number of men who ‘ran’ from their ships. These were men who left their ship without authorization and had not returned by the time the muster book was submitted. This chapter will challenge the idea that high mortality in the Royal Navy was the cause of the manning problem. The evidence will show that although the rate of morbidity was high, the rate of mortality was low throughout the course of both wars. Historians must look elsewhere to find the cause of the manning problem.

### **Morbidity**

In 1691, there were no losses due to enemy action. All casualties suffered that year were the result of sickness in the fleet.<sup>3</sup> In August, Admiral Russell wrote to the Secretary of State the Earl of Nottingham, to report on the condition of the fleet deployed in the Channel on blockade duty. On the fifth of the month he wrote:

The winds hanging westerly, and both the English and Dutch shipp wanting beer and water, ‘twas thought most for the service to sayle for Torr Bay, there to take in what is wanting, as allsoe to refresh the men who are sick of the scurvey in most ships of the fleet in great numbers, as if cannot otherwise bee expected, having been two monthes at sea without any refreshment.<sup>4</sup>

Admiral Russell had to disperse the blockade in order that the men might recover from their sickness. On August 10, he again reported to Nottingham that:

The fleet proves very sickly, and by what I can understand the men that are already onshoare and those that must bee now sent to Plymouth wilbe about two thousand, their distemper being chiefly the scurvey. I am very fortunate in haveing my ship’s company extreame healthy; since shee came out of dock I have buried bu tow men and now have not above three sick, which is very

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<sup>3</sup>J.J. Keevil, *Medicine and the Navy* II, p.176.

<sup>4</sup>*Manuscripts of Allan George Finch* III, p.195.

much, considering the number; but I observe (generally speaking) God Almighty comforts the afflicted in some kinde or other.<sup>5</sup>

The following day Russell received orders for the fleet to sail to the road of Kinsale. The arrival of these new orders caused him to write to Nottingham again to inform him of the situation: "I am very sorrey I did not recive itt [the orders] sooner, that I mought a prosecuted hur Majesty's commands, tho I shoud a found great difecultys in itt, great numbers of men being sick and all sorts of necesaryes for the churgions expended."<sup>6</sup> By the sixteenth of the month Russell was able to write to Nottingham that he had been able to send some of the fleet to Kinsale, but, he continued, "I am afraid severall shipps must bee left behind for want of men, haveing great numbers on shoare sick".<sup>7</sup> This was not the end of the difficulties for the home fleet in 1691. In October, Nottingham wrote to the Lords-Justices of Ireland to request information, on behalf of the Crown, regarding a "report of the outbreak of 'a pestilential disease' among the sailors in Kinsale."<sup>8</sup> This was the situation in the waters surrounding Britain.

That same year there were also serious health problems with the fleet in the West Indies. In April 1692, the Secretary to the Lords of Trade and Plantations received a letter from Governor Kendall of Barbados reporting for 1691 that: "all our ships [are] lamentably afflicted with sickness, which proves very mortal." Fortunately, the French were equally afflicted with sickness and so

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<sup>5</sup>*Manuscripts of Allen George Finch III*, p.198.

<sup>6</sup>*Ibid.*, p.202.

<sup>7</sup>*Ibid.*, p.208.

<sup>8</sup>*C.S.P.D., May 1690 - October 1691* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), pp.538-39.



neither side was in any condition to attack the other.<sup>9</sup> Serious health problems, which affected British strategy, were not confined to 1691. The types of illness which British seamen contracted were numerous and varied; however, they did not infect the British exclusively. The French were equally afflicted by disease, and thus neither side had the advantage. The surgeons used the medical knowledge available to them to attempt to counter the effects of morbidity within the fleet.

In 1757, James Lind (who gained his reputation with the publication, in 1753, of *A Treatise of the Scurvy*) published *An Essay of the Most Effectual Means of Preserving the Health of Seamen in the Royal Navy*. In the appendix to this work he listed the various complaints of the seamen who were admitted to the Royal Hospital, Hasler, during the two-year period from July 1, 1758 to July 1, 1760, when he was a surgeon there. Although Lind conducted this study forty-five years after the period under examination in this work, it is unlikely, given the slow advance of medical technology during the eighteenth century, that the diseases of fifty years previous were different from those that Lind encountered. A total of 5,743 seamen were admitted to the Hospital in the two years in question. Table 4.1 indicates the variety of complaints that Lind encountered.<sup>10</sup> Fevers and scurvy accounted for 58% of the men admitted to the Hospital. Many of the fevers were caused by diseases endemic in the foreign ports the Navy visited; the scurvy was caused by the composition of the victuals sent to sea with the fleet. The published works of William Cockburn shed the most light on the frequency of these diseases at sea, how they

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<sup>9</sup>C.S.P.C., 1689-1692 J.W. Fortescue, editor. (Vaduz: Kraus Reprint, 1964), p.627.

<sup>10</sup>R.S. Allison, *Sea Diseases - The Story of a Great Natural Experiment in Preventive Medicine in the Royal Navy* (London: John Bale Medical Publications Limited, 1943), p.xvii.  
For a definition of the more obscure or outdated medical terms, please see Appendix D.

Table 4.1

<b>Diseases Encountered at the Royal Hospital, Hasler</b>			
<i>Disease</i>	<i>Number of Patients</i>	<i>Disease</i>	<i>Number of Patients</i>
Fevers	2174	Gravel	20
Scurvy	1146	Lumbago	20
VDs Chirurgical - Itch Chiefly	680	Palsey	20
Consumptions	360	Scalled Hands	20
Rheumatisms	350	Headaches	17
Fluxes	245	Jaundice	15
Pains or Old Hurts	80	Scrofula	15
Cutaneous Diseases	73	Madness	14
Ague & Intermitent Fever*	67	The True Plurisy	11
Smallpox	53	Angina	10
Asthma	40	Colics	10
Measles	31	Hypocondriacs <sup>‡</sup>	10
Epilepsy	30	For the Lientancy	7
Eye Disorders	30	Sciatica	7
Gout	30	Deafness	6
Leprosy	30	Chincough <sup>□</sup>	5
Spitting Blood	30	Melancholy	5
The True Peripneumonia <sup>†</sup>	29	Strangury	5
Incontinence Urine	25	Apoplexy	3
Dropsey	24	For the Lethergy	3
Cachetic	20		

\*malaria

†pneumonia

‡stomach complaints

□whooping cough

manifested themselves and how he treated them. Since his are the only published accounts of the practice of a physician of the fleet they must serve to illustrate the types of diseases encountered at sea.

In William Cockburn's two books, *An Account of the Nature, Causes, Symptoms and cure of the Distempers That are incident to Seafaring People With Observations on the Diet of Seamen in His Majesty's Navy*, and *A Continuation of the Account of The Nature, Causes, Symptoms and Cure of the Distempers That are incident to Seafaring People* (published a year apart) he gives detailed commentaries on fifty-three case studies. Each case give the name of the patient, or at least his initials, often the ship that he is serving on and his age, his symptoms, and how Cockburn treated him, including the types of medications that he used. Table 4.2 shows the distempers that are included in the two works and the number of case studies devoted to them. The number of cases listed as 'fever' is frustrating, but it is impossible to be more specific than that because

Table 4.2

<b>William Cockburn's Case Studies</b>			
<i>Disease</i>	<i>Cases</i>	<i>Disease</i>	<i>Cases</i>
Fever	25	Jaundice	2
Dysentery	14	Scurvy	2
Hypochondria	4	Asthma	1
Malaria	3	Cholera	1
Qunisey	3	Cholic	1
Tuberculosis	3	Tape Worm	1
Venereal Disease	3	Pleurisy	1
Dropsey	2	Stroke (?)	1

Cockburn himself was not more specific. Descartes' scientific method had not yet reached Cockburn, and so his observations, apart from those which relate to the recipe for the medications, are very general; The example case of Isaac Pett (cited in Chapter Three) illustrates this point.<sup>11</sup> The treatment of the fevers that Cockburn describes are all very similar. Each patient was bled, sometimes more than once, purged and then given some medication, the ingredients of which were given in detail. Even with Cockburn's imprecise style, his books do contain some interesting cases.

Dysentery was an illness that plagued the Royal Navy. Cockburn cites fourteen cases. If left untreated, dysentery would weaken the men until they died. The sheer violence of this distemper is illustrated in the following example; it also illustrates how, for the average man, the workings of the human body continued to be shrouded in mystery. Alexander Ferguson was between sixteen and eighteen years of age and he returned to England with dysentery. Cockburn describes how Ferguson "went to stool sometimes twenty times a day, he voided little but blood, and a skinny sort of substance, which he [Ferguson] would be apt to take for the coats of the guts."<sup>12</sup> This caused the young man to panic, but Cockburn calmed him and ordered that he be bled and given some medication. While Cockburn had a successful standard treatment for dysentery, which included purging, in this case he altered his general prescription. This adapted treatment appears to have worked as Ferguson recovered.

Cockburn's books illustrate some of the various distempers that the sea-surgeon had to treat. Since these men were surgeons, and not physicians (although after 1709 they were examined

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<sup>11</sup>Please see Chapter Three, pp.68-69, for the details of this case.

<sup>12</sup>William Cockburn, *A Continuation of the Account...*, p.81.

in physic), they would have been able to use books, like those published by Cockburn, to help them to treat the more difficult cases. After 1691, when physicians were appointed, one to each squadron, the surgeons could consult with them when they were unable to treat the distemper themselves.

Cockburn did differentiate between fevers and scorbutic illnesses. Scorbutic illnesses are caused by a deficiency in the vitamin and mineral intake from foods. In a time before supplements, all vitamins and mineral had to be absorbed by the body from the foods that were ingested. Leaders within the Navy blamed the victualers for the quality of the food sent with the fleet; however, the victualers cannot be held responsible for the rudimentary level of food preservation. It was impossible for the victualers to store fruits and vegetables in a form which would allow for them to be taken to sea. In 1703, Rear Admiral John Leake noted that:

As to the sickness of the fleet, Bishop Burnet intimates, as if it had been much owing to the unwholesomeness of the provisions; and if so, justly blames the Commissioners of the Victualling for it; and, I think, there may be some truth in it, because the sickness was among our men at Portsmouth, before they left England. They carried it with them to sea, and the greater part died in a few weeks after they left England; for of sixty that died in the Prince George [second rate ship, average of 670 men] above one half was in the passage to Lisbon, and soon afterwards the ships' companies grew more healthy.<sup>13</sup>

When the men were hungry, their immune system would become weaker, making them more susceptible to illness. The Admiralty undermined their own strategies by adopting a policy of reducing the amount of food the men were given. The regular allowance of foodstuffs, as recorded by William Cockburn, was as follows:

the *victual*, allow'd them for their [the seamen] daily sustenance, are *Pork* and

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<sup>13</sup>Stephen Martin-Leake, *The Life of Sir John Leake, Rear-Admiral of Great Britain* G. Callender, editor. (London: Navy Records Society, 1920), p.130.

*Pease on Sundays and Thursdays; on Mondays Oatmeal (Burgoo) Butter and Cheese; on Tuesdays and Saturdays Beef and Pudding, or all Beef, which they please; on Wednesdays and Fridays Butter and Cheese or Oatmeal and Pease, and with all these abundance of Bread.*<sup>14</sup>

In April 1693, the Admiralty issued a warrant to place the fleet on 'short allowance' (meaning that the amount of food that had been designated to feed four men would feed six) for food but not for drink. The men were give short allowance money to compensate them for the short rations.<sup>15</sup> The money was intended to be used by the sailors when they came into port for them to purchase their own food. The admirals wrote immediately to the Secretary of State to voice their objection to this plan. They were concerned that the men would be dissatisfied with this arrangement.<sup>16</sup> The admirals refused to obey the order until they had the short allowance money delivered to them, anticipating the problems they would have with their crews if they reduced their victuals without compensation. It was not until the end of May that the issue was resolved.<sup>17</sup> It eventually became standard practice that a ship leaving port would place itself upon short allowance in order that the victuals might last longer. The Admiralty issued the first order out of a desire to economize. Short allowance was not continued through the winter.<sup>18</sup>

The weakened condition of the men caused them to be susceptible to the scorbutic illness scurvy. There were many treatments for scurvy; however, since the cause of the disease was

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<sup>14</sup>W.C., *An Account...*, p.5.

<sup>15</sup>*C.S.P.D., 1693* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.112.

<sup>16</sup>*Ibid.*, p.117.

<sup>17</sup>*Ibid.*, p.160.

<sup>18</sup>*Ibid.*, p.352.

unknown the treatments were the result of trial and error. In many cases, even when a treatment worked the result was attributed to an incorrect factor. An example of this can be found in “A hasty Abstract of some Years Observation Concerning The General Occasions of Sickness In Fleets, & Ships of War; which Come not within the Verge of Physick & Surgery at Sea But Come wholly under the Cognisance of Great Officers, on shore, & Principall Officers, att Sea.” The author, who remains anonymous, does not claim to have any medical training or experience, save that which he acquired while serving at sea. He writes at length on the topic of scurvy and the best means of curing those infected with it. He ascribes the cause of the disease to the inability of new recruits to digest the victuals, particularly the salted meats, which they were issued at sea. There was also the problem of the limited rations of wine at sea. The author claimed that “wine will most certainly cure this distemper [scurvy] at Sea,” if it was issued to the patient early enough in the course of the disease.<sup>19</sup> There was a second cure for scurvy which the author described in great detail:

The only other cure of Sea-Scurvey that I know, is y<sup>e</sup> Land-air...that the Air is is the cure in this case, and not the dyet, or other treatment, is aboudantly proved by our East India ships who always cure their men by carrying them any where on shore, making them walk, by hauling them along till they sweat; and making them smell to a hole purposely made in the Ground; and repeating the same for some days: And that without any other benefite from the Shore: doing this often in barren parts, where nothing can be expected.<sup>20</sup>

Neither of these treatments contain the reintroduction of vitamin C into the diet, which is the only known treatment for scurvy.

William Cockburn published an account of the treatment of scurvy. He relates the case of

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<sup>19</sup>BL Add. Ms. 9331, f.9.

<sup>20</sup>Ibid., ff.9-10.

George Manning, of the *Elizabeth*. Cockburn recognizes that Manning is suffering from scurvy from the outbreak of “red spots upon his Legs and Arms; [and that] a great many of those upon his Legs became of an olive colour, yellow blue and black.”<sup>21</sup> Cockburn did not bleed him, but did order a vomit, and a limited diet of water-gruel and a barley decoction. The medicine that was prescribed by Cockburn contained Lemon power, and after taking the medication for three weeks, the patient “came to his perfect health.”<sup>22</sup> In many cases, seamen suffering from scurvy would have been sent ashore with the other sick and there they would have been given fresh food, likely some vegetables and/or fruit if it was available, and that would have cured these patients. It was not until James Lind’s work in the 1750’s that the treatment for scurvy, citrus fruits (which are high in vitamin C) was discovered. Until then, various cures were tried with varying degrees of success.

It is impossible to deny that there was a very high morbidity rate in the Royal Navy in both the Nine Years War and the War of Spanish Succession; however, the low mortality rate signifies that the surgeons must have had a great deal of success in treating the various illness that occurred on board their vessel. Table 4.3 illustrates the relationship between the number of men discharged due to sickness and the number of men discharged due to death. The numbers are taken from the

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<sup>21</sup>W.C., *An Account...*, p.150.

<sup>22</sup>*Ibid.*, p.152.



Table 4.3

<b>Rates of Morbidity and Mortality 1689-1713</b>							
<i>Ship/Rate</i>	<i>Dates</i>	<i>Complmt</i>	<i>R %</i>	<i>DSQ %</i>	<i>DS %</i>	<i>DD %</i>	<i>Total</i>
Royal Sovereign 1	Mar.1702-Oct.1703	760	17	5	4	0.8	1698
Ramillies 2	Dec.1706-Feb.1707	660	2	0	6	0.2	1120
Vanguard 2	Jan. 1692-Oct.1692	660	2	0	12	2	999
Oxford 3	July 1696-June 1697	476	19	2	0.6	2	318
Rupert 3	July 1691-Jan.1692	365	14	5	4	2	1301
Russell 3	Dec.1701-Oct.1702	476	9	0	5	0.9	645
Stirling Castle 3	Feb.1690-Oct.1690	420	6	0	23	7	819
Swiftsure 3	July 1691-Dec.1692	420	11	0	5	4	648
Torbay 3	Dec.1693-Dec.1694	390	6	0	2	6	509
Pembroke 4	Oct.1695-July 1697	330	11	3	3	15	576
Plymouth 4	Aug. 1696-Aug.1697	330	12	18	1	1	521
Reserve 4	Oct.1690-Feb.1692	260	3	0	0	3	279
Ruby 4	Oct.1694-Feb.1698	260	13	4	11	26	892
Sapphire 4	Apr.1691-June1694	135	14	0	7	2	808
Smyrna Factor 4	Sept.1692-Dec.1693	140	24	0.5	2	4	368
Winchester 4	Apr.1693-Feb.1694	355	11	11	6	3	810
Richmond 5	Oct.1692-May1695	160	20	0	0.7	3	276
Rye 5	July 1696-Mar.1698	160	26	4	3	4	260
Saudadoes Prize 5	Oct.1695-Feb.1696	180	6	0	0.9	0.5	218
Swallow 5	Mar.1691-Feb.1692	200	17	0	3	0.8	398
Tartar 5	Sept.1702-Aug.1704	145	21	2	1	6	376
Queenborough 6	Dec.1694-June1697	126	26	5	0.8	4	262
Rose 6	June1709-May 1711	115	32	6	5	0.8	266
Seaford 6	Oct.1697-Sept.1699	126	17	3	6	2	214

Rates of Morbidity and Mortality 1689-1713							
<i>Ship/Rate</i>	<i>Dates</i>	<i>Complmt</i>	<i>R%</i>	<i>DSQ%</i>	<i>DS%</i>	<i>DD%</i>	<i>Total</i>
Squirrel 6	Nov.1704-Feb.1706	115	21	0	2	5	221
Granada bombship	Feb.1710-Nov.1711	30	11	0	0	11	37
Serpent bombship	Mar.1696-Sept.1696	30	33	0	3	2	60
St. Paul fireship	Aug.1689-Sept.1693	45	26	0	3	6	218
Vulcan fireship	Oct.1692-Sept.1695	45	13	0	5	2	185
Unity hoy	Aug.1692-Nov.1693	140	42	0	2	2	484
Postillion Prize ketch	July 1703-Sept.1706	50	19	7	11	2	129
Quaker ketch	July 1692-Nov.1694	50	34	0	11	7	166
Soesdyke yacht	Oct. 1702-Jan.1704	30	14	0	7	8	87

thirty-eight muster books which were studied.<sup>23</sup> The information from the muster books of the four hospital ships has been excluded as it does not accurately represent morbidity or mortality in the fleet. Moreover, the yacht *William and Mary* suffered no loss of personnel through desertion, sickness or death between December 1705 and June 1706, the period covered by her muster book.<sup>24</sup> The letters used at the head of the columns are those which were used by the pursers to

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<sup>23</sup>PRO ADM/36/1307, ff. 46r-47r; 36/2340, ff. 163r-182r; 36/2415, ff. 217r-238r; 36/2725, ff. 290r-294r; 36/2750, ff. 106r-125r; 36/2787, ff. 398r-408r, (mispaginated); 36/2790, ff. 195r-203r; 36/2814, ff. 175r-202r; 36/2826, ff. 395r-400r; 36/2885, ff. 252r-260r; 36/2999, ff. 151r-161r; 36/3080, ff. 421r-472r; 36/3124, ff. 350r-385r; 36/3147, ff. 359r-395r; 36/3185, ff.280r-300r; 36/3204, ff. 279r-291r; 36/3259, ff.278r-285r; 36/3355, ff. 229r-247r; 36/3375, ff. 332r-340r; 36/3456, ff. 389r-401r; 36/3490, ff. 212r-218r; 36/3541, ff. 111r-113r; 36/3602, ff.545r-593r; 36/3735, ff. 288r-304r; 36/3777, ff. 439r-460r; 36/3808, ff. 81r-83r; 36/3871, ff. 233r-247r; 36/4121, ff. 171r-181r; 36/4169, ff. 297r-308r; 36/4249, ff. 249r-269r; 36/4381, ff. 364r-400r; 36/4432, ff. 368r-372r; 36/4453, ff. 275-288r; 36/4555, ff. 328r-349r.

<sup>24</sup>PRO ADM/36/4610A.

note any change in the status of the men on his ship. The “R” was used to denote deserters, “DS” men discharged by reason of sickness and “DD” men discharged due to death. In March 1691, a fourth set of letters was added. These were for men who had been set on shore sick but had not yet returned to their ship. The “DSQ” was put on the books and acted in the same way that an “R” did. It stopped the pay of the sailor until he returned to the ship or reported to another ship in the fleet.<sup>25</sup> Of the thirty-three ships, only eight of them have a morbidity rate higher than ten per cent. The *Vanguard*, *Stirling Castle*, *Plymouth*, *Winchester*, *Rose* and *Postillion Prize* were all cruising in the Channel and/or Mediterranean, although several years apart, during the period covered by their muster books.<sup>26</sup> The *Plymouth* sailed in the Channel during the first year of the Admiralty’s experiment with short allowance and this may partially explain the high level of morbidity experienced by this ship which never sailed very far from the shores of home. The other two ships, the *Ruby* and the *Quaker* were both in the West Indies during the period of their muster books.<sup>27</sup> They were posted there one after the other and their unusually high morbidity rates can be accounted for by the environment in which they operated.<sup>28</sup> Table 4.3 shows that the greatest losses suffered by the Navy were not due to morbidity or mortality but through desertion, both by men who simply ran from their ships and those who were set on shore legitimately and then ran from their sick quarters. It is impossible to determine what happened to the men who were

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<sup>25</sup>John Dennis, *An Essay on the Navy*, pp.13-14.

<sup>26</sup>PRO ADM/36/2724, ff. 290r-294r; 36/2750, ff. 106r-125r; 36/2999, ff. 151r-161r; 36/3602, ff. 545r-593r; 36/4382, ff. 364r-400r; 36/4555, ff. 328r-349r.

<sup>27</sup>PRO ADM/36/2728, ff. 398r-408r (mispagination); 36/3124, ff. 350r-385r.

<sup>28</sup>Morbidity and mortality in the West Indies will be discussed in the following section.

discharged sick, either to a hospital ship or shore quarters. They may have died while being cared for off of their ships, but they did not die while under the care of their ship's surgeon.

### **Mortality**

It follows that if there were fewer men sick than has been generally believed, then the number of men who died would also be less. This is true. The mortality rate of the thirty-three ships in Table 4.3 illustrate this fact. Of the thirty-three ships, only three have a mortality rate of greater than ten per cent. The *Granada* bomb ship, although the mortality rate during her commission from February 1710 to November 1711 was eleven per cent, in real numbers only four members of the crew died.<sup>29</sup> This should be compared with the *Royal Sovereign*: the mortality rate for her cruise from March 1692 to October 1693 was only 0.8%, however, in real numbers that was fourteen members of her crew.<sup>30</sup> The situation of the *Granada* is unique, among the muster books studied, because of the very small number of men carried on the books during her cruise.

The *Pembroke*, a fourth-rate ship, had a mortality rate of fifteen per cent during a long cruise, from October 1695 to July 1697.<sup>31</sup> During this time, the *Pembroke* sailed in the Channel, the Mediterranean, and the West Indies. Mortality is concentrated in June (6 deaths) and July (9 deaths) 1696, and June (17 deaths) and July (24 deaths) 1697. The *Pembroke* was engaged in battle on June 28, 1697 and fourteen of the seventeen deaths from that month are men listed as

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<sup>29</sup>PRO ADM/36/1307, ff.46r-47r.

<sup>30</sup>PRO ADM/36/3080, ff.421r-472r.

<sup>31</sup>PRO ADM/36/2415, ff.217r-238r.

being slain during the battle. There was also an epidemic in the home fleet, that is ships that were guarding the Channel, during 1697, and this may account for the high mortality rate during July of that year. The *Pembroke* was in the West Indies in the spring of 1697, and there were very few deaths while they are there. The spring is not the 'sickly season' in the West Indies and the good health they enjoyed while there attests to that. The *Ruby* was not as fortunate.

The *Ruby*, a fourth-rate ship, was stationed in the West Indies and North America during her three and a half year cruise. The mortality on board this ship was concentrated in one month. In September 1695 the ship was docked at Port Royal, Jamaica, and during that month seventy-three men died. The month with the second highest mortality was August 1697 when the ship was docked at Virginia, and nineteen men died. The government was well aware that the sailing schedule that they adhered to put the health of the seamen in the greatest danger. There is plentiful correspondence between merchants and citizens of the islands and the Council of Trade and Plantations which was concerned with the affairs of the various islands. The merchants in particular were concerned that the fleet was being sent to the West Indies at the most deadly time of the year, arriving in late summer when illness was at its height.<sup>32</sup> The state was also aware of the situation of the *Ruby* and the rest of the fleet. In June 1695, Edward Cranfield wrote to the Duke of Shrewsbury from Barbados to report, "Now that we have entered the calm months the sickness increases, and, as the physicians report, with grater malignancy than ever."<sup>33</sup> In October 1697, J. Vernon wrote to Ambassador Sir Joseph Williamson to advise him that,

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<sup>32</sup>*C.S.P.C., December 1, 1702-1703* Cecil Headlam, editor. (Vaduz: Kraus Reprint, 1964), p.473.

<sup>33</sup>*C.S.P.C., January 1693 - 14 May 1696*, p.523.

All the news we have here is that one of the ships of Nevill's squadron has come in. She lost company with the others on the 18<sup>th</sup> of September, as they were returning from Virginia. We hear a sad account of the great mortality they have had among them. Vice-Admiral Nevill died on the 27<sup>th</sup> of August at Virginia; Captain Mees died before him, and there are six other English captains dead.... They say we have lost 1,300 men...and yet many recovered upon their coming to Virginia. This has been a very unfortunate expedition on all accounts.<sup>34</sup>

These two examples illustrate the health risk connected to deployment in the West Indies and North America. Nevertheless, both the British and French fleets continued to send their fleets into this pestilential area to protect their island and colonial holdings. The French also suffered from high mortality. In April 1692, the Governor of Barbados reported that "the French are no more able to injure us than we them, all our ships being lamentable afflicted with sickness, which proves very mortal."<sup>35</sup> In the West Indies, unlike the Channel or the Mediterranean, a high level of morbidity or mortality did not give one side a tactical advantage over the other. It appears that each side attempted to keep their ships as fully manned as possible and to engage each other at every opportunity. The deployment of ships in the West Indies would prove deadly for the next two hundred years.

There were many theories about why the West Indies were such a deadly place for British subjects. William Cockburn submitted this report to the Council for Trade and Plantations in May 1700:

Some of the causes, known and suspected, of the continuance of the pestilential fevers and great mortality in Barbadoes. (1) The beds in St. Michael's Town, whereon many people have died of the distemper, were wet almost through by the excessive sweats of the dying persons, and this was repeated. It is believed

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<sup>34</sup>*C.S.P.D., 1 January - 31 December, 1697* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.422.

<sup>35</sup>*C.S.P.C., 1689-1692*, p.672.

the infection remains in them. (2) Decayed provisions are brought into the towns. The blacks are fed on stinking fish by their masters. All bad beef, pork or fish should be ordered to be carried out and sunk in the sea and the beds burnt. (3) The nastiness of the houses, which every housekeeper out to cleanse every day before their doors, and scavengers under severe penalties carry away dirt twice a week at least....(6) The New Canal, formerly so called, from the Old Bridge up by the swamp and through Egginton's Bridge to Laffton's farther storehouse, opposite to Smart's buildings, is of late years filled up and should be cleansed. This used to be the healthiest part of the town, but trade was drawn from it by the mole which the Legislative Authority built, and which was destroyed by a hurricane the same year. By barring the bar, this mole is one of the greatest causes of the infection of the air....(8) The nastiness of negroes laying their tales in the night in the streets [it is unclear what this phrase is referring to]: which evil can never be removed but by removing the negroes out of town. This no doubt will meet with great opposition. It would have the good effect too, of preventing the frequent robberies and breaking open of houses by the negroes, as well as to secure them from conspiracy. (9) By worthy and good design the Island has provided by law that servants should have one pound of flesh or fish a day, which for the most part is salt and in so hot a country hurtful....<sup>36</sup>

The points which have been omitted from this quotation refer to offences committed by specific individuals in the community, concerning their failure to maintain their property. Cockburn is relating the theory that dirt and bad smells caused disease. He is recommending that the citizens of the island live as cleanly as possible, and that the blacks on the island also be forced to live in a clean, 'British' manner. There were other reports which also attempted to assist the Admiralty in reducing mortality in the West Indian squadrons. These did not come from medical men but from men in the Navy and the merchants who traded with the islands. The high mortality rate in the West Indies was disconcerting for every sailor who might have to serve there. The men who sailed to the West Indies realized that the rate of mortality, whether high or low, depended upon the month of the year. The Admiralty received a report from one of the ships returning from the West Indies in August 1696. It is clear from the report that the fleet was decimated while in the West

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<sup>36</sup>*C.S.P.C., 1700* Cecil Headlam, editor. (Vaduz: Kraus Reprint, 1964), pp.228-229.

Indies, “The Mary [a fourth-rate ship] alone whose Compl<sup>mt</sup> of Men was 280 buried in y<sup>e</sup> Voyage between 4 and 5 hundred any [sic] y<sup>e</sup> rest of y<sup>e</sup> Squadron fared no better.”<sup>37</sup> This report also contains the story of the *Winchester*, a fourth-rate ship, that ran aground on the coast of Florida. When the ship struck land, according to the report, there were only six healthy men on board (from a standard complement of 280 men), and “that Contagion Raged so that Men in health in Six hours time have been buried.”<sup>38</sup> This report attempted to identify the cause of the high mortality rate:

in y<sup>e</sup> Winter time there I mean between the 10<sup>th</sup> of September and the 10<sup>th</sup> of March the time of the Suns Declination & Extremily South wee buried but verry few Men and had little or no Distemper more than Intermitting Fevers, and on the Contrary in y<sup>e</sup> Summer from Aprill to y<sup>e</sup> latter end of August that Mallignity was So great that our Men dyed in heaps wee loosing in two Months time in May and June between 5 & 6 hundred Men out of the Fleet of Merchant Men and Men of Warr...the like has happened every Year since as there has been more or less Shipping there.<sup>39</sup>

It was recognized that there were times of the year when it was best for the fleet in the West Indies to remove themselves from the area. Merchants, as well as men in the Navy, attempted to make the government see the wisdom of this theory. Their business was affected by the high mortality just as much as the Navy’s was. In September 1696, they sent the following memorandum to the Lords of Trade and Plantations:

To explain ourselves as to the state of health in Jamaica, we would observe that not only May and September, but the intermediate months of June, July and August, are generally rainy on shore and more sickly than other months. Ships cruising at sea about the Island in those months will not be so sickly as in Harbour.

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<sup>37</sup>BL Harl. Ms. 6378, f.3.

<sup>38</sup>BL Harl. Ms. 6378, f.2.

<sup>39</sup>Ibid., ff.3-4.



We again beg that the convoy may sail [from England] in December.<sup>40</sup>

The Governor of Jamaica, Sir William Beeston, confirmed this report in a letter written January 1700, to the Council of Trade and Plantations:

This island from a pleasant and healthy place till my Lord Insequin's arrival, is grown very sickly, and every year in July, August and September many died, but they were seamen and new-comers, but his year has been more fatal than any before and a great mortality has fallen, and still continues not only on the seamen and new-comers but is gone quite through the island and many of the inhabitants, old standers, men, women and children, are dead and unless it please God to remedy it, the place must become nothing but the residence of a few Merchants on Port Royal to sell negroes to the Spaniards.<sup>41</sup>

The Navy appeared unable to have the West Indian squadron ready to sail in December, so that they would arrive in the West Indies before the sickly season. The reason for the higher incidence of sickness in the summer months is attributable to the fact that in the warm, wet months the two species of mosquito responsible for the transmission of malaria, the *Anopheles gambiae*, and yellow fever, the *Aedes aegypti*, were able to breed in shallow pools of stagnant water.<sup>42</sup> People who were infected with malaria tended to have recurring symptoms over a long period of time and often did die during one of the relapses; yellow fever, in contrast, had a high mortality rate. It was probably the leading cause of death in the West Indies until 1901, when an American Army surgeon, Walter Reed, discovered that the *Aedes aegypti* mosquito was the vector for the disease

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<sup>40</sup>C.S.P.C., *15 May 1696 - 31 October 1697* J.W. Fortescue, editor. (Vaduz: Kraus Reprint, 1964), p.126.

<sup>41</sup>C.S.P.C., *1700*, p.20.

<sup>42</sup>William H. McNeill, *Plagues and Peoples* (New York: History Book Club, 1976), p.48; p.213.

and he was then able to develop a treatment for the disease.<sup>43</sup> The reason that yellow fever was especially deadly for ship's crews is the evolutionary quirk that caused this particular species of mosquito to reproduce only in water held in man-made containers. On a ship, therefore, the mosquito could find breeding grounds in any water cask. This, in turn, meant that the disease would remain with the crew as long as infected mosquito larva continued to hatch. Due to the sudden "onset and frequently lethal outcome" of this disease, it came to be feared even more than malaria by those men who sailed in the West Indies.<sup>44</sup> Yellow fever continued to decimate ships' crews until Reed's revolutionary work.

With the exception of the sickly season in the West Indies and North America, the Royal Navy did not experience a high rate of mortality within the fleets. Considering the limited knowledge of both the physicians and surgeons, and the high level of morbidity, the low level of mortality is impressive. Mortality could not have caused the manning problem, since rarely was more than ten per cent of the crew discharged due to death during the course of the ship's cruise.

### **Primary Care**

When a sailor became ill, was wounded or injured in an accident the person who immediately cared for them was the ship's surgeon. He was restricted in space, variety of medicines and, in many cases, knowledge, especially if he was a surgeon faced with an epidemic of a contagious disease. Very little is known about the conditions in which these men were treated. There is some information in the medical texts written by sea-surgeons for sea-surgeons and from

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<sup>43</sup>Ibid., p.280.

<sup>44</sup>William H. McNeill, *Plagues and People*, p.214.

these it is possible to understand the conditions and difficulties of primary care in the Royal Navy

The sick bay of the early eighteenth century was probably a very cluttered space. The sick were crowded together so that they would not spread contagion throughout the ship. The hammocks would be slung close together and there the men would lie while the surgeon tried to treat their ailments. In some cases, the patient was unable to recuperate in his hammock. Richard Wiseman recalled in his *Treatise of Wounds*, that after having treated an “extremely shatter’d” arm he “caused. the Mariner’s Bed to be set up (which was Four pieces of Wood nailed together and corded, and a Bears skin laid upon it, this was fastened between two Guns to the Carriages:) Upon this I see him placed. .it was the right Arm, which I caused to be laid outermost that I might better come to dress it.”<sup>45</sup> This bed appears to be more elaborate than a hammock and it may have been due to the nature of the seaman’s injury that he was placed in a bed which would not swing with the motion of the ship. The sick bay seems an unlikely place for the pursuance of health care; however, the medical texts from the period provide evidence that men did recover while being treated onboard their own ships.

There are numerous case studies which were published in the medical works of the seventeenth century, and which would have been available to the surgeon of the period in question. Very few of the studies concern an unsuccessful treatment, despite the fact that the mortality figures show that men did die. The reason for this unrealistic bias is that these works were intended to encourage and assist the reader. By providing instances when a particular cure was successful, the reader would be able to follow the specific instructions, confident in the knowledge that it had worked before.

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<sup>45</sup>Richard Wiseman, *A Treatise of Wounds*, pp.41-42.

There does not appear to have been an active effort, on the part of surgeons or captains, to have the sick removed from their ships and placed in hospital ships. Out of the thirty-eight muster books, hospital ships only appear in one of the books. Only the *Stirling Castle*, a third-rate ship, records sending men to a hospital ship. They sent seven men to an unnamed hospital ship during their cruise.<sup>46</sup> This does not necessarily indicate that the hospital ships were underused. Some of the muster books contain no notation of the location where the sick men were sent. This sample of muster books can give a clear indication of the rates of morbidity and mortality which can be applied to the Royal Navy as a whole. This is not the case with the locations listed in the muster books of where the men were sent. They are incomplete and, therefore, they can only convey a vague impression of the ports which were used with greater frequency for the reception of the sick and wounded. This information is useful in understanding why the Commission for Sick and Wounded Seamen were concerned with some ports more than others.<sup>47</sup> Since few men were removed from their ships and placed in hospital ships, when the squadrons returned to England, the sick and wounded would be removed from the ship and placed in shore hospitals. There the surgeons and physicians attempted to complete the healing process begun by the sea-surgeons. The conditions may appear to be horrific by twentieth century, antiseptic standards; nevertheless, the mortality rates, for the majority of the fleet, were low and many men who did fall ill at sea did recover their health. Service in the Royal Navy, during the Nine Years War and the War of Spanish Succession, was not as deadly as it has been portrayed.

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<sup>46</sup>PRO ADM/36/3602, ff. 545r-593r.

<sup>47</sup>The specific ports in question will be discussed further in the next chapter.

## CHAPTER FIVE

### SECONDARY CARE: HOSPITAL SHIPS & SHORE HOSPITALS

In the previous chapter it was determined that although the rates of morbidity and mortality were not as high as historians have inferred, there were still a substantial number of men falling sick during their time in the Royal Navy. These men could only be cared for on their ships for a short period of time. Shipboard care was never intended to be the final stage of the health care system. When it was convenient the sick were removed from their ships and placed in hospital ships and shore hospitals, both at home and abroad. Chapter Two considered how secondary care facilities were established and organized, this chapter will focus on how they worked in practice. There were many problems with the system as it stood in 1689, at the beginning of the Nine Years War; however, the solution to many of the problems — the construction of permanent naval hospitals at the port towns — was not considered economically feasible until well into the War of Spanish Succession. Only then did the cost of the problems in the port towns out-weigh the cost of the solution. Even once the hospitals were built, captains continued to land their men wherever it was most expedient for them, without consideration of how the men would be cared for. It is impossible to estimate the mortality in these secondary care facilities. The documents do not exist which would make such an estimation possible. It can be said that the state believed that secondary care facilities were vital to a health care system the goal of which was to return men to their ships once they had recovered their health.

## Hospital Ships

Hospital ships were commissioned by the Navy during both the Nine Years War and the War of Spanish Succession. They were expensive; in addition to the regular complement (based upon the tonnage of the ship) there were surgeons, surgeon's mates, assistants, and nurses who had to be paid. There was the expense of special food and medications, the blankets, soap, linen and instruments. From the thirty-four muster books examined, that is for ships other than hospital ships, only one, the *Stirling Castle*, a third-rate ship, listed a hospital ship as the destination of sick men discharged from the ship.<sup>1</sup> There are many muster books which do not mention where the discharged sailor was sent. In some of these cases the men may have been sent to a hospital ship. There are some records of the activities of the hospital ships and these show that, for those who recognized their value, they were a useful addition to the fleet.

Admiral Benbow recognized the important role that a hospital ship played as part of a fleet. When he was assigned as commander of the West Indian Squadron for 1701 he submitted a list of conditions to the Commission for Sick and Wounded Seamen. He declared that these conditions would have to be met before he would take command of the squadron. One of these conditions was that:

an Hospitall Ship with Surgeons, Mates and Sufficient Medicines be appointed to attend the squadron on board which the Sick Men may be put for preventing contageon when the squadron is at Sea and on Enemy Coasts where the men cannot be put on Shore.<sup>2</sup>

This condition only makes sense considering the length of time this group of ships would spend

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<sup>1</sup>PRO ADM/36/3602, ff. 545r-593r.

<sup>2</sup>ADM/99/1, unfoliated.

in the West Indies. Benbow also had the experiences of Sir Francis Wheeler's Squadron to learn from. Wheeler was in command of the West Indian Squadron in 1693 when it was decimated by yellow fever.<sup>3</sup> Governor Codrington of St. Christopher wrote to the Lords of Trade and Plantations to inform them:

that Sir F. Wheeler's squadron caught an infection or plague from the merchant ships in harbour at Barbadoes, which has much wasted both the sailors and soldiers on board. Since our leaving Martinique to this time the sickness has increased with such rage that, as Sir Francis informs me, he has lost half his sailors and most of his officers.<sup>4</sup>

This "plague" was likely yellow fever. Benbow had to sail in the West Indies for an extended period of time without proven treatment for yellow fever. He hoped to avoid the level of mortality that had come to be expected from tours in the West Indies by having a hospital ship accompany his squadron. Unfortunately, Benbow's tour was not dissimilar from those who had gone before him. In May 1702, he wrote from Jamaica to Josiah Burchett, Secretary of the Navy, to report, "We lose a great many men daily by the distemper of the country."<sup>5</sup> Benbow understood the important role that the hospital ship played as part of a squadron but, in the West Indies, the distempers always won.

The crew of a hospital ship included, in addition to the medical staff, the regular complement of seamen. In March of 1705, each hospital ship was permitted to carry five assistant

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<sup>3</sup>J.J. Keevil, *Medicine and the Navy* II, p.312.

<sup>4</sup>*C.S.P.C., January 1693 - 14 May, 1696*, p.103.

<sup>5</sup>*C.S.P.D., 1702-1703* Robert Pentland Mahaffy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.175.

surgeons, who were to act as nurses, and three laundresses.<sup>6</sup> The crew also included gunners. There was no Hague Convention to protect these floating hospitals. If the hospital ship got too close to the action, the captain would attempt to come under the protection of a larger ship. This did not always ensure the safety of the ship or her crew. A newsletter, dated August 27, 1697, reported that the *Expedition*, a third-rate ship, while sailing southwest of Sicily with a hospital ship, engaged two French men-of-war. The hospital ship “secured herself under the protection of the *Expedition*, but the captain and seven of her men were killed.”<sup>7</sup> Duty on board a hospital ship did not necessarily mean a quiet tour. Hospital ships may also have sought out engagements of their own, in order to claim the prize money for a captured enemy ship. Mortality from enemy fire was always a possible threat. The more obvious cause of mortality, the diseases brought on board the ship by the sick, did not affect the crew of these hospital ships to any greater degree than it affected the other ships in the fleet.

Mortality on board the hospital ships was not much higher than throughout the fleet. The muster books for three hospital ships survive: the *Siam*, the *Smyrna Factor*,<sup>8</sup> and the *Society*. Table 5.1 illustrates the number of men from the crew who were discharged from the ship dead or sick and those who ran from the ship in relation to the total number of men carried on the books.<sup>9</sup>

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<sup>6</sup>BL Add. Ms. 9333, f. 62.

<sup>7</sup>*C.S.P.D.*, 1 January - 31 December, 1697, p.333.

<sup>8</sup>There were two ships with the name *Smyrna Factor*. One was a fourth rate man of war and the other was a hospital ship. The muster books clearly identify the ship they correspond to.

<sup>9</sup>PRO ADM/36/3371, ff.99r-101r; 36/3737, ff.166r-169r, 112r-115 (mispagination); 36/3740, ff.105r-10r; 36/3741, ff.129r-135r; 36/3804, ff.67r-70r, 343r-348r, 437r-438r, 490r-494r; 36/3805, ff.105r-106r; 36/4143, ff.257r-261r; 36/4144, ff.279r-284r, 287r-290r; 36/4145, f.1r-4r.



Table 5.1

Losses on Hospital Ships						
<i>Name</i>	<i>Sailing Dates</i>	<i>Men/Guns</i>	<i>Discharged Dead</i>	<i>Discharged Sick</i>	<i>Run</i>	<i>Total on Books</i>
Siam	Oct. 1693- Aug. 1696	45/22	11	3	3	99
	Oct. 1696- Sept. 1697	45/22	1	3	15	88
	Feb. 1703- Dec. 1703	58/30	2	3	6	80
Smyrna Factor	Feb. 1702- Nov. 1702	45/?	10	3	8	76
	Feb. 1703- Sept. 1703	45/?	7	3	8	66
	July 1705- Dec. 1709	45/?	27	2	15	167
Society	Apr. 1690- Oct. 1690	45/22	3	1	27	92
	Jan. 1693- Jan. 1694	45/22	8	8	21	127
	Dec. 1694- Sept. 1696	45/22	1	0	12	64
	Apr. 1697- Oct. 1697	45/22	2	3	4	66

It is evident that these were not ships of death. The low mortality rate among the crew would indicate that the surgeons were able to contain any contagious cases brought onto the ship. It may also indicate that the majority of cases treated on the hospital ships were of a surgical nature (most likely amputations) which would not affect the health of the crew.

Hugh Ryder, in his work *Practical Chirurgery*, recorded a case study taken from when he served as a surgeon on board a hospital ship. He complains, at length, about the quality of surgery practiced on the other ships, and the poor state in which men were sent to him. He tells

of one man who, “having a Compound Fracture of the Arm by a great Shot, and shattered all in pieces from the Elbow to the Wrist, there was only a sheet of brown Paper (without any other Application) wrapt round it.”<sup>10</sup> He continues his discussion of this case, and in the course of describing the best treatment for this man describes the conditions of the hospital ship: “having at that time above five hundred wounded Men on board, near two hundred of them with Amputations, the rest with Compound Fractures, and other Wounds by Gunshot.”<sup>11</sup> It is clear that when the hospital ships were used, particularly after a battle, they could be crowded, stinking places where the surgeons attempted to heal shattered bodies.

The success of treatment on the hospital ships, which is reflected in the low mortality figures, led men like Admiral Benbow recognized the benefits of having a hospital ship with the fleet, and refused to sail without one. With a surgeon on every ship, perhaps some captains were reluctant to let any of their men leave the ship to receive treatment elsewhere, especially since they could not be guaranteed that the men would be returned to their ship once they regained their health. Nevertheless, by the end of the War of Spanish Succession, the hospital ship had become an established part of any squadron and would continue to be so, even in the wars of the twentieth-century.

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<sup>10</sup>Hugh Ryder, *Practical Chirurgery: Being a Methodical Account of divers Eminent Observations, Cases and Cures*, p.108.

<sup>11</sup>*Ibid.*, p.109.

## Shore Hospitals

Landing the men appears to have been the method of choice for dealing with the sick and wounded. Men were landed all over the coasts of England, Scotland and Wales, as well as in Barbados, Jamaica and Portugal. The state had promised that the men of the Royal Navy would be cared for if they fell sick. The Commissioners for Sick and Wounded were charged with keeping this promise. In Chapter Two the system used in the port towns was described. The sick and wounded were placed in civilian quarters until the government began to fund the erection of naval hospitals. Table 5.2 illustrates the various towns where men were landed based upon the sample thirty-eight muster books.<sup>12</sup> The favourites were Portsmouth, Chatham, Gosport and Plymouth, all located along the south and west coasts of England. The dock facilities at Portsmouth were probably among the best in England and that might account for the frequency with which men were landed there. All of the port towns had one thing in common — the citizens of the town were, at one time or another, owed money by the government.

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<sup>12</sup>PRO ADM/36/1307, ff. 46r-47r; 36/2340, ff. 163r-182r; 36/2415, ff. 217r-238r; 36/2725, ff. 290r-294r; 36/2750, ff. 106r-125r; 36/2787, ff. 398r-408r, (mispaginated); 36/2790, ff. 195r-203r; 36/2814, ff. 175r-202r; 36/2826, ff. 395r-400r; 36/2885, ff. 252r-260r; 36/2999, ff. 151r-161r; 36/3080, ff. 421r-472r; 36/3124, ff. 350r-385r; 36/3147, ff. 359r-395r; 36/3185, ff.280r-300r; 36/3204, ff. 279r-291r; 36/3259, ff.278r-285r; 36/3355, ff. 229r-247r; 36/3375, ff. 332r-340r; 36/3456, ff. 389r-401r; 36/3490, ff. 212r-218r; 36/3541, ff. 111r-113r; 36/3602, ff. 545r-593r; 36/3735, ff. 288r-304r; 36/3777, ff. 439r-460r; 36/3808, ff. 81r-83r; 36/3871, ff. 233r-247r; 36/4121, ff. 171r-181r; 36/4169, ff. 297r-308r; 36/4249, ff. 249r-269r; 36/4381, ff. 364r-400r; 36/4432, ff. 368r-372r; 36/4453, ff. 275-288r; 36/4555, ff. 328r-349r.

Table 5.2

Ports Frequently Used to Land Sick Men							
<i>Port</i>	<i>Men</i>	<i>Port</i>	<i>Men</i>	<i>Port</i>	<i>Men</i>	<i>Port</i>	<i>Men</i>
Portsmouth	188	Jamaica	12	Chatham Hosp.	4	Southampton	2
Chatham	123	Sheerness	12	Gosport Hosp.	4	Blackstakes	1
Gosport	110	Falmouth	11	Harkley Pool	4	Cadiz	1
Plymouth	95	Sandwich	11	Torbay	4	Fareham	1
Deal	76	Weymouth	10	Hope	3	Lisbon Hosp.	1
Dartmouth	56	Kinsale	8	Liverpool	3	London	1
Deptford	35	Barbados	7	Margate	3	Newcastle	1
Downs	18	Hospital Ship	7	Milford	3	Reeuld	1
Yarmouth	18	Port Royal	7	Godeyd	2	Rochester	1
Kingston	17	Gravesend	5	Holland	2	Spithead	1
Dover	13	Harwich	5	Hull	2	St. Helens	1
Nore	13	Pembroke	5	London Hosp.	2		

The Treasury owed money to the inhabitants of the port towns from the beginning of the Nine Years War. As early as April 1690, the citizens of Rochester, Strood and Chatham were petitioning the Privy Council for payment of the money owed to them. The Privy Council referred the matter to the Admiralty.<sup>13</sup> Following the Battle at Beachy Head in the summer of 1690, the Earl of Nottingham, then Secretary of State, wrote to the mayors of Hastings, Weymouth, and Brighthelmston to encourage them in their care of the sick and wounded.<sup>14</sup> The

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<sup>13</sup>*C.S.P.D., 13 Feb. 1689 - April 1690* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.559.

<sup>14</sup>*C.S.P.D., May 1690 - October 1691*, pp.56-57.

inhabitants of these port towns had to be encouraged because there was still money owed to them by the government. By May 1692, the Commission for Sick and Wounded owed £30,000 to quarterers in various towns.<sup>15</sup> The only way that the quarterers got a response from the Commission was to threaten to shut their doors to the sick and wounded that came into their town. In March of the following year, the Commissioners for Sick and Wounded informed the Lords of the Treasury that “the inhabitants of Portsmouth and places adjacent, to whom there was due about £12, 000, had sworn to each other that until their demands were satisfied no seaman should have the least relief.”<sup>16</sup> On May 14, the Commissioners wrote again, “urgently seeking for a speedy supply without which numbers must undoubtedly perish, if set on shore in the approaching action, especially on the western coast, viz., Portsmouth, Dartmouth, Plymouth, &c.”<sup>17</sup> On May 24, the Lords of the Admiralty wrote to the Lords of the Treasury, on behalf of the Commissioners for Sick and Wounded, “desiring that they would order a supply of money...on account of the great arrears due for quarters, as the nurses at Portsmouth, Gosport, &c., refused to receive any more sick and wounded men until their arrears were paid.”<sup>18</sup> On the same day the Commissioners for Sick and Wounded themselves wrote to the Lords of the Treasury to inform them “that their agents tell them plainly that from all, especially the western ports, viz., Portsmouth, Gosport, Dartmouth &c. they can no longer procure quarters, and the seamen are daily sent on shore in great numbers...[since their letter of the 16<sup>th</sup>] about 600 hundred more had

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<sup>15</sup>*C.T.P., 1557-1696*, p.238.

<sup>16</sup>*Ibid.*, p.283.

<sup>17</sup>*Ibid.*, p.294.

<sup>18</sup>*Ibid.*, p.295.

been sent on shore.”<sup>19</sup> In June, the Commissioners wrote that “the poor people were almost distracted” for want of money<sup>20</sup> and in September the Commissioners believed that if they did not receive funds “the Seamen as they were landed must starve in the streets.”<sup>21</sup> When pressed, the Lords of the Treasury did manage to find some money to pay the debts incurred by the Commissioners for Sick and Wounded Seamen; however, the quartering system continued to function on credit, and the state was often in arrears in the payment of debt. This was a problem which never was solved.

In 1711 the letters from the Commission for Sick and Wounded Seamen to the Lord High Treasurer, Robert Harley, Earl of Oxford and Mortimer, assume a tone similar to those from the Nine Years War. On June 8, 1711, the Commissioners wrote that they had received only £20,000 for that year and that without further funds they could not continue to function; the quarterers were two years in arrears, the hospital at Deal had been forced to close due to lack of money, and the Commissioners feared that other hospitals would be forced to close resulting in the sailors dying in the streets.<sup>22</sup> They requested £71,683 3s. 4d. to cover immediate debts and expenses.<sup>23</sup> The Commissioners were forced to write again on June 22, to remind the Lord High Treasurer of

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<sup>19</sup>*C.T.P., 1557-1696*, p.296.

<sup>20</sup>*Ibid.*, p.301.

<sup>21</sup>*Ibid.*, p.318.

<sup>22</sup>The phrase “sailors dying in the streets” was a favourite with the Commissioners for Sick and Wounded Seamen and it often appears in their correspondence with the Lords of the Treasury, especially when they were requesting large sums of money.

<sup>23</sup>*C.T.P., 1708-1714*, p.277.

the urgency of the situation.<sup>24</sup>

Throughout the course of both wars, the quarterers threatened to shut their doors on the sick and wounded, and in some cases they did, if they did not receive payment of the money which was owed to them. The Lords of the Treasury were simply unable to pay the state's debts, to anyone, in good time. By withholding the service of quartering the sick and wounded, the landlords and ladies did prompt the Lords of the Treasury to pay some of the money owed to them. Although the quarterers do not appear to have been owed as much money by the state during the War of Spanish Succession, in April 1715, some quarterers were still petitioning the Commissioners for Sick and Wounded for money owed to them, nearly two years after the war was over.<sup>25</sup> Regardless of whether the quarterers were at as great a financial disadvantage as they reported to the Commissioners for Sick and Wounded, they were able to use the leverage of forcing the government to break their understanding with the seamen of the fleet, that they would receive medical attention if they were sick or wounded, in order to have their debt satisfied. The government does not appear to have been trying to renege on their debt to these quarterers. The problem was that there were many extra expenditures in a time of war and some things had priority over others. The quarterers were paid, eventually. The tactic of threatening to close their doors ensured that their demands went to the top of the Treasury's list of debts pending.

Since the sick were quartered with the general population in these port towns there was always the risk of an epidemic breaking out. Some of the sick would have been suffering from

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<sup>24</sup>*C.T.P., 1708-1714*, p.282.

<sup>25</sup>*C.T.P., 1714-1719* Joseph Redington, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1974), p.97.

diseases which were unknown to the people of England, brought home from the West Indies, or they were suffering from illness which were all too familiar plagues, such as typhus or smallpox. The threat of an epidemic concerned the Commissioners in two ways: first, they did not want an epidemic in any one port town to cause a panic in other towns and lead to landlords and ladies refusing to quarter the sick, and, second, there was the very real need to keep the ports as free from infection as possible so that the other ships docked there would not become contaminated.

In November 1702, the Commission for Sick and Wounded Seamen was expecting the eminent arrival of the fleet from the Mediterranean. At a meeting of the Commission on Friday the 13<sup>th</sup> of November it was decided that “to prevent any infection spreading among others [meaning inhabitants of the town and naval personnel docked there] such of them as are thought to be infectious shou’d not be Quarter’d at Plym<sup>o</sup> Portsm<sup>o</sup> or Rochester but at other places thereabouts & at Convenient distance from the said Parts.”<sup>26</sup> This addressed the problem of infecting the other ships docked at the port. The Commissioners also decided to send one or two of the members of the Commission who were physicians to the ports in order to establish whether or not the men were contagious. The following Saturday the Commission read a letter written by Commissioners Dr. Adams and Dr. Sherrard stating that “none of y<sup>e</sup> Seamen on shore at Deal or Portsm<sup>o</sup> had any Infectious distempers.”<sup>27</sup> By sending members of the Commission for Sick and Wounded from London to the port, the Commissioners were able personally to reassure the populace that they were in no personal danger from quartering the sick and wounded of the fleet.

The Commissioners were not always successful at containing infection from the men sent

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<sup>26</sup>PRO ADM/99/2, unfoliated.

<sup>27</sup>Ibid.



on shore. In December 1703, Mr. Merrick of Pembroke wrote to the Commission to inform them that “the Sick Seamen set on shore there have Infected the Towne.” The Commission wrote to their agent, Mr. Courey, in Pembroke to “let the Towns People know that they [the sick seamen] shall be remov’d and that he [Mr. Courey] will provide such a House,”<sup>28</sup> for the men to be put into. This concern for the health of those who were quartering the men shows that the Commissioners recognized the crucial role these innkeepers and landladies played in the system for treating the sick and wounded. The Commissioners needed the continued good will of the quarterers in order that the health care system could continue to operate.

There is one document which indicates the condition of men set down on the shores of England. *An Account of all the Sick & Wounded Seamen in the Sick Quarters at the Port of Rochester the Sixth of December 1703 with how many have beene Dis: [discharged] Dead or Run Since the 29<sup>th</sup> of October last*, begins in August 1703 listing the names of the men, the ship they were removed from, with whom they were quartered, why they were placed on shore, whether they died or ran away and when that occurred.<sup>29</sup> Twenty-one of the twenty-six quarterers listed were women. It is surprising that twelve of the men set down in Rochester were quartered in their “Own House”, according to the *Account*. It is unclear whether this is the home of the man who penned the *Account*, or whether some of the sailors landed at Rochester had a permanent residence there and so went home to recover their health. The majority of the men listed in the *Account*, thirty-seven per cent, suffered from “fever”. Fever was followed by “Scurbolic”, twenty-eight per cent, and “Dysentery”, eleven per cent, as the most common complaints. There

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<sup>28</sup>PRO ADM/99/2, unfoliated.

<sup>29</sup>BL Sloan Ms. 1198, ff. 130-131.

were also men recovering from wounds: one man from a fractured thigh and one from an amputated toe. One-quarter of the men cared for in Rochester died. Since this is the only record from an individual port town, it is impossible to determine whether this is typical of the mortality at these shore hospitals. Most of the men who did die, over half, were listed as suffering from “fever”, which could have been any number of diseases. The dietary complaints, being scurvy and dysentery, had a very low mortality rate, since the change in diet which would accompany being set on shore would soon repair the damaged health of the seaman.

If there was no one willing to quarter the men, or no quarters could be found, the Commission for Sick and Wounded was put to the expense of hiring a house in which the sick could reside. This was the case in Bristol in September 1690. Sir Robert Southwell received a letter from Robert Henley stating that, “he has been obliged to hire a house out of the town for them [the sick sent ashore] as nobody would take them in”.<sup>30</sup> This was not a financially practical option, as it incurred much greater expense for the state than if the men were quartered by townspeople.

The alternative to using civilian quarters was to build naval hospitals at the ports. The earliest reference to a permanent naval hospital is in a memorial from the Commissioners for Sick and Wounded to the Lords of the Treasury requesting more money. Included in the list of places that needed money was the hospital at Plymouth.<sup>31</sup> It is likely that this hospital was not built specifically for the use of the navy as a hospital, but rather a house that was used by the

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<sup>30</sup>Historical Manuscript Commission, *The Manuscripts of Allan George Finch* Vol. II (London: H.M.S.O., 1922), p.458.

<sup>31</sup>*C.T.P., 1557-1696*, p.238.

Commissioners for Sick and Wounded to shelter the seamen set on shore. There are quite a few references to port hospitals in 1704, with the opening of hospitals at Rochester<sup>32</sup> and Gosport<sup>33</sup> both in May of that year. Once the hospitals were opened, the Admiralty attempted to have them used rather than quartering the sick men with civilian quarterers. In December 1704 the Admiralty issued an order forbidding sick men to be put ashore at Sheerness, and that they should instead be set down at Rochester where there was a hospital. The surgeon at Sheerness was dismissed to ensure that men would no longer be landed there.<sup>34</sup> However, the following summer a surgeon was re-appointed at Sheerness to “take care of such Men as shall be sent on Shoar there from her Maj<sup>ty</sup> Ships w<sup>th</sup> the Small Pox or other Malignant Distempers.”<sup>35</sup> This was due to the fact that the Admiralty found it impossible to dictate where men could and could not be landed.

There were problems with the hospitals. The Admiralty sent to the Commissioners for Sick and Wounded Seamen a letter it had received at the beginning of October 1704. Complaints were leveled against the hospital at Gosport, which had room for five hundred men, by the captains of four ships who had visited the hospital. Some of the problems they found with the hospital were that the majority of the beds, eighty-four per cent, were double beds which they felt were “extreamly improper for entertaining Sicke persons.” The hospital was situated “close by a swamp, which is left dry when the tyde is out, & yields a very offensive smell”, and was a great distance from any place where the men could be landed. They also felt that the number of women

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<sup>32</sup>NNML ADM/E/2, f.57r.

<sup>33</sup>PRO ADM/99/5, unfoliated.

<sup>34</sup>Ibid.

<sup>35</sup>PRO ADM/99/6, unfoliated.

employed as nurses was too small.<sup>36</sup> This report led to a further inquiry directed by the Admiralty which then reported their findings and recommendations to the Commission for Sick and Wounded. The Admiralty ordered that the sick be removed from the hospital and placed in quarters in the town until a new building was erected away from the swamp and closer to where the men were landed from their ships. It would seem that the men were removed from the hospital as was ordered by the Lord High Admiral; however, some of them were not put into quarters but were sent to the *Elizabeth* as if they were cured. This caused the captain of the *Elizabeth* to write to the Commissioners for Sick and Wounded to complain that the men “relapsed and not only became unseizable themselves but brought a distemper among the others of that Ships Company.” The Commissioners of Sick and Wounded informed the Lord High Admiral, Prince George, that they had ordered the following changes to the hospital:

- 1<sup>st</sup> That the Bedds have better Sheets.
- 2<sup>dly</sup> That the Low Rooms be Employd at the Descretion of the Physitian and Surgeons For y<sup>e</sup> Engertainm<sup>t</sup> of Such of the Men as are Weakest & require to Lye Warne.
- 3<sup>dly</sup> That Two Sick or Wounded Men be not lay’d in One Bedd except in such Cases where the Phisitian & Surgeons think it may be done without prejudice to them.
- 4<sup>th</sup> That Such a Number of Nurses be allways Employ’d to attend them as the Phisitian and Surgeons shall think fitt.<sup>37</sup>

These changes answered most of the concerns of the Captains who had visited the hospital earlier in the year. It is uncertain whether these changes were implemented as there is no further correspondence on this subject.

When the War of Spanish Succession appeared to be near an end, the Admiralty began

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<sup>36</sup>NMML ADM/E/2, f.99r and following.

<sup>37</sup>PRO ADM/99/5, unfoliated.

closing hospitals in order to reduce the expenditure of the Commission for Sick and Wounded Seamen. In June 1711, the hospital at Deal was closed and the men who had been in the hospitals at the time of its closure, eighty-seven in all, were placed in town quarters.<sup>38</sup> The Admiralty again attempted to limit the ports that men could be landed at. As of November 1712, men were no longer to be landed at Kinsale, although the men already being cared for in the town could remain there until their cure was complete.<sup>39</sup>

The health care system continued to care for the needs of the men of the Royal Navy at sea, in hospital ships, and on land in quarters and naval hospitals. It is much more difficult to judge the quality of the care these men received as the documentary proof does not exist. The state paid large sums of money to private citizens, physicians and surgeons who practiced in port towns, and money for the renovation of existing structures or the construction of naval hospitals so that the men of the Navy could be cured of their hurts and diseases. The system on land seems to have been less controlled than that at sea, the inevitable use of civilians made it so. The Treasury continued to have difficulties meeting its financial obligations; however, in the case of the inhabitants of the port towns, who could refuse to generously open their doors to these men, they had the leverage that some other creditors lacked in order to make the Treasury pay at least some of what was owed to them. As the War of Spanish Succession waged on, the Commissioners for Sick and Wounded and the Admiralty increasingly recognized that naval hospitals were much more efficient than relying on quarters. The naval hospitals could cure the men in a central location, using the services of a recognized physician and surgeon and then send

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<sup>38</sup>PRO ADM/99/10, unfoliated.

<sup>39</sup>Ibid.

the men back to their ships. The naval hospital was efficient both in terms of finances and man power. For some men the cycle of health care in the Navy ended on their own ships, for others it included time spent on shore before they were returned to their ships; however, there were some who were chronically ill or had been disabled to the point where they could no longer serve aboard one of the ships of the Royal Navy. For them, the health care system had one more provision — the issuing of pensions and the creation of a hospital devoted to the care of disabled seamen, the Royal Hospital at Greenwich.

## CHAPTER SIX

### CARE OF DISABLED VETERANS

The focus of this work thus far has been on the men who served in the Navy and continued to do so once they recovered their health. This chapter will consider the plight of those men who could not return to their ships, due to a chronic illness or a disability, and also the widows and orphans who were left behind. The state, with an eye to practicality, attempted to be generous in its care of the sick and wounded both at sea and in shore hospitals. This generosity extended to the veterans and their families. The state was under no obligation to continue to provide medical and financial aid to those seamen who were discharged from the Royal Navy for medical reasons. The state chose to include care for those disabled veterans after their discharge as part of the 1696 Register Act.<sup>1</sup> Although the men themselves contributed financially to their own care, the state supplemented this base amount in order to ensure that disabled veterans and their families did not suffer economic hardships. Financially, the state awarded pensions to both veterans and their families, and through the building of Greenwich Hospital, created a place where the chronically ill and the disabled, who were not able to provide for themselves could go to live out their last days. This chapter will consider both of those provisions.

#### **Pensions**

The men themselves supplied one of the pension funds. Following the Battle of Bantry Bay (1 May 1689) Admiral Lord Torrington appealed to the House of Commons that some

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<sup>1</sup>7 & 8 Guil. III. c.21. *Statutes of the Realm*. VII, pp.98-102.

provision be made for the sick and wounded seamen.<sup>2</sup> This led to a general inquiry into the type of financial support disabled seamen were entitled to. To that end, Sir Richard Haddock reported to the Committee the nature of the provision made for the sick and wounded sailors. He stated that the Chatham Chest,

was an institution of Elizabethan origin, controlled by nine governors yearly chosen by former governors and supervised by two Commissioners of the Navy, chosen by the other governors. It derived its revenue from (i) a deduction of 6d. per month made from the pay of 'every common seaman' in the Navy, of 4d. per month additionally subtracted from a seaman's pay if the ship in which he served was rated to bear, but did not actually carry, a chaplain, and of 2d. a month if the vessel should have carried a surgeon and did not (ii) lands purchased worth £400 per annum (iii) forfeits, fines, mulcts on officers for misdemeanours.<sup>3</sup>

It was from this fund that the disabled men drew their pensions. There was a formal payment scheme which outlined the specific entitlement. For the loss of an arm or a leg, the sailor was to receive £6.13.4; for the loss of both arms or feet, £13.6.8; for the loss of both arms, if that loss incapacitated the seaman to the extent that he could not find employment, £15; for disablement of one arm or leg, £5; for the loss of an eye, £4.<sup>4</sup> By using a table compiled by Gregory King in 1688, it is possible to determine the relationship between the amount paid by the state as a pension and the sailors normal wage. King stated that a common seaman received £20 per year.

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<sup>2</sup>*Journals of the House of Commons, 26 December 1688 to 26 October 1693.* (London: 1803), p.293.

*Parliamentary History of England From the Earliest Period to 1803.* Vol. V. (London: T.C. Hansard, 1809), pp.447-448.

<sup>3</sup>Edward B. Powley, *The Naval Side of King William's War, 16th/26th November 1688 - 14 June 1690* (London: John Baker Publishers Ltd., 1972), pp.200-201.

Edward B. Powley has noted that the governors were "The Two Masters of Attendance, the first Shipwright of Chattam, Two Boatswains, Two gunners, and Two Pursers of the Great Ships...ordinarily the Officers of the First and Second Rate Ships are taken in turn."

<sup>4</sup>J.J. Keevil, *Medicine and the Navy* II, p.136.



This can be compared with the yearly income of “Labouring People and Out Servants” who earned £15 per annum and “Common Soldiers” who earned £14 yearly.<sup>5</sup> Of course, monetary remuneration could never compensate for the loss of an eye or a limb; however, the fact that the state was prepared to compensate a sailor financially for his loss meant that it was acknowledging some responsibility for the loss. In a paternalistic fashion, the government attempted to care for those who had been injured and disabled in service to the state.

Payment dates were advertised in the *London Gazette* and were usually repeated over two or three issues. The following is an example of one such announcement:

These are to give notice, that the Right Honourable the Lords Commissioners of His Majesty’s Treasury, have been pleased to declare that One years Pension ending at Lady-day 1696 (being for the year 1695), shall be paid to the Pensioners belonging to the Chest at Chatham; and the said pay begin on Tuesday the 20<sup>th</sup> of July next.<sup>6</sup>

The Treasury was quite far behind in its payments to the Chest. As this announcement states, the pensions that were being paid in July 1697 were for the year 1695. Other than the fact that the government was two years in arrears in its payments, one of the greatest problems for the disabled seamen was that the payment of the pensions was conducted *at Chatham*. For those men who did not live in Chatham, they either had to journey there or appoint an attorney to collect the funds. Payments from the Chest were made up until the end of the War of Spanish Succession. The payment made in December 1713 was only one year in arrears.<sup>7</sup> It would appear that the size of

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<sup>5</sup>D.C. Coleman, *The Economy of England, 1450-1750*. (Oxford: University Press, 1977), p.6.

<sup>6</sup>*London Gazette*, no.3296, June 10 to June 14, 1697, p.2.

<sup>7</sup>*London Gazette*, no.5163, October 10 to October 13, 1713, p.2.

the pension, particularly that from the Chatham Chest, was not sufficient to support a family. Those men who could not earn a living in their community were able to petition the government for more assistance.

One recourse was for the disabled seamen and, in some cases their wives or widows, to petition the Privy Council for an almsman's place. An almsman was permitted to collect alms from the specific church to which he was assigned. In March 1692, the Board determined:

Proceedings upon the Petition of John Green. Shows that he was a seaman on board the *Defiance*, his majesty's ship, commanded by Captain Gurney, and on 3<sup>rd</sup> September last, he received a blow over his eyes, whereby he utterly lost his sight. Having a wife and child in great want, prays for an almsman's place at Westminster. Granted on a vacancy occurring.<sup>8</sup>

This place was granted, perhaps in consideration of Green's family. Some of the petitions are very detailed, showing the sailor's loyalty to the crown and his service to the state:

Proceedings upon the petition of Daniel Crosskeys, of St. Margaret's, Westminster, shewing that he served in all the engagements at sea in King Charles II's time, when he lost his left leg, and that he also served since their Majesty's accession, and has been hurt in his right leg. Being fifty-five years of age, and having a great family, he prays and almsman's place at St. Stephen's, Westminster. Order to the Clerk of the Signet attending to prepare such a grant accordingly.<sup>9</sup>

The Privy Council also received recommendations for disabled men to hold the position of a 'maundy man'. A 'maundy man' was someone who received charity on Maundy Thursday, which was the Thursday prior to Good Friday.<sup>10</sup> In March 1696, the Lord Almoner received a letter from Sir William Trumbull, "recommending Richard Richardson, who has had his left arm shot off

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<sup>8</sup>*C.S.P.D., 1<sup>st</sup> November 1691 - End of 1692*, p.198.

<sup>9</sup>*C.S.P.D., 1694 - 1695* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.312.

<sup>10</sup>*Oxford English Dictionary*.

in an engagement with the Dutch at sea, for a share of his Majesty's bounty as one of the 'mau[n]dy men'.<sup>11</sup> The request was repeated the following year, with the recommendation coming again from Sir William Trumbull.<sup>12</sup> It is unclear whether or not this request was granted, but there exists no further petition on the behalf of Richard Richardson.

The Privy Council entertained petitions from the wives and widows of seamen. In December 1691, the Board received the following detailed account:

Proceedings upon the petition of Ann Bolton, wife of Nicholas Bolton, mariner. Shows that her husband served on board the fleet for some time, and was in the engagement against the French at Bantry bay, where he lost his hearing because of the noise of the guns; whereupon he was discharged from the said ship. He has likewise lost two fingers, whereby he is unfit for further service; she therefore prays for an order for her husband to be allowed a protection to preserve him from being again 'impressed'.<sup>13</sup>

It is interesting that Mrs. Bolton was not seeking money from the government but was instead seeking protection for her husband from being sent to sea again. The Privy Council did not make a decision on this matter but referred it to the Admiralty. The petitions from wives tended to be much more detailed than those submitted by the sailors themselves. The following is a case in point:

Proceedings upon the petition of Mary Heath, widow of Capt. Thomas Heath, late commander of the ship *Chester*. Shows that her husband served as captain of several ships, and in the last engagement against the French, in May 1692, burned one of the French ships called the *Royal Sun*, he being then commander of the *Blaze* fireship; and that her said husband, being in January last ordered to the West Indies with the rest of the ships under command of Sir Francis Wheler,

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<sup>11</sup>*C.S.P.D., 1 January - 31 December, 1696* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.96.

<sup>12</sup>*C.S.P.D., 1 January - 31 December, 1697*, p.75.

<sup>13</sup>*C.S.P.D., 1<sup>st</sup> November 1691 - End of 1692*, p.46.

was in all the engagements against the French in those parts. The said Sir Francis Wheler being forced to withdraw himself and the ships under his command from the West Indies by reason of the prevailing sickness, left her husband with his ship at St. Christopher to act as guard-ship to the Leeward Islands; but her said husband, together with all his officers, died of the plague then raging, and as all his effects were since taken by the French in the *Diamond* frigate, the petitioner is left destitute, and she and her child must suffer great want. Prays for an allowance of the royal bounty for the present, and also for a pension such as was granted to the widow and orphans of Capt. Wren.<sup>14</sup>

Mrs. Heath knew that in detailing her husband's record of service to the state and the precedents for granting pensions to the widows of officers, she improved her chances of receiving some funds. The Privy Council did not decide upon the matter, but, again, referred it to the Admiralty.

One of the most interesting petitions was submitted by Elizabeth Turner, not for her husband but for *herself*. In the minutes of the Commission of Sick and Wounded for February 1709 appears her petition stating that she, "lost her left hand on board the *Hector* by firing a great Gun in an Engagm<sup>t</sup> being at that time being w<sup>th</sup> Child & within a month of her time recommended to the Gov<sup>rs</sup> of y<sup>e</sup> Chest at Chat<sup>m</sup>".<sup>15</sup> It is unclear what she was doing on board the *Hector*, but it would seem that during a sea fight it was expected that *all* hands would assist in fighting the enemy. She was also the subject of a letter written in 1711, from the governor of Greenwich Hospital to the secretary of the Admiralty:

Hon<sup>ble</sup> S<sup>r</sup>, I am ordered by the Directors of her Maj<sup>ty</sup>s Royall Hosp<sup>l</sup> for Seamen to desire you will be pleased to represent to the lords of the Adm<sup>ty</sup> the Case of — Turner who is entertained in the Hosp<sup>l</sup> on account of the losse of her arm in battell. Her Husband some time since came to the Hosp<sup>l</sup> & pretending to provide for her elsewhere, kept her out one night & then left her; She returned to the Hosp<sup>l</sup> & is with child, having another child also before [likely the child she was carrying when she sustained her injury] which she maintains there. The Directors are informed her

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<sup>14</sup>*C.S.P.D.*, 1693, pp.359-60.

<sup>15</sup>PRO ADM/99/9, unfoliated.

husband is in her Maje<sup>ts</sup> Ship the Hector. The desire their Lord<sup>ps</sup> will order his wages to be stopt for maintenance of the children.<sup>16</sup>

This is a story of her husband removing her from the hospital and then abandoning her in response to the rules of Greenwich Hospital, which did not allow for conjugal visits. Mrs. Turner does not appear in the records again. This specific case raises more questions than it answers. The regulations of Greenwich Hospital do not make provision for women injured at sea. Was Mrs. Turner there as a pensioner or was she working there as a nurse? It is impossible to say.

These women were recognizing the fact that the economic stability of their families had been disrupted if the seamen were disabled and unable to earn some money in a trade or by begging, or destroyed if the seamen had died at sea. This put these women, and their families, in an extremely vulnerable position. They turned to the state for the economic protection that had been taken from them when their husbands had been killed or injured. However, there were many men who were killed or injured in the course of their employment, but their wives and widows did not petition the government for funds to help support them. The reason for this was that men who worked as masons, carpenters or blacksmiths belonged to a guild which protected its members, and their families, in case of injury or death.<sup>17</sup> Seamen did not have an equivalent organization which could protect their economic interests. It was the state which did so. The injured could petition the state if the pension from the Chest at Chatham was not sufficient to support their family. In response to specific tragedies, for example the loss of a ship with its entire crew, the state made other provisions. Following the loss of the second-rate ship the

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<sup>16</sup>PRO ADM/66/28, unfoliated.

<sup>17</sup>Christopher Hill, *The Century of Revolution, 1603-1714* (New York: W.W. Norton & Company Inc., 1969), p.269.

*Coronation* during a violent storm,<sup>18</sup> an order was passed in the Privy Council so that the widows and orphans of the men lost in the ship could be provided for.<sup>19</sup> This was not a permanent solution; nevertheless, it does further illustrate the responsible actions of the state towards those who suffered in service.

In October 1693, another scheme was proposed to raise funds. As part of a discussion of ways to minimize the debt incurred in caring for the orphans of London it was proposed by a committee from the city of London, “That half the revenue arising by 800 hackney coaches be applied towards the relief of poor seamen’s wives and children, and the other half to the relief of the said orphans, each coach to pay 5s. *per annum* and to be licensed by the said city.”<sup>20</sup> It is unknown whether the revenue from the licencing of coaches was used in the relief of naval widows and orphans. The state was making a concerted effort to provide for these women and children who had lost their main source of income. These widows and orphans, along with the disabled seamen, were further cared for with the opening of Greenwich Hospital.

### **Greenwich Hospital**

Queen Mary was entirely responsible for the creation of a Royal Hospital for Seamen. She was so moved by the large number of casualties brought home to England following the Battle of La Hougue (May 23 and 24, 1692) that she proposed that the seamen have a hospital of

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<sup>18</sup>David J. Hepper, *British Warship Losses in the Age of Sail, 1650-1859* (Ashley Lodge, Rotherfeild, East Sussex: Jean Boudroit Publications, 1994), p.14.

<sup>19</sup>NNML, CLU/5, f.93.

<sup>20</sup>*C.S.P.D., 1693*, p.361.

their own. The royal palace at Greenwich, on the banks of the Thames, had fallen into disuse and disrepair. It was decided that, with a few modifications and some new construction, the palace could be used as a hospital. Sir Christopher Wren, the famous London architect, was commissioned to design the hospital. As with any government project, there were problems right from the start. As early as May 1692, the Earl of Nottingham, as Secretary of State, was writing to the Commission of the Treasury to inform them that, "The Queen desires you...to hasten, as much as possible, the grant of Greenwich, as a hospital for seamen, which is now depending before you, or otherwise that you report your opinion in the case to her Majesty with all speed".<sup>21</sup> The Queen was anxious that the Treasury approve the plan so that the hospital project could move forward. Queen Mary was also in consultation with Sir Christopher Wren about the design of the hospital. The architect had wanted to pull down all of the old buildings and design the hospital himself; however, the Queen insisted that the buildings which had been built during her uncle's reign remain standing.<sup>22</sup> In October, the Treasury further stalled the project with its slow response to a proposal for the annexing of land adjacent to the palace in order that the hospital might be made larger.<sup>23</sup> But until September 1695, nearly a year after the death of Queen Mary, was a commission was established which would oversee the Greenwich Hospital project.

Prince George was to head the Greenwich Committee which included the Archbishop of Canterbury, "several peers, knights, citizens and gentlemen, one of the lords of the Privy Council,

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<sup>21</sup>*C.S.P.D., 1<sup>st</sup> November 1691 - End of 1692*, p.301.

<sup>22</sup>*The Wren Society, Volume VI - The Royal Hospital for Seamen at Greenwich, 1694-1728* (Oxford: University Press, 1929), p.19.

<sup>23</sup>*Ibid.*, p.481.

of the Treasury and the Admiralty, and the Lord Mayor of London, or one of the aldermen.”<sup>24</sup> The warrant which established the Committee also granted the hospital a yearly stipend of £2,000 towards expenses. John Evelyn senior, who had served as a Commissioner for Sick and Wounded Seamen during the Second Dutch War,<sup>25</sup> was appointed treasurer of the hospital with a yearly salary of £200.<sup>26</sup> Following the creation of this commission, work on the hospital began in earnest. Sir Christopher Wren submitted a draft of the plans for the first phase of the renovation to King William and, in April 1696, the King approved the plan.<sup>27</sup> With receipt of the King’s authorization work began on the buildings, and in June of that year the cornerstone of the new hospital was laid.<sup>28</sup>

While the building was being designed and built, the government was erecting safeguards to ensure that the hospital would be open to all sailors, regardless of rank. On May 7 1697, the following proclamation was issued: “to avoid partiality, all Seamen entitled to be admitted to Greenwich Hospital shall be admitted in due order according to their number in the register book.”<sup>29</sup> This provision allowed for the admission of specific men as pensioners. The following notice appeared in the *London Gazette* for December 27 to December 29, 1711:

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<sup>24</sup>*C.S.P.D. July 1 - December 31, 1695. Addenda 1689-1695* William John Hardy, editor. (Nendeln, Liechtenstein: Kraus Reprint, 1969), p.73.

<sup>25</sup>J.J. Keevil, *Medicine and the Navy* II, p.17.

<sup>26</sup>*C.S.P.D. July 1 - December 31, 1696. Addenda 1689-1695*, p.73.

<sup>27</sup>*The Wren Society, Volume VI*, p.103.

<sup>28</sup>*Ibid.*, p.30.

<sup>29</sup>*C.S.P.D., 1 January - 31 December 1697*, p.147.



My Lords Commissioners of the Admiralty having order'd the eight disabled Seamen undermention'd to be entertain'd in Her Majesty's Royal Hospital at Greenwich, are pleas'd to give Notice, That if they do not apply themselves to Sir William Gifford, Kt. Governor of the said Hospital, within one Month after the Date hereof, other disabled Seamen will be entertain'd in their Rooms.<sup>30</sup>

The names of the prospective pensioners appeared at the bottom of the notice and the notice appeared in the following three issues. When the hospital opened at first there were general calls for pensioners; the following one was placed in the November 9 to November 13, 1704, issue of the *London Gazette*:

It being resolved, That one hundred Seamen, such as have been disabled in the service of the navy, shall be forthwith received and provided for in the Hospital at Greenwich; His Royal Highness, Lord High Admiral, has commanded this Notice to be given thereof, that so all such Persons, whose Condition entitle them to the Benefits of the aforesaid Hospital, may attend at the Admiralty Office, on Monday the 20<sup>th</sup> of this Month, to make their Provisions.<sup>31</sup>

This notice was also repeated in the subsequent two issues. There was no shortage of disabled men to fill the beds of the hospital. Regular calls for pensioners appeared in the *London Gazette* over the course of the War of Spanish Succession.

Although much of the construction of the new hospital occurred during the brief peace between the two wars, there was a recognition, on the part of the Greenwich Committee, that the financial situation of the hospital could become problematic. Since the hospital was a state institution some of the funds for the hospital were provided by the Treasury. It has been demonstrated throughout this work that the Treasury was often in arrears to the various creditors of the state. From the very beginning there was an effort to avoid that situation at the hospital.

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<sup>30</sup>*London Gazette*, no. 4945, December 27 to December 29, 1711, p.2.

<sup>31</sup>*London Gazette*, no. 4070, November 9 to November 13, 1704, p.3.

It was established in 1697, that, in addition to the money garnished from a sailor's wages to pay the surgeon and to put into the Chatham Chest, six pence per month was to be deducted from the wages towards the upkeep of Greenwich Hospital. This would guarantee each sailor a place in the hospital should he require it.<sup>32</sup> By September 1703, the sailors from the Royal Navy had contributed £43,444 to the running of the hospital. This was nearly half of all of the money the hospital received during that time.<sup>33</sup> Additional funds came from fines levied against sailors and officers for various offences. In April 1698, a notice ran in the *London Gazette*, stating that:

Captain *Thomas Smith*, formerly Commander of His Majesty's Ship the *Dunwich*, having lately been Tried at the Assizes in *Suffex* for Embezilling His Majesty's stores belonging to the said Ship, and being convicted for the same, was Fined 100*l.* And to remain in Prison till Paid; And His Majesty has been pleased to order that the said Fine be applied to the Use of *Greenwich* Hospital.<sup>34</sup>

These fines accounted for a smaller percentage of the money taken in by the hospital, however, it was yet another way that the seamen themselves provided for their future care.

A register exists of all the men who entered the hospital, beginning in September, 1710. This manuscript volume lists the names of the men, the number of years each served in the Navy prior to coming to the hospital, their ranks on being discharged from the Navy, the reason why they were granted places at the hospital and the dates on which they were taken in.<sup>35</sup> Between September 1710 and December 1713 there were 379 names entered into the register; however

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<sup>32</sup>*C.S.P.D., 1 January - 31 December 1697*, p.147.

*London Gazette*, no. 3573, February 5 to February 8, 1700, p.2.

<sup>33</sup>*The Wren Society, Volume VI*, p.45.

<sup>34</sup>*London Gazette*, no. 3387, April 25 to April 28, p.2.

<sup>35</sup>PRO ADM/2/1133, unfoliated.

eight of those men never arrived at the hospital. The majority of the men who entered the hospital were seasoned seamen: 125 of the men had served between one and nine years in the Navy; 142 of them served between ten and nineteen years; 86 served between twenty and twenty-nine years; and three men had served over thirty years in the Navy. The average length of enlistment was 13 years. There were men of many ranks in the hospital, with the exception of commissioned officers, of which there were none entered in the hospital books for the period in question. This can be accounted for by the constitution of the hospital itself. It was a place for those men who were unable to support themselves once they had left, or been discharged from, the Navy. Officers would likely have had family and money to support them once they retired from naval service. There were some warrant officers, however, the vast majority of the men were not officers at all. Table 6.1 illustrates the ranks of the men who entered Greenwich Hospital between September 1710 and December 1713. In addition to those presented in the table, the following ranks were represented by one man each: captain's clerk, captain's mate, captain's servant, carpenter, purser, quarter master's mate, marine sergeant, and master's mate. Table 6.2 presents the medical reasons for which men were entered into the hospital. Those complaints represented by only one man have been omitted as many of them may have been a complaint unique to that man.<sup>36</sup> All of these men found a place where they could be cared for at Greenwich hospital.

With the establishment of Greenwich Hospital, the center of naval medicine moved from the Barber and Surgeon's Company to the hospital. Those physicians and surgeons appointed to the hospital had all spent some time at sea, and a certain level of prestige was attached to an

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<sup>36</sup>PRO ADM/2/1133, unfoliated.

Table 6.1

<b>Ranks of Pensioners</b>			
<i>Rank</i>	<i>Number of Men</i>	<i>Rank</i>	<i>Number of Men</i>
Able Seaman	262	Master's Mate	3
Marine	37	Quarter Gunner	3
Ordinary Seaman	21	Boatswain	2
Midshipman	11	Master	2
Cook	5	Quarter Master	2
Armorer	3		

Table 6.2

<b>Medical Reasons for Entry</b>			
<i>Condition</i>	<i>Number of Men</i>	<i>Condition</i>	<i>Number of Men</i>
Age	184	Lost an arm	4
Wounds	24	Brusted	3
Dim-sight	21	Consumptive	3
Age & dim-sight	18	Infirmness	3
Age & wounds	10	Lost use of hand(s)	3
Blind	10	Lost use of limbs	3
Lost leg	10	Palsy	3
Bruised	5	Bruised & lame	2
By a fall	5	Falling sickness	2
Lame	5	Lost use of leg(s)	2
Deaf	4	Rupture	2

appointment. An excellent library began to grow at the hospital, and the pensioners could be assured of treatment from men who had years of experience with naval medicine and the types of chronic diseases and hurts which were particular to the Navy.<sup>37</sup>

The state went beyond mere considerations of utility or legal requirement in its care of those who had been disabled while serving in the Royal Navy. There is a real sense that the government recognized its responsibility, in a paternalistic manner, to care for these men and their families; these men had no one else to turn to and if the state had not provided, then it is unclear where they could have gone for help. It is true that the government used Greenwich Hospital and the promise of a place for every man who needed it to lure men into volunteering for the Navy; however it did not need to fulfill that promise as faithfully as it did.

The emphasis on the quality of care provided for the disabled veterans is manifest in the advertisements placed by “The Director’s for Greenwich Hospital for Seamen”<sup>38</sup> in the *London Gazette* for the provision of goods for the hospital. The first advertisement was placed in the October 5 to October 9, 1704 (no. 4060) issue of the paper. The Directors of the hospital called for “such Clothiers, Butchers, Bakers, Brewers, Tallow-Chandlers, Lamp-Men, Ironmongers, Brasiers, Pewterers, and Tanners” who were interested in furnishing goods for the hospital to submit their sealed tenders to the Directors.<sup>39</sup> Those who had their proposals accepted would have supplied the hospitals with the goods needed when it first opened. The next call for tenders appears in the August 19 to August 22, 1710 (no.4733) issue of the *London Gazette*. This

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<sup>37</sup>J.J. Keevil, *Medicine and the Navy* II., pp. 264-265.

<sup>38</sup>*London Gazette* no. 4060, October 5 to October 9, 1704, p.3.

<sup>39</sup>*Ibid.*

advertisement called for “Persons as desire[d] to serve the said Hospital with Beer” to submit tenders. Following this advertisement, regular advertisements appeared in the paper calling for the various expendable goods used by the hospital. It is from these advertisements that it is possible to learn what the hospitals provided for the pensioners.<sup>40</sup>

The goods which the Directors of Greenwich Hospital advertised for can be divided into three categories: foodstuffs, clothing, and fixtures for the hospital. The advertisements for food are very similar to those placed by the Commission for Victualing the Navy during the course of both the Nine Years War and the War of Spanish Succession.

The Directors of the Royal Hospital for Seamen at Greenwich do hereby give Notice, That such Bakers, Butchers, Brewers, and Cheesemongers, who are willing to serve the said Hospital with the several Provisions of Dyet for the Pensioners there, may give their Proposals to them, seal'd up...<sup>41</sup>

The insistence on sealed tenders was begun by the Commission for Victualing in November 1701 when preparing to contract with dealers in butter and cheese.<sup>42</sup> The Directors of the hospital always called for sealed tenders. In some cases, the Directors indicated that the sealed tenders had to be accompanied by a sample of the goods which the contractor was prepared to supply. The call for samples began with a call for river sand with which to make mortar,<sup>43</sup> and then extended to malt and hops. In the fall of 1717 the hospital began construction of its own

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<sup>40</sup>The scope of this section of the study has been extended beyond December 1713 in the interest of gaining a better picture of the way in which the state provided for the pensioners at Greenwich Hospital. The comments which follow are based upon an examination of issues of the *London Gazette* from January 1689 to December 1720.

<sup>41</sup>*London Gazette*, no. 5464, August 28 to September 1, 1716, p.2.

<sup>42</sup>*Ibid.*, no.3761, November 24 to November 27, 1701, p.2.

<sup>43</sup>*Ibid.*, no. 5724, February 24 to February 28, 1719, p.2.

brewery.<sup>44</sup> Prior to that, the Directors had advertised in the *London Gazette* for a supplier of beer.<sup>45</sup> There must have been a problem with the quality of the hops and malt which were supplied to the hospital. The advertisement which ran in the April 11 to April 14 issue of the *London Gazette* included the instructions that: “such Persons as are willing to serve the said Hospital with good Malt and Hops, may give in their Proposals *and Samples*.”<sup>46</sup> The insistence on samples of both hops and malt, even when they were tendered for separately, continued throughout the period in question. The hospital did not advertise regularly for the submission of tenders for the supply of foodstuffs. It would appear that the relationship between the hospital and their suppliers was amicable — that is the suppliers were paid in good time for their wares.

The same can be said for the suppliers of clothing for the pensioners. There are four advertisements in the period between March 1714 and June 1720 for the submission of tenders for the supply of clothing. Outer garments (jackets, waistcoats and breeches) were tendered separately from linen and accessories. The March 6 to March 9 1714 issue of the *London Gazette* contained a notice that “any Person who desires to Cloth the Pensioners...may bring their Proposals in Writing, seal’d up, for Suits of Coat, Waistcoat and Breeches.”<sup>47</sup> The May 19 to May 22 1716 issue contained this notice, “That such Persons as are willing to serve them [the Directors of the hospital] with Linnen of all sorts, and also with Hats and Hose for the Pensioners

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<sup>44</sup>Ibid., no. 5571, September 7 to September 10, 1717, p.2.

<sup>45</sup>Ibid., no. 4733, August 19 to August 22, 1710, p.2.

<sup>46</sup>*London Gazette*, no. 5737, April 11 to April 14, 1719, p.2. Italics mine.

<sup>47</sup>Ibid., no.5205, March 6 to March 9, 1714, p.2.

there, may give in their Proposals.”<sup>48</sup> The state not only fed the pensioners housed in the hospital, but also ensured that there were clothes on their backs. This is another example of the bounty of the state with regards to the needs of these pensioners.

Finally, there are advertisements for fixtures, such as lamps, “turnery ware” and other brass work. With the exception of expendable goods, like candles, these notices only appeared once. This included wall coverings which would have kept out draughts. In the February 23 to February 26 1717 issue of the *London Gazette* the Directors, “haveing Occasion to hang some of the new Rooms there [at the hospital] with Tapestry, do hereby give Notice, That such persons who have any Quantities of good second-hand Tapestry by them” tender their proposals.<sup>49</sup> The Directors were searching for an inexpensive way in which to ensure the comfort of the pensioners.

The government appears to have taken a genuine interest in the lives of the men who defended Britain’s trade and defeated the French on the waves. In a time when ideas about nationalism were in their infancy, it is interesting to see the government fostering those ideas in the men who served in the Royal Navy. The belief that the state should care for those who had sacrificed something while in service to her was very much a part of the mentality of the seamen of the Royal Navy. Greenwich Hospital became the focus of that care for the men who were no longer able to provide for themselves. The provisions made by the state, supplemented by funds contributed by the sailors themselves, were sufficient to reinforce the prevailing language of a paternalistic relationship which existed between the seamen and the state.

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<sup>48</sup>Ibid., no.5435, May 19 to May 22, 1716, p.2.

<sup>49</sup>*London Gazette*, no. 5515, February 23 to February 26, 1717, p.2.



## CONCLUSION

The question posed at the beginning of this study was: "Did employment in the late Stuart Royal Navy mean almost certain death?" After careful consideration of the available evidence, the answer would appear to be no. In fact, a seaman was more likely to be maimed or disabled in the course of his service than to die. The muster books show that the rate of mortality was relatively low, although it was dependent upon the theater of operation where the ship was stationed. The historians who have indicated that the manning problems which plagued the Admiralty during both the Nine Years War and the War of Spanish Succession were caused by the high level of mortality in the fleets do not appear to have considered the role that those men who ran (deserted) from the Navy play. In all thirty-eight cases considered for this study, more men ran from their ships than died while in service. This would appear to be the central cause of the manning problem rather than a high level of mortality. The latter is not confirmed by a study of the muster books. Mortality was lower than hitherto reported because there was a system in place, funded partially by the men themselves and partially by the government, which worked to keep the men alive.

The Commission for Sick and Wounded Seamen was not a permanent body until the War of the Spanish Succession; nevertheless, there was an element of continuity from one Commission to the next. The Admiralty issued instructions for the Commissioners in order that the lessons learned by one Commission did not have to be re-learned. This insured that the men at sea received the best care possible. The health care system also recognized the long-term nature of the care that they were providing. There was a very clear procedure for handling chronic cases:

they spent time in a port hospital or civilian quarters, they were then moved to London for what was most likely a higher quality of care in one of the two major hospitals, and then the men were granted pensions and other charitable gifts or, after 1704, entered into Greenwich Hospital so that the state could continue to care for them until their deaths. The extent of the system was so complete as to pay for the cost of the funeral of those men who could not be healed. Although the time and energy of the Commissioners for Sick and Wounded was divided between the incapacitated and Prisoners of War, the sick and wounded do not appear to have suffered from lack of attention. The Commissioners were tireless in their correspondence, and when the fleets arrived home, they traveled to the expected landing points so that they could personally oversee the distribution of the sick and wounded.

It is very tempting to judge eighteenth century medicine by the sterile, antiseptic standards of the twentieth century. Many of the solutions that men like Cockburn, Ryder and Wiseman found to the medical problems they faced appear to be extreme. However, the quality of medical care available to the men of the Navy must be judged not on style but on effectiveness. The goal of the naval health care system was to keep men alive so that they could continue to fill their places in the crew. Based upon the low levels of mortality, it can be said that the medicine practiced at sea was effective in keeping the men alive. The medical men were central to the health care system. If the medicine practiced was ineffective, that is that it did not ensure the survival of the majority of the crew, then it could be said that the system itself was a failure. Clearly this was not the case. The system succeeded in granting warrants to medical practitioners who were qualified to care for the sick and wounded of the Navy.

The health care system was not perfect. There were human errors in decisions taken, men

granted warrants, or the best course of action with regards to the civilian quartering system. This is only to be expected. In addition to these there were difficulties caused by a shortage of funds. Health care systems, throughout history and in this present age, are poorly funded. Providing medical care is expensive. There is more to a health care system than simply providing doctors and medicines. The Commission for Sick and Wounded also provided food, clothing, shelter and pensions for those men who were unable to return to a productive lifestyle. All of this cost money at a time when the Treasury was already stretched due to the general expenses of warfare. The sick and wounded do not appear to have suffered from lack of funds. When the civilian quarterers threatened to leave the seamen in the streets if they did not receive some of the money owed to them, the Treasury was able to give the Commissioners some money with which to pay them. The Treasury continued to clear the debts incurred during the war two years after the declaration of peace but, in the end, everyone was paid. The availability of funds with which to support a health care system is a problem that has yet to be solved; the Commissioners for Sick and Wounded used their influence, and that of the Admiralty, to ensure that the sick and wounded men did not want for anything necessary to their care.

The health care system was not perfect; however, it did fill an need which was evident from the Navy of Henry VIII. Men at sea fall ill and are unable to continue to be part of the crew necessary for the continued function of the ship. This difficulty was addressed through the creation of the Commission for Sick and Wounded Seamen. The first four, impermanent bodies, passed their knowledge to the Fifth Commission which was not dissolved following the declaration of peace. As the Navy continued to put ships to sea, so too the Commission for Sick and Wounded remained to see to the needs of the sick and wounded of the fleets. A socialized

health care system is usually identified with the twentieth century, as a response to the First World War. The health care system developed in the early eighteenth century by the British state to answer the health care issues of the Navy has many features similar to the modern model. The men who served in the Royal Navy contributed to their own health care; however, the greatest monetary burden rested upon the shoulders of the state, who ensured that the men who served their country were cared for when they were wounded or fell ill. The success of the health care system cannot be discounted as contributing to the success of the Royal Navy in the early eighteenth century. Britannia ruled the waves because her men were healthy.

## APPENDIX A

*A Draught of Instructions for the Guidance and Government of the Com<sup>rs</sup> of the Register in providing for and taking care of the Sick and Wounded Seamen & others sett on shore from his Ma<sup>ty</sup> Shippes for Cure.<sup>1</sup>*

Issued July 9, 1698.

1<sup>st</sup> You are to Informe your selves what Ports have been made use of by the last Comm<sup>rs</sup> for sick & Wounded Seamen for the said Service, and to Consider which of them will bee absolutely necessary to be Continued now the Warr is over, and which of them may be spared for retrenching the Charge, and give an Acct thereof to the R<sup>t</sup> Hon<sup>ble</sup> the Lords of the Admiralty for their Lo<sup>ps</sup> [Lordships] direction therein.

2<sup>d</sup> You are to Informe your selves what Officer, Physitions, Surgeons or Others have been employed at each Port for the care and Cure of Sick and wounded Seamen, & of their Dutyes respectively, As also of y<sup>e</sup> Salary and Allowances made to each of them and to Consider which of the said Officers will be needfull to be continued to Carry on y<sup>e</sup> service for the time to come, as also what Salarys or Allowances will be fitt to be made them, & which of them may be retrenched, and give their Lo<sup>ps</sup> an Acc<sup>t</sup> thereof at the same time for their direction therein.

3<sup>d</sup> You are to make Enquiry and Obtaine an Acc<sup>t</sup> of the Methods that have been used before as well as in the late Warr, in Quartering & Curing the Sick and Wounded Seamen sett on shore from his Ma<sup>ty</sup> Ships (there having been severall Exercized, as wee have been Informed) and of y<sup>e</sup> Allowance of all Kinds made for the same & to Consider & propose to their Lo<sup>ps</sup>, which of them, or what other Methods and Allowances will be proper in your opinion to be Established for Carrying on the said Service for the future, for their Lo<sup>ps</sup> Confirmation.

4<sup>h</sup> And when their Lo<sup>ps</sup> shall have Established the Ports to be used for this service the Officer & officers to be employed therein, with the Salarys and other Allowances to be made them for the same, the Method of Supplying the Sick and Wounded with Medicines & the Allowances to be made for the Quarters, Medicines Funeralls and other contingences, you are carefully to pursue the same, & not without their Lo<sup>ps</sup> directions to Vary from them, but if at any time in the Execution of y<sup>e</sup> said Business, you shall find any alterations needfull to be made in the said Rules, either for Easing the Charge, or better Carrying on the Service, you are to acquaint their Lo<sup>ps</sup> therewith, that so you may receive the signification of their pleasure therein.

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<sup>1</sup>NNML ADM/E/5, 1-22.

5<sup>h</sup> You are to take care, That no Officer Seamen or other Person be received from any of his Ma<sup>ty</sup> Ships or Vessells for Cure, by any of your Officers or Agents, otherwise than by a warrant under the hand of the Comission & warrant Officers of the said Ships or Vessells or Four of them at least, whereof a comission Officer to be One, the Surgeon another, and the Purser (or Steward in his Absence) another, which warrants you are to be caused to be Printed accordingly to the Forme mentioned in Page 23<sup>2</sup>, and to supply y<sup>e</sup> Surgeon of his Ma<sup>ty</sup> Ships and Vessells from time to time with Competent Numbers of them for the said Service, as hath been usuall.

6 You are to take care, That your Officers, or Agents at the severall Ports, do provide Convenient Quarters for the said Men as they shall be sent on Shore, & that it be done so timely, as that no One may stay for the same, or suffer any injury for Want thereof, & when they are Quarter'd, care is to be taken that they be supplied whilst they Continue there, with Medicines, Dyett, & other Accomodations of all sorts necessary and proper for Men in their Condition, to which end your Officers or Agents intrusted therewith, are to Visitt them at their severall Quarters as often as the Circumstances of their Diseases or Hurt shall require it, and not less than once a day.

7<sup>h</sup> Severall Hospitalls haveing from time to time been made use of for the cure of Sick and Wounded Seamen you are to Informe your selves of the Names & Constitutions of y<sup>e</sup> said Hospitalls, of the Number each House may receive, and the Allowances to be made them by it's Constitution, Also what Additions have been made on the Kings Acc<sup>t</sup> for the care and cure of such men as have been sent thither for Cure, and if you shall find any Charge may be saved to his Ma<sup>ty</sup> thereby and the Men as well provided for, you are as often as you shall see cause, to take an Acc<sup>t</sup> what Number of Men each or any of the said Hospitalls can provide for, and to cause such of y<sup>e</sup> Sick and Wounded Men received on Shore to be sent thither for Cure as shall be thought Convenient, requiring your Officers or Agents if they travell to y<sup>e</sup> said Hospital to pay them conduct Money after the usuall rate of a penny a Mile from the Ports to y<sup>e</sup> s<sup>d</sup> Hospitall and as your Officers are to give them warrents to y<sup>e</sup> Officers of the said Hospitalls for the reception of the said Men, in such Forme as shall be necessary, so the Officers of the Hsoptialls are to be enjoined to receive & take care of such Men as shall be sent to them according to the Methods of the House, Discharging & returning them to their own or some other of his Ma<sup>ty</sup> Ships as they shall be recovered, & in a Condition to serve his Ma<sup>ty</sup> by Certificate likewise in a proper Forme. But if the Allowances of any of the Houses shall not be significant for the Maintenance, Accomodation and Cure of such men, you are to make such Additions there to att his Ma<sup>ty</sup> Charge, as (upon Examination of what hath been done before in like causes) you shall judge proper and needfull.

8<sup>h</sup> Each of your Officers and Agents is to be obliged to keep a Booke of the Names and Quarters made use of for this service in his Port or District, with the Entry and Discharge of every Man, his Number on the Ships Booke, Number of Days he was in Quarters, Moneys due for the same, according to the Allowance that shall be settled on that behalf, & such other Columns as upon advising with the Principall Officers and Comm<sup>rs</sup> of the navy shall be thought fitting. From which Booke a Sett of Quarter Books (Namely Five) is to be formed and prepared (in such a Forme also

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<sup>2</sup>These *Instructions* included sample forms at the end of the volume.

as the said Principall Officers and Com<sup>s</sup> shall advise) at the end of each Quarter, reckoning the Quarters by Month as is done by the clerks of ye Cheque of his Ma<sup>ty</sup> Yards, and by them you are to cause the said Quarters to be Quarterly Paid, Two of y<sup>e</sup> for your selves and one of the Agent, & the Treãrs Bookes (or One of the them) to be made up and signed by Three or more of you, (according to the Method of paying his Ma<sup>ty</sup> Yards, and makeing up the Bookes) for his vouchers for the said payments.

9<sup>h</sup> And for preventing any Mistakes or Abuses in the said Quarter Bookes, you are at the end of each Quarter (before the payments shall bee made) to cause the Entrys of the Men to be Carefully Compared with the Warrants from the Officers of the Ships from whence they came, and the Agents to make Oath to the truth of their Discharges (no other Testimony being easily to be had thereof) & the Times, Rates and Sums Carefully Cast, Examined and Adjusted by the Establishment that shall be settled on that behalf.

10<sup>h</sup> The Comanders of his Ma<sup>ty</sup> Ships and Vessells being required by their Instructions when they send any Men onshore for Cure, to cause his cloathes and Bedding to be sent along with him, for his reliefe in his Sickness, you are to give directions to your Agents diligently to Inspect it & if any Seaman shall be putt onshore for Cure without his Cloathes or Bedding to enquire into the reason of it, and give an Acc<sup>t</sup> thereof to your Board, if it be not satisfactory, for yo<sup>r</sup> writing to the Captaines about it, or representing it to the R<sup>t</sup> Hon<sup>ble</sup> the Lords of y<sup>e</sup> Admty, if there shall be occasion.

11<sup>h</sup> The relief of the Sick & Wounded Men being thus provided for as to this point, your Agents are not to supply them with any Cloathes but where they are not otherwise to be had, and there shall be a necessity to furnish them therewith for their preservation, in which Case (& no other) they may supply them with such Shirts, Drawers, Shoes, Stockings and the like, as shall be absolutely necessary, taking care to do it as Cheap as possible, and forthwith to send an Acc<sup>t</sup> thereof to the Comander of the Ship, and the Office of y<sup>e</sup> Navy, that the same may be Charged upon the said Mens Wages for Abatement at Pay Table.

12<sup>h</sup> You are likewise to give in Charge to your Agents if they shall at any time observe any Men to be sent onshore for the Cure unnecessarily viz: such as are in health, or that might have been recovered by y<sup>e</sup> Surgeon on board, to give you an Acc<sup>t</sup> thereof, that you may write to the Comander of such Men about it, or lay the same before the R<sup>t</sup> Hon<sup>ble</sup> the Lords of the Admiralty if needfull.

13<sup>h</sup> You are to require from you Agents a Monthly Account of the Men received from every Ship and Entertained by them with their Entrys and Discharges and Number of Days they were in Quarters, according to y<sup>e</sup> Method in Page 24, or such other Method as shall be directed & Comm<sup>d</sup> of the Navy, and from the said Accounts you are to cause a Generall Account thereof in the Forme aforesaid to be transcribed, Examined and transmitted to the said Principall Officers and Comm<sup>s</sup> of the Navy, under Two or more of your hands, for enabling them to Cheque the Pursers on their Victualling Accounts for such Men as shall be Sett Sick on shore from his Ma<sup>ty</sup> Ships,

sending it to them soon after the end of every Month as possible may be, for preventing any delay in passing y<sup>e</sup> Pursers Accounts th<sup>o</sup> y<sup>e</sup> want thereof, and by the said Monthly Acco<sup>ts</sup> you are to cause the Quarterly Accounts of the Ports to be Carefully Examined, as a further Caution against any Mistakes or Abuses therein.

14<sup>h</sup> and the said Sick & Wounded Men putt on Shore for Cure being to be returned againe to the Ships they belong to as they shall be recovered, speciall care is to be taken to have them sent to the said Ships as soon as they shall be in a Condition fitting for it, for preventing any unnecessary Charge to his Ma<sup>ty</sup> therein, it being altogether as unreasonable that any Man should be kept in Quarters after he is well, as that any should be sett on shore who by Wounds, Hurts, Sickness or other Infirmity are not render'd unfitt for Service and incurable on board.

15<sup>h</sup> As to the Method of returning the said Men to their Ships it is to be thus. If the Ships they belong to shall be in y<sup>e</sup> same Port, or near it, when they are recovered, they are to be sent directly on board her, if not, Enquiry is to be made what other Ships or Vessells of his Ma<sup>ty</sup> are in or near the said Port, most likely to give them Conveyance to their own Ships, and they are to be sent on board y<sup>e</sup> said Ships for that purpose, and if neither the Ships they belong to, nor any other of his Ma<sup>ty</sup> Ships shall at that time be in or near the Said Port, the said Men are to be sent to the next Port where any such Ships are, with Conduct Money to Defray their Charges, all Comanders in such Cases being by their Instructions to receive them and give them Conveyance to y<sup>e</sup> Ships into which they belong. But because it may sometimes happen, that y<sup>e</sup> Ships to which the said Men belong may be Sayled on foreigne Voyages during their being in Quarters, or otherwise out of reach, It is directed that in such Cases y<sup>e</sup> said Men shall be putt on board any Ship of his Ma<sup>ty</sup> at hand that will Entertaine them, & if none will receive them or no such oppertunity shall offer, then they are to be Discharged from the Service as well as Quarters, and the reason of it express'd in their Certificates.

16<sup>h</sup> And the comanders of his Ma<sup>ty</sup> Ships being likewise by their Instructions to putt a Query against each Mans Name that shall be sett on Shore for Cure, for the Stopping of his Wages untill he shall returne to his owne, or bring Certificate of his Entry on board Some other Ship or Vessell of his Ma<sup>ty</sup>, and hold a Correspondence with the Com<sup>rs</sup> of the Sick and Wounded concerning the Men putt on shore, to y<sup>e</sup> end they may be Informed from time to time how they are disposed of, & thereby enabled to do right both to his Ma<sup>ty</sup> and them, you are from the aforesaid Monthly Accounts from your Agents to Notifye the Comanders of his Ma<sup>ty</sup> Ships and Vessells from time to time which of their Men are Dead or Run, which of them are Continued in Quarters, which are Discharged there from, and how disposed of, for their Information & guidance therein.

17<sup>h</sup> as the said Men shall bee Discharged from Quarters your Agents are to be Enjoyed to give them Certificates thereof under their hands mentioning the Times of their Entry and Discharge and the Name of the Ship or Port whereinto they are sent and other particulars according to the Forme in Page 25.

18<sup>h</sup> If an any time there shall be a necessity for putting any Men on shore for Cure at any other



Ports than what shall be Established either Abroad or att Home, you are to provide for them likewise by Correspondent or such other means as shall be most proper and best for the service, or if any Comander of a Squadron or Captains of a Shop shall be necessitated to make any Disbursements abroad of this kind, you are to Examine their Accounts & Vouchers, and to pass Bills for what shall be found reasonable to be allowed thereon, sending the like Accounts of the said Men to the Principall Officers & Com<sup>rs</sup> of the Navy, as by the 13<sup>h</sup> Article of these Instructions you are to send them of the Men putt on Shore at the Established Ports.

19<sup>h</sup> As to the manner of making your Payments for this service, it is to be in the Method of the Navy Office, by Bills made out, Number'd and Assigned by Three or more of you for Payment in Course upon the Treār of the Navy, out of such Moneys as shall be appointed from time to time for the service of the Sick and Wounded, and by Quarter bookes to be paid by the said Treārs Officers in the presence of One or more of your board, & made up and directed by the 8<sup>h</sup> Article of these Instructions, concerning which Method you are from time to time to Consult and advise with the Principall Officers & Com<sup>rs</sup> of the Navy, & to follow such as shall be found best for y<sup>e</sup> service. And you are not only hereby Authorized to make such Assignments on the Treār of y<sup>e</sup> Navy but the Treār of y<sup>e</sup> is hereby also Empower'd to answer the same and bring them to Acc<sup>t</sup> in his Leidgers in distinct Sections, as he does those of the Com<sup>rs</sup> of the Victualling, and the Principall Officers & Com<sup>rs</sup> of the Navy, to pass & allow them accordingly.

20<sup>h</sup> Whereas by the Custome of the Navy, Two pence a Man a Month hath always been Deducted out of the Wages of the Seamen and others serving in his Ma<sup>ty</sup> Ships in Ordinary and paid to the Surgeons of the severall Ports, you are to make Enquiry at the said Ports what care is taken by them of the Ordinary for the said Allowance and in what manner the Sick and Hurt Men of the Ordinary are releived at each Port, & give an Acc<sup>t</sup> thereof to the Princip<sup>le</sup> Officers, and Com<sup>rs</sup> of the Navy that if any regulations shall be necessary to be made therein, the same may be done.

21<sup>st</sup> And Whereas the Authority of Civil Majestrates may sometimes be wanting for obtaining of Quarters for Sick & Wounded Men sent on shore from his Ma<sup>ty</sup> Ships for Cure, as you shall foresee the want thereof you are to apply to the R<sup>t</sup> Hon<sup>ble</sup> the Lords of the Admty for such Orders of Council on that behalf as hath been granted on the like occasions.

## APPENDIX B

Extracted from, *Regulations and Instructions Relating to His Majesty's Service at Sea.*  
Established by His Majesty in Council.  
(London: 1731.), 137-38, 129-32 .

### Of Hospital Ships.

Article I - SHIPS, appointed for Hospitals, shall have the Gun Deck entirely set apart for the Reception Sick Men, which shall be flush, without any Cabbins or Bulkheads, except a Deal or Canvas one (to Roll up) for seperating such as have malignant Distempers, from the rest. The Said Deck is to hold all the necessary Cradles, with the Bedding; and two Pair of chequer'd Linnen Sheets shall be allowed for every Bed. And Scuttles shall be made in the Sides, in convenient Places, for Inlets of the Air.

II - Besides a Physician, there shall be in the Hospital Ship and [sic] able and experienced Surgeon, with four Mates, and six Men Assistants, a Servant to the Surgeon, a Baker, and four Washermen; all Supernumary to the complement.

III - The Captain of the Hospital Ship shall subsist the Men under Cure, out of the best and newest Provisions in the Ship; and with fresh Mean, as often as the same can be procured.

IV - When any Men are well enough recovered to return to their Ship, the Captain of the Hospital Ship shall put aboard their Ship's Signal and a Weft, that a Boat may be sent for them.

### Responsibilities of the Surgeon.

Article I - When a Surgeon is warranted to serve in any of His Majesty's Ships, he is to provide himself with Instruments and a Chest of Medicines, according to the Rules of the Navy, and present the same to be viewed by the Physicians in the Commission of Sick and Wounded, or (if there be none) by the Physician of *Greenwich* Hospital, in Conjunction with the Governors of the Surgeons Company; who are to take care, that all Instruments, Drugs, and Medicines, be of Sorts, Goodness, and Quantity required, and to give him a Certificate thereof. And when the Survey is over, the Chest is to be locked, and the Seals of the Physician and of the Surgeons Company to be affixed thereto in such Manner, as to prevent its being afterwards opened before it comes on board; nor is the Captain to admit any Chest into the Ship, without those Marks upon it.

II - The like Method is to be taken in surveying the Remains, and recruiting the Chest in London; but in the Out-Ports, the Physician and Surgeon of the Sick and Wounded at the Port are to make the Survey; or, if there be none such, the Surgeon of the Yard is to do it singly, and to

observe the same Methods as in the preceding Article, taking care to destroy all such Medicines or Drugs as shall be found in the Chest not fit for Use.

- III - He is to provide himself, before going on board, with a competent Number of printed Sick Tickets, which will be delivered to him at the Sick and Wounded Office.
- IV - He is to examine the Necessaries sent on board for the Use of the Sick Men, and if they are not good in their Kind, to acquaint the Captain, that he may represent the Matter to the Navy-Board. He is to keep the said Necessaries in his Custody, and not to embezzle or misapply any Part thereof, but take care that they be well husbanded, and duly served out for the Relief of the Sick Men.
- V - He is to visit the Men under his Care at least twice a Day, and oftener, if their Circumstances require it; and, at other Times, to distribute his Mates and Assistants amongst them, that none may want due Attendance and Relief.
- VI - In Cases that are difficult, if there be a Physician in the Squadron, he is to resort to him for Advice, and follow his Prescriptions.
- VII - He is to inform the Captain every Day of the condition of his Patients, especially if any of the Distempers are Infectious, that they may be sent out of the Ship, or (if that cannot be done) separated from the rest.
- VIII - When any Sick Men are ordered ashore to the Hospital or on board a Hospital Ship attending the Squadron, he is to send along with them to the Surgeon, an Account in Writing of the Time and Manner of their being taken ill, and the Methods used towards their Recovery.
- IX - In an Engagement, he is to keep himself in the Hold, where a Platform is to be prepared for the Reception of the wounded Men; and himself, and his Mates and Assistants, are to be ready, and have everything at Hand, for stopping their Blood, and dressing their Wounds.
- X - He is to keep a Day Book of his Practice, noting therein the Names of the Men that come under his Care; their Hurts, or Distempers; the Day they were taken ill, and the Day of their Recovery, Removal, or Death; together with his Prescriptions and Methods or Treatment, while under Cure.
- XI - He is from the said Day Book, to compose two Journals, the one his Physical Practice in Diseases; the other of his Chirurgical Operations in Cases of Wounds or Hurts; and, at the End of the Voyage, to deliver the first to the Physicians in the Commission of Sick and Wounded, or (if there be no such) to the Physician of *Greenwich* Hospital, and the latter to the Governors of the Surgeons Company who are to examine the same, and certify their Judgement thereupon.

## APPENDIX C

### SURGEON'S WARRANTS PRO ADM/106/2952 - 106/2963

#### FORM 1

By the Principal Officers and Commissioners of Her Majesties Navy

Whereas, by a Certificate from the Master or Governors of the Mistery and Comonalty of Barbers and Chyrurgeons of *London*, bearing date the \_\_\_\_\_ We are Informed of your Ability and Fitness to serve as Chyrurgeon's \_\_\_\_\_ Mate [the word "Mate" would be crossed out if the warrant was for a master surgeon] of any of Her Majesties Ships of the \_\_\_\_\_ Rate. These are therefore to Authorize and Require you, forthwith to make your Repair on Board Her Majesties Ship \_\_\_\_\_ as Chyrurgion's \_\_\_\_\_ Mate, and there to Officiate in all Things proper to the Duty of your place as becometh you, during her present Intended Voyage, and to be Obedient unto such commands as You shall from time to time received from your Captian, or other Superior Officer in his Absence: As also the Chyrurgeon of the said Ship for the time being. For which this shall be your Warrant, Dated at the Navy-Office this \_\_\_\_\_ day of \_\_\_\_\_, 17 \_\_\_\_\_.

To \_\_\_\_\_ hereby Appointed Churgeon's \_\_\_\_\_ Mate of Her Majesties Ship \_\_\_\_\_.

#### FORM 2

Office for Sick and Wounded, &c. the \_\_\_\_\_ Day of \_\_\_\_\_, 17 \_\_\_\_\_.

*To the Principal Officers and Commissioners of Her Majesty's Navy.*

*Gentlemen,*

We the Physicians in the Commission for taking Care of Sick and Wounded Seamen, &c. whose Names are Subscribed, do hereby certifie, That, pursuant to an Order from the Right Honourable the *Lord High Admiral* of GREAT BRITAIN, &c. Dated the 9<sup>th</sup> of *April*, 1709, We have examined the Bearer hereof \_\_\_\_\_ touching his Qualifications to be Surgeon of one of Her Majesty's Ships (as to the Physical Part) and do judge him fitly qualify'd for a \_\_\_\_\_ Rate Man of War. We are,

*Gentlemen,*

*Your Humble Servants,*

**FORM 3**

BY Virtue of the Power and Authority to us given, we do hereby appoint you \_\_\_\_\_ of Her Majesties Ship the \_\_\_\_\_ in the room of \_\_\_\_\_ directing and requiring you forthwith, to repair on Board the Said Ship, and take upon you the Employ of \_\_\_\_\_ accordingly and perform the Duty thereof with all possible care and diligence, To hold the said Employment till further Order, together with such an Allowance of Wages and Victuals for your self and Servant as is proper and useful for the \_\_\_\_\_ of the said ship, and for so doing this shall be your Warrent. Dated on Board Her Majesties Ship \_\_\_\_\_ the \_\_\_\_\_ day of \_\_\_\_\_ 170\_\_\_\_\_.

To \_\_\_\_\_  
hereby appointed \_\_\_\_\_  
of Her Majesties Ship \_\_\_\_\_

By Command of the Admiral \_\_\_\_\_

## APPENDIX D

The following are definitions of some of the more obscure or antiquated terms used by Lind and others. All definitions are taken from *Stedman's Medical Dictionary*, 26<sup>th</sup> edition. The page reference, in brackets, follows the definition.

ague - 1) archaic term for malarial fever.  
2) a chill. (39)

angina - 1) a severe, often constriction pain, usually referring to a. pectoris [chest] pain.  
2) old term for a sore throat from any cause. (83)

apoplexy - a classical, but obsolete, term for a cerebral stroke, most often due to intracerebral hemorrhage. (116)

asthma - originally, a term used to mean "difficult breathing", now used to denote bronchial a.  
(158)

cachectic - relating to or suffering from cachexia.

cachexia - a general weight loss and wasting occurring in the course of a chronic disease or emotional disturbance. (257)

colics - 1) relating to the colon.  
2) spasmodic pains in the abdomen. (363)

cutaneous - relating to the skin. (424)

dropsy - old term for edema. (522)

edema - an accumulation of an excessive amount of watery fluid in cells, tissues, or serous cavities. (544)

gout - a disorder of purine metabolism occurring especially in men, characterized by a raised but variable blood uric acid level and severe recurrent acute arthritis of sudden onset. (740)

gravel - small concretions, usually of uric acid, calcium oxalate, or phosphates, formed in the kidney and passed through the ureter, bladder, and urethra. (745)

jaundice - a yellowish staining of the integument, sclerae, and deeper tissues and the excretions with bile pigments, which are increased in the plasma. (903)

lethargy - a state of deep and prolonged unconsciousness, resembling profound slumber, from which one can be aroused but into which one immediately relapses. (955)

lientery - passage of undigested food in the stools. (964)

lumbago - pain in mid and lower back; a descriptive term not specifying cause. (998)

palsey - paralysis or paresis. (1285)

sciatica - pain in the lower back and hip radiating down the back and thigh into the leg. (1580)

scrofula - obsolete term for cervical tuberculous lymphadenitis. (1587)

strangury - difficulty in micturition, the urine being passed drop by drop with pain and tenesmus. (1683)

## BIBLIOGRAPHY

### *Primary Documents*

#### 1. Manuscript

##### British Library

Add. Mss. 9331 - "A Hasty Abstract of Some Years Observations Concerning The General Occasions of Sickness in Fleets."

Add. Mss. 9333 - Abstract of Navy Orders, 1700-1714.

Add. Mss. 9336 - Navy List, 1691-1713.

Add. Mss. 28748 - Instructions to the Commission of Sick and Wounded, 1690.

Add. Mss. 40796 - Captain Pennycook's Journal from the Madera Islands to New Caledonia.

Egerton Mss. 2525 - William Haddock's Third Liev<sup>t</sup> of His Ma<sup>ty</sup> Ship the Cornwall His Journal, 1696.

Harl. Mss. 6190 - Account of St. Thomas' Hospital, 1689-1693.

Harl. Mss. 6378 - Letter from a Ship returning from the West Indies, 1696.

Sloan Mss. 1198 - An Account of all the Sick and Wounded Seamen in the Sick Quarters at the Port of Rochester, the sixth of December 1703 with how many have been Dis: Dead or Run Since the 29<sup>th</sup> of October last.

Sloan Mss. 1689 - Manuscript of the Surgeon Dr. Edward Browne, 1692.

Sloan Mss. 1709 - The Case of the Surg<sup>ns</sup> of Her Maty'es R<sup>ll</sup> Navy Humbly Offer'd.

Sloan Mss. 3943 - A Memorial of My Practice in Physick and Surgery on Board Her Maj<sup>ties</sup> Ship Tyger, 1706.

##### National Maritime Museum Library

ADM/D/2, 4 - In-Letters to Admiralty from the Victualing Board, 1703, 1705.

ADM/E/1-4 - In Letters Commission for the Commission for Sick and Wounded, 1702-08.



ADM/E/5 - A Draught of Instructions for the Guidance and Government of the Com<sup>rs</sup> of the Register in providing for and taking care of the Sick and Wounded Seamen.

CLU/5 - Orders in Council, 1660-1720.

Public Record Office

ADM/2/1133 - Greenwich Hospital Patient Register.

ADM/36/1307 - *Granada* Muster-book, 1710.

ADM/36/2340 - *Oxford* Muster-book, 1696.

ADM/36/2415 - *Pembroke* Muster-book, 1695.

ADM/36/2724 - *Postillion Prize* Muster-book, 1703.

ADM/36/2750 - *Plymouth* Muster-book, 1696.

ADM/36/2787 - *Quaker* Muster-book, 1692.

ADM/36/2790 - *Queenborough* Muster-book, 1694.

ADM/36/2814 - *Ramillies* Muster-book, 1708.

ADM/36/2826 - *Reserve* Muster-book, 1690.

ADM/36/2885 - *Richmond* Muster-book, 1692.

ADM/36/2999 - *Rose* Muster-book, 1709.

ADM/36/3080 - *Royal Sovereign* Muster-book, 1692.

ADM/36/3124 - *Ruby* Muster-book, 1694.

ADM/36/3147 - *Rupert* Muster-book, 1691.

ADM/36/3185 - *Russell* Muster-book, 1701.

ADM/36/3204 - *Rye* Muster-book, 1696.

ADM/36/3259 - *St. Paul* Muster-book, 1693.

- ADM/36/3355 - *Sapphire* Muster-book, 1691.
- ADM/36/3371 - *Sarah & Betty* Muster-book, 1702.
- ADM/36/3375 - *Saudadoes Prize* Muster-book, 1695.
- ADM/36/3456 - *Swallow* Muster-book, 1691.
- ADM/36/3490 - *Seaford* Muster-book, 1697.
- ADM/36/3541 - *Serpent* Muster-book, 1696.
- ADM/36/3602 - *Stirling Castle* Muster-book, 1690, 1693.
- ADM/36/3735 - *Smyrna Factor* Muster-book, 1692.
- ADM/36/3736 - *Smyrna Factor* Muster-book, 1693.
- ADM/36/3737 - *Smyrna Factor* Muster-book, 1702.
- ADM/36/3740 - *Smyrna Factor* Muster-book, 1705.
- ADM/36/3741 - *Smyrna Factor* Muster-book, 1709.
- ADM/36/3777 - *Swiftsure* Muster-book, 1691.
- ADM/36/3804 - *Society* Muster-book, 1690.
- ADM/36/3805 - *Society* Muster-book, 1694.
- ADM/36/3808 - *Soesdyke Yacht* Muster-book, 1702.
- ADM/36/3871 - *Southampton* Muster-book, 1694.
- ADM/36/4121 - *Squirrel* Muster-book, 1704.
- ADM/36/4143 - *Syam* Muster-book, 1693.
- ADM/36/4144 - *Syam* Muster-book, 1693.
- ADM/36/4145 - *Syam* Muster-book, 1703.
- ADM/36/4169 - *Tartar* Muster-book, 1702.

- ADM/36/4249 - *Torbay* Muster-book, 1693.
- ADM/36/4381 - *Vanguard* Muster-book, 1692.
- ADM/36/4382 - *Vanguard* Muster-book, 1692, 1694.
- ADM/36/4383 - *Vanguard* Muster-book, 1694.
- ADM/36/4432 - *Vulcan* Muster-book, 1692.
- ADM/36/4453 - *Unity* Muster-book, 1692.
- ADM/36/4555 - *Winchester* Muster-book, 1693.
- ADM/36/4610A - *William and Mary Yacht* Muster-book, 1704.
- ADM/66/28 - Out-letters for Greenwich Hospital, 1704-1714.
- ADM/82/4 - Chatham Chest Account Book, 1689-1691.
- ADM/97/11416 - In-letters to the Commissioners for Sick and Wounded from the Hospital at Lisbon, 1707.
- ADM/99/1-11 - Minutes of the Sick and Hurt Board (also known as the Commission for Sick and Wounded), 1698 - 1714.
- ADM/106/385 - In-letters for the Navy Board, 1689.
- ADM/106/2951 - Surgeon's Receipts for Free Gifts, 1700-1714.
- ADM/106/2953-2963 - Alphabetical Collection of Surgeon's Qualifications and Warrants.

## 2. Printed Sources

- A Lover of Mathematicks [Edward Ward], *The Wooden World Dissected*. 2<sup>nd</sup> edition. London: by H. Meere, 1708.
- An English Sailor, *The State of the Navy Consider'd in Relation to Victualling*. London: For A. Baldwin, 1699.
- Anonymous, *An Authentick Relation of the many Hardships and Sufferings of a Dutch Sailor*. London: 1728.

- “Anonymous Parliamentary Diary” W.A. Speck, editor. *Camden Miscellany*. Vo.23. Camden Fourth Series, (v.7). London: Offices of the Royal Historical Society, 1969.
- Blair, Patrick, *Miscellaneous Observations in the Practice of Physick, Anatomy and Surgery*. London: for William Mears, 1718.
- Boulton, Richard, *The Works of Robert Boyle Epitomized by Richard Boulton*. London: 1699.
- Boyle, Robert, *Medicinal Experiment*. London: 1703.
- Browley, J.S., *The Manning of the Royal Navy - Selected Public Pamphlets, 1693-1873*. London: Navy Records Society, 1974.
- Burgis, Tho., *Vade Mecum: Or a Companion for a Chirurgion*. With Ellis Pratt, *Chirurgus Methodicus; Or the Young Chirurgions Conductor through the Labyrinth of the most difficult cures occuring in his whole art*. 7<sup>th</sup> edition. London: for B.T. and T.S., 1689.
- Burchett, Josiah, *Memoirs of Transactions at SEA During the WAR with FRANCE; Beginning in 1688 and ending in 1697*. London: 1703.
- Caermarthen, Marquess of, *Journal of the Brest Expedition*. London: for Randal Taylor, 1694.
- Calender of State Papers Colonial, America and West Indies, 1689-1692*. J.W. Fortescue, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, January 1693 - 14 May 1696*. J.W. Fortescue, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 15 May 1696 - 31 October 1697*. J.W. Fortescue, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 27 October 1697 - 31 December 1698*. J.W. Fortescue, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 1699. Addenda 1621-1698*. Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 1700*. Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 1701*. Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.

- Calender of State Papers Colonial, America and West Indies, January-December 1, 1702.* Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, December 1, 1702 - 1703.* Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 1704-1705.* Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 1706 - June, 1708.* Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, June 1708 - 1709.* Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Colonial, America and West Indies, 1710 - June 1711.* Cecil Headlam, editor. Vaduz: Kraus Reprint, 1964.
- Calender of State Papers Domestic, 13 February 1689 - April 1690.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, May 1690 - October 1691.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1 November 1691 - End 1692.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1693.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1694-1695.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, July 1 - December 31, 1695.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1 January - 31 December, 1696.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1 January - 31 December, 1697.* William John Hardy, editor. Nendeln Liechtenstein: Kraus Reprint, 1969.

- Calender of State Papers Domestic, 1 January - 31 December, 1698.* William John Hardy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1 January, 1699 - 31 March, 1700.* Edward Bateson, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of State Papers Domestic, 1 April, 1700 - 8 March, 1702.* Edward Bateson, editor. London: H.M.S.O., 1937.
- Calender of State Papers Domestic, 1702-1703.* Robert Pentland Mahaffy, editor. London: H.M.S.O., 1916.
- Calender of State Papers Domestic, 1703 - 1704.* Robert Pentland Mahaffy, editor. Nendeln, Liechtenstein: Kraus Reprint, 1969.
- Calender of Treasury Papers, 1557-1696.* Joseph Redington, editor. Nendeln, Liechtenstein: Kraus Reprint, 1974.
- Calender of Treasury Papers, 1697-1702.* Joseph Redington, editor. Nendeln, Liechtenstein: Kraus Reprint, 1974.
- Calender of Treasury Papers, 1702-1707.* Joseph Redington, editor. Nendeln, Liechtenstein: Kraus Reprint, 1974.
- Calender of Treasury Papers, 1708-1714.* Joseph Redington, editor. Nendeln, Liechtenstein: Kraus Reprint, 1974.
- Calender of Treasury Papers, 1714-1719.* Joseph Redington, editor. Nendeln, Liechtenstein: Kraus Reprint, 1974.
- Charnock, John, *Biographia Navalis.* London: 1795.
- [Cockburn, William], *An Account of the Nature, Causes, Symptoms and Cure of the Distempers that are Incident to Seafaring People.* London: for Hugh Newman, 1696.
- Cockburn, William, *A Continuation of the Account of the Nature, Causes, Symptoms and Cure of the Distempers That are Incident to Seafaring People.* London: for Hugh Newman, 1697.
- Cockburn, William, *Sea Diseases: Or A Treatise of Their Nature, Causes and Cure.* 3<sup>rd</sup> edition. London: for G. Strahan, 1736.
- Collins, John, *A Discourse on Salt.* London: by A. Godbid and J. Playfor, 1682.

*A Concise Description of the Royal Hospital for Seamen at Greenwich.* 2<sup>nd</sup> edition. London: by the Chaplains, 1790.

Cooke, James, *Mellificum Chirurgiæ. Or the Marrow of Many Good Authors.* London: for Samuel Cartwright, 1648.

"Debates in the House of Commons, 1697-1699", *Camden Miscellany, Vol. 23*, D.W. Hayton, editor. Camden Fourth Series (v.34). London: Offices of the Royal Historical Society, 1987.

Dennis, John, *An Essay on the Navy.* London: 1702.

*The Dispatches of Sir Robert Sutton, Ambassador in Constantinople (1710-1714).* Akdes Nimet Kurat, editor. Camden Third Series (v.78). London: Office of the Royal Historical Society, 1953.

Drake, Dr. & Dr. Baden, *The History of Physick.* London: 1699.

Dover, Thomas, *The Ancient Physician's Legacy to his Country.* London: 1733.

*English Historical Documents, 1660-1714.* Andrew Browning, editor. London: Eyre & Spottiswoode, 1953.

*The Flying Post or the Post Master, London.* April 1698-August 1700. no. 452-816.

Historical Manuscript Commission, *The Manuscripts of Allan George Finch, Vol.II.* London: H.M.S.O., 1922.

Historical Manuscript Commission, *The Manuscripts of Allan George Finch, Vol.III.* Francis Bickley, editor. London: H.M.S.O., 1957.

Historical Manuscript Commission, *The Manuscripts of Allan George Finch, Vol.IV.* Francis Bickley, editor. London: H.M.S.O., 1965.

Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1689-1690.* London: Eyre & Spottiswoode, 1887.

Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1690-1691.* London: Eyre & Spottiswoode, 1892.

Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1692-1693.* London: Eyre & Spottiswoode, 1894.

- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1693-1695*. London: Eyre & Spottiswoode, 1900.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1695-1697*. London: Eyre & Spottiswoode, 1903.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1697-1699*. London: Eyre & Spottiswoode, 1905.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1699-1702*. London: Eyre & Spottiswoode, 1908.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1702-1704*. London: Eyre & Spottiswoode, 1910.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1704-1706*. London: Eyre & Spottiswoode, 1912.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1706-1708*. London: Eyre & Spottiswoode, 1921.
- Historical Manuscript Commission, *The Manuscripts of the House of Lords, 1708-1710*. London: Eyre & Spottiswoode, 1923.
- Hodges, W., *Humble Proposals for the Relief, Encouragement, Security and Happiness of the Loyal Courageous Seamen of England*. London: 1695.
- Hutchinson, Benjamin, *Biographia Media*. London: 1799.
- Journals of the House of Commons, 26 December 1688 to 26 October 1693*. London: 1803.
- Life of Captain Stephen Martin, 1660-1740*. C.R. Markham, editor. London: Navy Records Society, 1895.
- The London Gazette*, January 1689-December 1720, no. 2419-5910.
- The London Post-Boy*. January 1701-November 1702. no. 899-1176.
- "Lord Cutt's Letters, 1695", *Camden Miscellany, vol.30*. John Childs, editor. Camden Fourth Series (v.39). London: Offices of the Royal Historical Society, 1990.
- Lowe, Peter, *A Discourse on the Whole Art of Chyrurgery*. (reprint) London: by R. Hodgkinsonne, 1654.



MacPherson, James, *Original Papers Containing the Secret History of Great Britain*. London: 1775.

Martin-Leake, Stephen, *The Life of Sir John Leake*. G. Callender, editor. London: Navy Records Society, 1920.

*Naval Administration 1715-1750*. Daniel A. Baugh, editor. London: Navy Records Society, 1977.

Pechy, John, *The London Dispensatory*. London: 1694.

[Pitman, Henry], *A Relation of the Great Suffering and Strange Adventures of Henry Pitman, Chyrurgion to the Late Duke of Monmouth*. London: by Andrew Sowle, 1689.

Powley, Edward B., *The Naval Side of King William's War, 16th/26th November 1688 -14th June 1690*. London: John Baker Publishers, 1972.

*Regulations and Instructions Relating to His Majesty's Service at Sea*. Established by His Majesty in Council. London: 1731.

Ryder, Hugh, *Practical Chirurgery: Being a methodical Account of divers Eminent Observations, Cases and Cures*. London: for John Taylor, 1689.

*The Sergison Papers*. R.D. Merriman, editor. London: Navy Records Society, 1950.

Slush, Barnaby, *The Navy Royal: Or a Sea-Cook Turn'd Projector, containing A Few Thoughts about Manning our Ships of War with the best of Sailors, without Violences, and in the most pleasing manner: According to the Fourth Article of a late Proposal Publish'd by our Worthy Chaplain, of Her Majesty's Ship the Lyme*. London: for B. Bragg, 1709.

Smollett, Tobias George, *The Adventures of Roderick Random*. 1748 London: Oxford University Press, 1952.

*Statutes of the Realm*. Volume VII. London: Dawsons, 1963.

*Thesarus Chirurgiæ: The Chirurgical and Anatomical Works of Paul Barbette, M.D.* Raymundus Minderius, translator. 4<sup>th</sup> edition. London: for Henry Rhodes, 1687.

Thompson, Mark. A., *William III and Louis XIV - Essays 1680-1720*. Ragnhild Hatton and J.S. Bromley, editors. Liverpool: University Press, 1968.

*Three Sea Journals of Stuart Times*. Bruce S. Ingram, editor. London: Constable & Co. Ltd., 1936.

- Ward, Ned [Edward], *The London Spy: The Vanities and Vices of the Town Exposed to View*. 1698. Arthur L. Hayward, editor. London: Cassell and Company, 1927.
- The Whole Works of Thomas Sydenham*. John Pechy, translator. London: 1696.
- Wiseman, Richard, *Several Chirurgical Treaties*. London: by E. Flesher and J. Maccock, 1679.
- Woodall, John, *The Surgions Mate, or A Treatise discovering faithfully and plainly the due contents of the surgions chest*. London: by Edward Griffin, 1617.
- Yonge, James, *Currus Triumphalis, é Terebinthô. Or an account of the many admirable vertues of Oleum Terebinthine*. London: by J. Martyn, 1679.

### *Secondary Sources*

- Allison, R.S., *Sea Diseases - The Story of a Great Natural Experiment in Preventive Medicine in the Royal Navy*. London: John Bale Medical Publications Limited, 1943.
- Alsop, J.D. and K.R. Dick, "The Origin of Public Tendering for Royal Navy Provisions, 1699-1720." in, *The Mariner's Mirror*, 80.4 (November 1994).
- Baugh, Daniel A., *British Naval Administration in the Age of Walpole*. Princeton, N.J.: University Press, 1965.
- Bourne, Ruth, *Queen Anne's Navy in the West Indies*. New Haven: Yale University Press, 1939.
- Brewer, John, *The Sinews of Power - War, Money and the English State, 1688-1783*. London: Routledge, 1989, 1994.
- Capp, Bernard, *Cromwell's Navy - The Fleet and the English Revolution, 1648-1660*. Oxford: Clarendon Press, 1989.
- Coleman, D.C., *The Economy of England, 1450-1750*. Oxford: University Press, 1977.
- Colley, Linda, *Britons - Forging the Nation, 1707-1837*. New Haven: Yale University Press, 1992.

- Cook, Harold J., *The Decline of the Old Medical Regime in Stuart London*. Ithaca: Cornell University Press, 1986.
- Cook, Harold J., "Practical Medicine and the British Armed Forces After the 'Glorious Revolution'", in *Medical History*. W.F. Bynum & Vivian Nutton, editors. Vol. 34, 1990.
- Crewe, Duncan, *Yellow Jack and the Worm: British Naval Administration in the West Indies, 1739-1748*. Liverpool: University Press, 1993.
- Earl, Peter, *A City Full of People - Men and Women of London, 1650-1750*. London: Methuen, 1994.
- Ehrman, John P., *The Navy in the War of King William III, 1689-1697*. Cambridge: University Press, 1953.
- Elton, G.R., *England Under the Tudors*. (1955) London: Methuen & Co. Ltd., 1969.
- G.W., *The Cures of the Diseased In Forraine Attempts of the English Nation*. Charles Singer, editor. Oxford: Clarendon Press, 1915.
- Gilbert, A.N., "Buggery and the British Navy, 1700-1861" in *Journal of Social History*, 10 (1976), 72-98.
- Gordon, Maurice, *Naval and Maritime Medicine During the American Revolution*. Ventnor, N.J.: Ventnor Publishers, 1978.
- Graham, Gerald S., *The Politics of Naval Supremacy - Studies in British Maritime Ascendancy*. Cambridge: University Press, 1965.
- Handbook of British Chronology*. F. Maurice Powicke and E.B. Fryde, editors. 2<sup>nd</sup> edition. London: Royal Historical Society, 1961.
- Hansard, T.C., *The Parliamentary History of England From the Earliest Period to 1803*. Vol.V., 1688-1702. London: T.C. Hansard, 1809.
- Hepper, David J., *British Warship Losses in the Age of Sail, 1650-1859*. Ashley Lodge, Rotherfeild, East Sussex: Jean Boudroit Publications, 1994.
- Hill, Christopher, *The Century of Revolution, 1603-1714*. New York: W.W. Norton & Company Inc., 1969.
- Holmes, Geoffrey, editor, *Britain after the Glorious Revolution 1689-1714*. London: Macmillan, 1969.

- Jones, J.R., "Limitations of British sea power in the French Wars, 1689-1815." in *The British Navy and the Use of Naval Power in the Eighteenth Century*. Jeremy Black & Philip Woodfine, editors. Leicester: University Press, 1988.
- Keevil, J.J., *Medicine and the Navy, 1200-1900*. Vol. II. Edinburgh: E. & S. Livingston Lt.d, 1958.
- Kemp, Peter, *The British Sailor - A Social History of the Lower Deck*. London: J.M. Dent & Sons Limited, 1970.
- Kennedy, Paul, *The Rise and Fall of British Naval Mastery*. 3d edition. London: Fontana Press, 1991.
- Lewis, Michael, *The Navy of Britain - A Historical Portrait*. (1948) London: George Allen & Unwin Ltd., 1949.
- Lloyd, Christopher, *The Nation and the Navy - A History of Navy Life and Policy*. London: Cresset Press, 1954.
- Masters, Anthony, *Bedlam*. London: Michael Joseph, 1977.
- McInnes, E.M., *St. Thomas' Hospital*. London: George Allen & Unwin Ltd., 1963.
- McNeill, William H., *Plagues and Peoples*. New York: History Book Club, 1976.
- The Navy Miscellany*. Vol.II. John Knox Laughton, editor. London: Navy Records Society, 1912.
- The Old Scot's Navy from 1689-1710*. J. Grant, editor. London: Navy Records Society, 1914.
- Oppenheim, M., *A History of the Administration of the Royal Navy and of Merchant Shipping in Relation to the Navy - From XDIX to XDCLX with an Introduction Treating of the Earlier Period*. (1896) London: The Shoe String Press, 1961.
- Orme, Nicholas and Margaret Webster, *The English Hospital, 1070-1570*. New Haven: Yale University Press, 1995.
- Owen, J.H., *War at Sea Under Queen Anne, 1702-1708*. Cambridge: University Press, 1939.
- Plumb, J.H., *The Growth of Political Stability in England, 1675-1725*. London: Macmillan, 1967.
- Queen Anne's Navy*. R.D. Merriman, editor. London: Navy Records Society, 1961.

Rediker, Marcus, *Between the Devil and the Deep Blue Sea - Merchant Seamen, Pirates and the Anglo-American Maritime World, 1700-1750*. (reprint) New York: Cambridge University Press, 1990.

Rodger, N.A.M., *The Wooden World - An Anatomy of the Georgian Navy*. London: Collins, 1986.

Runyan, Timothy J., "Ships and Mariners in Later Medieval England" in *Journal of British Studies*. 16 (1977), 15.

*Stedman's Medical Dictionary*. 26<sup>th</sup> edition. Baltimore: Williams & Wilkins, 1995.

Tunstall, Brian, *The Anatomy of Neptune - From King Henry VIII To the Present Day*. London: George Routledge & Sons, Ltd., 1936.

Williams, Penry. *The Tudor Regime*. (1979) Oxford, Clarendon Press, 1989.

*The Wren Society, Volume VI - The Royal Hospital for Seamen at Greenwich, 1694-1728*. Oxford: University Press, 1929.