

A STUDY OF  
THE DEVELOPMENT OF GENERAL PRACTICE  
IN THE SCOTTISH ISLANDS.

Thesis submitted for the degree of  
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by:

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**CONTAINS  
PULLOUTS**

## ABSTRACT

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This study traces the development of General Practice in the Scottish islands from the earliest times up until the present day.

The earliest evidence of medical practice is trephination carried out in the Bronze Age. In the Dark Ages, and succeeding centuries, medical practice was in the hands of the Columban missionaries, for whom medical cures demonstrated the superior power of monotheism over pagan gods. There was also a rich body of folk-beliefs, based on witchcraft, evil-eye etc., with healing by means of incantations, charm-stones and well-rituals

In the twelfth century, the island chiefs employed well-educated hereditary clan physicians, but their influence declined in the early eighteenth century. For those less highly placed in the clan hierarchy, recourse was still made to folk-medicine. Increasingly, from the seventeenth century, readily recognisable medical practitioners were to be found in the islands.

Medical practice was most unsatisfactory in the Scottish islands until the middle of the nineteenth century, when the Poor Law Amendment Act was passed. Although this Act improved medical practice considerably, the structure of landownership in the islands delayed its full benefits. A significant development was the Highlands & Islands Medical Service of 1912, which was practically unchanged by the advent of the National Health Service. It is second in importance only to the coming of air-service to the islands, which largely removed the geographical truism of remoteness and isolation.

## ACKNOWLEDGEMENTS

This study originated during my tenure of general practitioner posts in the Outer Hebrides and the Orkney Islands, between 1973 and 1978. The rapid turnover of doctors holding general practitioner posts in the outer isles of Orkney, and the recurrent heated debates over the continuation of certain island practices, led me to inquire into the development of general practitioner services in the Scottish Islands.

This work owes thanks to many people. Firstly, to Dr. Ian K. MacIntosh, my former trainer in the Isle of Lewis. Dr. MacIntosh's pragmatism, kindness and wisdom, following many years of island practice, showed me that 'medicine can be fun'; for this one fact, I am greatly indebted.

I must extend my thanks also to my former colleagues in Orkney, who frequently discussed with me the medical problems held in island practices; to the librarians of Leicester University, who became used to seeking out lengthy lists of obscure publications and tomes; to the Royal College of General Practitioners and the Monument Trust for financial support in endowing a History of Medicine Research Fellowship; to Professor Marshall Marinker, for most capably acting as supervisor to a student with often heated differences of perception; to my wife and children for their acceptance of many hours spent in isolation - they have lived with this project a long time.



There is something, however, in the very name of St. Kilda which excites expectation. Remote and solitary, the spirit of romance appears still to dwell in the clouds and storms that separate this narrow spot from the world; but like other spirits, it vanishes at the rude touch of investigation.

(MacCulloch, John, 1824.)

#### ERRATA

- (i) Refs p37 et seq. should read (Martin, Martin, 1705).
- (ii) Refs p62. (Mowat, John ?) in line 15 should be deleted.

Reference in line 30 should read (Mowat, John, 1921).

- (iii) Refs p 67. omitted from References should read

Hossack, B.H. (1900). Kirkwall in the Orkneys. Published privately: Kirkwall.

- (iv) Figure p 100. The populations given on the vertical axis have been misnumbered by a factor of 10, and should reflect the table on page 99.

- (v) Page 212, line 25 should read 'to Dr. T.B.L. Bryan.'

- (vi) Page 221, last line should read ' < 1.00'.

- (vii) Ref p 272, line 26 should read 'Martin, Martin (1697).

Philosophical Transactions of the Royal Society of London, 233, 727.'

- (viii) Ref p 272, line 33 should read, 'Martin, Martin (1707).

Philosophical Transactions of the Royal Society of London, 312, 1469.'

- (ix) Ref p 273, line 3 should read 'McConaghey, R.S. (1961).

In Poynter, N. (Ed). Evolution of Medical Practice in Britain. Pitmans: London.

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## (1.1) INTRODUCTION

For the majority of the population of the United Kingdom, the Scottish Islands are remote places to be visited only on a peaceful summer holiday. Visitors come to Iona to see St. Columba's monastery; to see Fingal's Cave in Staffa; the stone-circles of Callanish in Lewis; or the stone-age village of Skara Brae or the Broch of Maes Howe in Orkney. Shetland appears to be known only for its 'ferry-louping' oilmen.

But people have lived, worked and died in the islands, since homo sapiens migrated into northern Europe. With them came their diseases, and the need to control or ameliorate the symptoms their diseases caused. This study is an exploration of the evolution of medical services - and particularly the general practitioner services, from the earliest times.

There were very few doctors indeed in the Scottish Islands until the early decades of this century, and facilities that did exist were largely independent of the rest of the country. Following the Dewar Report, and the setting up of the Highlands and Islands Medical Service Scheme, doctors were appointed to most of the practices which exist today.

Unlike most of the United Kingdom, which already had a strong tradition of medicine, both general practitioner and hospital, the islanders had negligible access to medical care. The Poor Law medical services of the nineteenth century had done very little to attract doctors to the islands. The Royal College of Physicians' report of 1852, on the availability of medical

services in the islands, compares in every way with the Poor Law reports of 1904 and 1909 - medical attention in the islands was most unsatisfactory.

The islands have special problems by their very nature. They are remote, and access is difficult. They are in areas where the weather can, ~~be~~ and often is, wild in the extreme, and where communications are poor. It was therefore easy for medical neglect to occur. The islands, by their very nature, are more vulnerable to the effects of epidemic disease.

The inaccessibility of medicine led to a rich tradition of folk-medicine, beliefs of which persist to the present day (Parman, Susan, 1977). Medical mythology exists everywhere today, even in the middle-class areas of English Midlands towns. But in the Scottish islands, the absence of 'conventional' medicine led to more firmly held beliefs in folk-medicine, and which have persisted for centuries. These primitive beliefs must not be derided. Half of what is taught in medicine today is probably wrong - but we are ignorant as to which half.

Island society has suffered in ways other than their deprivation of conventional medical care. The standard of living has always been lower than that of Mainland Britain. The housing-stock, water-supply and sanitation has always been, and still is, lower than elsewhere (Report of Sanitary Condition of the Lews, Cd 2616, 1905). The diet of the islanders, especially the reliance on sea-fowl in certain communities has always been a source of amusement and wonder. The population of the islands was at its highest in the middle of the nineteenth century, but



has declined considerably over the past 140 years, mainly as a result of emigration; this often leaves behind those people more in need of social and medical help.

The standard of provision of medical care in the islands is now excellent. As a result, initially of the Highlands and Islands Medical Service Scheme, the islands are well-provided with medical practitioners, whose list-size is small, although geography may still make access difficult in some instances. The development of the air-ambulance service has meant that an island GP is no longer isolated, and, as with his colleagues elsewhere in the country, can easily refer his patient for specialist help. Hospitals are now present in all the island groups. The island GP is truly a 'family doctor'.

But problems for these doctors still exist, which are not very different from those of the middle of the nineteenth century - money, professional isolation and social isolation - affecting both the doctor himself and also his family. It is these factors, together with an entrenched conservatism and distrust of strangers on the part of the indigenous communities, which have led to the high turnover of island doctors.

This then, is a study of the evolution of general practitioner services in the Scottish islands from the earliest times until the 1980's.

## (1.2) A NOTE ON HISTORICAL LITERARY SOURCES

Every historical study must examine the quality and quantity of its sources. In view of the relatively small population of the Scottish islands, and their geographical inaccessibility, it might be thought that sources for a study of the evolution of general practice might be sparse. This is definitely not the case.

The main historical sources used in this study are:

1. Official publications, and evidence submitted to Royal Commissions of Enquiry, including Reports, Acts of Parliament etc.
2. Journals, travelogues and personal accounts.
3. Newspaper articles.
4. Recorded folk-lore.
5. Scholarly articles, studies and reviews.

Historical literary sources are subject to qualitative and quantitative errors. The required material may never have been recorded. The material which is extant may not be representative of the total recorded material (for example, in respect of the surviving Gaelic medical manuscripts).

Official publications may be subject to bias. Bias is certainly present in the evidence submitted to Royal Commissions of Enquiry, where personal interests may influence the evidence submitted. The journals, travelogues and personal accounts may not be factually correct. They may be biased. Their authenticity may be in doubt. Unspoken assumptions may be present which are difficult to interpret nowadays. For example, eighteenth and



nineteenth century travelogues describing the conditions and inhabitants of St. Kilda were commonly written with the arrogance of the Crusoe 'noble savage' ideal.

Newspaper articles have the advantage of being contemporary with events. They are usually factually correct, but their interpretation of these facts and events may be biased.

Records of folk-lore are an important source of our knowledge of earlier medical practices. However folk-lore is usually recorded at a late stage - often after belief in such lore had passed. Folk-lore was initially transmitted orally giving rise to many opportunities for adjustment. It suffers from the prejudice associated with mysticism, and cannot usually be verified except through analogy. Recorded folk-lore may well be unrepresentative of the beliefs of the time and it is difficult to place in its chronological text.

There are particular problems associated with the literary sources of historical medical research. Most sources were not written by doctors themselves, and diagnostic criteria were seldom included, making the interpretation of data difficult. There are problems too of anachronistic labels - for example the meaning of the word 'leprosy' or 'infectious fevers' has changed over the years. Medical historical development is not a continuous process, but rather a process of development into and out of many 'blind-alleys'. It is difficult to evaluate the importance of these 'blind-alleys' in interpreting contemporary medical practice (cf. inoculation against smallpox). There is also the problem of the delay in the diffusion of ideas. Recorded practises and ideas may take time to diffuse into daily

practise.

These difficulties with historical medical sources are practically insuperable. The method which I have adopted in this study in an attempt to overcome these difficulties, is by quoting a multiplicity of sources wherever possible. Although this may not be wholly satisfactory, it would appear that the more independent sources that can be used to illustrate a point, the less likely is the error. It is with an awareness of these particular difficulties -- and others -- associated with a historical medical research topic, that this study is presented.

### (1.3) METHODOLOGY

It is difficult to describe the methodology used in historical medical research. Honesty compels me to admit the somewhat haphazard way in which this study was undertaken. This study was founded on my own experience as a general medical practitioner, firstly in the Isle of Lewis in the Western Isles, and latterly in the Isle of Westray in the Orkney archipelago.

My interest in the historical development of general practice in the Scottish islands was the result of the convergence of two factors. The first factor was initiated when appointed sole medical practitioner to the population of Westray. At my appointment interview, I was asked if I might be prepared to take over the practice of the adjacent island of Papa Westray in addition, at a future date, if asked to do so. Papa Westray appeared to have a very small population indeed. Many doctors in Orkney seemed to have very small list sizes. There was frequently some difficulty in finding suitable applicants for these posts, who, when appointed, did not hold the post for many years before resigning. I was intrigued to know how it was that doctors first became appointed to these tiny populations, and what



were the factors that compelled them to leave after so short a time.

The second factor in commencing this work, was reading two books, which I happened to purchase whilst on holiday in Aviemore. The first was by Tom Steel, entitled 'The Life & Death of St.Kilda'; the second was by Charles Maclean, entitled 'Island on the Edge of the World -- Utopian St.Kilda & its passing'. The first account I considered a fair and factual account of life on this most isolated of inhabited British islands. I was intrigued by its medical problems, its infectious diseases, especially the 'boat cold' (something similar to which I had experienced in Westray), and neonatal tetanus, and the effects that these diseases had upon the functioning of the island society. The second book, by Charles Maclean, however, appeared totally different, and appeared to distort the facts to fit his preconceived notion of an island utopia. It seemed highly improbable to me, that life on St.Kilda could have been anything approaching a utopian existence.

From these early beginnings, I then attempted to read anything and everything concerning St.Kilda, and now feel that I have read at least the majority of the extensive bibliography of the island. However, it soon became apparent that ever since the seventeenth century, successive authors had plagiarised and embellished earlier authors. Where lay the grain of truth?

Methodology therefore had to be haphazard. I have examined the parochial and civil registers of births, marriages, baptisms and deaths for St.Kilda, which now reside in Register House in Edinburgh. I have been to the islands of Westray and Sanday in Orkney, and examined similar registers. I spent a week at the Newspaper Library of the British Museum, studying local newspapers from Orkney, Shetland and

the Western Isles since the turn of the century. I have examined the collection of Scottish books in the library of the University of Leicester. I have examined local collections of papers and books in the public libraries in Stornoway, Isle of Lewis, in Lerwick in Shetland, and in Kirkwall in Orkney. I have visited, and received assistance from the local county archivists in Shetland and in Orkney. I have been assisted by the curators of the museums in Lerwick and Kirkwall. I have examined hundreds of pages of official government reports and Acts of Paliament, on microfilm, in the library of Leicester University. I have followed up many esoteric references through the inter-library loan system. I have acquired an extensive collection of island bibliography through an antiquarian bookseller in Fortrose, Inverness-shire. I have travelled extensively in the Outer Hebrides, Orkney and Shetland, and held many conversations with doctors and other interested parties. I have received help from Mr. David Hamilton, consultant surgeon in Glasgow, who has recently written a book on the development of medicine, as a whole, in Scotland. I have attended the course for the Diploma in the History of Medicine of the Society of Apothecaries in London. I have received help from the librarian of the Royal College of Physicians of Edinburgh. With the help of an archivist in Edinburgh, I have scoured the original Dunvegan Macleod muniments for medical material.

All this collected material has been filed under subject headings and chronology, and then evaluated and extracted. This thesis has been subjected to a number of drafts.



#### (1.4) THE SIGNIFICANCE OF THIS STUDY.

The study of history is important in two respects. It helps to explain the past, and it can provide experience upon which to make decisions for the future. Life in the islands of Scotland has always been different from life in the urban centres of southern Scotland and also, from life in England, on account of its geographical remoteness and its own historical tradition. The development of medical practice elsewhere in the country has been extensively studied. There has, to my knowledge, been no similar study of general practice in the Scottish islands.

The development of general practice in the islands shows some remarkable disparities from its development elsewhere. The islands were outside the ambit of intellectual thought, which occurred in Edinburgh, London and Europe, until recent times. The islands were subjected to intense social deprivation during the period of the Clearances, with which medicine had to cope. But medical practitioners were rare in the islands until a century ago, and were forced to act by themselves. The tradition of folk-medicine continued longer in the islands than in the rest of the country. The effects of the Poor Law Amendment (Scotland) Act was delayed in respect of the concomitant improvement of medical care in the islands, as a result of the islands' social and landownership structure. So poor were medical conditions in the islands, that a special act of parliament was passed in the early twentieth century, specifically to improve medical conditions in these regions. So good were the effects of this Act, that the islands' medical services were practically unchanged by the coming of



It is my belief that this study adequately shows how medical practice in the islands -as we know it today- came into being.

A fuller understanding of the reasons for doctors' short tenure of island posts is indicated. Anecdotal evidence of personality, social and psychiatric problems amongst some island doctors is harmful to their esteem, and needs to be either confirmed, or else expunged. The development of better communications, and in particular the air-ambulance service could be a study in itself. The social effects of island epidemics needs further evaluation. Better evidence for the nature of common diseases in the islands in the eighteenth and nineteenth centuries, than is presented here, would be valuable. Better evidence for the actual standard of medical practice in the islands, is also needed.

## (2.1) EARLY MEDICINE UNTIL THE END OF THE SEVENTEENTH CENTURY

Scotland has no record of man until post-glacial times around 6400 BC. The first firm dates of early man are from Fife, where reading of carbon-dating of charcoal from hearths range from 6100 - 255 BC to 4165 - 110 BC. In southern England, small numbers of men had appeared during the Old Stone Age, coming and going over several hundred thousand years as glaciation waxed or waned. If ever they reached Scotland during the warmer interglacial periods, all evidence for them has been obliterated by the last big advance of the ice. The first known men in Scotland were Mesolithic men, so named to indicate a chronological succession, and not because they represented a cultural advance on the Old Stone Age of Britain or Europe. The Hebrides received their first men later than the mainland, at around 3800 BC, when temperatures were warmer than present, and forests of birch and hazel heavily covered the islands. (Murray, W. H. 1973).

The earliest extant example of a medical procedure carried out in the Scottish islands is a trephination of a skull found at Mountstuart on the Island of Bute in the Inner Hebrides in 1890 (Munro, Robert, 1891). This skull is probably from the Bronze Age, and shows healing of the trephination on the left side of the frontal bone. (Parry, T. Wilson, 1916: Smith, G. Elliott, 1916)

Trephination of skulls has been carried out throughout the world until contemporary times. Indeed Martin, writing in 1703 (Martin, Martin, 1703) refers to an untrained doctor in the Island of Skye, Neil Beaton, who:

had the boldness to cut a piece out of a woman's skull broader than half-a-crown, and by this, restored her to perfect health.

The reason for undertaking a trephination has been hotly disputed, and only surmises can be made. Analogies with tribal contemporary medicine may be unreliable. In principle, there are two main ideas. Either the hole was cut in the calvarium to allow spirits or demons to escape (possibly they caused mental illness or epilepsy), or else the hole was cut in order to procure a disc of skull-bone, which, worn as a charm or amulet, had magical properties. These ideas must however be considered as surmise only.

## (2.2) THE DARK AGES

In the Celtic period of Scotland, it seems likely that the only source of 'conventional' medical care lay with the missionaries. Although the development of a Christian monotheistic religion in the Eastern Mediterranean had resulted in the belief that diseases, as well as cures, emanated from the one god (Castiglioni, A, 1958), the beliefs of the early Christian Church had as yet to evolve in those areas hitherto deprived of Christian evangelism. In these remote areas, the existing pagan beliefs had to be fitted, in procrustean fashion, into a Christian mould. For example, the Roman goddess of fever, Febris, eventually became St. Febronia. The symbolism of Apollo's arrows of disease was incorporated into the mystical character of St. Sebastian.

Christianity brought with it the growth of ideas for the care of the sick, later to be developed into the mediaeval doctrine of the Seven Corporal Works of Mercy. These included giving food to the hungry, drink to the thirsty, hospitality to strangers, and the visitation of the sick. Under Charlemagne in the ninth



century, medicine became part of the compulsory training for the clergy. Healing was seen as a valid function of the clergy, since Biblical authority had been given:

He called his twelve disciples together and gave them power and authority over all devils, and to cure diseases. (St. Luke, ix,1)

Contemporary belief in disease being caused by devils or other gods was widely held among the Picts of the Scottish Islands. It was seen as a Christian duty to expel demons, and thereby, to cure diseases. It was also necessary for the early missionaries to perform miracles of healing in order to impress the populace of the strength of Christianity over the power of other devils.

Unlike the Scottish Borders, where 'leches' practised medicine, it is likely that 'in the north and west of Scotland, Columba and the other missionaries may have been the only persons with medical training' (Hamilton, D, 1981).

In 563, St. Columba travelled from Ireland to establish his monastery in Iona. Ancient texts show that Columba was involved in curative works before leaving Ireland. For example, the 'Old Irish Life of St. Columba', which is believed to date from the sixth century, and whose earliest extant copy, the Leabar Breac, is dated c. 1397, states:

Another time he and his guardian went to attend a sick man. As they were going through a wood, the cleric's (Cruithnechan's) foot slipped on the path, so that he fell and died suddenly. He (Colum Cille) placed his cloak under the cleric's head, thinking

that he was asleep, and began rehearsing his lessons, so that some nuns heard his loud reading.... The nuns came afterwards, and found the cleric dead before them, and they told him (Colum Cille) to resuscitate the cleric for them. He went forthwith to resuscitate the cleric; and the cleric arose from death at the word of Colum Cille, as if he had been asleep.

(Anon, 6th C)

Also:

Colum Cille afterwards founded Rath-Both (Raphoe in Co. Donegal). There he resuscitated the carpenter from death, after he had been drowned in the mill-pool.

(Anon, 6th C)

Columba obviously considered medicine to be an integral part of his work. It is clear that the sick were often brought to Iona from other parts of Scotland in order to be cured by him:

When Colum Cille had been thirty years in Alba, great anxiety seized the men of Eriu to see him, and speak with him, before he died; and messengers went from them to meet him, that he might come to speak with them to the great convention of Druim-Ceta, that he might bless them in that place, men, boys, women, and that he might heal their diseases and pestilences.

(Anon, 6th C)

Adomnan's hagiology of Columba also gives evidence of his medical ability (Adomnan, 688 AD):

By virtue of prayers, and in the name of the Lord Jesus Christ,



he healed people who endured the attacks of various diseases. He, one man alone, with God's aid repulsed innumerable hostile bands of demons, making war against him, visible to his bodily eyes, and preparing to inflict deadly diseases upon his community of monks; and they were thrust back from this our principal island.

Also:

As has been told us by men that knew of it, the man of memorable life cured the ailments of various sick people, by invocation of the name of Christ, during those days in which, when he went to the conference of Kings, he remained for a short time in the ridge of Cete. By the extending of his holy hand, or when they were sprinkled with water blessed by him, or even by touching the hem of his cloak or by receiving a blessing of any thing, such as salt, or bread, and dipping it in water, very many sick people, believing, regained full health.

Also:

One day, a young man of good ability, called Lugne, came to the saint and complained of a discharge of blood that at frequent intervals during many months, had flowed immoderately from his nostrils. The saint bade him come nearer; and blessed him, pressing together both his nostrils with two fingers of the right hand. And from the hour of that blessing until his last day, blood never fell from his nose.

The importance of Columba's ability to heal as a means of showing the superior power of his God over that of pagan gods is shown in the following two examples from Adomnan's hagiology:

At the time when Saint Columba passed some days in the province of the Picts, a certain layman with his whole household heard and believed the word of life, through an interpreter, at the preaching of the holy man; and believing, was baptised, the husband with his wife and children, and his servants. And after the interval of a few short days, a son of the head of the household was seized by a severe illness, and brought to the boundary of death and life. When the magicians saw that he was dying, they began to taunt his parents, with great reproach, and to magnify their own gods as the stronger, and to belittle the Christian's God as the weaker.

When all this was reported to the blessed man, he was roused with zeal for God, and went with his companions to the house of the layman, where the parents were performing the sad funeral rites for the child that had lately died....Rising from his knees he turned his eyes to the dead boy and said: 'In the name of the Lord Jesus Christ be restored to life, and stand upon thy feet'. With these glorious words of the saint, the soul returned to the body; and the dead boy opened his eyes and lived again.

And:

At one time, when the blessed man passed some days in

the Province of the Picts, he heard that the fame of another well was widespread among the heathen populace, and that the insensate people venerated it as a god, the devil deluding their understanding. For those that drank from this well, or deliberately washed their hands or feet in it, were struck, by devilish art, God permitting it, and returned leprous, or half-blind, or even crippled, or suffering from some other infirmity. Led astray by all this, the heathen gave honour to the well, as to a god. When he heard of that, the saint went boldly to the well one day. The magicians, whom he often repelled from himself in confusion and defeat, rejoiced greatly when they saw this, since they imagined he would suffer the like ills, from touching that noxious water. But he, first raising his holy hand in invocation of the name of Christ, washed his hands and feet; and after that, with those that accompanied him, drank of the same water, which he had blessed. And from that day, the demons withdrew from that well, and not only was it not permitted to harm anyone, but after the saint's blessing, and washing in it, many infirmities among the people were in fact cured by the same well.

Monasteries in the style of that in Iona were established by Columba and other contemporary missionaries in many Scottish islands, viz Ethica Terra (Tiree), Insula Hinba (unidentified, but probably the Garveloch isles near Mull), Ibdone (?), Eninis (Inchkenneth in Mull), Isla, in Skye at Portree, Snizort and



Loch Chollumcille, Canna, Lismore, Kingarth in Bute, and in Eigg. According to Adomnan, Columba founded monasteries within the territories of both the Picts and the Scots. By inference, one assumes that Columban medical practice was similarly distributed.

There is a commonly held, but erroneous belief that Columban monasteries possessed hospitals (cf Hamilton, D, 1981). The evidence for this is very sparse. The presence of a hospital was not mentioned by Adomnan or other early writers, nor is archaeological evidence supportive in the case of Iona. If any hospital did exist, it certainly did not continue into mediaeval times (Easson, D. E., 1957). This common fallacy has arisen because monastic houses usually contained an apartment known as the infirmary or 'hospitium'. This 'hospice' existed for the use of sick monks or nuns, although occasional travellers may have been admitted. Since monks entered the house for life, a special place for their care in sickness and approaching death was obviously essential (Cartwright, F. F., 1977). The hospice was also used as accommodation for visitors to the monastery.

The Columban influence on the medical care of the inhabitants of the Western Isles eventually declined with the decline in power of these religious houses. This was itself caused by both internal and external factors. Increasing religious schism culminating in the Synods of Whitby in 664 AD, and Tara in 692 AD, where differences of use of religious calendars were resolved, which reduced the importance of the Columban church. Viking raids took a heavy toll of religious houses on the Scottish islands, and on the mainland near the coast. The Danish raids on Iona in

795 AD, 801 AD, 805 AD and later in 825AD further diminished the influence of the Columban church and the practice of medicine in the Western Isles.

### (2.3) COMMON DISEASES IN THE TWELFTH CENTURY

Although it is impossible to ascertain which diseases were common in the twelfth century in the Scottish islands, archaeological evidence on skeletal remains gives some indication of the diseases that affected the skeleton. It is self-evident that the such evidence tells little or nothing about those diseases which have no bony counterpart. However, Reece (Reece, Richard, 1981) described the excavation of approximately forty-five skeletons from the island of Iona.

When this material was analysed, a number of conditions were found to be present, including healed fractures, osteomyelitis following fracture, osteoarthritis of the hip and spine, dental caries, alveolar abscess and dental tartar (Wells, Calvin, 1981).

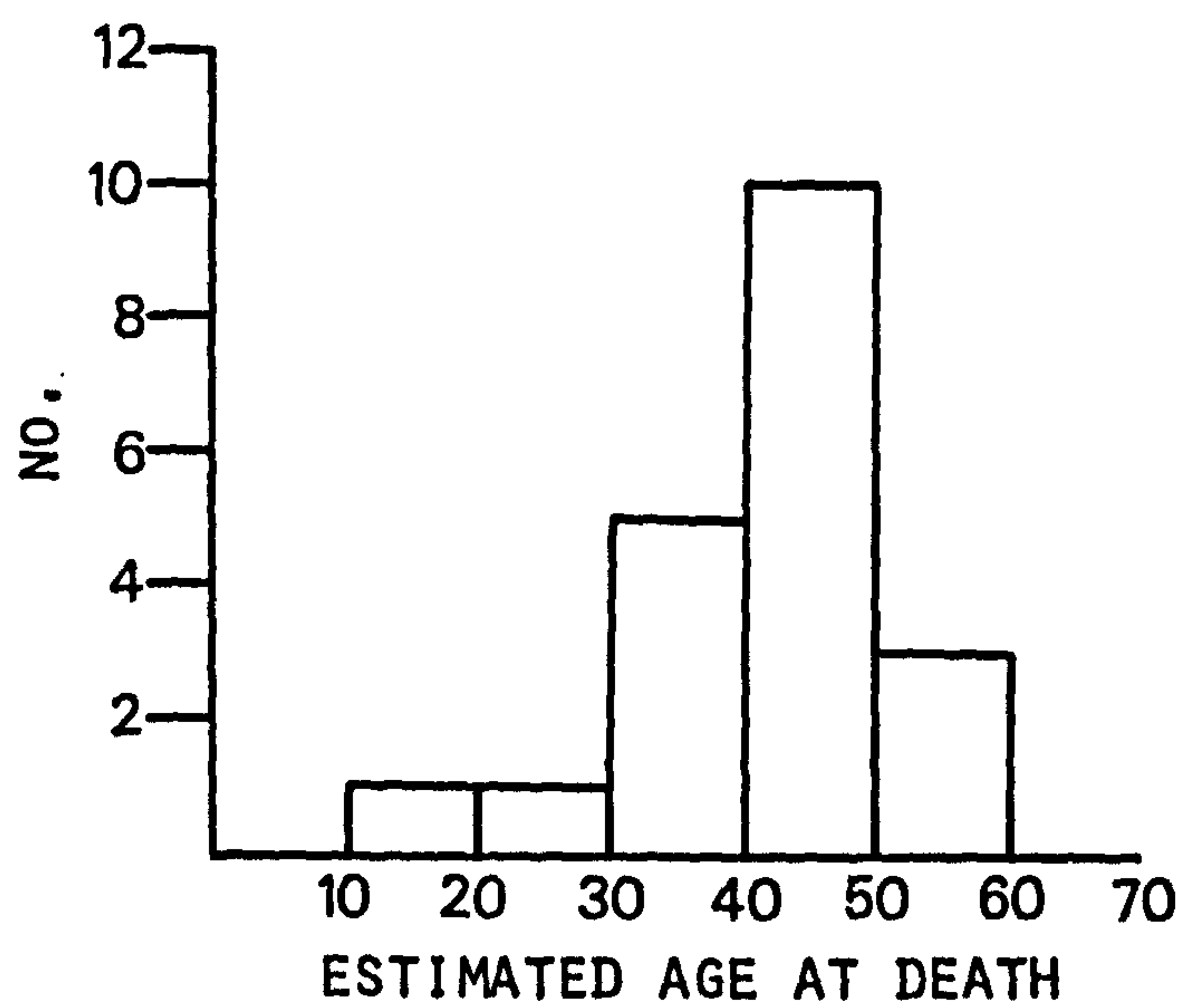
Radiology of all the tibias found, showed a remarkable freedom from Harris' lines, compared with skeletons of similar date. This is suggestive of an absence of serious disease or malnutrition during childhood. Wells suggested that it was probably that the common juvenile exanthemata, such as measles, rubella, and scarlet fever, together with mumps, diphtheria, and whooping cough had not occurred.



The average age at death, based on some twenty skeletons, was estimated at around 39 years of age. This is shown in the following table and histogram:-

<u>Age at death</u>	<u>Number</u>
0-9	0
10-19	1
20-29	1
30-39	5
40-49	10
50-59	3
60-69	0
<hr/>	<hr/>
Total number	20

By contemporary standards, these Ionan inhabitants lived some ten years longer than other British populations, suggesting that this island community was in some degree healthier.



HISTOGRAM: TO SHOW DISTRIBUTION OF AGES OF TWELFTH CENTURY SKELETONS FROM IONA.

#### (2.4) ORTHODOX MEDICINE IN THE MEDIAEVAL PERIOD

With the decay of the monasteries and the decline in the importance of the clergy as healers of the sick, the practice of medicine in the islands reverted to primitive superstitious beliefs, with its apparatus consisting of witchcraft, the 'evil eye', charm-stones, healing-wells, and local folk-healers.

However, in mediaeval Scotland, a style of conventional orthodox medicine evolved under the clan system. The clergy and the clan chiefs were well educated by the standards of the time, and well-travelled in Europe. They were served by physicians who were educated men and well-read. For example, the surviving Gaelic medical manuscripts of the period greatly out-number the handful of Latin medical manuscripts recovered from lowland monasteries after the Reformation. It is likely however, that the services of these clan physicians were largely restricted to the clan chiefs and their immediate families.

#### HEREDITARY CLAN OFFICES

Under the clan system in the Western Isles, several important posts were held by an hereditary tenure, such as that of the breves (?lawyers):

The office belonged to certain families, and was transmitted like every other inheritance, from father to son. Their stated salaries were farms of considerable value. (MacPherson, John, 1768).



Other posts held by certain families during the Lordship of the Isles were ecclesiastical posts held by the Martins, the Malcolms, the MacArthurs and the MacQueens, and the hereditary archivists (keepers of the records of the Lordship of the Isles), the MacDuffies. The family O'Senog, Mac O'Senog or MacSenach, held the position of professional harpers, and had lands from the Lords of the Isles in respect of their office. The families of the MacCrimmons, MacArthurs and Rankins were hereditary pipers. The post of historian to ClanRanald was held by the MacMhuirish family. An account of the 'Genealogie of the Campbells', written before 1678 refers to:

Certain persons called Seanachies, and Bards, who were antiquaries and whose work it was from father to son for many ages, to keep an account of the genealogies of great families, and their actings, which ordinarily they did put in Irish ryme of a most exquisit frame.

(MacPhail, J. R. N., 1916)

#### HEREDITARY PHYSICIANS TO THE CLANS

Outside the specifically literary profession, native Gaelic learning in Scotland seems to have been confined to the doctors, and there is evidence of the hereditary medical families becoming the ultimate custodians of the old libraries. In part, this was due to the differing rates of decline in various official functions. The loss of temporal power by a great chief or noble, such as the Lord of the Isles, limited his need for an official archivist or judge, but left him as dependent as before on a physician. These hereditary doctors

remained prosperous for a longer period than other court officers.  
(THOMSON, Derick S, 1968)

There were at least three main medical dynasties in Gaelic Scotland, and several lesser ones. The chief one, both numerically, and in terms of length of service, was that of the Beatons, MacBeths or Bethunes. The traditional account of the origins of this family in Scotland is that its founder came in the retinue of the daughter of O'Cathain, who married Angus Og of the Isles about the year 1300.

The earliest reference to a member of the family is in the grant of lands in Melness and Hope in Sutherland in 1379. This grant was made by the Wolf of Badenoch to Ferchar Lighiche, and confirmed by King Robert II in 1379. In 1386, King Robert II granted to Ferchar ("nostro Ferchardo leche") the isles of Jura, Calwa and Sanda, together with a large group of small islands lying off the north-west and north coasts of Scotland (Mackay, Angus, 1906). In 1408, a Fercos MacBetha appears as a witness to a Gaelic charter granted in Islay by John of the Isles, and although there is no indication that he was a physician, it is believed that he was the ancestor of the medical MacBeths or Beatons of Islay. The earliest recorded grant of land to a MacBeth in Islay is in 1506, to 'Gilcristo McVaig, surrico'.

Branches of the MacBeth medical family appear in various parts of Gaelic Scotland, mainly in areas once ruled by the Lords of the Isles. One of the Mull branch, described as 'Joannes Betonus, Macclenorum familiae medicus' on his tombstone in Iona, died in 1657. This specific connection with the MacLean

family was emphasised by John MacLean, writing to Robert Wodrow in 1701 (Maclean, John, 1834). Fraser of Wardlaw, in the second half of the seventeenth century refers to a son of Lord Lovat being 'cut of a stone by Gilleandris Beatton, in 1612; and implies that Beatons had been living and practising as leeches in Glenconvinth in the Aird of Inverness-shire for 'time out of mind' (Mackay, William, 1905).

Martin (1703) refers to a Fergus Beaton who lived in South Uist, and who possessed of a traditional medical library in manuscript form:

Fergus Beaton hath the following Antient Irish manuscripts in the Irish character, to wit, Avicenna, Averroes, Joannes de Vigo, Bernadus Gordonus, and several volumes of Hypocrates.

The Rev. Donald MacQueen who donated a copy of Bernard Gordon's 'Lilium Medicinae' to the Society of Scottish Antiquaries in 1784 stated that it belonged to Farchar Beaton of Husibost in Skye, some five generations earlier, ie circa 1630.

The Rev. John Beaton, second son of 'Joannes Betonius, MacLenorum familiae medicus' (Argyll Synod Minutes, April 10th, 1651), was interviewed by Edward Lhuyd, at the end of the seventeenth century, who recorded the Gaelic manuscripts in his possession (Lhuyd, Edward, ?1699). He stated:

Mr. John Beaton from Mull has a chest full of Gaelic books; most of them (almost all) are written on parchment, and they are in the Isle of Tiree now, with the father of Mr. McLean of Salchur. Medicine:  
(1) Averroes. 424 leaves in folio. (2) (Practica?)



concerning medicine, ie surgery. (3) The Liliu  
Gordonium (4) The Aphorisms, great and small,  
definitions, prognostications, gerffach, Aidiu  
'De urina', Anatomy and diverse (yea, very many)  
books.

Thus it appears that Dr. John Beaton may have had a library  
containing, amongst other works, translations of Averroes,  
perhaps Ruggiero's 'Practica Chirurgiae' or Lanfranc's  
'Chirurgia Magna', Bernard de Gordon's 'Liliu Medicinae',  
Hippocratic 'Aphorisms' and 'Prognostications', and Aegidius  
Corboliensis' book entitled 'Carmen de urinarum judiciis',  
together with many other books.

However, the name of John Beaton is found in the following  
Gaelic manuscripts: MSIII 'Materia medica' of the National  
Library of Scotland - a tract dealing with fevers and other  
illnesses; MS XXXIII of the National Library of Scotland,  
dealing with the proper times for bleeding, together with an  
anatomical tract, a copy of the rules of the medical school of  
Salerno, and Aegidius' treatise on Urine; MS 15582 of the  
British Museum, containing the 'Regimen Sanitatis',  
(Gillies, H. Cameron, 1911); MS XXVI of the National Library  
of Scotland, dealing with sleep and diet.

Martin mentions the presence of several Beatons in practice  
in the Western Isles in the seventeenth century including  
Dr. Fergus Beaton in Benbecula, Dr. Neil Beaton in Skye, and  
Dr. James Beaton in North Uist. He also refers to another  
Dr. Beaton, who was blown up aboard a Spanish ship in Tobermory  
Bay in 1588.

Although the earlier members of this dynasty cannot have had any formal medical training, later generations of the family received their training at Glasgow University, where Beatons were educated from the early sixteenth century onwards. The first of these was David Beaton, whose name appears on the University Register in 1511 (Pennie, I.D., 1958). Health care methods in the Scottish Islands in mediaeval times are described in the surviving medical manuscripts belonging to these hereditary physicians (Mackay, George, 1904/1905) (MacKinnon, Donald, 1912/1914) (Gillies, H. Cameron, 1909/1911) (Gillies, H. Cameron, 1902) (MacKinnon, David, 1889).

#### OTHER HEREDITARY CLAN PHYSICIANS

The Beatons were not the only medical dynasty in Scotland during Mediaeval times, although less knowledge exists concerning the others.

After the death of Dr. John Beaton of Mull, and his second son, the Rev. John Beaton, the Beaton library of manuscripts was dispersed, although several were acquired by the MacLachlans of Kilbride. For example, the MacLachlans possessed Gaelic MS XXXIII of the National Library of Scotland, a manuscript which has signed memoranda by various members of the Beaton family. It appears that the MacLachlans of Craiginverve were leeches and hereditary doctors to the Argylls.

Some of the manuscripts in the library of the MacLachlans of Kilbride were previously in the family of the O'Conachers of Lorn, a family of Irish descent. In 1530, John McConchra of Stronecormick (at the head of Loch Feochan) paid 40 merks "for ye grassum of ye office of chirurgeon" (MacKinnon, Donald, 1912).

A number of manuscripts are extant which were owned by various members of this family. Some of these manuscripts later found their way into the possession of the Beatons. Cooperation and collaboration clearly existed between the members of these different medical families.

Another family of physicians was that of the Macleas. The MacLeas were physicians to the family of Lamont at Inveryn. The medical line of the Macleas ended in the mid-seventeenth century.

#### (2.5) FOLK-MEDICINE AND BELIEFS IN THE SIXTEENTH AND SEVENTEENTH CENTURIES

The services of orthodox practitioners were only available to a small section of society. For the majority of the community, primary treatment inevitably involved superstitious beliefs in the power of the supernatural to cause disease; its treatment involved parallel superstitious beliefs in the need to banish witches by burning, and in the rituals associated with folk-healers using charm-stones, and incantations, and the attendance of patients at healing wells. It seems likely that there was a network of local folk-healers, bone-setters and charmers, together with itinerant healers.

#### WITCHCRAFT AND 'THE EVIL EYE'

Belief in witchcraft in the seventeenth century was commonplace in the Scottish Islands. Witchcraft and the 'evil eye' could bring about disease and death. Witchcraft itself was a criminal offence. Though much of the evidence to back up such charges came from the demonstration of supernatural powers,



the essential evidence necessary for a conviction was to prove that a compact with the devil had been made. Witches were indicted for 'the sinful and damnable renouncing of God, your Faith and Baptism, giving and casting yourself, body and saul in the hands of the Devil, following, exercising, using and practising of the fearful and damnable craft of witchcraft, sorcerie and charming .....' (Hibbert, S, 1822).

Witches were indicted of causing sickness and death in Orkney and Shetland as elsewhere. In Shetland, Marion Peebles was tried for causing disease to affect Janet Robertson, in 1630, the charge being that:

ye, by your devilish art of witchcraft, did cast sickness upon the said Janet, who immediately upon your departure, fell in an extraordinary and unkindly sickness, and lay eight weeks, taking her shours and pains by fits, at midday and midnight, and so continued most terribly tormented. (Hibbert, S, 1822).

In Birsay, Orkney, in 1624, Marable Couper was tried for witchcraft. Among other charges was:

The said Daudid Mowat, haueing met yow cuming to your hous with ane stoup of aill, quhairof ye causit him to drink; and that same night efter, he contractit seiknes, and fyftene dayis thair efter ye came to visite him, quha said, yewald lay your lyff for him, and that he wald ly yit ane moneth seik, or he war heall; quha continwit seik, according to your speiche, and never slipit, and at the sext oulkis end he became heall, be your witchcraft and divelrie: Quhilk, rank witche,

ye cannot deny.

Marable Couper was sentenced:

to be tane be the lockman, hir hands bund, and be caried to the head of the Lon, the place of execution, and thair to be knet to ane staik, and wiried to the death, and brunt in asses. (Maconochie, J. A., 1837).

In North Ronaldsay, Anie Tailzeour was charged that:

in Maij last, Mareoun Paulsone, spous to James Fotheringheme in Burnes, in Sanday, haueing rane ane luik meall furth of your pock, ye prayed that scho sould suall that eat your meall; quhairvpoun the said Mareoun swalled, and now is dead, be your witchcraft and diuelrie.

Anie Tailzeour was also charged with causing the death of Mrs. Stevin Tailzeour in Paps Westray:

ye are indyttit and accusit for the said cryme, in that ye being broght out of Ethay, be Stevin Tailzeour in Papa Wastray, cam to his hous, and efter aucht dayis haueing focht ane peice butter frae the said Stevin's wyff, and scho refussing yow, vpon the morne efter, the kow wald not suffer ane to milk hir; and ye geing challengit and delaitit to the kirk, and straitlie flighterd with ane tedder the tyme of the sessioun, quhen the sessioun faise, ye was standing at the end of the kirk louse, nane being to help yow; and the said Stevin's Wyff thairefter incontinentlie contractit seikness, continuit seik quhil ye came and charmed hir, faldomeing the woman, saying, 'Motheris blissing to the head, motheris blissing to the feit, and motheris

blissing to the heart', in plaine scorne; for the wyff  
contiuit seik and deit, be your witchcraft and  
diuelrie. (Maconochie, J. A., 1837).

Anie Tailzeour was burned at the stake in 1624.

In Sanday, in 1633, Marrione Richart was accused of causing  
the death of Elspet Sandisones:

The said Elspet, vpon fyue or sax yeir since, contraktit  
ane deadlie disease, in so farre that scho was senceles  
and mundels for ane long speace; the said Marrione cam  
to the said Elspetis house, and made ane watter, quhilk  
scho callis ane remeddie for forspeaking; the said  
Marrioun tuik wqatter into ane round coupe, and went  
out into the byrne, and tuik sumthing out off hir  
pursse, lyke wnto great salt, and did put it into  
the watter, and did spit thrie severall tymes into  
the watter; and scho confesit hir selff quhen scho  
had done so, scho aundit in bitt, quhilk in ane Nourne  
terme, and to exponit into right languag, is alse  
mikill as, scho did blew hir breath thairin, and sent  
it in to the woman, with the servant woman off the  
house and directit that the woman should be saschin  
hand and face thairin, and scho should be restorit  
to hir health againe. This she said Marrioun confesit  
befoir the sessioun; and it is grantit be the woman  
that the watter was made wnto, that she said Marrioun  
said wnto the lass, that iff ewer the lass reueillit  
it againe scho should neuer thryue, and so schune



after that the lass reuellit the wordis, scho deit.

(Maconochie, J. A., 1837).

Marrione Richart had the power of both causing and curing disease. It was stated that she cured Margret Browne of 'ane deadlie diseas':

Deponit be Margret Browne, spouse to William Flet, that quhair the said Margret discordit with Catreine Miller, the said Margret contrakit ane deadlie diseas; and scho said to the said Margret, 'evill might thow put the yeir aff the;' thairefter scho contrakit ane senslesnes, quhilk continuit for the space of ane halff yeir; and at the halff yeiris end, the said Margret cam to hir, and the said Catrien tuik her by the hand, and immediatlly got hir health, and ay since was well. (Maconochie, M. A., 1837).

Marrione Richart was convicted in 1633 and burned at the stake.

Superstitions akin to witchcraft persisted until the end of the nineteenth century. MacLagan (MacLagan, R. C., 1902) showed that belief in the power of the 'Evil Eye' in causing disease and death was common in Sutherland, Caithness, Lewis, Harris, North & South Uist, Barra and the Inner Hebrides, at the time of his writing (1902).

The 'Evil Eye' was possessed by both men and women. Disease could be caused by the possessor praising the victim excessively. Such power to cause disease was thought to be inherited from father to daughter, and from mother to son. The



effects of the 'evil eye' could be overcome by disparaging the victim (who had been excessively praised by the possessor of the 'evil eye', or by saying blessings on the victim. The use of accessories such as horse-nails, horse-shoes, rowan and juniper sticks, string or threads, charm-stones etc, and actions such as spitting, could ward off the effects of the 'evil eye'.

Folk-healers existed at the same time - with a parallel supernatural power of reversing the effects of the 'evil eye'. Folk-healers generally accepted no payment, and no ostentatious show of their skill was made. Some members of communities had been regarded as possessing healing powers from the time of their birth, and a posthumous child, i.e., one born after the death of its father, traditionally had these powers, as did those born by breech delivery, or inside an intact foetal sac. (Hand, W. D., 1971). A seventh son, particularly the seventh son of a seventh son was also blessed with the power of healing.

### INCANTATIONS

Healing was undertaken by the recitation of incantations over the victim. Many of these incantations survive (see MacBain, A., 1887; MacBain, A., 1890). For example, in Sanday, Orkney, the following charm was used to stop bleeding:

Three Virgins came across Jordan Land,  
Each with a bloody knife in her hand;  
Stem blood, stem! setherly stand!  
Bloody nose (or mouth etc.) in God's name mend!

(Wood, 1836)

In the same island, treatment for a sprain involved tying a knotted thread around the sprain and reciting the following lines:

Our Saviour slade,  
 His foal's foot slade,  
 Our Saviour Lichtit down;  
 Sinew to sinew, vein to vein,  
 Joint to joint, and bane to bane;  
 Mend thou in God's name! (Wood, 1836)

Incantations were usually associated with other ritualistic methods of reversing the effects of the 'evil eye'. The Kirk Session Records of Canisbay record:

The minister reports that he is credibly informed that Margaret Bain, spouse to James Donaldson in Nybster, professes to cure diseases, and has lately practised her skill in this parish, particularly on David Bremder and Euphans Doull, his wife, in Freswick, and on a child of William Cormack's in Auckingill and others; that she practises her art in different methods, and by different ceremonies, upon different diseases. One of her cures, particularly is this. She takes a stockine, a horn spoon, and an unscoured woolen thread; she lays the stockine on a stool and some of the yarn upon it, and sets the patient thereon; then takes the rest of the thread and wraps it about several parts of the patient's body, particularly the arms, breast, and head, then ties the end of the thread to the Kettlecrook, takes hold of the Kettlecrook with her own hand, and crosses the fire three or four times, going against the sun - all the time muttering some

unintelligible words, shaking and pulling all her joints in such a way as if the devil were in her. Then she raises the patient from off the stool, and if the spoon, which was on the outside of the stockine, be within the stockine, and the thread which was with it be wrapt about it, she reckons her cure performed.

(Kirk Session Records, Canisbay, 1724).

Such methods of healing, by means of charms and incantations were unacceptable to the church. The Rev. John Brand considered that:

such admirable effects upon the using of the charms are produced by the agency of Demons, I think few, if any, will doubt, God so permitting it to be in his holy and wise providence, for the further punishment and judicial blinding of those, who follow such unlawful courses, and the Devil thereby engaging his slaves more in his service. (Brand, J., 1701).

#### CHARM-STONES

Belief in the healing properties of charm-stones was prevalent in the Scottish islands and appears to have originated with St. Columba of Iona, around the middle of the sixth century. Adomnan describes how St. Columba:

proceeded to the River Nesa, from which he took a white pebble, and showing it to his companions, said to them:-

"Behold, this white pebble, by which God will effect the cure of many diseases" ..... The stone was then



immersed in water, and in a wonderful manner, and contrary to the laws of nature, it floated on the water, like a nut or an apple, nor could it be submerged. Brochan drank from the stone as it floated on the water, and instantly recovered his perfect health and soundness of body.

This little pebble was afterwards preserved among the treasures of the king, retained its miraculous property of floating in water, and through the mercy of God, effected the cure of sundry diseases.

(Simpson, J. Y., 1872)

Simpson also described the "Clach-na-Bratach", a stone that had been in the possession of the MacDonalds since 1315, and which served as a military talisman. He stated:

The virtues of the Clach-na-Bratach are not altogether of a martial nature, for it cures all manner of diseases in cattle and horses, and formerly in human beings also, if they drink the water in which this charmed stone has been thrice dipped by the hands of Struan. (Simpson, J. Y., 1872)

Similar stones having medicinal or midwifery functions were found throughout Scotland (Viz. Rorie, D., 1911).

In the island of Rona, Martin states:

There is a chappel here dedicated to St. Ronan, fenc'd with a stone wall round it; and they take care to keep it neat and clean, and sweep it every day. There is an altar in it, on which there lies a big plank of wood about ten foot in length; every foot has a hole in

it, and in every hole a stone, to which the natives ascribe several virtues; one of them is singular, as they say, for promoting speedy delivery to a woman in travail. (Martin, M., 1703).

In Barra, a charm-stone was believed to have prophylactic power against disease:

There is a sort of stone in this island, with which the natives frequently rub their breasts by way of prevention, and say it is a good preservative for health. This is all the medicine they use; providence is very favourable to them, granting them a good state of health, since they have no physician among them.

(Martin, M., 1703)

In the island of Skye, charm-stones had mainly curative properties:

The Lapis Hecticus, or white hectick stone abounds here both in the land and water; the natives use this stone as a remedy against the dysenteria and diarrhea; they make them red-hot in the fire, and then quence them in milk, and some in water, which they drink with good success. They use this stone after the same manner for consumptions, and they likewise quench these stones in water, with which they bathe their feet and hands. (Martin, M., 1703).

To cause any particular part of the body to sweat, they dig a hole in an earthen floor, and fill it with hazle sticks, and dry rushes; above these they put

a Hectic-stone red hot, and pouring some water into the hole, the patient holds the part affected over it, and this procures a speedy sweat. (Martin, M., 1703).

Martin also described charm-stones in the island of Colonsay:

There is an altar in this church, and there has been a modern crucifix on it, in which several precious stones were fixed; the most valuable of these is now in the custody of Mack-Duffie, in black Raimused village, and it is used as a catholicon for diseases.

(Martin, M., 1703)

Some charm-stones had both medical and mystical qualities.

Martin describes a further stone in the Island of Skye:

There is a chappell in the isle dedicated to St. Columbus, it has an altar in the east-end, and there is a blue stone of a round form on it, which is always moist. It is an ordinary custom, when any of the fishermen are detained in the isle by contrary winds, to wash the blue stone with water all round, expecting thereby to procure a favourable wind, which the credulous tenant living in the isle says never fails, especially if a stranger wash the stone; the stone is likewise applied to the sides of people troubled with stitches, and they say it is effectual for that purpose. And so great is the regard they have for that stone, that they swear decisive oaths on it. (Martin, M., 1703).

Other charm-stones had both medical and military qualities.

Martin states, of the Isle of Arran:



I had like to have forgot a valuable curiosity in this isle, which they call 'Baul Mulay', i.e. Molingus, his stone globe; this saint was chaplain to MakDonald of the isles; his name is celebrated here on the account of this globe, so much esteemed by the inhabitants. This stone for its intrinsick value has been carefully transmitted to posterity for several ages. It is a green stone much like a globe in figure, about the bigness of a goose-egg.

The vertue of it is to remove stitches from the sides of sick persons, by laying it close to the place affected; and if the patient does not outlive the distemper, they say the stone removes out of the bed of its own accord. The natives use this stone for swearing decisive oaths upon it.

They ascribe another extraordinary vertue to it, and 'tis this; the credulous vulgar firmly believe that if this stone is cast among the front of an enemy, they will all run away; and that as often as the enemy rallies, if this stone is cast among them they still lose courage and retire. They say that MakDonald of the Isles carried this stone about him, and that victory was always on his side when he threw it among the enemy. (Martin, M., 1703).

Charm stones were highly regarded in the seventeenth century, and the reformation made little impact on their use. However,

there is a suggestion that after the Reformation, it was thought that some chemical escaped from the healing stones, thus explaining their success in secular terms. The kirk-session however, which had outlawed the holy wells, also considered the position of healing stones. The matter was brought to a head over the use of the Lee Penny in Glasgow. The church synod was put in an uncomfortable position since the stone was owned by a nobleman, and they also believed that it worked. (Hamilton, D., 1981). The kirk-session escaped from this dilemma by a memorable judgement:

Considering that in nature there are mony thinges seen to work strange effects qr of no humane witt can give a reason, it having pleasit God to give unto stones and herbes special virtues for the healing of mony infirmities in man and beast, - advises the bretheren to surcease thir proces as q'rin they perceive no ground of effence; and admonishes the said Laird of Lie, in the using of the said stone, to take heed that it be usit heirafter wt the least scandal that possiblie maye bie. (Black, G. F., 1892).

### HEALING WELLS

St. Columba and the early missionaries faced the problem of marrying pagan beliefs in gods and spirits of water and springs to Christian beliefs. To exorcise pagan beliefs they blessed the springs and wells which they encountered, and thereby the wells. A new, Christian, belief developed in the power of the wells, many being given the name of the saint associated with them. The wells became famous in healing diseases - mental illness, eye disease, asthma and skin diseases were the most

common ailments cured.

The ritual associated with the use of the well often had pagan associations and involved a visit at a particular time of the year or day, usually before sunset or at sunrise. Sunrise on Mayday was a particularly propitious time for healing. A small votive offering was often left at the well, either by throwing a coin into the water, or by leaving a rag or strip of clothing on a bush near the well. Other rituals might include the patient's being left at the well, sometimes bound and gagged, which was preceded by a ritual such as walking round the well a number of times, usually in silence.

(Hamilton, D., 1981)

A well in Skye is described:

The most celebrated well in Skie is Loch-siant well; it is much frequented by strangers, as well as by the inhabitants of the isle, who generally believe it to be a specifick for several diseases, such as stitches, headaches, stone, consumptions, mēgrim. Several of the common people oblige themselves by a vow to come to this well and make the ordinary tour about it, called dessil, which is performed thus: they move thrice round the well, proceeding sunways from east to west, and so on. This is done after drinking the water; and when one goes away from the well, it's a never failing custom to leave some small offering on the stone which covers the well. (Martin, M., 1703)



The ritual associated with the Tonbir well in Jura was associated with the following ritual:

It is common with sick people to make a vow to come to the well and, after drinking, they make a tour sunways round it, and then leave an offering of some small token, such as a pin, needle, farthing, or the like, on the stone cover that is above the well. But if the patient is not likely to recover, they send a proxy to the well, who acts as above mentioned, and carries home some of the water to be drunk by the sick person. There is a little chappel beside this well, to which such as had found the benefit of the water, came back and returned thanks to God for their recovery. (Martin, M., 1703)

Wells with healing properties were to be found throughout the Scottish islands, and in Caithness and Sutherland. To St. Mary's loch in Dunnet in Caithness, pilgrimages were made by Orcadians. The first Monday of each quarter was the most propitious time for visiting St. Mary's loch. The patient walked, or was carried round the loch, in the early morning, and then had to wash in the loch, and throw in money.

(Mowat, J., 1921).

At St. Tredwell's loch on the island of Paps Westray in Orkney, the patient had to encircle the loch several times in silence, before washing in the water. After washing, the patient had to leave behind an article of clothing (Brand, J., 1701).

The church of St. Moluag, built in the sixth century near Ness in Lewis, became a centre for healing patients with psychiatric and skin diseases. Patients had to drink from the nearby well, and walk seven times round the church. In order to effect their cure, the patient was then bound by the hands and feet, and left near the altar overnight. (Mackenzie, W. C., 1919).

It was often considered that the wells, notably that of St. Columba in Eigg could not heal local people. Associated with this faith in water were a number of related faiths, notably that of hydromancy - namely that the water of the wells could be used to foretell the outcome of disease. For example, Martin says of the well of Shadar in Lewis:

St. Andrew's well in the village Shadar is by the vulgar natives made a test to know if a sick person will die of the distemper he labours under. They send one with a wooden dish to bring some of the water to the patient, and if the dish which is then laid softly upon the surface of the water turns round sunways, they conclude that the patient will recover of that distemper; but if otherwise, that he will die. (Martin, M., 1703)

A major attempt was made in Scotland at the Reformation to destroy the credibility of these holy wells, as part of the systematic extermination of the Roman Catholic faith. An Act of Parliament in 1581 makes clear the new church's attitude:

pervers inclination of mannis ingyne (imagination) to superstition through which the dregges of idolatrie yit remainis in divers pairtis of the realme be using

of pilgrimage to sum chappellis wells. (Mackinlay, J. M., 1893)

Kirk-sessions throughout Scotland attempted to stamp out pilgrimages to the wells, and many convictions were made. However, in trying to end well-worship, the reformed church was only partially successful. The old beliefs were so popular that they could not easily be abolished. Nevertheless a change in attitudes to the wells did occur, and the old belief in the healing properties of the wells occurred in a different form - a belief in the chemical properties of the water. Thus began the cult of the spa.

#### (2.6). FOLK-MEDICINE IN THE WESTERN ISLES

Details of folk-medicine in the Western Isles during the late sixteenth and early seventeenth centuries can be studied with reference to two books by Martin Martin. These are entitled "Voyage to St. Kilda", which was published in 1698, and his "Description of the Western Isles of Scotland", which was published in 1703.

Martin was born in the Western Isles, but was educated in London, and was a friend of Sir James Moray, President of the Royal Society. He contributed two papers to the Transactions of the Royal Society in 1695 and again in 1706, one dealing with the North Islands of Scotland, the other with the restoration of hearing and speech to a deaf and dumb person, after a fever. In 1695, Martin returned to the Highlands in the position of factor to the laird of Macleod. (A.M.B., 1906)

Martin was not a physician, but has been described as



'a protestant minister in the island of Skye' (Ross, A., 1976).

It is known that he had been Governor to Donald MacDonald, younger of Sleat, (Shaw, Frances, 1980), and also to the son of Iain Breac MacLeod, since among the extant MacLeod archives a bill exists to be paid by Iain Breac MacLeod for eighteen months' board for his eldest son, his governor Martin, and a servant for £720. (MacLeod Papers, Accounts Box 2, Folder 8 'John MacLeod of Dunvegan, 1654-93). However, as an educated man, Martin was from time to time asked for his opinion in treating diseases.

#### FOLK-HEALERS

In the late seventeenth century, the majority of the inhabitants of the Western Isles only had access to folk-healers or 'impirics':-

Many of the natives, upon occasion of sickness are disposed to try experiments, in which they succeed so well, that I could not hear of the least inconvenience attending this practice.

One of the untrained healers was Neil Beaton of Skye. Martin Martin describes the qualities of this man as follows:

I shall only bring one instance more of this, and that is of the illiterate Empirick Neil Beaton in Skie; who of late is well known in the Isles and Continent for his great success in curing several dangerous distempers, tho he never appeared in the quality of a physician until he arrived at the age of forty years, and then also without the advantage of education.

He pretends to judg of the various qualities of plants and roots, by their different tastes; he has likewise a nice observation of the colours of the flowers, from which he learns their astringent and loosening qualities; he extracts the juice of plants and roots, after a chymical way peculiar to himself, and with little or no charge.

He considers his patients constitution before any medicine is adminstered to them; and he has formed such a system for curing diseases, this serves for a Rule to him upon all occasions of this nature.

He treats Riverius' "Lilium Medicinae", and some other practical pieces that he has heards of with contempt; since in several instances it appears that their method of curing has fail'd, where his had good success.

Some of the diseases cured by him are as follows: Running Sores in legs and arms, grievous head-aches; he had the boldness to cut a piece out of a woman's skull broader than half a crown, and by this, restored her to perfect health. A gentlewoman of my acquaintance having contracted a dangerous pain in her belly, some days after her deliveray of a child, and several medicines being used, she was thought past recovery, if she continued in that condition a few hours longer; at last, this doctor happened to come there, and being implored, applied a simple plant to

the part affected and restored the patient in a quarter of an hour after the application.

One of his patients told me that he sent him a cap interlined with some seeds etc., to wear for the cough, which it removed in a little time; and it had the like effect upon his brother.

The success attending this man's cures was so extraordinary, that several people thought his performances to have proceeded rather from a compact with the Devil, than from the virtue of simples. To obviate this, Mr. Beaton pretends to have had some education from his father, tho he died when he himself was but a boy. I have discoursed him seriously at different times, and am fully satisfied that he uses no unlawful means for obtaining his end.

His discourse of the several constitutions, the qualities of plants etc., was more solid than could be expected from one of his education. Several sick people from remote isles came to him; and some from the Shire of Ross, at 70 miles distance, sent for his advice; I left him very successful, but can give no further account of him since that time.

Neil Beaton was an untrained physician - although of the family which included the hereditary physicians of Clan MacLeod. Other folk-healers too appeared to derive from certain chosen families. For example:

There is a smith in the parish of Kilmartin who is



reckoned a doctor for curing any faintness of the spirits ..... The smith is famous for his pedigree; for it has been observed of a long time, that there has been but one child born in the family, and that always a son, and when he arrived to man's estate, the father died presently after; the present smith makes up the thirteenth generation of that race of people who are bred to be smiths, and all of them pretend to this cure.

The cures available to these folk-healers were vegetable and animal potions, surgery, healing stones, healing waters, and humoral methods.

#### METEOROLOGICAL AND ASTROLOGICAL IDEAS IN THE CAUSATION OF DISEASE

That diseases were caused by changes in the air and weather has been recorded for millenia. Hippocrates, in his "Epidemics" wrote:

Cases of paralysis started to appear during the winter, and became common, constituting an epidemic. Some cases were swiftly fatal. In other respects, health remained good. Cases of causus were encountered early in the spring and continued past the equinox towards summer. Most of those who fell sick in the spring or at the very beginning of summer recovered, though a few died. In the autumn, when the rains came,

the disease was more fatal, and the majority of those that took it died. (Lloyd, G. E. R., 1978)

Martin stated:

This isle (Jura) is perhaps the wholesomest plat of ground either in the isles or continet of Scotland, as appears by the long life of the natives, and their state of health; to which the height of the hills is believed to contribute in a large measure, by the fresh breezes of wind that come to 'em to purify the air; whereas, Ilay and Gigay on each side of this isle are much lower, and are not so wholesome by far, being liable to several diseases that are not here....

Fevers and the diarrhea's are found here only when the air is foggy and warm, in winter or summer.

and also:

They are well proportion'd, and indifferntly healthful; the air here (Ilay) is not near so good as that of Jura, from which it is but a short mile distant; but Ila is lower and more marshy, which makes it liable to several diseases that do not trouble those of Jura.

Diseases were also believed to be caused by the influence of the planets. This was a view current in mediaeval times (Curry, W. C., 1960; see Geoffrey Chaucer's "Doctor of Physick").

Martin observes:

Donald Chuan, in a village near Bragir, in the parish of Barvas, had by accident cut his toe at the change

of the moon, and it bleeds a fresh drop at every change of the moon ever since.

A poor man in the village of Rowdil, commonly called St. Clements-blind, lost his sight at every change of the moon, which obliged him to keep in bed for a day or two, and then he recovered his sight.

Neil Mackdonald in the island of Heiskir is subject to the falling of the Tonsels at every change of the moon, and they continue only for the first quarter. This infirmity hath continued with him all his days, yet he is now 72 years of age.

A boy in the castle of Duntulm, called Mister to a by-name, hath a pain and swelling in his great toe at every change of the moon, and it continues only for the space of one day, or two at the most.

### VEGETABLE CURES

The seventeenth century was a period of awakening interest in the uses of plants as remedies for disease. In London, the Society of Apothecaries established a laboratory in 1623 concerned with making vegetable remedies. In 1673, the Chelsea Physic Garden was opened.

In the Western Isles, according to Martin Martin, most diseases were cured by the use of vegetable products.



The diseases that prevail here are fevers, stitches, cholick, head-ach, megrim, jaundice, sciatica, stone, smallpox, measles, rickets, scurvy, worms, fluxes (diarrhoea) too thach, cough and squinance (quinsy).

The ordinary remedies used by the natives are taken from plants, roots, stones, animals etc..

Martin Martin describes the use of some thirty-two plants as various remedies. The plants used were those commonly found in the countryside, or else, those washed up on the shore (Molucca beans, seaweeds etc..) The plants were either applied directly to the affected part, or the plant was eaten, or drunk as an infusion, for example:

The broth of a lamb, in which the plants shunnish and alexander have been boiled is found by experience to be good against consumptions. The green sea-plant linarich is by them applied to the temples and forehead to dry up defluxions, and also, for drawing up the tonsels.

and

I had an account of a young man who had lost his appetite, and taken pills to no purpose: And being advised to boil the blade of the alga (sea tangle) and drink the infusion boiled with a little butter, was restored to his former state of health.

A 'herbal' based on a trawl of Martin Martin's literature is to be found in the appendix.

ANIMAL REMEDIES

Animal extracts were also occasionally used, for example:

The Os-Sepie (cuttlefish bone) is found on the sand in great quantities. The natives pulverise it, and take a dose of it in boiled milk, which is found by experience to be an effectual remedy against the diarrhea and dysenteria. They rub this powder likewise, to take the film off the eyes of sheep.

The flesh and liver of seals are used both for the diarrhea and dysenteria.

The case of the Carrara-Fowl, with the fat, being powdered a little, and applied to the hip-bone, is an approved remedy for the sciatica.

The pale wilk, which in length and smallness exceeds the black periwinkle, and by the natives called 'Gil-fiunt', is by them beat in pieces, and both shell and fish boiled; the broth being strained, and drank for some days together, is accounted a good remedy against the stone.

The jaundice is commonly cured by drinking the powder of shell-snails among their drink, in the space of three or four days.

The animals used in these remedies were those readily available to the islanders. For example, in St. Kilda, where fulmars and gannets were common:

When anyone approaches the fulmar, it spouts out at its bill about a quart of pure oil; the natives surprise the fowl, and preserve the oil, and burn it in their lamps; it is good against rheumatick pains, and aches in the bones, the inhabitants of the adjacent isles value it as a catholicon for diseases; some take it for a vomit, others for a purge.

The most sovereign remedy against this disease (Boat cold) is their great and beloved catholicon, the Giben, ie, the fat of their fowls, with which they stuff the stomach of a Solan goose, in fashion of a pudding .... This Giben is by daily experience found to be a sovereign remedy for the healing of green wounds; it cured a cancer in an inhabitant of the isle of Lewis, and a fistula in one Nicholson in Sky, in St. Mary's parish.

#### HUMORAL METHODS OF CURE

Remedies based on humoral ideas of the causation of disease persisted in the folk remedies of the Western Isles in the seventeenth century. Thus bleeding was commonly employed, as was purging and blistering. Martin describes bleeding being used in the treatment of fevers, stitches and pleurisy. He also stated:



When their feet are swelled and benumbed with cold,  
they scarify their heels with a lancet.

and

The common cure used for removing fevers and pleurises  
is to let blood plentifully.

However, it would seem that such knowledge was not  
uniformly distributed. In St. Kilda, for instance:

The inhabitants are ignorant of the virtues of these  
herbs, they never had a potion of physic given them  
in their lives, now know anything of phlebotomy;  
so that a physician could not expect his bread in this  
commonwealth.

In Jura, Martin succinctly states:

Blood-letting and purging are not used here.

The use of vegetable purgatives, diuretics and blistering  
agents were commonly used - a use based on humoral ideas of the  
pathogenesis of disease. It was necessary for a patient with  
a fever to sweat. The methods employed in accomplishing this  
objective, were based on the same idea.

### (2.7) THE MOUNTEBANKS.

In the later part of the seventeenth century, the Scottish islands were visited by a number of mountebanks or quack doctors. Quacks 'practised' throughout Britain, and were one of the prime causes for the Edinburgh physicians to set up a College with political organisation to control the profession; a college was stated to be needed in view of:

the frequent murders committed universallie in all parts by quacks, women, gardiners and others grossly ignorant... and the unlimited and unaccountable practices of chirurgeons, apothecaries and empiricks pretenting to medicines ... all these undertaking the cure of all diseases without the advice and assistance of physitians.

Bacon remarked that 'the weakness and credulity of men is such that they will often prefer a mountebank or a witch before a learned physician', (Bacon, Francis, 1625). Oliver Goldsmith, himself a physician stated: 'There is scarcely a disorder against which they are not possessed of an infallible antidote. You will find numbers in every street who, by levelling a pill at the part affected, promise a certain cure. The doctor solemnly affirms the pill was never found to want success; he produces a list of those who have been rescued from the grave by it; every dead wall is covered by their names, their ability, their amazing cures and places of abode. Few patients can help falling into their hands, unless blasted by lightning, or struck dead by some sudden disorder.'

The quacks or mountebanks were characterised by their itinerant habits, their lack of formal training and particularly their use of publicity, self-advertisement and showy dress. They became prosperous, a point of irritation to more orthodox practitioners. They sold medicines, antidotes to poisons, operated on the eye and other parts of the body, and offered cures for impotence.

As Hamilton remarks, (1981), such a definition of a quack is appealing, but useless in separating out the claimants to healing skills in the seventeenth century. Since a faulty theoretical basis was used by trained physicians, the abuse of the empirics was unjustified. The only useful distinction that can be made in retrospect is between those healers who were dangerous, and those who were not. It is far from clear into which respective categories the quacks and the more orthodox practitioners fell.

One factor which favoured the popularity of the mountebanks was that during the seventeenth century, the medical profession was not well organised, nor were the practitioners equipped to combat diseases and repair injuries. They had only a very elementary knowledge of anatomy, surgery and chemistry, and their sole qualification was that they had served an apprenticeship with a member of the corporation of surgeons. With the advent of the eighteenth century, there was a rapid change for the better in the training of would-be physicians and surgeons. The Royal College of Physicians of Edinburgh had been established, and within the city of Edinburgh, the only physicians who could practise



were their licensees. The surgeon-apothecaries, or family doctors who practised in Edinburgh, were members of the corporation of surgeons.

To the patient it was results that counted, and Town Councils and Kirk Sessions adopted a pragmatic approach in employing anyone whom they could trust, in spite of the objections of physicians and surgeons. For example, John Pont and his entourage of ten were made welcome in Edinburgh in 1633, and allowed to set up a stage provided they acted "no obscene thing". The highlight of the show was a dancer

upon a single tow or rop, when the actor danced Seven Scour tymes at one tyme without intermission lifting himself and volting six quarters high above his ain head, and lichter down upon the tow as punctuallie as gif he had been dancing upon plane stanes.

(Thin, R., ?1964)

John Pont had previously visited Scotland in 1633 and 1643, putting out printed leaflets on his drugs in advance. His itinerary included Edinburgh, St. Andrews, Stirling, Aberdeen, Perth and Glasgow.

On January 3rd, 1687, a 'muntebanke-physitiane' by the name of Richard Reidman arrived in Kirkwall from the South. This colourful gentleman set up a stage some four days after his arrival "to show forth in discourse what cures he would perfect. He was accompanied by a Mr. Andrew Jackson, known as 'Merry Andrew', the fool of the said Reidman", whose job it was to attract a crowd to listen to Reidman. This he did by dancing

upon the rope or tow put to that effect between  
Cumer Sinclair's and the flesh mercat'. (Brown, Thomas, 1687)

From the handbills that still survive, and which Reidman distributed to advertise himself and his show, were announced:

The nobility and gentry shall be kindly entertained  
with a variety of divertisements and those that are  
really poor shall be cured for God's sake...

Walking up the slope rope with a slack rope by the  
famour Barbarian, seven storie high, with his  
pumps on.

Another was:

Antique dances by two Blackmores as they are performed  
in their own countrie.

Mountebanks usually had their panacea to sell. For example, John Pont and many other mountebanks, sold Orvietan. This was the invention of Lupi of Orvieto in Italy at the end of the sixteenth century, and was an electuary akin to Theriac. Formulae for Orvietan varied from nine to fifty-four ingredients, and the preparation came into the pharmacopoeias about the middle of the seventeenth century, and remained there until 1818. It had a reputation for healing fevers, gout, plague, smallpox and practically everything else. (Matthews, Leslie G., 1964)

Reidman's claims as a physician were described in his  
handbills

He cureth all external and internal distempers incident  
to mankind, which is not fit to be mentioned in a public

bill. He hath cut and cured many dangerous cancers,  
noli me tangere, greet weans -- ruptures, dropsies,  
scurvies, influxes of all sort.

One of his cures was described as follows:-

Thomas Lyall being trobled with an ague eighteen  
months tyme, cured him by giving him a dose of my  
ague-frighter.

Another patient had such bad toothache that he could not open  
his mouth, and therefore could not have his tooth extracted.  
However, Reidman apparently gave him relief:

I freed him of his distemper in the space of quarter  
of an hour.

Reidman also dispensed drugs. He had 'the pill of health'  
and 'elixir vitae' which "gives ease to all parts of the body  
in a moment". He also sold 'an emplaster good to ripen and  
dissolve all sort of tumours, both hot and cold'. Reidman  
stayed in Orkney for four weeks.

## (2.8) ORTHODOX MEDICAL PRACTITIONERS OF THE SEVENTEENTH CENTURY

In the Western Isles, the orthodox hereditary clan physicians  
continued into the seventeenth century. Donald O'Conchur,  
'mediciner', was settled in Mull in the late 1660s. In 1609,  
a Crown Charter was obtained by Fergus MacBeth in Islay granting  
him the office, for his lifetime, of principal physician within  
the Western Isles. John Beaton, commemorated by a tombstone in  
Iona, was physician to the MacLean family until his death in  
1657. There were also Beatons in Skye. In 1660, John Beaton was



surgeon in Trotternish. In 1690, another John Beaton was surgeon in Sleat. In 1696, James Beaton practised in North Uist.

But towards the end of the seventeenth century, there were signs of a change in the traditional pattern of medical patronage in Skye. The poll-tax returns of 1699 list one Donald MacLean, a surgeon of unknown extraction, and between 1672 and 1693, a number of loans were granted to the MacLeod chiefs by another surgeon in the island named John Ross (MacLeod Papers, Box 37, 1672-1693). Ross was almost certainly an incomer to the islands, since his surname was not at all common in the Western Isles, and did not belong to any of the known Gaelic medical families. Moreover, his wife, Janet, bore the Lowland name of Kerr. As evidence pointing to a decline in support for traditional medical families, this, by itself is slender; but there is by this time a general trend on the part of the clan chiefs away from the elaborate and often hereditary structure of household and estate appointments. (Shaw, Frances J., 1980)

The presence of orthodox educated medical practitioners in Orkney is first seen towards the end of the seventeenth century. A list of these early doctors in Orkney is as follows:-

Table: Early doctors in Orkney

<u>Name</u>	<u>Dates</u>	<u>Practice</u>	<u>Source</u>
Dr. Matteu Mackaile	1660-1665	Kirkwall	<u>Craven</u> , Arch. (1923)
Dr. William Baikie	1675-	Mainland	<u>Craven</u> , Arch. (1923)
Mr. George Hardie, Surgeon.	?-1676-?	Mainland	<u>Craven</u> , Arch. (1923)
Dr. Robert Glaine	1675-1693	Kirkwall	<u>Graeme</u> , H. S. (1954)
Dr. John Innes	-1688	Kirkwall	<u>Graeme</u> , H. S. (1954)
Dr. John Watt	1688-1698-	Kirkwall	<u>Craven</u> , Arch./(1923) <u>Graeme</u> , H. S. (1954)
Dr. Irving	1690-	S/Ronaldsay	<u>Graeme</u> , H. S. (1954)
Dr. Gordonin	-1690-	Mainland	<u>Craven</u> , Arch. (1923)

The first of these practitioners was Dr. Mattheu Mackaile, who was appointed as 'chirurgion-mediciner to the Sherriffdom of Orkney' for the period 1660-1665. In 1665 he returned to Edinburgh where in 1669 he described himself as 'apothecary'. He graduated M.A. from Edinburgh in 1654, and according to Craven (1923) graduated M.D. in 1696, from King's College, Aberdeen. Mackaile was clearly an educated gentleman. In 1664 he published a book in Edinburgh entitled 'The Moffet Well', and communicated papers to the Royal Society entitled 'A Short-Relation of the most considerable Things in Orkney', and 'An Account of the Current of the Tides about the Orcades'.

From extant accounts in the Scottish Records Office, it appears that Dr. Mackaile, in addition to being reimbursed for the drugs that he dispensed, was paid a retainer's salary by the landlords in Orkney, For example:

I, Mattheu Mackaile, chirurgion-medicine to the  
 Sherifffdom of Orkney grants me to have received from  
 John Graiham of Braiknes the sum of £12 Scots, and  
 that as his proportion of my salary for the year 1663

which he (with the rest of the Gentry) did oblige himself to pay me. As also I do discharge the payment thereof for all years preceeding. In witness whereof I have written and subscribed these presents with my own hand at Kirkwall, this 16 day of November 1663. (S.R.O. GD 217/905)

There is also a receipt extant which reads:

I, Mr. Mathew Mackaile, Physician and Chyrurgeon to the Sheriffdome of Orkney, grants me to have received from Robert Sinclair of Sabay, the sum of three pounds, Scots, and that as his proportion of my sallarie which he (with the rest of the Gentry) hath obliged himself to pay unto me for the year proceeding November 1, 1662. In witness throf I have written and subscribed this pnt.

November 14, 1662, Mathew Mackaile. (Mowat, John, ?)

Similar receipts are also extant (SRO GD 217/992).

Medical practitioners were resident in Shetland soon after this. For example, in Scalloway, a Mr. Archibald Gibb, described as 'surgeon' was practising in 1679 (SRO RS 45/3). Orthodox doctors practised in the North Isles continuously from this period.

Dr. Mackaile's stay in Orkney was not without its troubles. He was charged before William Douglas and Patrick Blair, Justices of the Peace at Kirkwall, on November 19th, 1664 of a breach of the peace, along with Hary Erbery, a merchant. It would appear that Erbery's wife had been a patient of Mackaile, and that he had said that the treatment of her breast had so protracted the cure that an old woman could have done it in a much shorter time. Erbery also said that Mackaile had killed a man by giving him a vomit which had made him blind, and from which he had died. A fight ensued. (Mowat, John, ?)



Some of Dr. Mackaile's accounts survive, in particular those for the years 1662-1665 presented to John Graiham of Braiknes, a principal landowner, for example:-

John Graiham of Braiknes, his account which was due to Mr. Mattheu Mackaile beginning August 8th 1662.

		Imprimis to his lady a hysterick plaister	£1 -4 -0
		3 drops of Assa Fatida	2 -0
		2 drams of Alkermes	1 -10-0
		And eye water	12-0
		These things I gave to her, being sent for.	
April 8th 1663		3 ounce of oil of chamomell	12-0
		½ ounce of oil of bayes	3-0
		A plaister for Duncan Graiham	9-0
	16th	Item a plaister for Duncan	9-0
June 10th		And eye water to himself	12-0
Dec. 18th		And eye water	12-0
Jan. 21st 1664		At Kirkwall to himself a gargatisme	12-0
		Canter plaisters to his lady	6-0
Feb. 12th		Item being sent for I gave to him a gargatisme	
	24th	Item when I returned I sent unto him 2 doses of piles	1 -16-0
		A pot with basilicon	2-0
July 14th		Being sent for, I gave to him a purging potion	2 - 0-0
	15th	Item a purging potion	2 - 0-0
		A plaster for the liver	16-0
		and ointment for his legs	18-0
	16th	Item, A purging potion	2 - 0-0
		This day I returned and sent unto him 2 doses of purging powder and 2 ounces of green plaister	16-0
			8-0
	20th	Item I returned to Skaile on a hired horse and gave to him the next day a purging potion and left with him 2 purging potions and 3 plaisters for his side	2 - 0-0 4 - 0-0 2 - 8-0
	30th	Item I sent to him the ointment as before and 2 doses of purging powders	18-0 1 -16-0
Aug. 23rd		Item being sent for to Skaile I gave to him a purging potion	2 - 0-0
		I did let blood of Duncan.	
	24th	Item 9 drams of manna	12-0
		3 ounces of purging syrup	1 -16-0
		to Duncan one eye water	12-0
		and 2 spatches	1-0
Sept. 13th		Item I sent to him from Birza 14 drams of manna	16-0
	21st	Item 3 doses of purging powders	2 -14-0
		2 ounces of purging syrups	1 - 4-0
		4 ounces of pectoral tablets	1 - 4-0
		3 ounces of cooling oils	12-0
Sum of this page			£42 - 4-0

The rest of John Graiham of Braiknes his account.

	Sept. 29th 1664.	
	Sum of the first page	£42- 4-0
	Item I sent unto him 1 ounce of manna	10-0
	1½ ounce of purging syrups	18-0
	5 ounces and a half of an ointment	1-16-0
	3 doses of purging powders	2-14-0
Aug. 16th	Item I sent unto him 2 doses of purging powders	1-16-0
1664 22nd	Item I sent unto him 2 doses of purging powders	1-16-0
	These 2 particulars were misplaced in the book, as they are here.	
Nov. 10th	Item two braces for Canters	6-0
1664	2 ounces of diapalma	8-0
		<hr/>
		£52- 8-0

John Graiham of Braiknes, did upon the 20th of December 1664 pay this account, as also I gave him a discharge for my pension for the preceeding years, having received some malt and meal which he sent unto me, as also July 16th 1664 he gave unto me two Rex dollars and one cross dollar and August 24th 1664 he gave unto me two Rex dollars.

Mattheu Mackaile. (Mackaile, M., 1664)

S. R. O. GD 217/992

John Graihams of Braiknes, his account, beginning  
Dec. 22nd 1664.

	Imprimis a purging potion to himself, being at Skaile	£2- 0-0
	Materials and syrups for other 4 purging potions	8- 0-0
Feb. 20th	Item, to his lady at Skaile a purging potion	2- 0-0
1665	A liniment for her side	1-10-0
22nd	Item to his lady a purging potion	2- 0-0
25th	Item Feb. 24th I went to Kirkwall and returned Feb. 25th and gave to his lady 4 ounces of cordial tablets	2- 0-0
	and a cordial bowl at night	18-0
	and 4 logh leeches applied to the arm	2- 8-0
26th	Item, a purging bowl	1-16-0
	Cordial and aromatic materials for wind	2- 2-0
28th	Item, a purging bowl	1-16-0
	4 ounces of pectoral tablets	1- 4-0
March 4th	Item, I sent to his lady materials for wind as before	2- 2-0
	a liniment as before	1-10-0
14th	Item, being sent for, I went by sea to Firth, fromthence on foot in the deep snow to Turmeston, where I tarried all night, and the	



	next day went to Skaile and gave to himself 3 ounces of peptic powder, the sugar being his own.	16-0
16th	Item a purging bowl a cordial bowl at night	1-16-0 16-0
17th	Item to his lady a purging bowl This day I returned to Kirkwall and sent to himself 2 purging bowls and to his lady 2 purging bowls and to himself an electuary for the cough	1-16-0 3-12-0 3-12-0 1-16-0
June 1st	Item, being sent for I gave to himself a vomitive potion	1- 4-0
3rd	Item a purging bowl	1-16-0
5th	Item, a purging bowl	1-16-0
15th	Item I sent to him 4 ounces of syrup of chichorie with rhubarb and 6 drams of a cordial and aromatic powder	2- 8-0 1-16-0
24th	Item, being at Birza I was sent for and gave him a pectoral syrup a cordial electuary with oil of cinnamon a dram of aromatic powder	10-0 1- 4-0 6-0
July 3rd	Item, from Birza I sent 2 bowls to himself and 2 bowls to his lady	1-16-0 1-16-0
27th	Item 5 ounces and a half of purging electuaries and 4 doses of materials for broth	3-10-0 2- 0-0
<hr/>		
	Sum £65-12-0	
	Pension for the year 1665 £12-0-0	
	Sum total £77-12-0	

I Mattheu Mackaile Apothecary in (Edinburgh?) grants  
me to be satisfied by bond, of this account, this  
21st of June 1669.

In witness whereof I have written and subscribed these  
presents with my own hand, the day and date foresaid.

Mattheu Mackaile (Mackaile, M., 1669)

Evidently, Dr. Mackaile treated the whole family, for in  
1662, Mrs. Graiham was prescribed 'an hysterick plaister', Assa  
foetida and Alkermes, whilst Duncan Graiham was prescribed a  
plaster in 1663, and in the same year Mr. John Graiham was  
treated for an eye condition.

Examination of these accounts shows too the continued reliance



upon humoral cures, in particular purgeing and bloodletting. In the six month period from July to December, 1664, John Graiham was given purgeing prescriptions on July 14th, 15th, 16th, 20th and 30th, August 16th, 22nd, 23rd, 24th, September 21st & 29th, and December 22nd. It is also noteworthy that he bled Duncan Graiham on 23/8/1664 and applied leeches to Mrs. Graiham on 25/2/1665. Other treatments consisted of local applications of linaments and plasters, together with cough medicines and electuaries.

Many of the cures prescribed by these early orthodox doctors were lengthy, complicated and bizarre. For example, Dr. Baikie prescribed for George Sinclair of Skaill in Deerness, the following cure for a 'flux':

Take a glassful of aquavitae which, they say, is better for you than brandye. You are desired to take ane spoonful or two yrof in the morning, with the yock of ane egge or two in the morning next your stomach, warm'd a little and stirred about... I have also sent you ane unce of pepper, two unce of stuffin, and ane drop of meacass; ye are desired to boil ane pynt sweet milk into ane chappin, and then put some of the suffin yrin; also ye may cast ane egge into it and then drink it. Ye may boyll some of the meacass therewith. Ye are desired also to get some black henn's egges and roast them, and take ane dessin peppar pickles cutt in four parts, and take them in, ane egge at ye tyme. Beware yt ye drink no sharp drink. Suppose ye be

thristye, wet only your mouth a little; if ye please, take some new burstain meall for stuffin till ye see if your flux come to be lesse. (Baikie, William, 1675)

By the standards of the time, these orthodox doctors in the North Isles were educated men, with respectable standards of practice. Dr. Mackaile had university training and eventually graduated. Dr. William Baikie and Dr. John Watt had both graduated at Edinburgh University. By the absence of evidence to the contrary, it is suggested however, that their work was confined to the gentry and clerics and their immediate families, whilst the cost of medical care, put their services beyond the reach of the majority of the population.

In 1686 in Orkney an attempt was made 'as very convenient and necessarie to have a settled Doctor of Phisicke to remain and reside in the country'. It would seem that the services of the few orthodox doctors whom they had experienced were highly rated in the county. The matter was warmly advocated by the bishop and clergy, and, a candidate being proposed, the bishop 'inquired the brethren what they would willingly bestow upon him for executing the said charge', when those present 'did unanimously and willingly condescend to give yearly two rix dollars' (Hossack, ? date). The result is not clear.

To a degree, Orkney was unlucky in its early doctors, for scandals abounded. The Provost of Orkney is reported to have made a 'call for the process and diligence contra Lady Sound and George Hardie, Chirurgeon, with their accomplices. Whatever

the case may have been there was a scandal'. The Provost was apparently made aware of Lady Sound's desire to leave Orkney in a hurry.

#### (2.9) COMMON DISEASES IN THE SEVENTEENTH CENTURY

It is difficult to ascertain the nature of the diseases which seventeenth century doctors were called upon to treat. Martin, in his travels round the Western Isles took a particular interest in the diseases which were common in the areas he described. These are given in the accompanying table:



TABLE(i): COMMON DISEASES IN THE WESTERN ISLES IN THE 17th CENTURY

	SKYE	LEWIS	HARRIS	JURA	SHETLAND	BUTE	ST. KILDA
<u>ABDOMINAL</u>							
Diarrhoea/Dysentry	x	x	x	x			x
Colic	x						
Constipation	x						x
"Iliac Passion"	x						
Stitches	x	x	x	x			
Stone	x		x				
<u>INFECTIONS</u>							
Coughs/Colds	x	x	x	x			x
Quinsy	x						
Pleurisy	x	x					x
Fevers (? Typhus)	x	x	x	x			x
Smallpox	x	x	x			x	x
Measles/Spotted Fevers	x		x				x
Scarlet Fever	x						
Green Wounds	x	x					
Consumption/King's Evil	x		x				
Jaundice	x	x			x		
Worms/Fillan	x		x				
Conjunctivitis	x						
Boils	x						
Whooping Cough		x					
"Bastard Scurvy"/Leprosy					x		x
<u>PAINS</u>							
Headache	x		x				
Toothache	x						
Sciatica	x		x				
In Arms/Legs			x				
<u>MISCELLANEOUS</u>							
Megrim (?)	x		x				
Anorexia	x						
Retained Placenta	x						
Fractures	x						
Deafness			x				
Blindness			x				
Falling of the Uvula or tonsils		x	x				
<u>DEFICIENCY STATES</u>							
Rickets	x						
Scurvy	x				x		

It is apparent that a number of diseases were recognised as being common, the majority being infections, and those giving rise to abdominal pain. In addition, he recognised the presence of many other diseases in Skye, namely, gout, corns on the feet, convulsions, vapours, palsy, lethargy, rheumatism, wens, ganglions, ague and surfeits, which he described as being uncommon.

With the contemporary state of medical knowledge in the seventeenth century, it is doubtful whether the physicians of the time could have helped to cure or ameliorate many of them.

### (3.0) THE EIGHTEENTH CENTURY

#### (3.1) GENERAL PRACTICE THROUGHOUT BRITAIN

The early years of the eighteenth century showed increasing disharmony between the apothecaries and the physicians. At the outbreak of the plague in London, in the second half of the seventeenth century, the physicians had moved out to the country, leaving behind the apothecaries to deal with the problems of the sick. On their return to the city, the physicians found that the apothecaries and surgeons were more numerous and more widely active in practice.

The physicians attempted to undermine the apothecaries' trade by setting up their own public dispensary in 1696, supplying medicines at cost. However, these dispensaries were unprofitable as the merchant class preferred to seek the personal attention of the apothecary to visiting a public dispensary. The position of the apothecary as a man in his shop, who could provide a diagnosis, dispense his own medicine, dress wounds, and bleed, without recourse to either physician or surgeon made him the most easily accessible form of medical help.

In an attempt to curb the growing practice of the apothecaries, the College of Physicians took legal action against William Rose in 1703, alleging that this apothecary had broken the Act of 1523, in prescribing 'without the advice of any physician, and without any fee for advice taken by him'. After an appeal to the House of Lords, Rose won his case, the Lords ruling that it was in the public interest to allow apothecaries to give advice when they compounded and sold medicines. (Cule, John, 1980).

The Society of Apothecaries increased in influence, setting



standards for the examination and approval of apothecaries after a seven years' apprenticeship. In 1772, Sir Hans Sloane acquired the Chelsea Physic Garden for the Society of Apothecaries to undertake research into herbal cures.

In the countryside, the parish might pay a small annual retainer fee for maintaining the services of a doctor for the poor. He was otherwise paid on a private basis by his richer patients. For many patients however, unqualified people still practised medicine. McConaghey related how that in Torrington, a 'stange woman' was paid by the parish for curing the leg of Richard White, and Mrs. Bond of Bideford was given 5/- for curing Jon Thorne of the itch. The tombstone of Prudence Potter, the wife of the rector of Newton St. Petrock, states that she spent her life 'in the industrious, charitable, and successful practice of physic, chirurgery and midwifery'. (McConaghey, R. S., 1961)

### (3.2) GENERAL PRACTICE IN THE ISLANDS

In the islands of Scotland, the medical services changed little during the eighteenth century. In Orkney, the only doctors in practice were those on Mainland, in Kirkwall, until the end of the century, as is seen in the following table:

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the spine.

Table: Doctors in Orkney, mid eighteenth century.

Dr. John Watt	c1720-1727-	Kirkwall	(Watt, John, c1720 (i)(ii), 1727)
Dr. Hugh Sutherland	late 1720s-1762	Kirkwall	(Baikie, E., 1729)
Dr. Robert Groat (Father)	? 1752-1782	Kirkwall	( <u>Graeme</u> , H. S., 1954)
Mr. William Butter	-1762-	Kirkwall	( <u>Butter</u> , W., 1762)
Mr. James Fea (Surgeon)	1772-	Kirkwall	( <u>Fea</u> , A., 1912)
Mr. William Paterson (Surgeon)	1775	Kirkwall	( <u>Craven</u> , Arch., 1923)
Dr. Robert Groat (son)	1782-1828	Kirkwall	( <u>Graeme</u> , H. S., 1954)
Dr. Alexander Duguid	1780-	Kirkwall	( <u>Graeme</u> , H. S., 1954)
Mr. Alexander Munro (Surgeon)	1786-	Kirkwall	( <u>Graeme</u> , H. S., 1954)

In 1795, there was a surgeon in Stomness (Clouston, William, 1795), and three doctors -- one physician and two surgeons in Kirkwall. (Barry, George, 1795).

These eighteenth century doctors in Orkney, relied heavily on humoral methods for their cures. The accounts debited to their patients, of Dr. Alexander Munro, Dr. Hugh Sutherland and Dr. John Watt show a reliance on bleeding, vomiting and purging, together with blistering, and the use of substances noted for their humoral qualities, such as Peruvian Bark (Quinine). A number of these eighteenth century accounts are still extant in the Orkney Archives, and are given in Appendix 2. Their similarity to others from Scottish towns some 75 years previously is remarkable. (MacPhail, J. R. N., 1914)(Drummond, D. G., 1965)

As had happened before, not all these doctors were held in high regard. For example, Eunson (Eunson, George, 1788) records



the local government of Orkney in a poem, which, privately published, lampoons many of the local dignitaries:

Seventeen hundred fifty two!  
 Full well we may remeber thou,  
 Unlucky year, to honest men,  
 For bribery rose triumphant then;  
 Patronio and his plas ic (?) elves,  
 To serve the devil and themselves;  
 Spread cursed mammon round our shore,  
 Which won too many converts o'er;  
 Made handicraftsmen change their style,  
 To be thought gentlemen awhile;  
 To crawl from dunghills up to places,  
 To show their conscience and their faces.....  
 Before I go further with my plan,  
 I shall mention every man,  
 Who in the council has a vote,  
 And now begin with Doctor G-r-t.  
 He is a doctor by profession,  
 As able a one as in our nation;  
 And he hath often shewn great skill,  
 Whenever he got - a purse at Will!

Dr. G-r-t is likely to be Dr. Robert Groat, who, before coming to Orkney, was an apothecary in Jermyn Street, London. He was well known in the county as a landowner who took an active part in the burgh and county affairs. As a landowner he was notorious for his litigiousness.

Medical practitioners were present in Shetland also. Low records how that:

There have occurred in this island, several cases of an inveterate scurvy, which commonly goes under the name of the leprosy. It generally baffles the efforts, not only of the surgeons here, but even those of the Royal Infirmary in Edinburgh. (Low, George, 1774)

He also records that a number of his parishioners were inoculated by Mr. Edmonston, a surgeon. However, it is likely that there were periods of time, when Shetland was without a doctor. For example, the Rev. John Mills, minister of Dunrossness in Shetland, stated that when he developed sciatica in 1744, he had to rely on the services of one of the naval surgeons, attached to a man-of-war that was currently moored in Bressay Sound. (Mills, John, 1740-1803). In 1758, his wife died in Lerwick 'when about to repair to the physician at Edinburgh'. However, by 1778, his second wife

was seized suddenly with a violent asthma, that threatened a dissolution, which obliged me to run an express for the doctor, and my sister, to Lerwick.

However, by 1795, the minister for North Yell & Fetlar wrote:

We have here three gentlemen in the medical line, who are very eminent in their profession.

(Gordon, James, 1795)

But other areas of the county suffered from the inaccessibility of the doctors. The minister for Walls & Sandness wrote:

Some of these, and other diseases, may perhaps be

more malignant owing to the difficulty and expense of procuring medical aid. (Thompson, David, 1795)

In the Western Isles, there was only one doctor in the Long Island at the time of the Old Statistical Account, a Mr. Robert Millar, in Stornoway (Thompson, F., 1968). In Skye however, in 1764, there were three doctors in practice, Mr. Maccaskile, surgeon, Mr. Maclean, Surgeon, and Mr. Macleod, surgeon. (Walker, John, 1764/1771). Boswell describes how that in 1773, Dr. Samuel Johnson met a Dr. Macleod and also a Dr. MacDonald in Skye. He also mentions the presence of a Dr. Alexander Maclean, a physician at Tobermory in Mull. (Boswell, James, 1785)

### (3.3) ALTERNATIVE SOURCES OF MEDICAL ASSISTANCE

The paucity of doctors in the islands during the eighteenth century was to some degree made good by a series of consultation by correspondence, undertaken by doctors in the larger Scottish towns. Pre-eminent amongst these doctors was Dr. William Cullen in Edinburgh, who undertook a considerable practice by way of correspondence, between 1764 and 1790. (Risse, Guenter B., 1974).

It is apparent that the doctors resident in Kirkwall often undertook postal consultation of this kind for patients residing in the outer isles. For instance, there is still extant a lengthy letter from Dr. Hugh Sutherland to Lady Elsness, residing in Stronsay. It seems that Dr. Sutherland was informed of Lady Elsness'



indisposition through her friend or servant, Mrs. Fea. On receipt of knowledge of her symptoms, Dr. Sutherland wrote to Lady Elsness giving lengthy and detailed instructions as to what to do to cure her troublesome nocturnal cough. He sent Mrs. Fea back to Stronsay clutching a number of medicaments including purgatives, blistering plasters, electuaries and cough medicines. He also gave her advice concerning her diet, and advocated that she obtain the services of somebody (not a doctor) to bleed her. (Sutherland, Hugh, 1730)

Inoculation against smallpox was undertaken by both medical practitioners and untrained practitioners alike. For example, the minister for Tingwall, Shetland, Mr. William Mitchell:

Finding that the common people declined to inoculate their children, in consequence of the expence attending it when a regular surgeon was employed, resolved to undertake it himself, without charging them anything, and carried it on with great success, having inoculated no less a number than 950, between the years 1774 and 1793. As it requires no great skill or dexterity, it is extremely desirable that his brethren, in other remote parts of the country, would imitate so laudable an example. (Mitchell, William, 1795)

The minister for Aithsting and Sandsting wrote:

They were at last persuaded to submit to inoculation. 327 were inoculated by a physician, of which 5 died; about 100 were inoculated by common men, who pretended

to no skill, and gave no medicines. (Barclay, Patrick, 1795)

A similar situation occurred in Burra:

About two years ago, a young gentleman inoculated 132 in the isles of Burra and House, some of whom were 40 years of age, and not one died. (Menzies, John, 1795)

In Yell, inoculation against smallpox was undertaken by John Williamson:

Inoculation is successfully practised, even by common people; but in particular by a person whose name is John Williamson, who from his various attainments, and superior talents, is called 'Johnny Notions', among his neighbours. Unassisted by education, and unfettered by the rules of art, he stands unrivalled in this business. Several thousands have been inoculated by him, and he has not lost a single patient...

He is a singular instance of an uncommon variety of talent, being a tailor, a joiner, a clock and watchmender, a blacksmith, and a physician. (Dishington, Andrew, 1795)

Another role carried out by untrained people, in the absence of trained doctors, was that of the midwife or 'howdie'.

Relatively few records of their activities exist, but their untutored and unhygienic ways were probably responsible for the high prevalence of neonatal tetanus in the Scottish islands (Collacott, R. A., 1981). The Rev. John Mills describes his wife's experience of the local howdie in 1754:

When my wife took pains before the birth of the second child, as I couldn't bear to hear her cries, I went

to Quendal and put up the Lady for her assistance, which yet I repented of, and should rather have staid at home, and held up her case to a good and gracious God, who had formerly delivered her by means of a poor old woman who was the best that could be got at the time. But the ignorant creature, having taken a table-knife, and made crosses over the bed after the childbirth, according to her superstitious custom - the remains of black popery - my dear wife bid her be gone with her devilry, and couldn't bear to hear of her afterwards. (Mills, John, 1740-1803)

#### (3.4) PERSISTENCE OF PRIMITIVE BELIEFS

During the eighteenth century, methods of medical care had hardly changed from those of the preceeding century. Humoral ideas of the causation of disease continued, together with humoral notions of bleeding and purgeing. Mills wrote:

However I continued drinking the water all winter, and in the beginning of the springtime, my skin stuck out in a sudden ruff - a sensible Vigour of my constitution ensued, which I had not felt for a long time, attended with a strong appetite, and after purgeing away of the noxious humour, was as clean and whole as ever. (Mills, John, 1740-1803)

In 1796, Mills sustained a stroke. He was attended by an untrained physician. He said:

I was oft troubled by stitches, and as this is usually owing to a redundancy of blood, I soon got



one well skilled in letting of blood, but he was  
 timerous, nor would draw off as much as I desired.  
 But as the stitch continued, I sent for him again,  
 and caused him to take as much, which relieved me  
 of the stitches. (Mills, John, 1740-1803)

The ideas of the healing waters persisted also, although  
 there was the beginning of an emphasis on the mineral content.  
 The minister for the parish of Orphir in Orkney wrote:

Mineral springs are to be met with in every district  
 of the parish. But the one most in vogue is the  
 water of Scoridale, which has been famous for time  
 immemorial, and is supposed to cure all diseases.  
 It, like all the others, is of the chalybeate kind,  
 without any mixture of sulphur. It is of a diuretic  
 and antiscorbutic quality, and helps to promote  
 digestion. (Liddel, Rev., 1795)

The Rev. William Clouston of Sandwick and Stromness wrote:

There are some mineral springs in these parishes.  
 There is one in the vicinity of the village of  
 Stromness, which has been tried for scorbutic  
 complaints, and has sometimes proved successful.

(Clouston, William, 1795)

In the island of Stronsay, there was a spring whose waters  
 were claimed to 'cure all maladies except black death'.

(Anderson, John, 1795)

In Sutherland, the traditional beliefs in healing stones

and waters also persisted. In his diary of 1767, James Robertson writes:

There is a small loch called Munar on the east side of the Naver, into which if a person plunges himself on the first Monday of the quarter, before sunrise, the people believe he shall be cured of any distemper that may have afflicted him. As ignorance abounds in causes, the following is assigned to explain the surprising virtue of the water. A man near this place possessed a stone with which he was wont to cure many diseases. Some people eager to possess a treasure so valuable, employed violence, to avoid which, the possessor of it fled. In his flight he passed this way, and being almost overtaken, he threw the wonder-working stone into this loch, praying that its virtue might be transferred to the water, and render it beneficial to all except the people of Strath Naver.

Mr. Munro added that several infirm people came hither to bathe, from Caithness, Ross, and the southern parts of Sutherland. This I can more readily believe, as when I was here on Sunday, I saw two or three people attending divine worship who intended to plunge next morning. They who know the power of imagination over the human frame, will not be surprised to hear that most of the plungers think themselves relieved. (Robertson, James, 1767)

Beliefs in witchcraft persisted throughout the eighteenth

century in the islands. The minister for Rasay said that:

since he came to be minister of the parish where he is now, the belief of witchcraft and charms was very common, insomuch that he had many prosecutions before his session (ie the parochial ecclesiastical court). (Boswell, James, 1785)

In 1708, Kathrine Taylor, a beggar in Stromness was charged that 'by her sorcerie and charming' she had transferred disease from one patient to another. (Kirk Session Records, Stromness, 1708)

Low, describing Orkney in 1774 states:

They are very much given to superstition, and an universal belief of witchcraft prevails among them, which by no means can be rooted out even from among people otherwise not a little sagacious. They put a great deal of trust in the cure of diseases by spells and enchantments, also they give great power to witches to inflict these by the same means.

And:

Nobody must praise a child or anything they set a value on, for if anything evil afterwards befalls it, these poor ignorant creatures will be sure to attribute to the tongue that spake it, and very probably quarrel on that account. This they call forspeaking, and pretend to cure persons so forspoken by washing them with a water compounded with great ceremony, the recipe of which our female sages, the only administrators, make an impenetrable secret;



however, these superstitious notions are not confined to Hoy alone, but are spread up and down the whole country, and are to be found, more or less, in every corner of it. (Low, George, 1774)

Of Aithsting and Sandsting in Shetland, he wrote:

They believe that any person is emaciated by sickness, of other accidental causes, that his or their heart is worn away; and they have a method of investigating whether it is so or not, or whether it shall be restored; which is this, they melt a peice of lead and throw it into cold water, and according to the shape it takes, so they form their judgment; if it takes the shape of the heart (their imaginations are pretty quick in helping out this and other kinds of augury both here and in Orkney), the person is not altogether gone, and he will recover. If otherwise, vice versa. (Low, George, 1774)

Folk remedies using plant and animal cures also persisted at this time. In the Mull of Kintyre, MacNeill of Carskey's estate journal for the years 1703-1743 contains the following local remedies (Mackay, Frank F., 1955):

Tumour: Take the root of figwort on handfull bruise it very small; boyl it wt as much fresh butter as will be sufficient aplay a pultice of it to the child's nack every night till the thoumer is quite dissolved

For labour: Take the skine of a serpent and bind it

to the thigh of the woman that is in labour and she will be delivered presently if you canot get the foresaid take a handfull of the root of polipodium and chop it very small boult it in water and aplay it warm to the womans right thigh.

Gout: Ane excellent and approved remedy for the gout take as fat a goose as you can get & ane fat black cat. Skin the catt & take all the intrales out of him & then bruize him as small as you can wt ane pound of hoges lair (lard) and ane handfull of cours salt & put them into the goose and rost him & keep all the drypings into ane frying pan, and then add to the droppings ane unce of pepper ane unce of Cinamon & ane unce of Ginger being weell punded in a mortar qch work in the dropings til itt become someqt thick qch keep in a bottell & rub itt the place paind befor the fire.

Gravel: Take ane quart of white wine and take into ane glass yrof for nine mornings nine slatters (woodlice) being dryed and bruised into powder wt the juice of three onions being strained through a clean cloath, also put ane ordinary dram of brandy into the glas of whit wine qch quantity drink for the sd space of nine mornings & itt will cure yow.

### (3.5) COMMON DISEASES AT END OF EIGHTEENTH CENTURY

Whereas it is easier to examine the prevalence of diseases which are serious enough to invariably cause death, it is considerably harder to estimate the prevalence of diseases which are not life-threatening.

However, in an attempt at discovering the common diseases in the Scottish Islands in the eighteenth century, an analysis has been made of the Old Statistical Account for Scotland (1798) where each parish minister had been asked to comment on the most common diseases present within his parish.

There are a number of sources of error in such a study. Firstly, out of 35 parishes in the Scottish Islands described in the Old Statistical Account, only 22 gave even the briefest account of common diseases. Secondly, the accounts were made on the basis of diagnoses made by church ministers. Thirdly, the accounts represent a subjective impression only of what diseases were common at that time. The accounts may not give a true impression of epidemic disease. Lastly, there are difficulties of interpretation. It is difficult to know what was meant by the diagnosis "white swelling", etc. Similarly, the diagnosis "rheumatism" is open to a wide variety of diagnoses.

In spite of these difficulties, the enclosed tables give an indication of the diseases that were perceived to have been common in twenty-two out of the thirty-five parishes.

Infectious diseases, epidemic fevers (?typhus), tuberculosis and others were common. Of interest too, neonatal tetanus was



described in three parishes - all in the Outer Hebrides. Scurvy too, as a result of a diet deficient in fresh vegetables was common.

Table: Common Diseases in the Scottish Islands, 1791-1799 (22 parishes)

<u>Disease</u>	<u>Number of parishes</u>
<u>Musculoskeletal disorders</u>	
Rheumatism	19
<u>Infective diseases</u>	
Epidemic Fevers (? Typhus)	9
Tuberculosis	8
Colds	7
Smallpox	6
Coughs	4
Neonatal Tetanus	3
Erysipelas	2
Leprosy	2
Scarlet Fever	1
Whooping-cough	1
Measles	1
<u>Cardiovascular/Respiratory Disorders</u>	
Dropsy	3
Asthma	1
<u>Deficiency Disorders</u>	
Scurvy	3
<u>Miscellaneous</u>	
Abdominal pains, colic etc.	5
Skin disorders	3
"Nervous complaints"	3
Others	5

Table: To Show Common Diseases in the Scottish Islands: Based on Statistical Account for Scotland, 1841

	Abdominal pains	Asthma	Cold	Coughs	Cramps	Dropsy	Epidemic fevers (? Typhus)	Erysipelas	Fits/Paralysls	Leprosy	Liver Disease	Measles	Neonatal tetanus	"Nervous complaints"	Rheumatism	Scarlet fever	Scurvy	Skin disorders	Smallpox	Tuberculosis	"White swelling"	Whooping cough	Source
Aithsting/Sandsting					x					x					x								Barclay, P., 1841
Barvas							x						x		x								MacDonald, D., 1841
Bressay/Burray/Quaff							x								x								Menzies, J., 1841
Cross/Burness	x		x				x								x		x	x		x	x		Clouston, W., 1841
Delting									x					x	x								Morison, J., 1841
Harray/Birsay			x			x				x				x		x		x	x				Low, G., 1841
Harris				x											x								MacLeod, J., 1841
Kirkwall/St. Olga	x	x	x	x		x						x			x				x			x	Barry, G., 1841
Lerwick							x												x				Sands, J., 1841
Lochs			x				x	x															Simson, A., 1841
Northmaven									x						x								Jack, W., 1841
North Uist			x	x											x								MacQueen, A., 1841
North Yell/Fetlar						x	x								x					x			Gordon, J., 1841
Orphir							x								x				x				Liddell, Rev., 1841
Sandwick/Stromness			x	x											x		x	x		x			Clouston, W., 1841
South Uist							x								x								Munro, G., 1841
Stornoway													x		x								MacKenzie, C., 1841
Stronsay/Eday			x						x					x	x						x		Anderson, J., 1841
Tingwall																			x				Mitchell, W., 1841
Uig	x							x					x		x								Munro, H., 1841
Unst									x						x				x				Mouat, T., 1841
Walls/Sandness							x			x					x			x					Thomson, D., 1841

### The Infectious Diseases

It appears then that infectious diseases represented a considerable proportion of the morbidity affecting the islands in the eighteenth century. This situation has persisted into the present day. (cf. MacGregor, J. D., et al, 1981). Sands, writing in 1791, about his parish of Lerwick, wrote:

The most destructive disorders known in this parish are fevers, introduced by frequent intercourse with strangers. (Sands, J., 1791)

In island communities, a disease may be absent for many years leading to a low level of 'herd immunity'. A visitor may bring the disease into the community, which then infects a very high proportion of the inhabitants, resulting in much social upheaval. The manner in which smallpox affected the Scottish islands in the 18th century is a good example of this. (Collacott, R. A., 1980)

Brand, who visited Shetland in 1700 wrote:

It hath been observed often by the inhabitants, that, when in Holy Providence, any sickness cometh upon, or breaketh up in the county, it useth to go through them like a plague, so that, since we came off, the smallpox hath seized upon many, both old and young; and was so universal that, upon one Lord's-Day, there were ninety prayed for in the Church of Lerwick, all sick from the same disease; whereas, when we were there a few weeks before, there was not one we knew



sick thereof. They say, a gentleman's son, in the country, who had lately gone from the south, and was under it when he came home, brought it with him, which very quickly spread among the people - the old as well as the young - and so sad have been the desolating effects thereof, that one told me, who had arrived here lately from the place, that he verily judgeth that the third part of the people in many of the Isles are dead thereof.

Brand also stated that in the Fair Isle, two-thirds of the population had died, so that it was impossible to manage the fishing boats. Such stories sound inflated, but are partly confirmed by presbytery records, which in late September 1700, refer to the:

raging sickness of the smallpox abounding, and a great death thereby ensuing throughout.

and to

many hundreds of the flower of our youth being killed by it (Zetland Presbytery Records).

In the Scottish mainland in the eighteenth century, smallpox was an endemic disease, which infected mainly children, and was considered an inevitable infection, such as mumps or measles today. However, the phraseology of the Zetland Presbytery records does not sound as though only young children were seriously affected, and maybe, memories of the extent of the damage which this epidemic caused to the breadwinners (perhaps uniquely), led the islands to be among the first to

adopt inoculation seriously in the eighteenth century, (Flinn, M., 1977). A magnified effect might be expected in isolated communities with very low natural resistance, although in the Outer Hebrides the pattern of smallpox infection was more conventional. Martin Martin (Martin, 1716) spoke of Lewis:

This place hath not been troubled with epidemical diseases except the smallpox, which comes seldom, and then it sweeps away many young people.

Of North Uist, Martin says:

The diseases that prevail here are fevers, diarrhoea, and dysenteria, stitch, cough, sciatica, megrim, the smallpox, which commonly comes once in seventeen years time.

Greig (1892) described the fate of the Gifford family of Delting, Shetland during the eighteenth century. At that time, the Giffords were one of the largest landowners and fishcurers in Shetland. He said:

Everything appeared to prosper with the Giffords for a time. They were rich, and were highly respected, and, no doubt deeply envied. Fourteen children were born of the marriage - six daughters and eight sons - the first child, a girl called Margaret, was born on 30th March 1715, and the last, a son named Thomas, was born on 5th September 1734. Death had meanwhile visited the family, and the first, Thomas, who was born on 6th June, 1727, died while quite young.

It was not until 1740 that any great trouble

appeared in Busta; but in that year, smallpox entered the family, and the children were soon all smitten with the terrible disease.

Greig then quotes from the diary kept by Thomas Gifford for the year 1740:

5, Wednesday - Poor Betty and Franky took to the bed yesterday morning.

10, Monday - The pox out. Betty and Francie very bad. The pox riseth very slow.

12, Wednesday - The bairns are worse. The day is the ninth with them.

13, Thursday - The bairns very bad all day, being the eleventh with the pox - feverish and weak.

14, Friday - They were a little easier but extremely weak - the pox began to fall.

15, Saturday - 13 days out. The bairns very weak and sore, but some hope.

18, Tuesday - My dear Betty died about 7 at night in a very calm manner. Robbie lay all that day.

19, Wednesday - Poor Frankie died about 7 at night very calm.

21, Friday - The pox began to appear on Robbie and Christie, and they lay all that day.

24, Monday - The bairns were buried. Anderina took the bed.

25, Tuesday - Hay took ye bed; all the bairns uneasy; but blessed be God, not very ill.



26, Wednesday - The bairns continue pretty easy -  
few pox appear on them but begin to rise.

Greig records:

With the exception of the two children whose deaths are recorded, the rest recovered from the disease, but the health of some of the others seems to have been undermined for only eight of the children reached maturity, four sons and four daughters, Thomas, James and Barbara having died shortly afterwards.

There is literary evidence for smallpox epidemics in Shetland in the following years:

1700	(Brand, 1701)
1720	(Cowie, 1874)
1729	(Ingram & Ingram, 1841)
1740	(Cowie, 1874; Ingram & Ingram, 1841)
1760	(Cowie, 1874)
1761	(Thomson, 1969)
1769	(Cowie, 1874)
1791	(Cowie, 1874)
1802	(Thomson, 1969)
1830	(Cowie, 1874)

In the 1720 epidemic in Shetland, the population of the Island of Foula was reduced from about 200 to less than ten. In 1740, 10% of the population of the parish of Aithsting and Sandsting died from smallpox, (Thomson, 1969). Such was the effect of smallpox on the total population of these island

communities that Ingram & Ingram (1841) believed that the population of the Parish of Unst had been held in check by smallpox. After vaccination had been resorted to in 1800, the population of this Shetland increased markedly. Such was also believed to have occurred in Skye. (MacDonald, C., 1841)

The Island of St. Kilda was practically depopulated by smallpox. Macaulay, who visited St. Kilda in 1758 stated (Macaulay, 1764):

It is a fact indisputably true that the inhabitants of St. Kilda were much more numerous heretofore, than they are at present. Martin who visited it about the end of the last century found an hundred and eighty persons there.

The number is now dwindled down to eighty-eight: an extraordinary change this in less than two generations; it is true indeed that a contagious distemper swept away the greatest part of this people, about four and thirty years ago (i.e. 1724).

The distemper which in so great a measure depopulated St. Kilda was the smallpox; one of the people there upon coming to Harris, was seized with it, and died there; unluckily, one of his friends carried his cloaths away next year, and these it is thought, communicated the infection at Hirta.

Very few of that little community escaped the plague of that year; of twenty-one families, four grown persons only remained, and these had the burden of twenty-six orphans to support; that these four

lived, was owing to what the very men who were saved must have at first called a singular misfortune.

Before the distemper was propagated, three men and eight boys were sent into one of their islands, with a design of catching solan-geese for the benefit of the whole community; an universal confusion and mortality ensuing at home, they continued there from the middle of August, till about the middle of May in the following year. The boat in which these men had been wasted over into that island was brought back to Hirta, before the distemper became epidemical. Had they been at home with the rest, it is more than probable that their fate had been the same with that of their friends.

Before this memorable year, the smallpox had never visited St. Kilda; the consequence must have been that every genuine Hirta man was an absolute stranger to the proper method of managing it; all medicines, and those who administer them, lay quite out of their way; and it is very probable that the gross aliments always used in that place, perhaps beyond the common rules of temperance, and together with that disadvantage, the habitual uncleanness of the natives, to which may be added the feculent air pent up within their dirty hovels, had a particular quality to inflame that cruel disease into a more than ordinary degree of virulence.

This terrible distemper has never since visited St. Kilda.



Such was the depopulation of St. Kilda, that it was repopulated by the SSPCK from the Island of Harris (SSPCK Minutes, 1729).

#### IMMUNISATION AGAINST SMALLPOX

Inoculation against smallpox was first tried out in London in 1715, but about six years prior to this, it had been recorded that

also in some parts of the Highlands of Scotland, they infect their children by rubbing them with a friendly pock. (Pennie, 1958)

This indigenous practice was later confirmed in 1765, when, if a child in the family happened to contract mild smallpox, other children were encouraged to take it by making them sleep together, and also by tying threads wet with pocky matter, round their wrists. (Creighton, 1891; 1894)

Inoculation was first tried out in Scotland in 1726 in Aberdeenshire, and later it became a general practice throughout the Highlands and at least some of the islands. Jenner's essay on cowpox was published in 1798, and soon the advantages of vaccination over the more dangerous inoculation were realised, although it was not until 1849 that the old inoculation was prohibited by statute.

In Shetland, inoculation was introduced after the 1760 smallpox epidemic. However it was an expensive procedure, costing the patient two or three guineas, and only ten or a dozen islanders took advantage of this opportunity.

After the 1769 outbreak in Shetland, inoculation was more generally used, and appears to have had the result of diminishing the mortality of the disease, but at the same time spreading this disease (Cowie, 1874). Inoculation was carried out by unqualified people, such as John Williamson, who, according to the Rev. Dishington (1792):

is careful in providing the best matter, and keeps it a long time before he puts it to use - sometimes seven or eight years; and in order to lessen its virulence, he first dries it in peat smoke, and then puts it underground, covered with comphor. Though many physicians recommend fresh matter, this self-taught practitioner finds, from experience, that it always proves milder to the patient when it has lost a considerable degree of its strength. He uses no lancet in performing the operation; but, by a small knife made by his own hands, he gently raises a very little of the outer skin of the arm, so that no blood flows; then puts in a very small quantity of water, which he immediately covers with the skin that had been thus raised. Several thousands have been inoculated by him, and he has not lost a single patient.

In the latter part of the eighteenth century, doctors from Kirkwall searched the Northern Isles of Orkney for cases of smallpox, from whom to acquire lymph for inoculation (Munro, 1786).

Firth (1974) describes further methods employed in the islands in

order to immunize against smallpox. In his reminiscences he states:

On account of its so frequent recurrence, smallpox was regarded as an unavoidable and almost inevitable evil, and for this reason, if the outbreak promised to be of a mild type, infection was courted. A prevailing custom of the times was for people to borrow and wear underclothing and blankets which had been used by those suffering from this malady. But a yet more revolting method of contracting the disease was sometimes adopted. The scab or desiccated pus of the pox taken from the diseased person was inserted with butter between the folds of berebread, which was then unwittingly partaken of by the young people whom it was desired to have infected. The amount of pain and discomfort endured by the patient was almost inconceivable, especially as the doctor's advice was seldom sought, and there were few home remedies available for the alleviation of suffering, because of the prevailing poverty and ignorance.

Vaccination was introduced into Shetland in 1804, and was first eagerly taken advantage of. Neill (Neill, 1806) describes the minister on the Island of Rousay, Orkney, Mr. Duguid, who:

has rendered incalculable service to this district of Orkney by introducing in his own family, and promoting with his own hand, among his parishioners, the vaccine inoculation - a preventive of smallpox -



that terrible scourge, which used formerly to desolate whole parishes of Orkney.

However, soon vaccination came to be used more by ignorant, unqualified vaccinators, and public confidence in vaccination sharply fell, as it did in Skye (Clerk, 1841). Compulsory vaccination was therefore met with opposition and widespread conscientious objection (Cowie, 1874; Kearton, 1897; BMJ, 1906; Taylor, 1948). Also, because of their very remoteness, some islands, such as St. Kilda, and the Fair Isle were seldom vaccinated (BMJ, 1906; Orcadian, 21/8/1866). By 1924, 30% of children in Orkney were registered as conscientious objectors to vaccination (Orcadian - 4.11.26).

Thus whereas a prophylactic measure was available, it was not employed as intensively in the Scottish Islands, as elsewhere on the Scottish Mainland - this in spite of the epidemic nature of the disease in the islands, as distinct from the endemic nature of the disease on the mainland, together with the historical fact of social upheaval and depopulation resulting from infection.

#### (4.1) THE NINETEENTH CENTURY

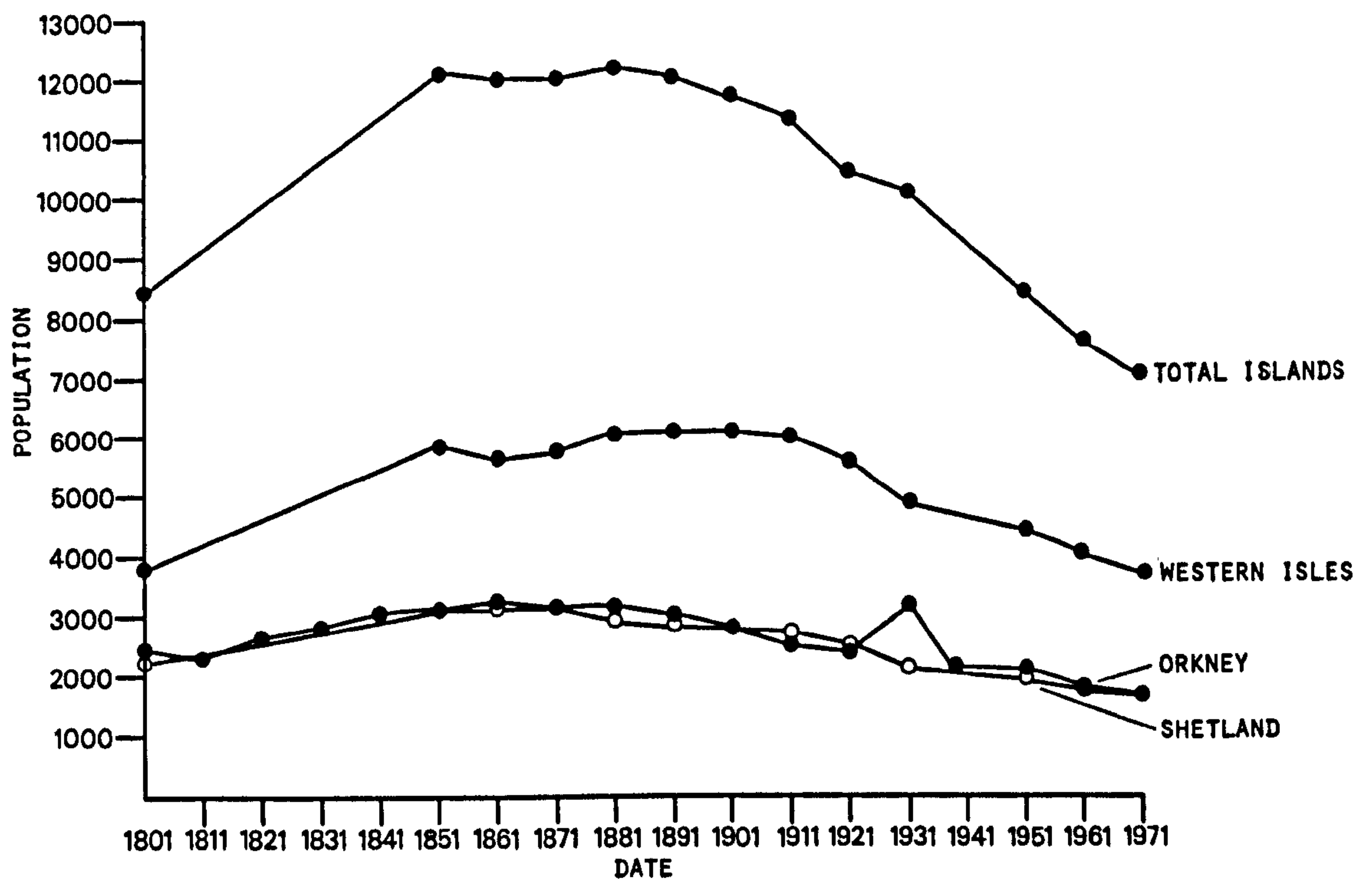
The nineteenth century was characterised by a growing awareness of people's social needs. The medical needs of the Scottish Islands were again dominated by the problems of imported infections, notably in the island of St. Kilda, with its outbreaks of respiratory tract infection following the arrival of visitors to the island.

On the other hand, the nineteenth century was a period of great social change in the islands, with a large increase in population, which reached an all-time height towards the end of the century, as is shown in the accompanying graph and table:

Table: Population of Scottish Islands: Historical

<u>Date</u>	<u>Orkney</u>	<u>Shetland</u>	<u>Western Isles</u>	<u>Total</u>
1801	24445	22379	37982	84806
1811	23238			
1821	26979			
1831	28847			
1841	30507			
1851	31455	31078	58922	121455
1861	32395	31670	56466	120531
1871	31274	31608	57889	120771
1881	32044	29705	60892	122641
1891	30453	28711	61793	120957
1901	28699	28166	61286	118151
1911	25897	27911	60447	114255
1921	24111	25520	56302	105933
1931	32077	21421	49674	103172
1939	21641			
1951	21255	19352	44438	85045
1961	18747	17814	40548	77109
1971	17071	17327	37426	71830

(Based on Historical Tables, Registrar General for Scotland, 1971, County Reports, Orkney, Zetland, Inverness, Ross and Cromarty)



GRAPH: TO SHOW POPULATION OF SCOTTISH ISLAND GROUPS WITH TIME



Associated with this vast increase in population were the marked social changes affected through the Highland Clearances. The change from run-rig farming to sheep-farming displaced the population. The population of the Western Isles, and, to a lesser extent, Orkney and Shetland, were forced either to emigrate to North America, or else to create crofting communities. (Grigor, Ian F. G., 1979: Hunter, James, 1976). The crofts were sited on the coast in order that the crofters might work kelp, or fish and at the same time, permitted the land to be used for extensive sheep-runs. The crofts on the other hand were created excessively small by the lairds, for the purpose of maintaining a community dependent upon them for employment. The cottar population was in even worse plight with no home, no land, no work. The potato blight led to starvation, and hastened emigration. (Salaman, R. N., 1949). The standard of housing with a reliance on thatched but-and-ben 'tigh dubh' with no chimney, a central hearth, and an earth floor - such as seen at Arnol in Lewis (Fenton, Alexander, 1978) gave no opportunity for sanitation. Animal faecal material could not but contaminate the damp, smoky and crowded living area. Sewerage sanitation was non-existent, nor was piped water.

Such social deprivation exacerbated the problem of infections. Noteworthy in this regard was the high neonatal mortality due to neonatal tetanus. Typhus, typhoid, tuberculosis, measles and smallpox were rife. Tuberculosis was largely brought to the Western Isles during this period. The daughters of crofters went at a young age to Glasgow to seek work as servants. In Glasgow they lived in poor, dark and overcrowded tenements such

as the Gorbals, where they contracted tuberculosis. On their return to the Hebrides for convalescence, the infection was spread under circumstances which were totally lacking in domestic hygiene.

Conversely, the nineteenth century was a period of social reform in the care of children, mothers, the elderly, the mentally ill, the factory workers and the impoverished and sick. On the one hand was the philanthropy of successful businessmen, and notably, the Quakers (Viz Tuke in York). There was also the evangelical group of reformers, led by the seventh Earl of Shaftesbury, and the Utilitarian group, characterised by Chadwick, whose aim was the greatest good, and the greatest happiness of the greatest number. Within this spirit of reform was the spirit of self-help and the marked disincentive to rely on the state.

Within the Scottish Islands will be seen the introduction of self-help schemes such as the Friendly Societies and the medical associations, on the one hand, and the introduction of reform of the Poor Laws (coming some dozen years later than in England), on the other. Poor Law reform can be seen as the first step in providing a comprehensive medical service in the Scottish Islands. It must be seen as a major landmark in the provision of general practice, although its effects were to be delayed many years after the Poor Law Amendment Act. Its effects too were incomplete, and had to be superseded by a greatly improved system in the first quarter of the next century.

#### (4.2) THE INFECTIOUS DISEASES

In the nineteenth century, the major health problem for the islands was epidemic infectious diseases. Smallpox was still a major problem, and, unlike the urban regions of Scotland, occurred as epidemics in the islands:

Further north, and in more isolated and rural areas, the disease attacked more as an epidemic, every so many years, and thus a greater percentage of the population would survive childhood without an attack of smallpox, only to be attacked at a later age.

(MacDonald, Thomas, 1972)

The annual reports of the parish medical officers for the islands give ample support to the epidemic nature of these diseases, and the way in which travellers to the islands brought these diseases with them. For example:

Islay: Scarlet fever appeared in Port Ellen in August, and was not finally stamped out till nearly the end of the year. The disease seems to have been introduced by visitors; probably by some case so mild as not to have been brought under medical supervision, and which might not even have been known to exist as such by the parents or guardians of the affected child, but which, as so often happens, was quite sufficient to originate a local epidemic and cause considerable amount of expense, trouble and anxiety. (Gilmour, Dr., 1894)



And:

Mull: Whooping cough appears to have prevailed over the whole of the island of Mull. One hundred and thirty-four cases were returned but, as already stated, some of the medical officers reported the disease as being 'prevalent' or 'epidemic' during some months, without stating the number of cases. The infection is believed to have been imported from Oban. (McNeill, Roger, 1894)

And:

Jura: At the beginning of January, a lad came from Glasgow to visit his parents who resided in a small village in the island of Jura. He took ill of the measles within ten days after his arrival. He therefore got the infection before he arrived. No doctor was called in to see the case. Anxiety for the lad's welfare, or curiosity, caused all the neighbours to flock to the house, and within a fortnight all the families in the village were found by Dr. McDonald to have become infected. Although prompt action was taken for isolation and disinfection at this instance by the Sanitary Inspector, 38 cases suffered, with one death. (McNeill, Roger, 1893)

#### (4.3) THE ST. KILDA BOAT COLD

The classic example of epidemic disease brought to the islands was the 'St. Kilda Boat Cold', which, as with all epidemics, was capable of total disruption of the life of the

community. St. Kilda, which lies forty miles to the west of Harris, supported, at one stage, some 200 people, who wove cloth made from the wool of Soay sheep, and traded products obtained from seabirds, notably, gannets, fulmars and puffins, which also formed a large part of their diet. The island was eventually deserted in 1930. In spite of its small size, its medical problems are well documented. Epidemics of leprosy (Martin, M., 1968: Buchan, A., 1752), smallpox (MacAulay, K., 1764), mumps (Shearer, A., 1920), typhus and whooping cough (Shearer, A., 1921) are well recorded.

The boat-cold was first described by Martin Martin at the end of the seventeenth century, when he reported to the Royal Society:

The inhabitants of St. Kilda are, every summer, infected with a cough upon the Chamberlan's landing, which lasts for ten or twelve days. (Martin, Martin, 1697)

When the Rev. Kenneth MacAulay visited St. Kilda in 1763, he was initially sceptical about the 'St. Kilda boat cold'. However, he later changed this viewpoint and stated:

When I landed, all the inhabitants, except two women in child-bed, enjoyed perfect health, and continued to do so for two days.....On the third day after I landed, some of the inhabitants discovered evident symptoms of a violent cough, such as hoarseness, coughing, discharging phlegm etc., and in eight days, they were all infected with this uncommon disease, attended in some with severe headaches and feverish disorders.

(MacAulay, Kenneth, 1764)

MacAulay also recorded that in 1746, after some troops arrived in St. Kilda, the St. Kildans again suffered from the boat cold. He stated that the boat cold was an annual epidemic following the arrival of the laird's steward.

The very existence of the St. Kilda boat cold was not widely accepted. Sands (Sands, J., 1878) and Connell (Connell, R., 1887) were unable to find any evidence for the cough. When Dr. Johnson toured the Hebrides in 1773, he ridiculed the story, saying:

The Steward always comes to demand something from them;  
and so they fall a coughing.

MacCulloch visited St. Kilda in 1815, and found no evidence for the boat cold (MacCulloch, J., 1824). However, in 1841, James Wilson, arriving at St. Kilda found several inhabitants suffering from the effects of 'this influenza' which broke out after the arrival of a boat from Harris several days previously (Wilson, James, 1841). In the summer of 1860, Dr. J. E. Morgan arrived at St. Kilda ten days after a visit by Capt. Otter, RN in HMS Porcupine. He stated:

There was a look of extreme depression and lassitude about every person we saw, and the short hacking cough heard on every side, resembled the monotonous and gloomy sounds which issue from the wards of a consumption hospital..... An extreme feeling of prostration as in severe epidemics of ordinary influenza forms a marked feature in the disorder, and is often preceeded by great febrile disturbance. The subvention of haemoptysis likewise is spoken of as an occasional occurrence. (Morgan, J. E., 1862)



The boat cold was described by others who had occasion to visit or stay on the island, such as the Rev. Neil Mackenzie who described three deaths between 1830 and 1846 following the boat cold, and the Rev. H. MacCallum who stayed on the island in 1884. (Mackenzie, Neil, 1830-1846: MacCallum, H., 1907). Dr. MacDonald from Beith visited St. Kilda in 1885, a few days after the visit of the steamer. He said:

Almost every person on the island was suffering from a cough. As a rule the invasion is sudden, but in some cases it is gradual. The patient complains of a feeling of tightness, oppression or soreness in the chest; lassitude; in some cases pains in the back and limbs, with general discomfort and lowness of spirits. In some cases there is marked fever with great prostration. Sooner or later a cough sets in which for the first day or two is dry, then clear viscid expectoration occurs, getting then muco-purulent.

In a few days, these unpleasant symptoms usually disappear, except the cough which in some cases last for weeks.

In mild cases the patient merely suffers from a cough for a few days.... I examined the chest of a few of them, and I could hear the moist rales of bronchial catarrh. (MacDonald, C. R., 1886)

In 1913, a warship, HMS Active was sent to St. Kilda to investigate an outbreak that had been reported to the press by a trawler skipper (Rilatt, W., 1913); the naval medical officer found that 73 out of 79 inhabitants on the island were suffering from an influenza-like illness, with the sudden onset of

severe frontal headache, pain in the eyes, dry burning skin, dryness in the mouth and throat, intense aching of the limbs, with pains in the joints, marked lumbar pain, and irritating, constant dry cough, with complete prostration.

(Hall, R. W. B., 1913)

The following summer, a further attack of influenza followed the arrival of the steamer 'Hebrides'. (Blair, G., 1914: Craig, D., 1920). On that occasion, all but three of the island's inhabitants succumbed (MacLennan, M. E., 1914: Hall, R. W. B., 1913). A further epidemic occurred in 1920. (Shearer, A., 1920)

Epidemics of upper respiratory tract infections are by no means uncommon in island communities following the arrival of strangers, and have been recorded in other island groups, viz. the Norfolk Islands (Coombe, F. E., 1930), Tristan da Cunha (Gane, D. M., 1930), Chatham Islands (Lyne, R. N., 1930: Chudleigh, R. A., 1886) and Tahiti (see Dixon, H. G., 1886).

#### (4.4) NEONATAL TETANUS

Another disease due to an infective agent, of major importance in the Scottish islands during the nineteenth century, was neonatal tetanus. This is described here in some detail as it exemplifies the association of disease with social circumstances. This disease was directly caused by poor sanitary conditions. The state of domestic hygiene existing in some of the islands at this period resulted in the inevitability of such infections,

with the resultant failure of natural increase in some island populations.

Neonatal tetanus was especially prevalent in the Outer Hebrides during the eighteenth and nineteenth centuries. (MacAulay, Dr., 1892 : Ross, John, 1892 : Ferguson, T., 1962). It was also prevalent in Iceland ("Guiklofie"), the Westmann Islands and Faroes (Mitchell, A., 1865) and Greenland ("Mundklemme") (Gibson, George, 1926). In Iceland, there were 4478 infant deaths from tetanus between 1827 and 1837, representing 30% of the total mortality. In the Shetland and Orkney Islands, if the disease occurred, it was not in such numbers as to excite comment (Ferguson, T., 1960). It was however a prominent cause of infant death in Ross & Cromarty and in Inverness-shire (Ferguson, T., 1958 : Bruce, Dr., 1892) and probably in the Islands of Tiree and Barra (Ferguson, T., 1962).

The first description of neonatal tetanus in St. Kilda was by the Rev. Kenneth MacAulay who wrote:

The St. Kilda infants are peculiarly subject to an extraordinary kind of sickness; on the fourth, fifth or sixth night after their birth, many of them give up sucking; on the seventh, their gums are so clenched together, that it is impossible to get anything down their throats. Soon after this symptom appears, they are seized with convulsive fits, and after struggling against excessive torments, till their little strength is exhausted, die generally on the eighth day. I have seen two of them expire after such agonies.

(MacAulay, Kenneth, 1764)



The St. Kilda parochial registers embrace the sixteen year period between 1830 and 1846. There then follows a break of ten years until 1856, when St. Kilda was formally constituted as a registration district. From this time until the island's evacuation in 1930, civil records are therefore available. An examination of these records demonstrates the enormously high neonatal mortality rate prevailing on the island until the first decade of the twentieth century. (Neonatal mortality rate is defined as a number of live-born infants who die under the age of twenty-eight days, per thousand live births).

Table: Neonatal Mortality Rate, St. Kilda, 1830-1930

Date	No. live births	No. of deaths < 28 days.	Neonatal Mortality Rate.
1830-1839	61	35	573.8
1840-1849 (Incomplete data)	5	-	-
1850-1859 (Incomplete data)	11	5	454.5
1860-1869	29	20	689.7
1870-1879	28	14	500.0
1880-1889	27	14	518.5
1890-1899	25	6	240.0
1900-1909	15	2	133.3
1910-1919	17	1	58.8
1920-1929	7	0	0.0

Such a high neonatal mortality hit some families particularly badly, Murray wrote:

On looking through the churchyard, I felt sad at the

sight of so many infant graves. One man, not yet fifty, I should say, pointed the place to me where he buried nine children. He is left with four of a family. Another buried no less than a dozen infants and is left with two. (Murray, George, 1886)

The high mortality from neonatal tetanus was met by passive acceptance by the St. Kildans. Connell records one St. Kildan's reaction:

If its God's will that babies should die, nothing you can do will save them. (Connell, Robert, 1887)

Sands recounts that he heard:

more than one pious gentleman suggest that this distemper was probably a wise provision of Providence for preventing a redundant population on a rock where food was limited. (Sands, J., 1878)

MacCallum records:

I met a gentleman some time ago who knew about this heavy death rate among the children, and strongly asserted that the removal was a providential arrangement to prevent overpopulation. (MacCallum, Hugh, 1907)

So accustomed were the St. Kildans to the death of their infants that they never thought of providing clothes for their babies, until they had passed the danger-period (Kearton, Richard, 1899; Nicol, Thomas, 1931). Some expectant mothers, however, avoided the risk of tetanus by leaving St. Kilda in late pregnancy, to go to Harris for their confinement.

### Historical ideas concerning the aetiology of neonatal tetanus

Many speculative ideas concerning the aetiology of neonatal tetanus were propounded during the nineteenth century, including diet, (Morgan, J., 1862; British Medical Journal 10.7.1926; Otter, H. C., 1871), or improper feeding of the infant (Sands, J., 1878; Ross, John, 1892). Connell described the administration of raw whisky and port-wine to infants a few days old, whilst Ross described the prevalent custom of delaying putting the infant to the breast for two or three days after birth (Connell, Robert, 1887; Ross, John, 1892). Other ideas included birth-trauma with displacement of the cranial bones and damage to the medulla oblongata (British Medical Journal, 31.3.1877; Sims, Marion, 1846; Sims, Marion, 1847; Hartigan, J., 1884). MacDonald blamed the intermarriage of the islanders (MacDonald, C. R., 1886).

The home environment was also incriminated, some writers blaming the smoky atmosphere and bad ventilation (Morgan, John, 1862; Ross, John, 1892; Mitchell, A., 1865), the darkness, damp, or sudden changes in the temperature (Mitchell, A., 1865; British Medical Journal, 10.7.1926). Many blamed umbilical sepsis or phlebitis as the source of neonatal tetanus (MacDonald, C. R., 1886; Gibson, George, 1926). Bad sanitation, and the ubiquitous cow-dung within the houses were frequently considered a source for sepsis (Corfield, W. H., 1871, (1); Corfield, W. H., 1871, (2); Macaulay, Kenneth, 1764; Mitchell, A., 1865). Turner believed that the umbilicus became contaminated from the use of communal infant clothing. Details of the care of the umbilicus soon after birth are not known with certainty. Gibson however found that



in the Hebrides, the umbilicus was covered with a rag that had been held in front of the fire with tongs, and had had a small hole burned in it. In Lewis, the rag was smeared with salt butter. He considered it likely that the rag was anointed with fulmar-oil in St. Kilda. The fulmar-oil had previously been stored in the dried stomach of a gannet for use as a ceremonial unguent for newborn babies.

The filthy environmental conditions imposed by the St. Kilda houses, with their contaminated earth-floors, certainly afforded ample opportunity for the infecting organism. From the constancy of the time of onset of the disease, it seems certain that the infection was acquired by way of the cord at birth, or very soon after. (Ferguson, T., 1958)

Once the minister and the island's nurse had been instructed by Professor G. A. Turner of Glasgow into the care of the newborn infant, and in particular, into the care of the umbilicus, the disease disappeared from St. Kilda (Fiddes, Angus, 1894; Turner, G. A., 1895; Turner, G. A., 1896; British Medical Journal, 1.8.1891).

#### (4.5) THE FRIENDLY SOCIETIES & SICK CLUBS

In England, the Voluntary Provident Associations, of which the most important were the Friendly Societies, were an important source of primary medical care in the nineteenth century. They originated from the need of working men to protect themselves from destitution as a result of sickness; this was at a time when the only alternative source of support

was the Poor Law Administration, which had become harsh to such a degree as to act as a deterrent, in order to save rate-payers' money. It was also associated with the Victorian ethos of 'self-help'.

There is however, evidence that Friendly Societies existed at the end of the seventeenth century. Defoe wrote in his *Essays on Projects*, 1697:

another branch of insurance is by contribution friendly societies; which is, in short, a number of people entering into a mutual compact to help one another in case of any disaster or distress fall upon them.

People who were 'sound in their limbs, and under fifty years of age', were to pay a shilling a quarter, and, in return:

if they were sick, physicians were to treat them, and provide prescriptions without charge. If they broke any bones, surgeons were to take charge and cure them, gratis. Those who were unable to work through injury or any kind of sickness were to be allowed subsistence pay or a pension for life, if their afflictions were permanent. The widows of seamen who died abroad, or who were drowned were to be given pensions during their widowhood.

In the early nineteenth century, it was unusual for Friendly Societies to make arrangements for any sort of medical attendance. The typical local town or village society, set

forth in its rules the sickness and death payments which they offered, but did not mention any free medical attendance among the advantages which membership conferred. However, by the end of the nineteenth century, a doctor's certificate was invariably required before a Friendly Society would pay sickness benefit to its members. In rural areas, where there was no local doctor, it was usual for the minister, or a pair of churchwardens to certify that the society's member was indeed sick (Gosden, P. H., 1961).

The 'medical clubs' were either a function of the Friendly Societies, or were merely a scratch enrolment of members acquired by the doctor himself, for his own convenience and profit. The members in either case paid a small sum, weekly or quarterly, whilst they were well, in order that when they became ill, they could claim medical attention and drugs, free of charge. The idea of sick clubs was made attractive to the labourer, by emphasising the provision of benefits given by the club as a means of averting the degradation of pauperism. According to Hodgkinson, it was an attempt to ally materialism with idealism, to solve the ratepayers' pocket, and to maintain the independence of the poor (Hodgkinson, R., 1967). By the end of the eighteenth century, there were several thousand sick-clubs and Friendly Societies throughout Britain (Gosden, P. H., 1973).

#### FRIENDLY SOCIETIES IN THE SCOTTISH ISLANDS

In Scotland, registered Friendly Societies were much less widely established in proportion to the population, than in England (Stanley, E. S., 1874). This was because the Scottish



agricultural worker was employed on a yearly basis, so that even when sickness arose, the employer had to maintain the labourer and continue paying his wages. This avoided the need for a sick-club in most instances.

Scottish societies were looked on largely as charitable organisations, to which men did not turn for aid until their own resources were exhausted. New applicants for membership had to be in good health at the time of joining, and would not qualify for benefit until they had paid contributions for a minimum stipulated period - sometimes as long as five years. The usual procedure was to offer full sick pay for about three months, followed by half-pay for a further three months.

There are few records of the function of Friendly Societies as conveyors of medical care in the Scottish Islands, and evidence for their existence and subsequent fate is somewhat piecemeal.

In Orkney, three Friendly Societies existed in Kirkwall, in 1841, which afforded:

aid to widows, orphans, and in the case of one at least, to sick or reduced members. There are also two subscription societies for the relief of the indigent and destitute sick. (Logie, W., 1841)

One of these societies, the Relief Society of Kirkwall, had been founded in 1800, whilst the Benevolent Society of Orkney was founded in 1831 (Cormack, A., 1971). There had also been a Friendly Society in Stromness, but it had collapsed by 1841

(Learmonth, P., 1841)

In Kirkwall, a Masonic Lodge had been founded in 1736. To some degree it was a charitable institution, giving sums of money to be spent on the maintenance and provision of drugs for the sick. Carson writes, circa. 1763:

The brethren, taking into consideration the calamitous and miserable state of numbers of poor people in this place, who are labouring under severe and different distempers and disorders, they therefore order their treasurer to pay the further sum of three guineas to Andrew Liddell, Kirk Treasurer, to be by him disbursed amongst these necessitous poor for buying maintenance and medicines necessary for them as the Session and he shall require. (Flett, James, 1976)

In 1779, a widow, Janet Spence, applied to the Kirkwall Freemasons as follows:

That your petitioner has applied to the several gentlemen professing surgery and physick in Kirkwall, and Dr. Thomas Balfour of Elwick who recommended the petitioner to proceed to the Infirmary at Edinburgh for her relief, but from the petitioner's indigent circumstances and inability to work, she is rendered unable to defray the expense of going to Edinburgh. She is therefore laid under the necessity of applying to the humane and benevolent for supply to prosecute her resolution of getting relief. (Flett, James, 1976)

A sum of money was duly given her for that purpose.

In Stornoway in the Western Isles, two Friendly Societies were in existence in 1841, of which one had been founded in 1769, the other in 1801. There was also a masonic lodge, which had been founded in 1767. These institutions gave weekly benefits to sick members, but it is uncertain as to whether medical attendance was given (Cameron, J., 1841).

In 1810, in Shetland, a 'Fisherman's Fund' had been established for 'the relief of widows, orphans and infirm individuals' (Edmonston, L., 1841). There were branches of the Fisherman's Fund in most parishes in Shetland. It was managed by twelve general directors, one representing each parish, and by parochial committees. In the parish of Bressay, with a population of 1699, there were 46 contributors. The enrolment fee was two shillings, and there was a similar annual subscription (Bryden, J., 1841). Twenty-four people were receiving relief from the fund, including eighteen widows, who each received 14/-, and six 'decayed members', receiving on average 5/8d. (Hamilton, Z. M., 1841; Gardner, J., 1841)

In 1797, the 'Lerwick United Trades Society' was founded:

The institution had for its object the relief of their widows and of infirm and unfortunate artisans. To extend its benefit, however, as much as possible, a permission to enter was afterwards given to every person, under forty years of age, who chose to become a member; and it was resolved that the fund should not be touched before the expiration of a certain specified period of time. As the fund increased, the entry-money was raised; and the beneficial effects



of the institution have been sensibly felt, not only in ameliorating their temporal concerns, but in improving their moral character. (Edmonston, A., 1809)

Forty years later however, the finances of this society, with its 200 members, were in a somewhat parlous state. The Secretary of the society wrote:

The society is not in a very flourishing condition. No additional members have entered for several years past. Many of the members, have, within the same period, ceased to contribute, and, consequently, lost all interest in the funds. The society was formed originally on unsound principles. While the members were young, too large allowances were made, - these have since been much reduced. The calculations were not originally submitted to an accountant, and hence has arisen the reduction of the annuities. The society has now been put on a better footing, the calculations having been submitted to an accountant in 1837 or 1838; but it has not since been well supported. Instances of the benefits arising from this society have come within my own knowledge. The falling off in the number of contributors, I believe to be partly owing to the severity of the times, and partly also to the dissatisfaction felt when the society, from the cause to which I have already adverted, were obliged to redeem their annuities. (Nicol, Alexander, 1844)

THE SIGNIFICANCE OF THE FRIENDLY SOCIETIES IN THE SCOTTISH ISLANDS

It is uncertain what impact the Friendly Society movement had in the Scottish Islands in the nineteenth century in respect of medical services. The Royal Commission on Friendly and Benefit Societies, 1874, sought details of the existence of Friendly Societies in the north of Scotland, from the Chief Constable, and Inspector of Poor in Wick. Apparently, apart from a peripatetic agent of the Royal Liver Society, there was, in 1874, nothing that represented a Friendly Society in the region. The Inspector of Poor recalled that a 'number of societies' had existed some 40 or 50 years previously. It is likely therefore that the majority, if not all, of the Friendly Societies in the Scottish Islands, had fallen into dissolution by that time.

The proportion of the population who subscribed to Friendly Societies was, in any event, always much greater in the towns. In England and Wales, Gosden (1973), calculated that more than 10% of the population of the industrial counties, such as Lancashire, West Riding of Yorkshire, Cornwall, Leicestershire, Nottinghamshire etc., were enrolled with Friendly Societies, whereas in the rural counties of Berkshire, Buckinghamshire, Cambridgeshire, Dorset and Kent, less than 5% of the population was enrolled. (Gosden, P. H., 1973)

Marshall, examining the development of Friendly Societies in Nottinghamshire, showed that the movement commenced in the towns and industrial regions, only later diffusing into the country regions. In the industrial areas, working men were

better able to afford the cost of Friendly Society membership, and may have felt greater need to make provision against sickness. (Marshall, J. D., 1960). In the one parish in the Shetland Isles where data is available for 1841 - Bressay - only 2.7% of the population has enrolled with a Friendly Society.

The role of the Friendly Society was primarily that of obviating destitution and the call on the stigmatising relief of the Poor Law administration. Its provision of medical care was a secondary benefit, which did not apply to all societies, and, even when it did exist, was a phenomenon largely of the latter half of the nineteenth century. It is unlikely that the size of population within the islands was large enough to justify the provision of a medical officer. There was, in any case, great opposition from the medical profession, to Friendly Societies (Moorman, W., 1868; Governmental Reports, 3-6), who felt abused by them.

Lack of actuarial knowledge, and the overambitious payment of relief, made many societies financially unstable. Too many of those who joined societies as young men, found that by the time they reached middle-age, their society had broken up through lack of funds (Annual Reports of Royal Commissions on Friendly Societies, 1871-1874). They had thus contributed during the years when they were unlikely to make any claim for benefit, only to find that when they most needed the help for which they had paid, there was no society to provide it.



Once a man passed the age of forty, it was virtually impossible for him to join another society, since they generally refused to admit members who were unlikely to be able to contribute for a number of years before requiring benefit. The main cause of financial difficulty was simply a tendency to offer benefits larger than the contributions could support, even though contemporary accounts of the collapse of societies often set out accusations of mismanagement.

#### MEDICAL ASSOCIATIONS & SICK-CLUBS

Sick-clubs, in the form of a scratch enrolment of patients by individual doctors, for the provision of their income, were present in the islands from the seventeenth century onwards, when Dr. M. Mackaile, in Kirkwall, was supported by subscriptions from the landowners. Without such financial backing, it is unlikely that the islands could have been served by qualified doctors, who were more likely to have sought private practice in more lucrative areas. Dr. Hugh Sutherland, who practised in Kirkwall from c. 1730, 'depended almost entirely upon the voluntary subscriptions of the more-or-less well-to-do folk, who were his 'encouragers', who received free treatment from him in return for an annual subscription of a guinea or two' (Graeme, P. N. S., 1954).

Graeme quotes a committee of the Kirkwall Kirk Session of 1750:

It is true that most of the Gentlemen, both in Town and Country, subscribe a certain annual sum for a physicians encouragement among them, and of these, five or six of the clergy sign for a guinea or ten

shillings. But it's at the same time to be observed that this Physician (who is as remarkable for his good nature and modesty as for his qualifications in this business) for this subscription money is tied down by himself and servants in this business to visit and attend the Subscribers and their families when sickly and tender without any other reward or gratuity but only bare payment for his medicines, upon which, with certainty, it may be said, he has not twelve per cent profit. And even this subscription and payment of medicines (far less anything else) his modesty does not allow him to demand from his encouragers in Kirkwall; that's done for him, and it's believed it's his case with those in the Country, and he waits with great patience till they are inclined to pay him. And it's also observable that for this subscription money, this physician by himself or servants, upon any emergency, waits on his encouragers, some whereof live from Kirkwall, the place of his residence, thirty miles by water, others sixteen miles by land, and never misses, either himself or most qualified assistant, when called for on occasion of sickness, to go and attend his patients. (Graeme, P. N. S., 1954).

Whereas the Friendly Societies fulfilled an uncertain role in the Scottish Islands in the nineteenth century, the development and presence of Medical Associations or Clubs, played a vital part in medical provision. In the smaller islands in Orkney,

such as Eday, Papa Westray and North Ronaldsay, the Medical Associations campaigned to attract doctors to the islands. In the larger islands, where resident doctors predated the medical associations, they helped to retain them. (Taylor, R., 1976). While the medical Associations were in theory open to all, in practice they tended to be joined and managed by tenants and small farmers, the larger landowners preferring private medical care.

In the island of Papa Westray, the Medical Association was formed after a public meeting in 1897. During the meeting, the following resolutions were carried unanimously:

- (1) That a Medical Association be formed for the purpose of trying to secure the services of a resident doctor on the island.
- (2) That all above 14 years of age be eligible as members of the Association.
- (3) That all subscriptions be voluntary and that each person be expected to contribute according to his or her circumstances.
- (4) That a committee be appointed to endeavour to carry out the wishes of the members.

Three days later, the Medical Association had a membership of 128, every home on the island being represented, and was promised annual subscriptions totally £34.6.-d. A promise of an annual contribution of £20 from the Parish Council, enabled the Medical Association to advertise for a qualified doctor at a salary of £50 per annum.



Medical Clubs existed in the islands into the twentieth century. In the Western Isles, the North Harris Medical Club had been formed by the proprietor, Sir Samual Scott, whose crofters paid 5/- annually, and those cottars were expected to pay 2/6d. The subscription also covered medical attendance on the subscribers' dependents. In return, the proprietor guaranteed the salary of a medical officer, and thus secured the services of a resident doctor for the district (Thompson, F., 1968). Similar medical clubs existed in the other islands of the Hebrides. The Medical Club of North Uist persisted until after the First World War.

The Medical Clubs must therefore be seen as a supremely important method, not only of paying for a doctor, but of attracting a doctor to these islands in the first place.

#### (4.6) THE POOR LAW MEDICAL SERVICE IN THE SCOTTISH ISLANDS

The first watershed in the development of general practice in the Scottish Islands, came with the reform of the Poor Laws, and in particular, with the Poor Law Amendment Act of 1845 (Scotland). The old, unenlightened legislation was swept away, and replaced by a system which acknowledged the central importance of disease and the lack of medical care as one major factor in the need for poor-relief. It was hoped that the provision of medical care would reduce the financial burden of maintaining the poor.

The provision of medical care in the Highlands and Islands

in the middle of the century was totally inadequate - largely as a result of the gross deficiency in the number of doctors residing in the region. Although reform of the Poor Laws was in many respects an inadequate method of increasing the level of medical care in the islands, there is good evidence to show that it attracted an increased number of doctors to the islands.

#### (4.7) BACKGROUND: THE "OLD" SCOTTISH POOR LAWS

The Old Scottish Poor Laws were a collection of enactments designed to reduce the social problems caused by groups of tramps and beggars. Their measures were harsh and unenlightened. For example, the Statute of Perth, 1424, directed that nobody was to beg if they were capable of supporting themselves, under a penalty of being branded on the cheeks, and banished. An Act of 1449 decreed that beggars were to be punished as follows: 'their ears are to be nailed to the trone, or to any other tree, and then cut off, and themselves banished from the county'. If they returned, they were to be hanged.

By the sixteenth century however, a distinction began to be drawn between the 'idle poor' and the 'sick poor'. Harsh measures continued to be inflicted on the idle poor, who were not allowed to beg. However, 'cruiked folk, blind folk, impotent folk, and weak folk' were to be tholed to beg, by an Act of James IV (1503).

The legitimate way of dealing with the begging poor had

for long been to oblige them to wear tokens, obtainable from the heritors and kirk-sessions, and confine their begging to their home parishes, a procedure which was effective in reducing begging.

In 1579, an Act was passed for "the punishment of the strong and idle beggars, and the relief of the poor and impotent". All strong and idle beggars between the ages of fourteen and seventy were to be apprehended and tried, and if convicted, scourged and burned through the ear with a hot iron, unless a person of means took the offender into his service for a year. The Act defined these beggars as "all idle persons going about, using subtle crafts and unlawful plays, as juggleirs, fast and loose, and such others; the idle people calling themselves Egyptians, or any feigning themselves to have knowledge of prohecy, charming, or other abused sciences, by which they persuade people they can tell fortunes, and such other fantastical imaginations ....."

Magistrates were to prepare a register of the "aged, pure, impotent and decayed persons, born within the parish, or having their most common resort therein, and who, of necessity must live by alms". The magistrates were empowered to tax the whole of the inhabitants within the parish, according to their means.

In an Act of 1661, the Scottish Parliament directed Justices of the Peace to draw up in every parish, a list of the "poor, aged, sick, lame, and impotent inhabitants of the said parish, who of themselves have not to maintain them, nor



are able to work for their living, as well as orphans and other poor children, within the parish, left destitute of all help".

An unusual method of relieving the poor existed in Shetland, known as 'quartering'. According to the minister for Unst,:-

The number of poor dependent on alms is generally from 25 to 30. For their support, the parish is divided into fourteen parts, called 'quarters', through which the whole poor are dispersed. To each of these a proportional number are assigned. In every family within each quarter, the poor belonging to it receive their board for as many days as the family occupies merks of land; and after proceeding in this manner throughout the whole families in that quarter, return upon the first again. When any person, unable to support himself applies "to be put on the quarters" (as it is called), the minister gives notice of the application from the pulpit; and if nothing be urged against his character or circumstances, he immediately obtains his request. The weekly contributions made at the church, together with the more liberal one at the celebration of the sacrament, are expended in the purchase of clothes and other necessaries for the poor, who are maintained upon the quarters. None are suffered to go about begging.

(Mouat, T., & Barclay, J., 1797)

It was the function of the rancelman to see that a register of the poor of the parish was maintained, and that no begging occurred. (Gifford, Thomas, 1786: Gifford, Thomas, 1725)

This system of quartering the poor was a system peculiar to Shetland. It persisted until the 1860's when the Board of Supervision stated that 'the ancient and primitive mode of providing for the poor, still maintained in Shetland, had become ineffectual or precarious'. (Board of Supervision, 1861)

By the end of the eighteenth century, the Church was experiencing considerable difficulty in affording reasonable assistance for the poor (Graham, H. G., 1899). The funds available for the purpose were drawn from various sources, such as church collections, fees for the use of the hearse or parish pall, rents from church seats, bequests, and the proceeds of fines imposed by the Church for breaches of chastity. At this time, assessments for the relief of the poor prevailed in ninety-two, mainly urban parishes, out of the 878 parishes in Scotland. The practice of levying compulsory assessments progressively increased from economic necessity. In 1820, one person in forty in Scotland was a pauper. The total sum raised for the relief of the poor was £114,196, of which £64,477 came from church collections and other voluntary sources, and £49,719 from compulsory assessments. The average outlay on each pauper was £2.11.8d. per annum.

An analysis of the returns made by parish ministers of 26 or the 39 parishes in the Scottish Islands, described in the Old Statistical Account, shows that 2.5% of the population were paupers in 1797. In 1842, when the New Statistical Account was published, the proportion of the population receiving poor relief from the parish, was unchanged. However, in the Western Isles, disastrous social changes related to the clearances, and

the development of the crofting system, combined with difficulties with the kelp industry and the potato famine had given rise to destitution on such a scale that little in the way of funds was available to support the poor. For example, the Rev. Roderick Maclean, the minister for South Uist stated:

There are no church collections, the people being so poor that nothing can be collected in that way for religious and charitable objects. Attempts were made, several years ago, in better times, to have regular church collections for the poor, but they proved abortive. (Maclean, Roderick, 1841)

In Barra:

Owing to the poverty of the people, no collections are made for charitable persons; neither are there any collections in the church. (Nicholson, Alexander, 1841)

In some parishes, such as North Uist, the poor were relieved to some extent by donations from the proprietor (Macrae, Finlay, 1841). In Kilmuir, Skye, begging was their sole means of assistance, whereas in Sleat, Skye:

The kirk-session came to the resolution of having no stated collection. The poor are now supported by the charity of their neighbours. All the rent-payers consider it a duty to appropriate a certain proportion of their potatoes and corn for the poor, and in this way, their wants have hitherto been supplied. When a case of extraordinary distress occurs, an occasional collection is made for its



relief. This plan for the support of the poor may answer well in good seasons. But should a bad season come and the crops fail, similar destitution to what took place in 1837 must recur. (Macivor, Alexander, 1841)

#### (4.8) THE NEW SCOTTISH POOR LAW

In January, 1843, a Royal Commission was appointed to inquire into the working of the old poor laws in Scotland. The Commission reported in 1844. In conducting their enquiry, the commissioners examined either the minister or session-clerk in every parish, together with other witnesses whom they believed to represent a cross-section of the Scottish community. The commissioners personally visited the homes of the paupers in each district, "to ascertain the condition of the inmates, and inquire into their means of subsistence". The notes they made of these visits were appended to their report. However, they insisted that the condition of the poor described in these notes should be judged with reference to the condition of the working classes in the locality for "if this is not attended to, the notes, particularly those relating to cases in the Highlands & Islands, will convey an exaggerated impression of the discomfort of the poor"!!!

The Commissioners found that the majority source of funds for relieving the poor had been the church collections.

"Throughout the Northern and Western Highlands, and nearly the whole of the parishes in the synods of Shetland, Orkney, Sutherland and Caithness, Ross, Glenelg, Argyle and Moray,

comprising in extent almost one half of Scotland, the church collections with such small sums as may accrue to the kirk-sessions from fees, fines etc., aided in a few instances by occasional donations from heritors or casual visitors, form the only public fund to which the poor can look for relief".

Where these sources proved inadequate for relieving the poor, the obvious recourse appeared to the Poor Law Commissioners to be "raising the required sum by an assessment regularly imposed and leviable from the parties liable by law to contribute". The Commissioners realised however, that "a strong feeling in opposition to a legal assessment has existed in Scotland, and the clergy in general, have strenuously exerted their influence to prevent recourse being had to any compulsory mode of raising funds for the relief of the poor". The number of legally assessed parishes had been steadily increasing, and hostility to assessment was gradually diminishing, especially in urban areas.

The Commissioners reported that there was very little provision for medical relief in Scotland, which appeared to have been left entirely to private charity. They felt however that the poor did not in general suffer from the lack of medical aid, since, in the towns there existed dispensaries supported by voluntary contributions. These supplied the medical needs of the poor, and the medical officers gave their services free of charge. In rural areas, the sick poor were usually served gratuitously by medical practitioners who, in general, also provided them with medicines. However, the doctors in rural

areas were dissatisfied with this situation, for although they were prepared to give their services freely, they resented having themselves to pay for medicines.

The Commissioners recommended that the managers of the poor in each parish should have a discretionary power to provide medical relief in all reasonable cases. They considered that granting speedy, efficient medical aid would be to the benefit of the parish "as temporary sickness may else grow into a permanent malady, and become an occasion of expense to, and a burden on, the parish funds". They wanted medical relief to comprise "the supply of nutritious diets, wine or cordials, where deemed necessary for the proper treatment of the case; and also, the vaccination of children, when necessary". They proposed that medical relief "should be supplied more extensively to the poor, and that this should form a proper charge upon the poor-funds". They further recommended "that in those parishes in which it is found expedient to build poorhouses, the managers of the poor should, in connection with the poorhouse, provide accommodation for dispensaries for the poor." In respect of insane paupers, they recommended that "where an insane person is in receipt of parochial relief, it shall be imperative on the managers of the poor to send such insane person forthwith to a lunatic asylum, unless authorised by the Board of Supervision to treat him otherwise.

The published Report of the Poor Law Inquiry Commission (1844), did not however receive the unanimous support of the seven Commissioners. Mr. Edward Thistleton refused to sign



the report, dissenting from their conclusions. He believed that these recommendations were totally inadequate. The main problem of caring for the poor was that of chronic shortage of funds. He believed that nothing short of the compulsory assessment of parishes would provide adequate financial resources. He felt that it should be made compulsory for the poor law managers in every parish to provide medical attention for the poor. He also felt that leaving individual parishes to decide the terms of service for the medical profession was doomed to failure, and would result in the doctors continuing to treat the poor gratuitously.

#### (4.9) THE POOR LAW AMENDMENT ACT, 1845.

Following the Commissioners' Report in 1844, a Bill was introduced in 1845 for 'the Amendment and better Administration of the Laws relating to the Relief of the Poor in Scotland', by the Lord Advocate, Duncan MacNeill. Mr. Edward Thistleton's dissent from the report was disregarded, little weight being attached to it (Nicholls, George, 1856). The Lord Advocate, in introducing this Bill believed it conferred a number of advantages on the poor. It focussed the problem of the poor in the public gaze, and assisted in the speedy rectification of injustices. It encouraged poor funds to be used for medical purposes, and for children's education. It required that the insane poor be sent to lunatic asylums, in all but exceptional cases. It allowed parishes to levy compulsory assessments to finance these projects, and for the building of poorhouses, with their attached dispensaries.

The development of medical services in the Scottish Islands was based on just three sections of this law:

Section 66: And be it enacted that in all cases in which Poorhouses shall be erected or enlarged or altered, under the Provisions of this Act, there shall be proper and sufficient arrangements made for dispensing and supplying medicines to the sick poor, under such regulations as the Parochial Board shall make, and the Board of Supervision shall approve; and that there shall be provided by the Parochial Board proper medical attendance for the inmates of every such poorhouse, and for the purpose, it shall be lawful for the Parochial Board to nominate and appoint a properly qualified medical man, who shall give regular attendance at such poorhouse, and to fix a reasonable remuneration to be paid to him by such Parochial Board; provided always that if it shall appear to the Board of Supervision that such medical man is unfit or incompetent or neglects his duty, it shall be lawful for the Board of Supervision to suspend or remove such medical man from his appointment and attendance.

Section 67: And be it enacted that it shall be lawful for the Parochial Board in any parish or combination to contribute annually or otherwise, such sums of money as to them may seem reasonable and expedient, from the funds raised for the relief of the poor, to any public infirmary, dispensary or lying-in hospital, or to any lunatic asylum or asylum for the blind or deaf and dumb.

Section 69: And be it enacted that in every parish or combination, it shall and may be lawful for the Parochial

Board, and they are hereby required out of the funds raised for the relief of the poor, to provide for medicines, medical attendance, nutritious diet, cordials, and clothing for such poor, in such manner, and to such extent as may seem equitable and expedient; and it shall be lawful for the Parochial Board to make provision for the education of poor children who are themselves or whose parents are objects of parochial relief.

#### The Medical Relief Grant, 1848

As part of Sir Robert Peel's scheme to relieve local rates, Parliament in 1848, elected to provide a sum of £10,000 annually "to improve the supply of medical relief to the poor in Scotland, and at the same time, to relieve the ratepayers of a part of the increased burden which a due performance of their statutory obligations to provide adequate medical relief for the poor would imply". The change from the Old Poor Laws to the new, required parishes to be educated to the fact that the provision of an adequate medical service for the poor and aged was now a duty, on which sufficient funds had to be spent.

The Board of Supervision submitted on February 2nd, 1848, a scheme for distributing the Medical Relief Grant. An essential condition for a parish to receive a share of the Medical Relief Grant was that each parish should spend a fixed minimum sum on medical relief annually. Without some such condition, it was believed that there might be a temptation to devote the Medical Relief Grant more to the reduction of existing charges, than to the improvement of the medical service.



In fixing the 'minimum expenditure' for each parish, the Board of Supervision took population-density as the basis of their calculations. The parishes of Scotland were grouped into seven classes according to population density, and a minimum expenditure on medical relief per head of population was fixed for each class. The scheme is shown in the following table:

Class	Population per square mile, from 1841 census.	Minimum expenditure per capita necessary for qualification for Medical Relief Grant.
I	1-25	2.00d.
II	26-50	1.94d.
III	51-100	1.88d.
IV	101-200	1.81d.
V	201-400	1.75d.
VI	401-1,000	1.69d.
VII	1,000-plus	1.63d.

On production of the necessary vouchers to show that the 'minimum expenditure' had indeed been spent, each parish that agreed to partake in the Medical Relief Grant received from the grant a sum equal to half of that expenditure. The scheme therefore envisaged that all the parishes in Scotland would spend £20,000 in order to qualify for an additional Government grant of £10,000.

In 1846, the intention of Parliament seems to have been

to give to Scotland the same proportion of medical relief as to England and Ireland. In England and Ireland, medical officers were necessarily appointed under the statutory rules and orders of their respective Central Departments, but in Scotland, the Central Department possessed no similar powers of issuing orders, and, except in the case of the poorhouses, there was no statutory duty to appoint a medical officer. In Scotland, a different method of distributing the grant was adopted, one result of this difference being that the grant became fixed at £10,000 annually, instead of growing, as it did in England and Ireland.

In reply to a question on April 22nd, 1879, the Chancellor of the Exchequer stated that the Treasury were willing to sanction an increased grant 'as soon as the appointment of medical officers is made compulsory in Scotland, and placed on the same footing as in England' (Hansard, 1879). In 1882, Parliament voted an additional sum of £10,000, thereby raising the grant to £20,000 annually.

The statutes regarding the Medical Relief Grant left it to the discretion of individual parochial Boards to provide such outdoor medical services as they thought fit. This led to administrative difficulties since no authority was vested in the Central Department to frame rules to guide Parochial Boards in discharging their duties. In cases where a Parochial Board refused or neglected to do what the statute required, the Board of Supervision had power to apply to the Court of Session for an Order, and, on the receipt of a complaint by a pauper,

to declare that the medical relief granted in a particular case was inadequate. These were the only powers of enforcing an adequate provision of outdoor medical relief, possessed by the Central Department.

The institution of the Medical Relief Grant in 1848 afforded an opportunity of supplementing the provisions of the statute by an agreement between the local bodies and the Central Department. Certain conditions were to be observed on the one hand, and a monetary obligation was incurred on the other. In addition to the imposition of a 'minimum expenditure', certain administrative rules were drawn up. These rules received minor modifications, but those in force at the end of the century, were very similar to those originally established.

#### (4.10) HOSTILITY TO THE NEW POOR LAW

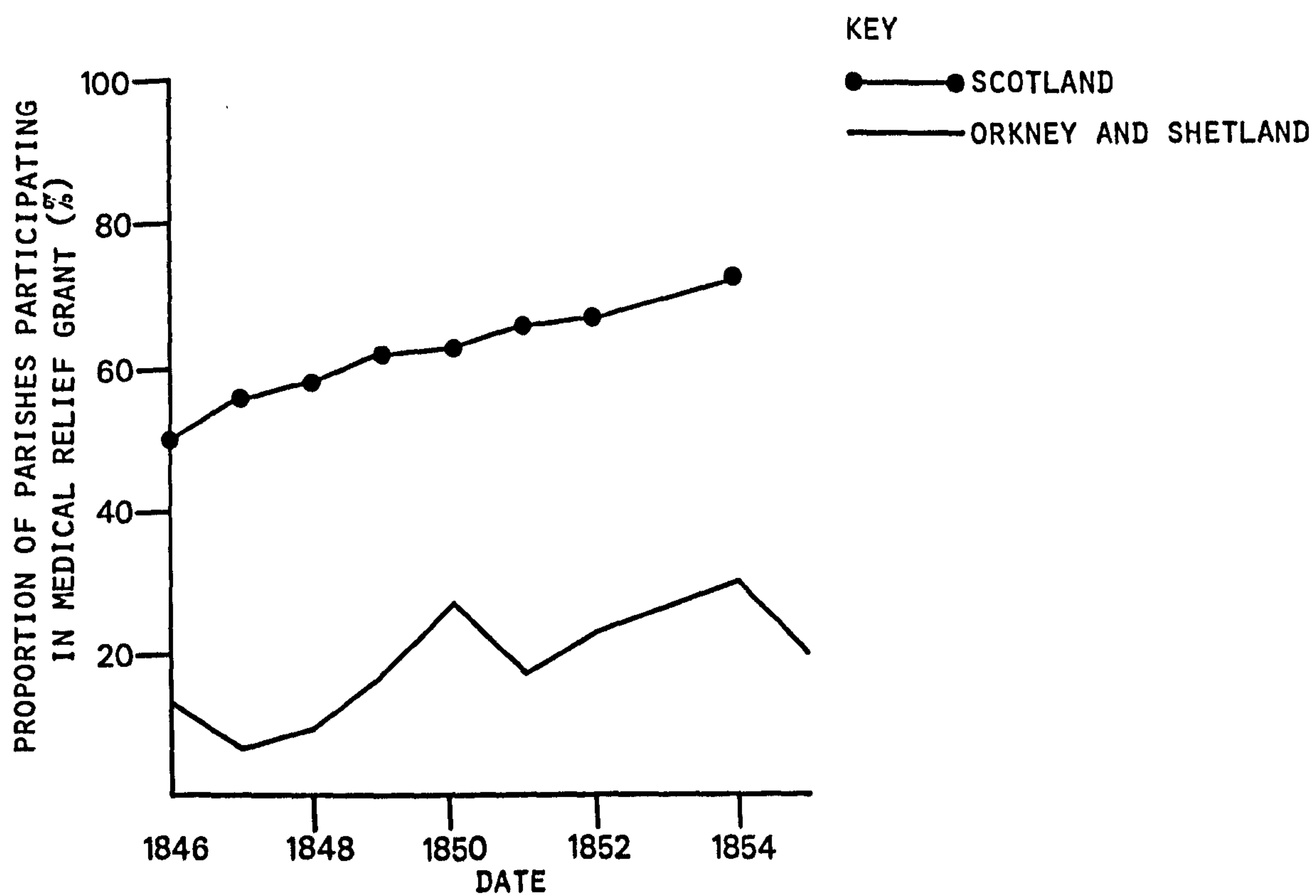
It soon became apparent that the only way that most parishes in Scotland could provide for the services of a medical practitioner and hence partake in the Medical Relief Grant, was by obtaining funds via a compulsory assessment, rather than by relying on voluntary contributions. The number of parishes in which a medical practitioner resided and worked strongly reflected the parishes that partook of the Medical Relief Grant.

In the years immediately following the introduction of the Poor Law Amendment Act, and the introduction of the Medical Relief Grant, very few parishes in Orkney and Shetland raised rates to pay for medical services, compared with the rest of Scotland. Accordingly, very few parishes in Orkney & Shetland participated in the terms of the Medical Relief Grant. This is shown in the following graphs:-





GRAPH: TO SHOW THE PERCENTAGE OF PARISHES ASSESSED UNDER THE POOR LAW AMENDMENT ACT.



GRAPH: TO SHOW PERCENTAGES OF PARISHES PARTICIPATING IN MEDICAL RELIEF GRANT (1846-1855)

Section 34 of the Poor Law Amendment Act (1845) permitted three methods of raising a compulsory assessment. The majority of island parochial boards, which did eventually levy a compulsory assessment, chose the method whereby half the total to be raised was levied from the land-owners, whilst the other half was raised from their tenants in proportion to the rent they paid. Not surprisingly, there was considerable hostility in Orkney and Shetland to the imposition of compulsory assessments, particularly from the clergy and landowners. For example, Captain William Balfour, who owned large tracts of land in Orkney stated:

In the parish where I reside, the poor were well off for medical relief. I should certainly think it undesirable to have an assessment for the aged and infirm. I consider the people very indolent, and very inclined to live upon the labour of others. I think there is a strong spirit of independence among them in earlier life, but at a later period of life, they rest upon the labour of others, sooner than in any other district with which I am acquainted. I have not found that the absence of an assessment has nourished a spirit of independence among them at a late period of life. (Balfour, William, 1844)

Arthur Gifford, who was an extensive proprietor in Shetland, stated:

I have had extensive opportunities of becoming acquainted with the condition, not only of the poor, but of the labouring classes in the island, generally ..... From what I have seen of the



poor, both in England & Scotland and from what I have read on the subject, I consider that our poor are as well off as in any part of Scotland. The allowances made by the kirk-session are of course, in themselves utterly inadequate to maintain them. Their principal means of support are derived from the kindness of relatives and the aid of their neighbours ..... I do not see how the poor could be well supplied in any other mode than they are at present. An alteration would, in my opinion, excite indefinite expectations, and would tend to excite jealousies, and break up that kindly feeling which now exists amongst all classes here. I should most decidedly object to an assessment for the aged and infirm ..... (Gifford, Arthur, 1844)

Similar views were held by Captain Cameron Mouat, the proprietor of Unst and Bressay (Mouat, Cameron, 1844) and James Baikie, a banker and also a landowner in St. Ola on Mainland, Orkney (Baikie, James, 1844). The parish ministers of Sandsting & Aithsting, Sandwick, Quarff & Burra, Walls (27) and many other parishes in Orkney & Shetland were opposed to assessments to provide for both the able-bodied poor and also for the relief of the aged and sick. (Bryden, John, 1844: Stark, Alexander, 1844: Gardener, James, 1844: Ranni, John, 1844)

The landowners themselves were capable of affording and obtaining private medical treatment from the few existing medical practitioners in the region, and did not feel justified

in themselves contributing towards a considerable proportion of the sum required to finance a medical service for the rest of the community. There was, after all, a considerable disparity in the wealth of the few landowners, and the mass of the people, owing to the virtual absence of an effective middle class. Even twenty years later, in 1874, three quarters of the counties of Orkney and Shetland were owned by 22 and 32 landowners respectively (McEwen, John, 1981). In 1843, the Earl of Zetland's Orkney estates were rented out as follows (Hutton, Thomas, 1844):

Tenants under £5	232
£5 and under £10	149
£10 and under £20	65
£20 and under £30	13
£30 and under £40	5
£40 and under £50	-
£50 and under £60	3
£60 and under £70	-
£70 and under £80	1
£80 and under £90	2
£90 and under £100	-
£100 and under £151	2

---

Total number of tenants .... 472

It follows that the Earl of Zetland was assessed for the same sum as were 472 of his tenants in Orkney, altogether.

#### (4.11) THE STATE OF THE MEDICAL SERVICES

The state of medical services in the Scottish Islands in the middle of the nineteenth century was beginning to cause some national concern. In 1850, the Royal College of Physicians of Edinburgh, under the chairmanship of Dr. John Coldstream, set about surveying the state of the service as it then existed (Royal College of Physicians, 1852). Their enquiry was directed at discovering the number of doctors practising in the islands, and the deficiency in their number that was believed to exist, together with the effects of this deficiency on the population.

The committee sent a questionnaire to all the parish ministers in the counties of Argyll, Bute, Inverness-shire, Ross, Sutherland, Caithness, Orkney and Shetland. Three hundred and twenty questionnaires were sent out, and two hundred replies, referring to 155 parishes in these counties were received. These represented 32 out of a total of 33 parishes in Orkney and Shetland, and from all except one in the islands of Skye and the Outer Hebrides.

The committee found that of the 155 parishes reported upon, 62 were adequately supplied with medical practitioners, 52 were partially supplied, and 41 were never visited by any medical practitioner. These latter 41 parishes could be considered as being destitute of medical aid. In Shetland, for example, it was found that the only medical practitioners resided in either Lerwick or the isle of Unst. All the other parishes were without medical assistance. In Orkney, there were



doctors in Kirkwall and Stromness in Mainland, in South Ronaldsay in the south isles, but in the north isles, only Sanday and Stronsay had resident doctors. An island such as Westray, cut off from the other islands by strong tidal races, and having a population of over 2,000 was without qualified medical services. The Outer Hebrides, with a population of 36,000, had only seven doctors.

The majority of the parishes that did not have a resident doctor were to be found in the Scottish islands.

The location of the doctors in these island groups in 1851 is shown in the following table:

Table: To show distribution of doctors in 1851 in the islands

Western Isles

Donald Nicholson, MD	Barra
David McGillivray, Surgeon	Barra
Roderick Maclean, MD	South Uist
John Macdonald, Surgeon	North Uist
Robert Clark, Surgeon	Harris
Roderick Millar, Surgeon	Stornoway
Charles MacRae, MD	Stornoway

Shetland

John Cowie, MD	Lerwick
Basil Spence, MD	Unst
James Smith, MD	Unst
Laurence Edmonstone, MD	Unst

Orkney

Alex R. Duguid, MD	Kirkwall
John Bremner, Surgeon	Kirkwall
James S. S. Logie, MD & Surgeon	Kirkwall
John M. Hamilton, Surgeon	Stromness
George Garson, Surgeon	Stromness
William Ballenden, MD	Stromness
John Smith, MD & Surgeon	South Ronaldsay
P. Wood, MD	Sanday
William Mackintosh	Stronsay

This deficiency of qualified medical practitioners was bitterly resented by the parish ministers. The minister for Walls (Sheltand) wrote in his reply to the questionnaire:

There is a kind of despair, or rather apathy, among the people, as if the hopeless condition in which they are left in regard to competent medical aid, were necessarily their lot. (Nichol, Archibald, 1851)

The minister for the parish of Cross in the Western Isles wrote:

The people complain very much, as well they may, of inadequacy in the supply of medical aid. Distance, poverty and disappointments press grievously upon them. (MacRae, D., 1851)

The minister of North Ronaldsay in Orkney wrote:

There exists complaint. When the case is critical, the doctor must be sent for. They have to cross the boisterous firth separating this island from Sanday, in a small open boat. At certain seasons, a fortnight or thereabouts may elapse before their attention can be made with safety. In some instances, death has ensued before his arrival. (Keillor, John, 1851)

The minister of Papa Westray declared:

The difficulty of procuring medical aid is felt by all the inhabitants of the island, and is a very serious hardship. During a stay of seven years on this island, I have known many cases where protracted

suffering might have been alleviated had proper advice been at hand, and I may venture to add that I know one instance at least, in which, in all probability, life might have been saved. (Logie, Rev., 1851)

The problems in supplying medical aid to the islanders was exacerbated by communication difficulties, and to the vast geographical areas in which the doctors practised. A minister in North Uist related:

I have certainly heard some complaint that the present medical man did not visit them so frequently as they could wish - which neglect cannot be accounted to wilful carelessness on his part, but to the frequency of calls in such an extensive and populous district. For the reasons first mentioned, I have no doubt these cases are occasionally occurring of protracted suffering. Urgent calls coming at the same time from different parties at a great distance in opposite directions, cannot possibly be at once attended to by the same individual. (MacLeod, Norman 1851)

Although there was a resident doctor in Lerwick, Shetland, his presence did not prevent complaints about the inadequacy of medical attention there, for his practice extended throughout the county:

There is, I believe, a great and universal complaint of inadequacy, - not that they are generally dissatisfied with Mr. Cowie, - but the work appears



to be too much for him, and he is liable to be called to a distant part of the county where he may remain for days. (Fraser, Rev., 1851)

#### (4.12) FACTORS COMPENSATING FOR THE DEFICIENCY IN MEDICAL AID

To some extent, the deficiency in the number of qualified doctors in the islands, was compensated for by other agencies, especially the parish ministers themselves, who administered medicines, and advised the patients. In addition, merchants, schoolmasters, the local landowners, unqualified midwives and mountebanks took their place.

In Mid Yell, the Rev. James Barclay stated:

I am almost the only person to whom the people of this parish and of a neighbouring parish resort to for medical aid. Tho' not regularly, but I obtain much information in medicine from my father, who for sixty years practised as a surgeon, and I have so much experience as to be able generally to assist most cases that occur gratuitously.

(Barclay, James, 1851)

The ministers in other Shetland parishes, such as Walls, Nesting, Whalsay (Shand, Alexander, 1851), Delting (MacIntyre, John, 1851), Sandsting (Bruden, John, 1851), Quarff and Burra (Webster, A., 1851) and Bressay (Hamilton, M., 1851) were practically the only source of medical assistance readily available. Such was also the case in certain parishes of the Western Isles such as in North Uist

(MacLeod, Norman, 1851), Barvas (MacRae, W., 1851), Uig (Watson, Rev., 1851: Campbell, J., 1851), Knock (Bethune, Rev., 1851) and Stornoway (MacRae, Rev., 1851). A similar situation existed in the Orkney parishes of Evie and Rendall (Rettie, A., 1851: Beattie, W., 1851), Birsay & Harris (Trail, Samuel, 1851: White, Adam, 1851), Sandwick (Clouston, Rev., 1851), Shapinsay (Scott, Rev., 1851), North Ronaldsay (Wilson, R., 1851) and Papa Westray (Logie, Rev., 1851).

In other parishes, bloodletting and simple remedies were provided by untrained persons, as in Cross and North Uist in the Western Isles (MacRae, D., 1851: MacLeod, Norman, 1851), and in Lerwick (Morgan, Rev., 1851), Scalloway (Fraser, Rev., 1851), Sandwick (Turnbull, Rev., 1851), Northmavine (Sutherland, James, 1851), Walls (Elder, Rev., 1851) and Delting (McIntyre, John, 1851) in Shetland.

In Fetlar, the local proprietor Sir Arthur Nicolson was accustomed to dispensing medicines (Watson, Rev., 1851). In Rousay and Egilsay, in Orkney:

One resident gentleman, William Traill, Esq., of (?) Moodwick has for the last twelve years been of very great service in visiting patients, giving advice, and medicines. But for the kindness of this gentleman, the deficiency would be more severely felt (Ritchie, George, 1851).

#### Attitude of island doctors towards the service provided in 1851

The Royal College of Physicians of Edinburgh, next

approached the island doctors themselves. They also were sent a questionnaire in which details were sought concerning the problems associated with medical practice in the islands. Of twenty doctors identified as practising in Orkney, Shetland and the Outer Hebrides, fifteen replies were received. There was a remarkable unanimity in their responses.

The doctors found that the physical environment of their practices prevented the degree of care that they would have wished. Dr. John Macdonald of Lochmaddy said:

The hardships of a medical practitioner in this and neighbouring islands cannot well be estimated by those who have not visited these remote parts, especially in the winter and in tempestuous weather, to which it is exposed from the Atlantic. When visiting the smaller islands, no accommodation can be procured, and this increases the hardships. Some of the ferries can be crossed by a conveyance only when the tides are out, and the other ferries are often dangerous (Macdonald, John, 1851).

Dr. Macrae in Stornoway wrote:

There are several other drawbacks which might be noticed, did space permit, such as the great fatigues consequent on the long journeys to be travelled, the exposure to vicissitudes of weather, and sometimes to danger by sea (Macrae, Charles, 1851).



Dr. Wood of Sanday in Orkney wrote:

When called to the neighbouring islands, I am  
exposed to such storms as to endanger my life.

(Wood, P., 1851)

The island doctors of this period were obliged to cover vast tracts of country. When estimating the extent of their practices, the mean distance covered by the fifteen doctors who replied to the questionnaire, was 20.7 miles (s.d.  $\pm$  8.7 miles) from their residences. The doctors made their visits either by walking on foot, or else by riding, over very indifferent roads; their visits often led them to be absent from home for several days at a stretch. Mostly, horses had to be hired, as the doctors could not afford to keep and maintain them, themselves. Travelling between islands in small boats in rough weather was always hazardous.

The doctors were especially concerned at their low level of remuneration. There were several causes for this. In the majority of island practices in 1851, the parish had not taken advantage of the Poor Law Medical Relief Grant. Thus the income of the doctor depended largely on the fees he could charge his patients. But this was a period of great destitution in the islands, as a result of the introduction of the crofting system, the collapse of the kelp industry, the mid-nineteenth century population explosion, and the potato famines. It was the gross poverty of the mass of the population, together with the very small number of landowners which stalled the early acceptance of the Medical Relief Grant system towards providing

finance for medical practice. Few patients could afford to pay the doctor for his services. Thus Dr. Roderick Maclean of South Uist wrote:

The special hardship incident to my situation is the poverty of the people, and the many applications for medical relief, which although unremunerated, cannot in many extreme cases be refused (MacLean, Roderick, 1851).

A similar sentiment was eloquently expressed by Dr. Macrae of Stornoway:

The principal hardship undoubtedly is the nonpayment of fees, which seems not unlikely to become an unexceptional rule. The extent of non-remuneration may be estimated from the fact that for the last two years and a half, my partner and myself have travelled in one parish, upwards of 2,000 miles on express visits, exclusive of the visits to paupers and on vaccinating tours, without obtaining any payment whatever, not even in most cases for the medicines given. It is proper to mention that our exactions in the way of fees are not pressed, for the simple reason that if punctually sued for, our attendance would not be sought to many cases of even extreme urgency. It may surely be deemed a hardship that disadvantages and discouragements of such a nature exist, sufficient to chill and repress the enthusiasm of most professional men, difficulties against which none but a genuine philanthropist of ample independence could heartily sustain a protracted

interest in his patients and prosecute his profession with ardour and success (Macrae, Charles, 1851)

It was generally felt that it was the poverty of the island communities which encouraged these people to rely on unqualified persons dispensing medicine. Indeed there appeared to be some rivalry with the clergy who usually treated all patients gratis (Wood, P., 1851). A particular grievance was that doctors had to provide for drugs and appliances out of their own meagre profits. The poverty of the people also meant that few of the patients were vaccinated against smallpox, whose epidemics created marked social havoc, and which was an item of service which attracted a fee, and which was legally enforceable (Collacott, R. A., 1981).

Poor conditions of work and remuneration were accepted by the doctors as leading to a poor level of medical care, and the failure to update medical knowledge and skills. Dr. Clark wrote:

The hardships incident to my situation are various and numerous. Owing to the miserable and inadequate remuneration, I cannot afford, after supporting a wife and ten of a family, even to insure my life, or make any provision for myself or them. As my family increased, I was obliged to give up a medical periodical. I can scarcely afford to give my family the common rudiments of education (Clark, Robert, 1851)



(4.13) THE SIGNIFICANCE OF THE POOR LAW MEDICAL SERVICE  
IN THE SCOTTISH ISLANDS.

To a high degree, the Poor Law Medical Service in the Scottish Islands has been dismissed as insignificant in the development of general practice in these regions. It is true that even by the end of the century many deficiencies still existed in this service, as were to be elucidated by Royal Commissions of Enquiry into the Poor Laws, in the first decade of the twentieth century. For example, in 1879, three-quarters of dying patients in Shetland were unattended by doctors (White, Peter, 1880). These deficiencies were largely resolved by the Highlands & Islands Medical Service.

However, the Poor Law Medical Service represented an initial step in providing medical service for those individuals who would hitherto have been unable to afford such care. It demonstrated the association which was now acknowledged, between sickness and poverty, and was humanitarian in its attempt to prevent destitution through sickness, accident or age.

A major contribution to the medical services was the increase in the number of medical practitioners in the islands, which took place following the introduction of the Poor Law Amendment Act - this, in spite of the fall in the population in some island groups. For example, an examination of Manson's Shetland Almanac, which was published annually from 1868 until 1950, gives, in each edition, a list of medical practitioners in Shetland. If the number of such doctors is related to the head of population for Shetland, as given by the Registrar General for Scotland,

there will be seen to have been a dramatic decline in the head of population per doctor, from 1861 onwards. This was caused by both a real increase in the number of doctors practising, as well as a steady fall in the population. This is shown in the following table and graphs:

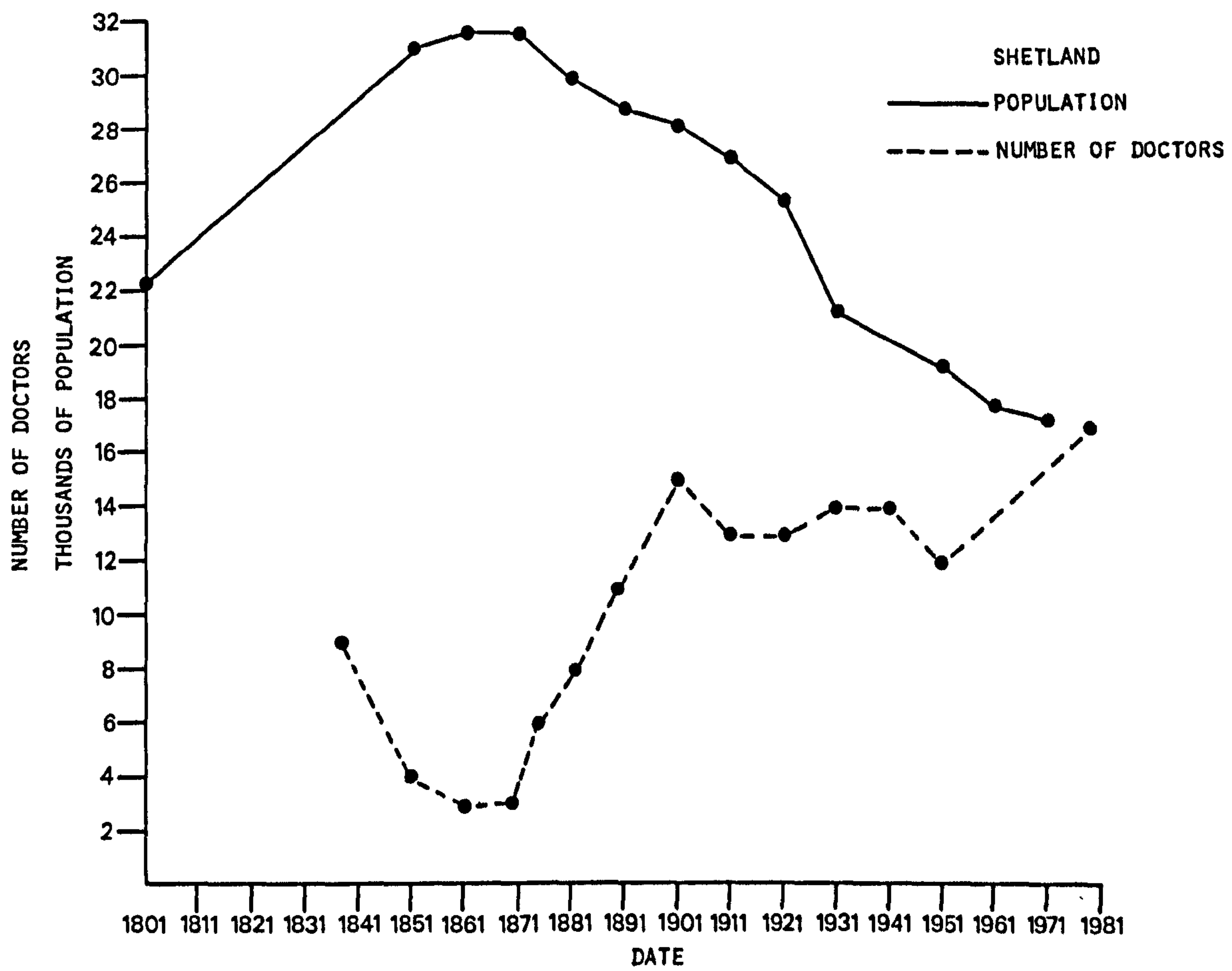
Table: To show fall in head of population per doctor in Shetland

<u>Date</u>	<u>Population *</u>	<u>Number of</u> <u>Doctors</u>	<u>Head of population</u> <u>per Doctor</u>
1837	31078	9	3453
1851	31078	4	7770
1861	31670	3	10557
1869	31608	3	10356
1875	31608	6	5268
1882	29705	8	3713
1890	28711	11	2610
1901	28166	15	1878
1911	27911	13	2147
1921	25520	13	1963
1931	21421	14	1530
1941 **	20386	14	1456
1950	19352	12	1613
1979 **	16840	17	991

\* Population to nearest decennial census figure

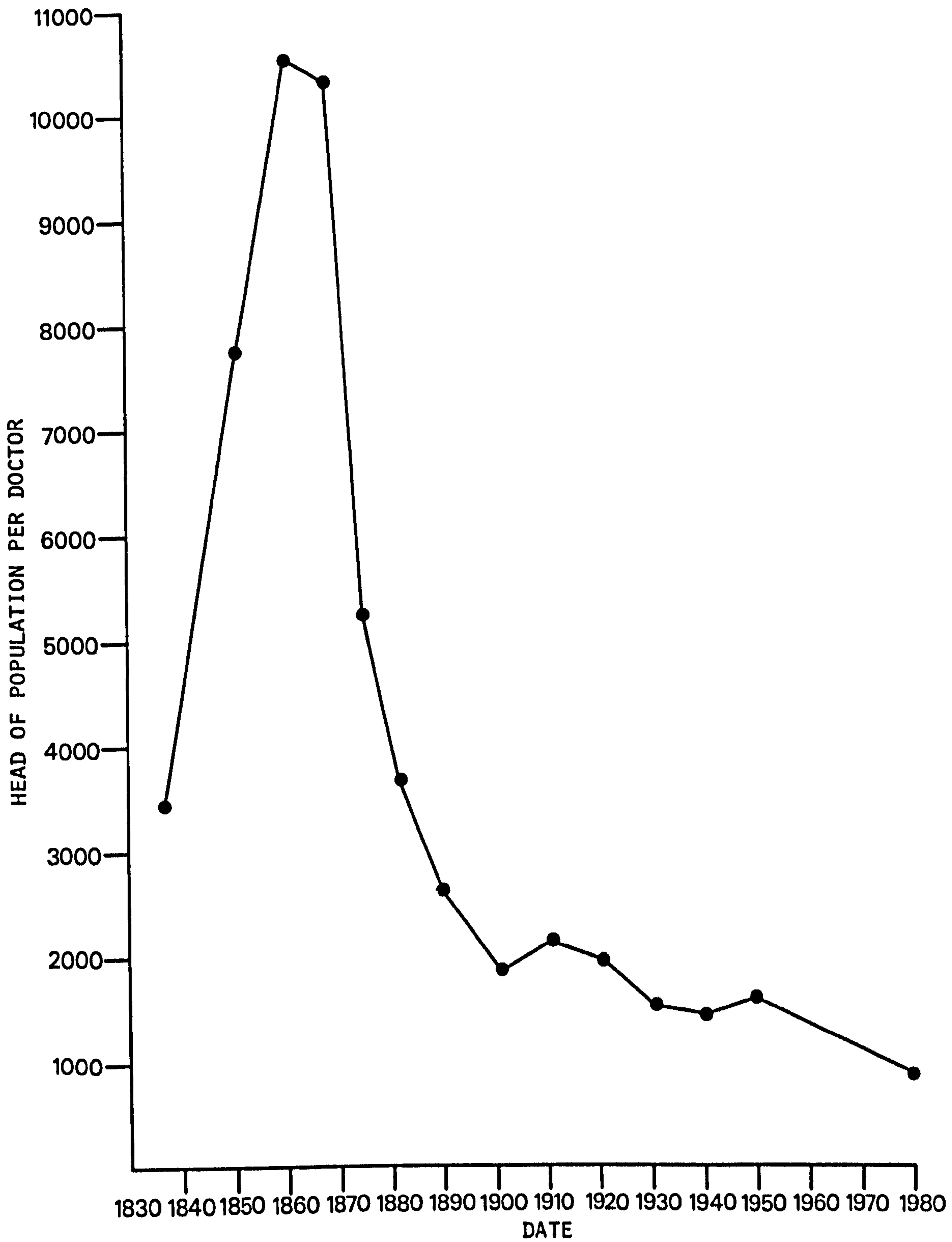
\*\* Estimated population size

GRAPH: TO SHOW CHANGES OF POPULATION AND NUMBER OF DOCTORS  
WITH TIME IN SHETLAND





GRAPH: TO SHOW CHANGE IN THE HEAD OF POPULATION PER DOCTOR  
IN SHETLAND AGAINST TIME.



### (5.0) THE TWENTIETH CENTURY

During the first decade of the twentieth century, two significant reports were produced which gave evidence to suggest that in the Highlands & Islands, the Poor Law Medical Service was inadequate. These reports were closely followed by Lloyd George's National Insurance Act, whose terms were largely inapplicable to the crofting communities. Accordingly, the Government set up a Committee of Enquiry to examine the special problems associated with the medical service in the Highlands & Islands. The Committee's report - known as the Dewar Report - recommended a revolutionary method of financing, and thereby developing the medical services in these areas. The Dewar Report was accepted almost in its entirety, giving rise to the Highlands & Islands Medical Service.

The Highlands & Islands Medical Service became fully operational after the first world war, which had delayed its implementation. As will be described, this scheme was revolutionary in uprating the medical services in the islands, such that when its operation was examined by two later Committees of Enquiry - the Cathcart and Birsay Committees in 1936 and 1967 respectively, it was found that the service was functioning at a most excellent level. With the coming of the National Health Service, the Highlands & Islands Medical Service was incorporated unchanged into the national system. Its concept is still to be found in the 'inducement payment' system for remote practices.

The other major developments which have affected the medical services in the islands during the twentieth century, have been the concurrent development of the consultant services and the growth of hospitals on the one hand, and the development of transport services, and particularly the aeroplane, on the other. The air-ambulance service has transformed island practices, which, in many ways, are no longer remote.

Associated with the changes that have occurred in the organisation and administration of medical practice, a significant change has occurred in the profile of diseases faced by the general practitioners. The central importance of epidemics of infectious diseases has subsided. It has been replaced by cardiovascular, cerebrovascular, degenerative, depressive and neoplastic diseases as a major cause of morbidity and mortality. To some degree, this has been brought about by the ageing of the community. In the islands themselves, the psychological importance of relatively uncommon diseases, such as multiple sclerosis, is totally out of proportion to the numbers involved.

#### (5.1) CHANGE IN THE NATURE OF DISEASE

The life expectancy of the Scottish Islanders has increased during the twentieth century. The following table gives the mean age at death of those who lived in the islands of Westray and Sanday in Orkney, since 1900 (Based on Register of Deaths, Sanday, Orkney; Register of Deaths, Westray, Orkney).



Table: To show age at death, Westray & Sanday, Orkney.

<u>Date</u>	<u>Mean Age at Death</u>
1900 - 1909	59.5
1910 - 1919	59.0
1920 - 1929	61.0
1930 - 1939	65.7
1940 - 1949	67.9
1950 - 1959	73.0
1960 - 1969	71.4

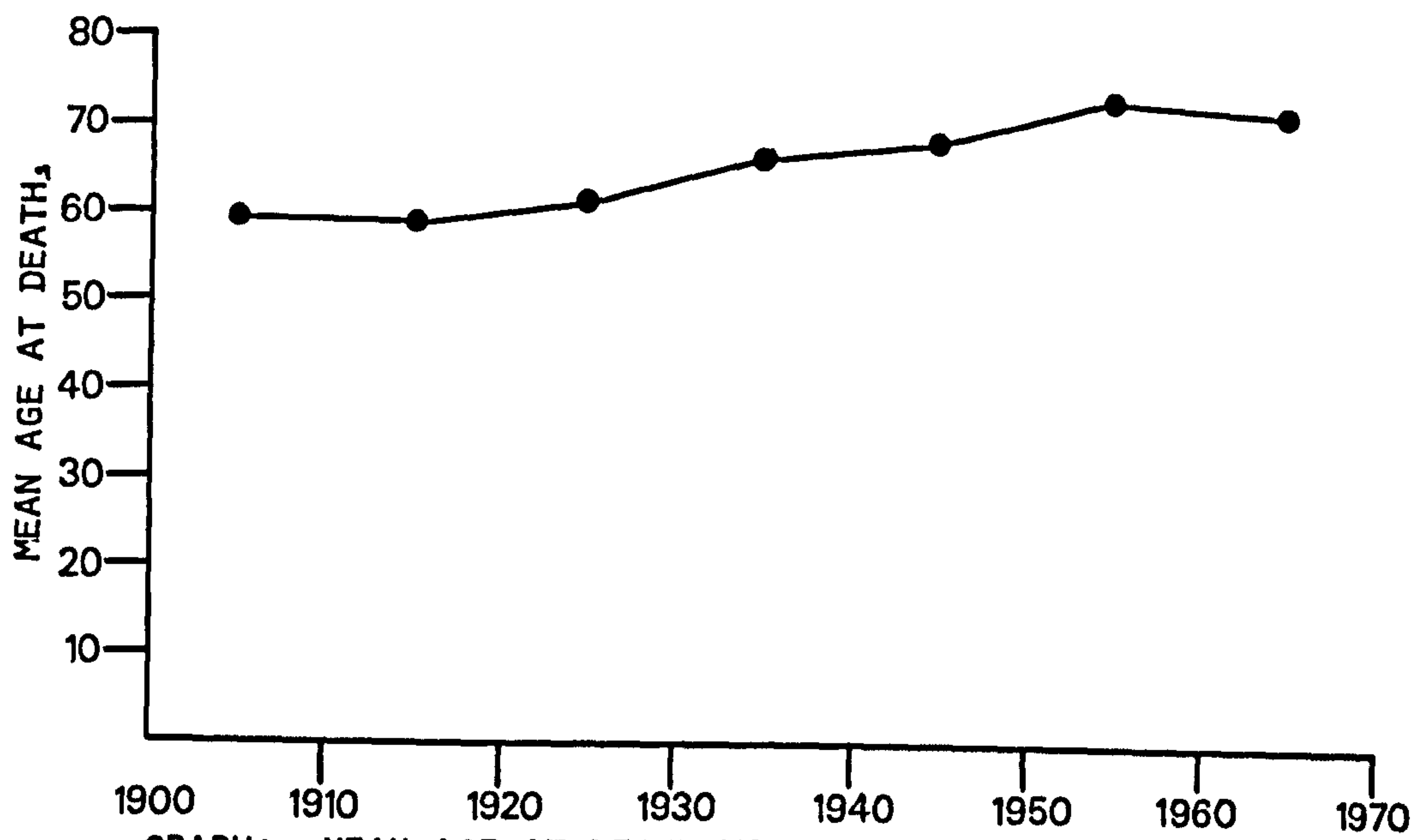
This is shown on the accompanying graph:

The percentage of 'young' deaths, i.e. those occurring prior to the age of 50 years has also fallen during this period:

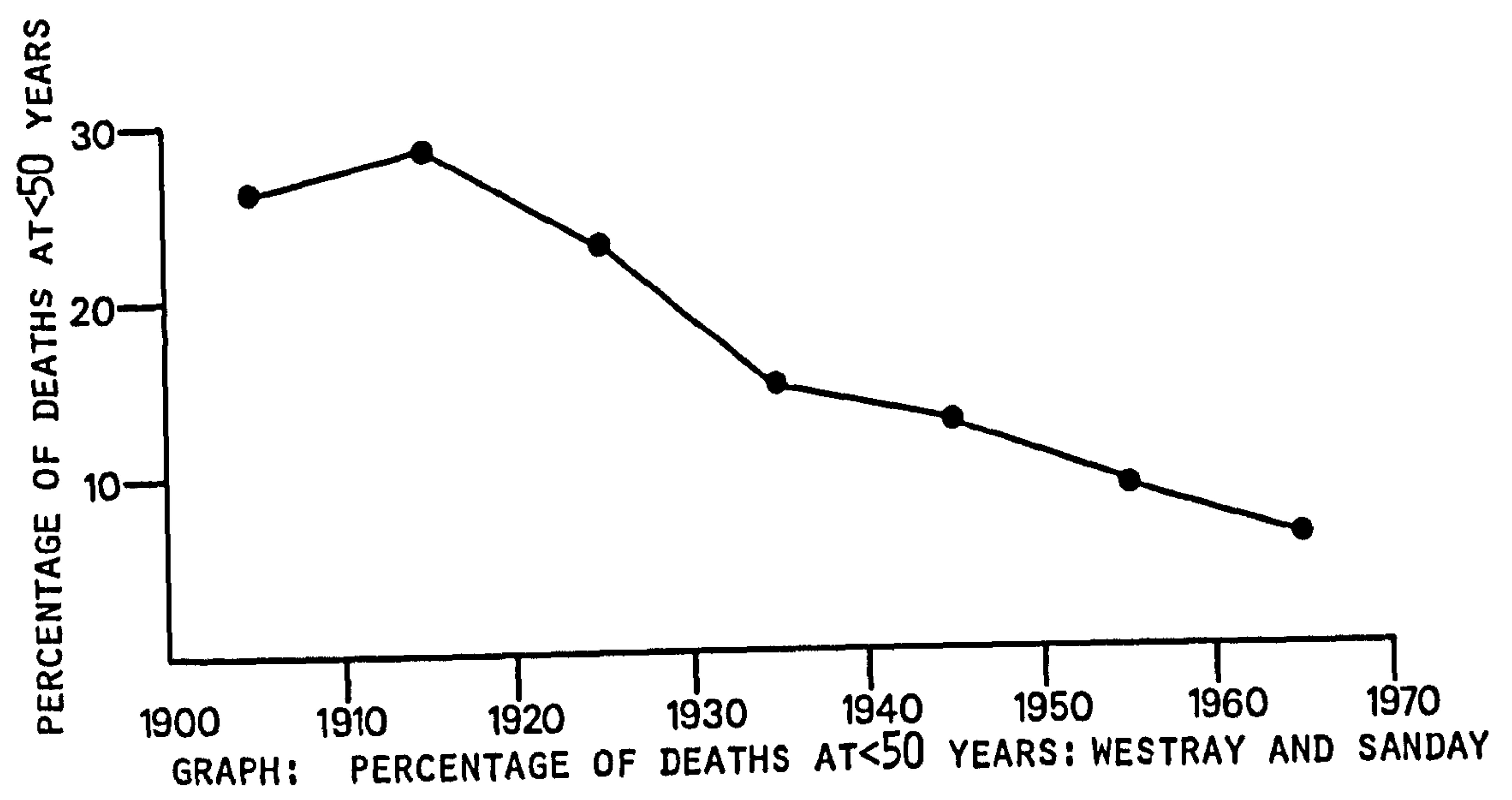
Table: To show fall in percentage of death occurring prior to age 50.

<u>Date</u>	<u>Percentage of death occurring prior to age 50 years.</u>
1900 - 1909	26.06%
1910 - 1919	28.90%
1920 - 1929	23.06%
1930 - 1939	15.09%
1940 - 1949	13.18%
1950 - 1959	9.52%
1960 - 1969	6.59%

These changes in mortality have been associated with changes in



GRAPH: MEAN AGE AT DEATH WITH DATE: WESTRAY AND SANDAY, ORKNEY





the cause of death. The epidemics of infectious diseases have given rise to progressively less mortality. This is shown on the accompanying tables and graphs:

Table: Deaths due to infectious diseases, Westray & Sanday, Orkney

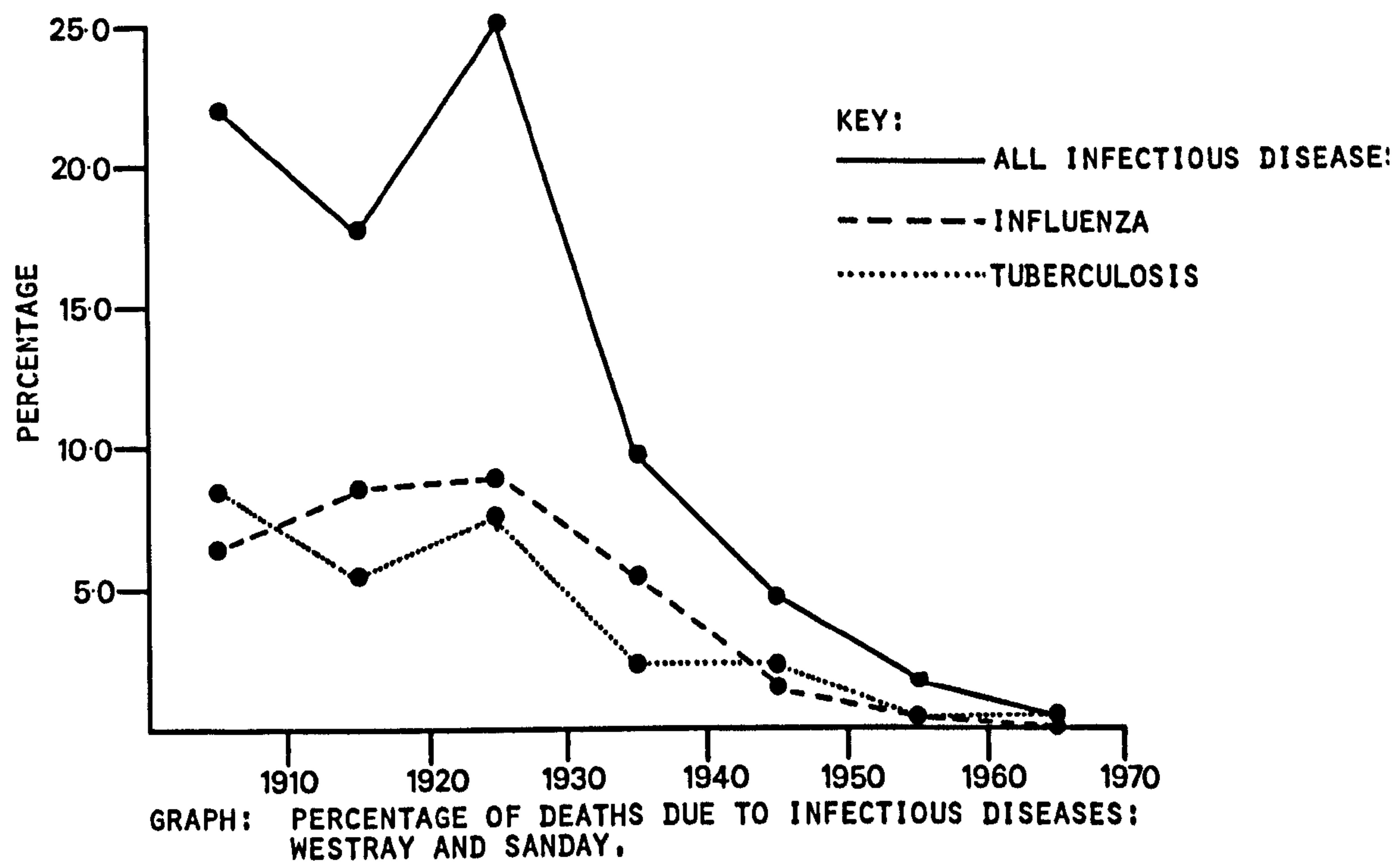
<u>Date</u>	<u>%age of deaths</u> <u>due to all</u> <u>infections</u>	<u>%age of deaths</u> <u>due to</u> <u>influenza</u>	<u>%age of deaths</u> <u>due to TB</u>
1900-1909	22.0%	6.6%	8.5%
1910-1919	17.7%	8.5%	5.6%
1920-1929	25.1%	8.9%	7.5%
1930-1939	9.7%	5.4%	2.3%
1940-1949	4.7%	1.6%	2.3%
1950-1959	1.7%	0.4%	0.4%
1960-1969	0.5%	0.0%	0.5%

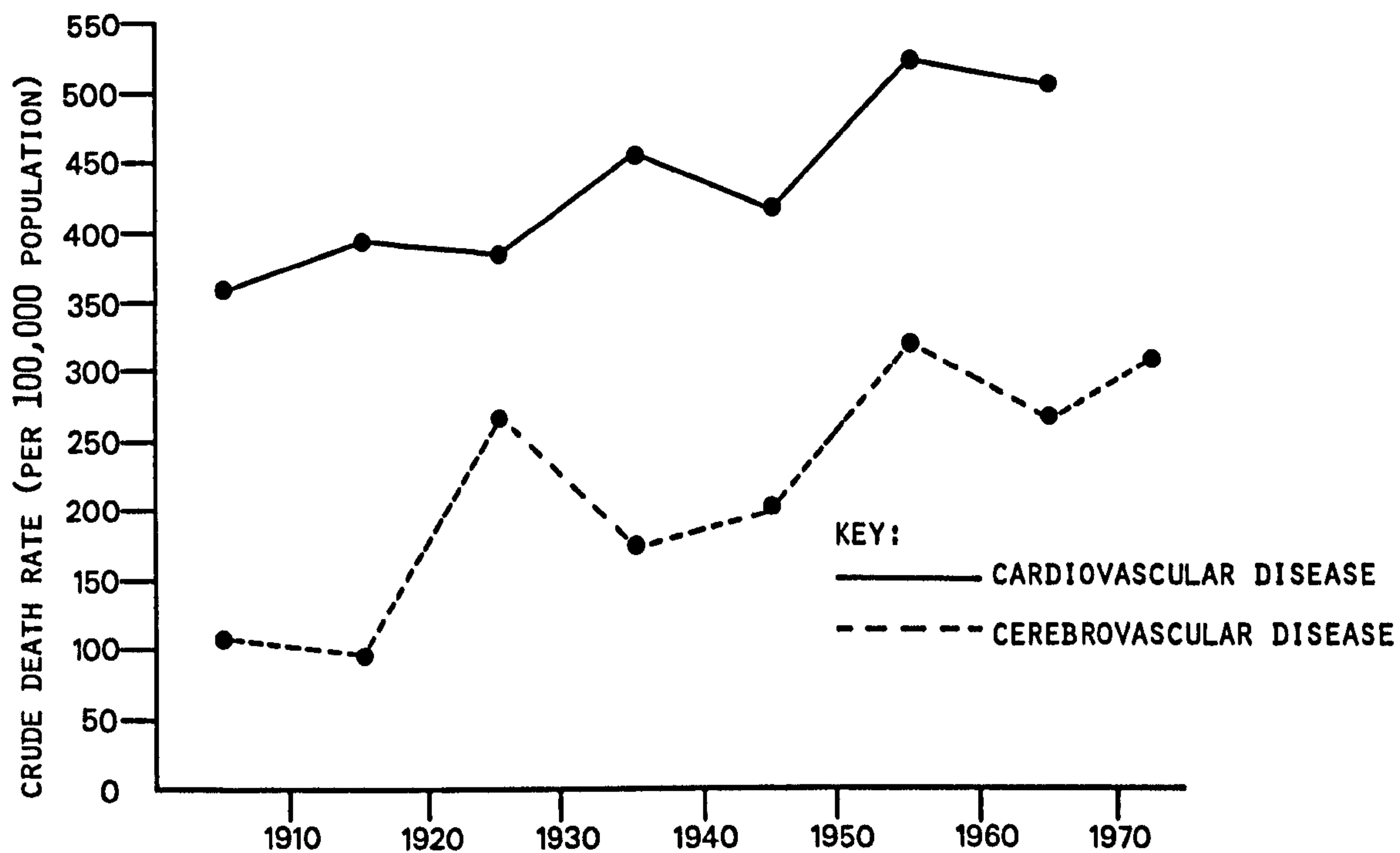
Conversely, there has been a marked increase in the mortality from cerebrovascular and cardiovascular disease. This is shown in the following table and graph:

Table: Crude death rates (per 100,000 population): Westray & Sanday

<u>Date</u>	<u>Non-valvular cardiovascular</u> <u>Disease</u>	<u>Cerebrovascular</u> <u>Disease</u>
1900-1909	358	109
1910-1919	393	97
1920-1929	383	267
1930-1939	455	174
1940-1949	414	202
1950-1959	523	319
1960-1969	507	267
1970-1974	---	311

(Collacott, R.A., 1978)





GRAPH: CRUDE DEATH RATE - CEREBROVASCULAR AND CARDIOVASCULAR DISEASE:  
WESTRAY AND SANDAY, ORKNEY.



## (5.2) DISSATISFACTION WITH THE POOR LAW MEDICAL SERVICES

In 1904, a Committee was appointed by the Local Government Board to examine the working of the Poor Law Medical Service, and to suggest improvements that could be made to it. The Committee took evidence from the Society of Inspectors of the Poor, the Association of Poorhouse Governors, the Poor Law Officers Association, the Scottish Poor Law Medical Officers Association, and other interested parties. The Committee also requested details from each parish, of the fees and salaries paid to outdoor medical officers, and of the arrangements made by the parish councils for the supply of medicines and medical appliances to the poor.

The "Report of the Departmental Committee appointed to Inquire into the System of Poor Law Medical Relief" (Cd 2008), was published in 1904. The view was held that although the Poor Law Medical Relief Service in Scotland was far from perfect, great strides had been made since it came into effect in 1846, in providing medical care for the poor. Peterkin, the retiring General-Superintendent of Poor stated:

The improvement in the medical relief service throughout the district (North Highland District) has been very great, chiefly through the operation of the medical relief grant. (Peterkin, W. A., 1893 - 1894)

Whereas in the first year after the Medical Relief Grant had been instituted, less than 50% of Scottish parishes had participated in the Grant, the number had steadily increased, until, in 1902, 91% of parishes participated, representing 99% of the population

of Scotland.

The number of medical officers was seen to vary with the area covered by the parish, and by the population. Each parish which participated in the Medical Relief Grant had appointed at least one medical officer, whilst large city parishes had large staffs. For example, in Glasgow, Edinburgh and Aberdeen, there were 25, 15 and 7 medical officers respectively. Their salaries varied considerably, the smallest being paid to medical officers in rural parishes.

In many parishes, the parochial medical officer was the only doctor available in cases of sickness. In some, the doctor's salary as parochial medical officer, represented practically his total income, his fees from non-pauper patients being negligible. It was felt that some parishes would have been unable to acquire the services of a doctor, were it not for the appointment of a Parochial Medical Officer.

In the year, 1901 - 1902, seventy-nine parishes in Scotland did not participate in the Medical Relief Grant. Their distribution is given in the following table:

Table: To show distribution of parishes which did not participate  
in the Medical Relief Grant, 1901 - 1902.

<u>County</u>	<u>No. of Parishes</u>	<u>County</u>	<u>No. of Parishes</u>
Aberdeen	7	Kincardine	1
Argyll	4	Kirkcudbright	1
Ayr	2	Lanark	7
Berwick	10	Orkney	1
Edinburgh	1	Peebles	3
Elgin	1	Perth	13
Fife	4	Roxburgh	11
Forfar	11	Selkirk	2

Seventeen of these had appointed a medical officer, at a fixed salary, but the total expenditure on health, by the parish, was below the 'minimum expenditure' stipulated as necessary for receipt of the Medical Relief Grant. Forty-three parishes had appointed a medical officer whose services were remunerated on an ad hoc basis. Only nineteen parochial boards had not appointed a medical officer.

With the singular exception of the parish of Orphir in Orkney, every parish in the island counties had participated in the Grant. Even the parish of Orphir had appointed a medical officer, at a salary of £10 per annum, but as the expenditure on medical relief was less than the minimum, the parish could not participate in the Grant.

Dr. Bell, a doctor in Kirkwall said in his oral submission:

It must however be stated, that while much remains to be done, the conditions appear to be improving.



Thus we have been told that, during the past twenty years, at least five islands in Orkney have secured the services of either male or female resident medical practitioners, where previously the inhabitants had to depend for medical aid on doctors from other islands, or from the Mainland of Orkney. (Bell, B.D.C., 1904)

However, the Committee felt that the standard of medical care in the Highlands & Islands of Scotland was not as high as elsewhere:

Notwithstanding the beneficial influence of the Grant, it can scarcely be said that the medical relief afforded to the outdoor poor is as efficient as it ought to be. We shall afterwards direct attention to the large percentage of uncertified deaths in these parishes.

Dr. MacKenzie of North Uist stated:

As I have frequently pointed out already, the want of sufficient medical attendance and nursing have a most prejudicial effect on the wellbeing of the district. The loss of life, hardship, and misery which this implies cannot be calculated. To a certain extent, the physical evil is evident, while it tends to produce a callousness to suffering and death, that becomes only too apparent in the number of uncertified deaths, especially among the aged.

The Report recognised a number of causes for the poor standards of medical care which were present. The first problem was that of geography - few patients scattered over vast tracts of countryside. In his oral submission, Sir Kenneth Mackenzie stated:

Of course, mercifully we may say that on 364 out of 365 days there is only one sick pauper in the parish, but what the parish council has to look to is this, that on the 365th day they may have three sick paupers, whose houses may be situated ten miles in one direction from the doctor's house, twenty miles in another direction, and fifteen or eighteen in still another direction. Now in heavy snow, the doctor cannot do the work. This is what I look to, and it is there where responsibility as a parish council is imposed on you; if these three people unfortunately take ill at the same time, you have to provide them with medical attendance, and it is physically impossible for the doctor to do the work. Even supposing there is no snow, and he has a motor car, I don't think it is fair to ask him to do it in this very stormy weather, because you would knock him up. (MacKenzie, Kenneth, 1904)

In some parishes, the method by which the parochial medical officer was remunerated contributed to the poor level of care. In the smaller islands, the method of paying the doctor was generally by item-of-service, rather than by a fixed salary. To save money, the Inspector of Poor would delay sending for

the doctor, when the patient was dying. Dr. B. D. C. Bell recounted his experience from Kirkwall:

In a certain parish in which I was acting as medical officer, I was sent for on two different occasions to see two different paupers, and on each occasion I was stopped on my way on being told that the pauper had died. I met the inspector, and he said to me he did not know what to do, that he did not like to send for a doctor unnecessarily, because the rate-payers objected to unnecessary expenditure.

(Bell, B. D. C., 1904)

The Committee felt that apart from the provision of a medical service to the poor of the islands, a wider issue was involved, namely, the provision of an adequate medical service to all the islanders. The medical service in the islands as a whole, was inadequate, as evidenced by the extremely high proportion of uncertified, and by inference, unattended deaths. There was also a large proportion of births that had been unattended by a doctor at any stage whatever.

So far as medical attendance is concerned, the paupers are, as a rule, better off than the general population. When they are ill, the medical officer of the parish is bound, under the existing rules, to attend them.

It was again believed that financial elements were involved in this poor level of care, in particular, the doctors' high



charges for visiting. The Chairman of the Parish Council for Lochbroom, Ross-shire, stated that a doctor would charge as much as three guineas for each visit to patients in areas distant from where he lived:

This has the effect of impoverishing the people, and it has also this effect, that it is only in extreme cases that the doctor will be called.

(Ross, Mr., 1904)

Three guineas seemed at that time, a heavy fee for those whose financial situation was not much removed from pauperism. But little of this fee went to the doctor himself:

When you consider the details, that is only a small fee for the doctor, because he has his hire, which costs him 25/- to the centre of the district, and he may have to go another stage, when he arrives there; the result being that he does not have £1 to himself, and he has to spend two days on a case like that. (Ross, Mr., 1904)

Dissatisfactions led to a high rate of turnover of doctors in the crofting counties at that period, with a consequent total failure in the continuity of care. In the seven-year period, 1895 - 1901, the post of resident parochial medical officer fell vacant in 42% of the parishes in the crofting counties. In the case of one parish, the post fell vacant seven times in seven years (House of Commons Return, 1903).

The 1904 Report on Poor Law Medical Relief was quickly followed by a report by the Royal Commission on the Poor Laws in 1909 (Cd 4922). This Report was consistent in its criticism of the standard of medical care for the poor in the Scottish Highlands and Islands.

Outdoor medical relief was considered to be adequate in the towns and lowland rural areas, where it was supplemented by the efforts of medical charities, and by private doctors who gave of their services gratis.

However, as regards the Highlands and Islands, it was clear that:

medical attendance in many parishes is deplorably insufficient, and affects not only the physical wellbeing of the paupers, but also that of the whole population. At the same time, it appears that, notwithstanding the deficiency, the paupers themselves are better off in respect of medical attendance than the classes immediately above them. The problem in these parishes is to secure even a minimum of medical attendance for the inhabitants. "Many of the smaller parishes", states Mr. Millar, the General Superintendent of Poor for the Northern Highland District, "cannot maintain a doctor. Some of the smaller islands in Orkney and Shetland are without medical officers ... In these small island parishes, the Medical Officers are continually changing, and the cost of advertising (it may be

for months), becomes a heavy charge on the rates".

The poverty of the great majority of the population renders it very difficult for a private practitioner to eke out a bare subsistence. But "besides their poverty," Dr. Fletcher, Harris, informs me, "a great deal of callousness exists among the people with regard to calling for a doctor. They are mostly extreme fatalists, and often do not call a doctor on the plea that "the hour has come".

The problem of providing a medical service in the islands had been partially, but very inadequately, met by the Medical Relief Grant. Higher salaries than were strictly justified by their attendance on the poor, had been allowed to rank against the Grant, in order to provide the nucleus of a living for a medical man. However, the 'nucleus' was almost the sole source of income for most island doctors, there being no opportunity for the doctor to engage in private practice. The Poor Law medical officer, in practice, gave medical attendance to the parish in general.

However, in spite of the assistance from the Grant, the number of doctors in the Highlands & Islands was still insufficient, and sometimes, villages situated ten or fifteen miles apart had to do without the services of a doctor. Dr. MacDonald, a medical officer from Stornoway stated in his evidence to the Commission:

Taking the west side of the island, extending from the village of Europie, near the Butt of Lewis, to Mealshader, at the upper end of Uig, we have a



district seventy-two miles long, by the only existing road. This district embraces the parishes of Barvas and Uig, and has a population of close upon 13,000, scattered all over the district in some forty villages.

All the medical assistance available in this large area is what can be rendered by two medical men, living at a distance of fifty miles from one another.

It can readily be understood how very inadequate the services of these two gentlemen, willing and energetic though they are, to meet the medical requirements of this large district. For it must be borne in mind that most of the villages are some distance from the main road, which is practically the only road in the district on which a gig can go. It follows therefore that the doctor must leave his gig on the main roads, and make all his visits to these villages on foot. It must also be kept in mind that though typhus and typhoid fevers are of frequent occurrences in the district, there is not a single place from end to end of the district in which a case of infectious trouble can be isolated or treated. A similar state of matters prevails in the parish of Lochs.

### Domiciliary Nursing

Neither in the Poor Law Act of 1845, nor in the Medical Relief Rules, was direct provision made for supplying the outdoor sick poor with trained nursing. The need for such nursing provision had been recognised by the Central Department, but no grant had been available for nursing the outdoor poor.

Trained nursing at this period was supplied by various district nursing associations, and notably, by the nurses of Queen Victoria's Jubilee Institute, of whom, in 1904, there were 248, in different parts of Scotland.

It was generally felt by the doctors in the Highlands and Island parishes, that in areas where no doctor was available, a nurse should be provided instead. For, as Dr. Taylor, the medical officer for Mid Yell in Shetland stated:

The provision of one or two trained nurses in remote Highland parishes would be of inestimable benefit to the paupers and general public, and would lessen the labours of the medical officer very materially. I would further suggest that the nurse ought to be capable of undertaking normal midwifery cases. It is not, in my opinion, more doctors who are needed in remote parishes such as this, but the provision of skillful assistance to those we have got. For instance, take the parish of Fetlar, an island of 347 inhabitants, five miles by sea from my residence. Frequently the weather is so bad that 'crossing the sound' is impossible .....

If a doctor were appointed to that parish, he could not make a living. The same argument applies to the more distant parts of the parish in which I am situated. I could give more instances where a sick nurse would have been of the greatest utility, but it is unnecessary.

The 1909 Poor Law Commissioners made thirteen recommendations for improving the medical services in Scotland. Amongst these, the following were directly applicable to the Scottish Islands:

- 1) Better provision for trained nurses.
- 2) An improvement in the method of remunerating outdoor medical officers.
- 3) The provision of dwelling houses for outdoor medical officers in county districts.
- 4) An increase in the number of outdoor medical officers in the Highlands & Islands.

The Report was summarized succinctly:

In many parts of the Highlands and Islands, the provision of medical attendance is deplorably inadequate; that in these districts, the absence of sufficient doctors has a prejudicial effect on the health of the community; that the extreme poverty of the great majority of the inhabitants makes it impossible for them to support more doctors unaided; and that this question is one demanding immediate attention.



### (5.3) THE NATIONAL HEALTH INSURANCE ACT

In 1911, the National Health Insurance Act was passed with somewhat more support from the medical profession in Scotland than in England. The preamble to the Act stated that its purpose was:

To provide for insurance against loss of health, and for the prevention and cure of sickness, and for insurance against unemployment and for purposes incidental thereto.

Employees were to contribute 4d., employees 3d. and the Treasury 2d. towards a fund which permitted several benefits. These were listed in Section 8 of the Act, namely:

- (a) Medical treatment and attendance, including the provision of proper and sufficient medicines, and such medical and surgical appliances as may be prescribed by the regulations, to be made by the Insurance Commissioners (Medical Benefit).
- (b) Treatment in sanatoria or other institution, or otherwise, when suffering from tuberculosis (Sanatorium Benefit).
- (c) Periodical payments whilst rendered incapable of work by some specific disease (Sickness Benefit).
- (d) Disablement Benefit.
- (e) Maternity Benefit.

The application of the Act to Scotland was defined in Section 80.

The Act was to apply to working men and women, aged between

16 and 70, who had a regular income. These regulations therefore excluded the crofting community in the Highlands & Islands, just at a time when there was mounting concern about medical conditions and the health of this region. Moreover, there had been unrest in the Highlands & Islands at the end of the nineteenth century, and the Government was well aware of the need to recruit soldiers from this area. The crofters survived on the tiny patches of land given to them at the time of the Clearances, and they lived at barely subsistence level with such irregular incomes, that they were ineligible for the Insurance Scheme. Much of the crofters' financial dealings were done by barter, and payment for services such as that of the doctor, was made in kind.

Under pressure from MP's from the Highlands & Islands, who realised that the National Health Insurance Scheme would bring no benefits to their constituencies, the Dewar Committee was set up. (Hamilton, David, 1981).

#### (5.4) THE DEWAR COMMITTEE

The Dewar Committee was established with the following terms of reference:

To consider at an early date, how far the provision of medical attendance in districts situated in the Highlands and Islands of Scotland is inadequate, and to advise as to the best method of securing a satisfactory medical service therein, regard being had to the duties and responsibilities of the several public authorities operating in such districts.

The Committee submitted its report, entitled "Report of the Highlands & Islands Medical Services Committee" in 1912. The recommendations of the Dewar Report had a far-reaching influence in the development of general practice in the Scottish islands.

The Dewar Report examined the problems of the region in respect of travel difficulties, poverty, housing and sanitation, diet, depopulation, and also, the problems affecting the provision of satisfactory primary medical care, including finance, the frequent change of doctor, and the standard of these doctors. It also sought evidence for the fact of inadequate care. The Enquiry was broadly-based and examined domiciliary care, the hospital service, the nursing service, the ambulance service, care of the poor, and the working of the Insurance Act.

Apart from taking oral evidence in a number of districts, the Committee sent a questionnaire to 102 doctors in practice in the region, obtaining a 90% response. A questionnaire was also sent to 158 other people in the region, of whom 91% responded.

#### Problems of the Region

The Dewar Committee indentified the following problems which affected health, and the provision of health-care in the Highlands & Islands:

- (a) Difficulties of travel
- (b) Poverty
- (c) Housing and sanitation



(d) The diet of the community

(e) Depopulation.

The difficulties of travel in the region were graphically portrayed:

The greater part of the area under review is sparsely peopled. A considerable portion of the population is from twenty to thirty miles from the nearest doctor. The country is rugged, roadless and mountainous, and where not composed of islands, is very largely peninsular on the seaboard, and inland, is broken up by lakes and rivers. The weather conditions too, and particularly in the wintertime, add enormously to the difficulties of travel.

Under these conditions, the cost of providing medical aid was necessarily high, because transport costs, and the time taken in travelling were great.

For many people the costs of medical attention was prohibitive, especially in an area where the population was poor. Ready-cash, rather than 'payment in kind' was a rarity in the crofting economy. The minister on the Island of Barra, Father Cameron, gave written evidence to the Committee:

To pay anything like an adequate fee is beyond the means of nine out of ten of the population.

Housing was sub-standard, and could make the treatment of the sick impossible. The District Medical Officer for the

Island of Lewis, Dr. Murray, wrote in the Annual Report of the Public Health in the County of Ross & Cromarty, 1911, that the houses were:

of practically one room, with damp walls, damp clay floors, sunless interiors, a vitiated and smoky atmosphere, and the cattle under the same roof with the human inmates, the surroundings usually badly drained, and the site often damp. When a case of phthisis occurs in one of these houses, isolation is impossible. In too many cases, the patient spits on the floor, and on the floor of the churches and meeting-houses, scattering tubercle bacilli all round. When one considers the probability of the cattle being affected with tuberculosis, under the conditions prevailing, what else could we expect than a wide prevalence of the disease?

Depopulation of the islands had hampered the ability of the Poor Law Authorities to provide medical care. Emigrants from the islands were, in the main, the strong and fit islanders 'leaving behind the larger proportion of the weak and unfit, who at all times and everywhere, claim the greatest share of medical attention'.

#### Financial aspects of the Poor Law Service.

By 1912, the Parish Council, as an agent of the Poor Law Authorities, was the only public body that had taken any steps towards the provision of general medical services.

The Medical Relief Grant provided 54% of the Parochial Medical Officer's salary in the 1890's (following the increase in the Medical Relief Grant to £20,000 in 1882) but in 1912, only comprised 21% of his salary. The growth of the nursing service at the poorhouses creamed off the money available in the Medical Relief Grant to pay the Parochial Medical Officer. To pay the doctor, the local rates had to be increased. However, in order to attract a doctor at all, the Parish Councils were obliged to offer salaries which were out of proportion to the number of paupers attended. Examples are given below:

Parish	Salary of Parochial Medical Officer	No. of Outdoor Paupers	Salary per Outdoor Pauper
Papa- Westray	£70	1	£70/--/--
Eday	£70	4	£17/10/--
Coll	£70	4	£17/10/--
Strachur	£70	4	£17/10/--
Colonsay	£100	8	£12/10/--
Lochgeilhead	£100	8	£12/10/--
Kilmorich	£100	8	£12/10/--
Southend	£75	6	£12/10/--
Killeen- Kilkenzie	£110	10	£11/10/--

The poor-rate, which largely provided for the medical officer's salary assumed an increasingly large proportion



of the total rates collected in these small communities, for example, in the parish of Lochs, in the Island of Lewis, the poor-rate represented nearly 10% of the rates collected.

The salary of Parochial Medical Officers was inadequate, most doctors in the Highlands & Islands grossing only £200 per annum (about £120 per annum after expenses), which was only just within the taxable range. The net income of many Parochial Medical Officers was only £50 to £70 per annum. Because of this, Parochial Medical Officers could not often afford to purchase their own means of transport- this in an area where geography made transport difficult. They were also unable to provide for their old age, or periods of sickness.

Dr. Hector Mackenzie from North Uist, in his evidence to the Committee, stated:

The most hopeful outlook before him was to die in harness, in case he dies of starvation when old-age and decrepitude render him unable to continue work.

The cost of providing a locum tenens was prohibitive. Holidays and postgraduate education courses had to be sacrificed. These doctors also had no job-security, and had to provide their own accommodation which was often difficult to find.

Evidence for the fact of inadequate medical care in the islands.

As evidence for the fact of inadequate medical care in the Scottish Islands, the Dewar Committee examined

the proportion of deaths which were uncertified with the implication that these deaths were unattended at any stage by a doctor. Whereas the average rate of uncertified deaths in Scotland as a whole, was around 2%, in the Scottish Islands this was considerably higher. The following data was given for various parishes in the Island of Lewis, between 1908 and 1910:-

Uig	69%	of deaths	uncertified
Carloway	61%	"	"
Lochs	41%	"	"
Barvas	36%	"	"
Stornoway	17%	"	"

It was suggested that 50-70% of episodes of illness were not attended by a doctor. Instead, patients tended to send for patent-cures from the nearest pharmacist.

Mr. Cairne, a pharmacist in Thurso suggested that:

It is much cheaper to buy patent-medicines than to send for a doctor. In many cases, the distances are so great they must hesitate before they send.

#### Persistence of folk medicine and primitive beliefs

Additional evidence for the poor state of medical attention in the Scottish islands was to be found in the persistence of folk-remedies, long after they had been abandoned elsewhere in the United Kingdom. For example in Rona (Isle of Skye), epilepsy was 'cured' by the live burial of a black cock at the spot where the patient had had his

first ictal attack. The Parochial Medical Officer of South Harris described the treatment of keratitis:

He was not getting on, and I had to go over one very wild day (to the Island of Scalpay, off Harris) to see him, and when I arrived he was away from home ... and he had to drive ... to an old lady at Licisto. The old lady made up some rhyme, and mixed some grasses with water and sand, and sung. He came back and said he was a little better. The seventh son is supposed to be able to cure such diseases. I know of one case of a person who had a carbuncle on the back of his neck, and it did not heal, and he got a seventh son to come to his house, and every night for a long time he put cold water on it, and a sixpence round his neck. (Tolmie, Dr., 1912)

### Standard of doctor

The Dewar Committee noted that one result of the poor conditions of service suffered by the Parochial Medical Officers was the fact that they only stayed in post for short periods of time before finding other practices. This frequent change in doctor led to a serious lack of continuity in medical care. In one parish, there had been ten doctors and as many locums in twenty-two years. In a further two parishes, there had been seven and five doctors between 1902 and 1912.

The doctors who were appointed as Parochial Medical Officers, fell into two classes:



(a) Young men, recently out of college, who make the appointment a stepping-stone to something better, who remain only a year or two - not long enough to become sufficiently acquainted with the idiosyncracies of the people, or to the diseases that families inherit or are liable to.

(b) Older men, who after perhaps a chequered career, fall back on such places as a last resort, and harbour of refuge. (Mackenzie, H., 1912)

#### Recommendations of the Dewar Committee

The Dewar Committee's recommendations, aimed at improving medical care in the Highlands & Islands were financial and administrative. These recommendations were accepted by the Government, and were embodied in a bill that passed through Parliament on 15/8/13 as the Highlands & Islands (Medical Services) Grant Act, 1913.

The Treasury provided a grant of £42,000 per annum, to be paid to the Highlands & Islands (Medical Services) Fund. The purposes of the fund were to:

- (a) Provide grants to medical practitioners
- (b) Provide grants to District Nursing Associations
- (c) Provide grants towards capital expenditure and the maintenance of hospitals, and for ambulance services.
- (d) Provide grants towards the provision and improvement of housing for doctors and nurses.
- (e) Provide grants for specialised services.

(f) Provide grants towards the extension of the telephone and telegraph services.

(g) Provide grants to special emergency schemes.

In the contract of service of doctors working under the scheme, it was laid down that the Highlands & Islands Medical Service should apply to:-

- (i) Insured persons, their families and dependents.
- (ii) Uninsured persons of the crofter and cottar classes, together with their families and dependents.
- (iii) Poor-Law patients.
- (iv) Schoolchildren.
- (v) Public Health Authority duties.

Fees were to be charged by the doctor for general practitioner duties on a fixed scale. It was an essential part of the scheme that these fees should be the same, whatever the distance of the patient from the doctor's practice. The amount of the grant paid to the doctor from the Highlands & Islands (Medical Services) Fund, was based on a target figure of income for the doctor, after account had been taken of his likely income from all other medical sources (such as private practice, if any). The amount of subsidy therefore varied widely from one practice to another. Fees were not abolished altogether under the scheme, but the great obstacle of distance was eliminated; to a certain extent, the advantages of a public services were secured without sacrificing private practice. (Ferguson, Thomas, 1958)

The Highlands & Islands Medical Service was to be administered

by a special Board, consisting of representatives of the Local Government Board, the Scottish Education Department, the Board of Lunacy, and the Insurance Commissioners, with a chairman nominated by the Secretary of State for Scotland.

#### (5.5) THE SIGNIFICANCE OF THE HIGHLANDS & ISLANDS MEDICAL SERVICE

The Dewar Report (1912) and the Highlands & Islands Medical Service Grant Act (1913) have been widely acclaimed as a major development in the provision of medical care in the Scottish Islands.

This scheme brought medical care within the financial range of all people living in the islands, and, in this sense, offered a better service to people living in these remote areas, than for people living elsewhere in the United Kingdom. The system was not free, but dispensed with the financial handicap that living at a distance from the doctor had hitherto produced.

The doctor, on his part, was guaranteed a target income. Although he was allowed, and to some degree, expected to undertake private medical care, and obtain some other sources of professional income, any money that he acquired in this way was likely to be offset by a reduction in his proportion of the Highlands & Islands Medical Service grant.

By allowing the doctor to be more financially secure, and by the provision made in the Act to allow the HIMS Board to acquire property for the use of the doctor, these island practices became more attractive to doctors, and indeed, the number of



doctors in these regions, particularly the remotest regions, increased. This in itself reduced the list-size still further for each doctor, reducing the time and effort that he spent travelling about his otherwise huge practice area. This was one reason for the increase in the accessibility of medical care after the introduction of the HIMS scheme. Thus doctors were appointed to practices in North Ronaldsay in Orkney and Whalsay and Northmavine in Shetland, where they were guaranteed an income (First Report of the HIMS Board, 1915).

The HIMS scheme also assisted in the provision of the District Nursing service, especially in the remoter islands such as St. Kilda, the Fair Isle, Foula and the Skerries, but also in areas such as Bressay and Lerwick in Shetland, and Bernera and Lochs in Lewis.

The provision of a nurse on St. Kilda was a particularly vexatious but humanitarian gesture. This remote island carried an extremely small population. The Board were however of the opinion that the isolation and special circumstances of the islanders were such as to give them a claim for assistance from the Fund. They decided to send a fully qualified nurse to reside in the island, as a temporary and experimental measure, relatively soon after the Board was inaugurated. Nurse MacIennan, supplied with medicines and dressings, was despatched on 18.5.14, and when she left the island in August 1914, was replaced by Nurse Aitchison.

The problem of servicing the very small and isolated communities such as St. Kilda, Foula, The Fair Isle and the Skerries was considered by the Board, which planned to provide these communities

with qualified nurses. It was recognised that the time taken to reach these isolated communities would preclude a medical practitioner from giving anything like regular and systematic attendance.

The Board believed that the only solution to this problem would be by the direct employment by the Board of a small staff of doctors and nurses to care for these communities. The work of such peripatetic doctors would be to visit outlying islands on a systematic basis, reside there for a week or two at a time, and give any necessary medical treatment. The doctor would also act as locum for isolated medical practitioners who were themselves unwell. Such a scheme was approved by the Treasury, but no appointments were made owing to the scarcity of both doctors and nurses during the War years.

The H.I.M.S. was gravely affected by the First World War. Many of the practitioners in the Board's area had held commissions in the Territorial Army, and were called out when war was declared. Others volunteered in answer to appeals from the War Office for nurses and doctors. In regions where medical men were so sparsely distributed as in the Highlands and Islands, the inconvenience caused by the shortage of doctors was acutely felt, and it was often impossible to fill vacancies.

The next most serious problem faced by the H.I.M.S. Board was inflation. Although the amount of money available at the beginning of the war was adequate for the Board's plans, the expenditure on doctors' salaries and travelling had risen so much on account of inflation that it was taking almost all of the



H.I.M.S. budget. When peace was restored, the H.I.M.S. Board might have expected an increase in its budget; however, the financial stringency of the Depression had set in, and all non-essential government expenditure was frozen. Any thoughts that the H.I.M.S. might have had about building doctors' or nurses' houses, or laying telephone lines had to be forgotten, and indeed the only expenditure other than payments to the doctors was one for urgent repairs and modifications to the Belford Hospital in Fort William. Even then, special Treasury permission had to be obtained.

The final irony of the financial problems of the H.I.M.S. was that having been allowed to keep any unspent money from the lean war years they now had accumulated a fund of no less than £129,000 which represented all the unbuilt houses and non-appointed nurses. Because of government policy, the money could not be spent on the houses, ambulances and hospitals, etc., and the H.I.M.S. had to watch this healthy fund disappear during the 1920's as the doctors' salaries and travel exceeded the annual grant, and the accumulated fund had to go to the doctors alone, and a few nurses.

With economic health returning to the nation by 1930, the H.I.M.S. successfully applied to the Treasury for more money. The Treasury however, were not prepared to make any open-ended commitment to a comprehensive health service, although this was the intention of the Dewar Report, and believed that the H.I.M.S. scheme should be devolved to local authorities. The H.I.M.S. was handed over to the new local government, except for the remuneration of the doctors.



WORKLOAD OF H.I.M.S. DOCTORS

The workload of doctors who worked under the Highlands & Islands Medical Service can be examined through studying the Annual Reports of the H.I.M.S. Board, and also through the monthly returns made by individual G.P.s to the Board in support of their financial claims.

The size of medical practices in the island regions was examined in the Fourth and Fifth Annual Reports of 1917 and 1918, when the practices of 114 and 116 doctors respectively were examined. Compared with today's list sizes in the islands, in 1917-1918, the size of these island practices were large:

Table: Mean number of patients per doctor in 1917-1918 in island regions.

<u>Area</u>	<u>Mean number of patients per doctor</u>	
	<u>1917</u>	<u>1918</u>
Inverness-shire, excluding Inverness burgh.	2243	2098
Ross & Cromarty	4298	4072
Orkney (excluding Mainland)	2226	1590
Shetland	3489	3489

These figures belie some of the practical difficulties of these medical practices. For example, the practice of Dr. J. Macleod in Scolpaig, North Uist, also included visiting patients on the associated islands of Berneray, Boreray, Lochportain, Cheesebay, Hoebeg, Heisker, Kirkibost, Baleshare, Broad Island, Grimsay, Ronay, Eaval and Claddach-Carinish, which at that time involved sea passages. (Macleod, John A, 1981: Leighton, Kenneth M., 1982)

The majority of medical consultations during the period of the Highlands & Islands Medical Service were conducted as domiciliary visits. (The ratio of domiciliary visits to surgery consultations from 1928 onwards equalled 5.8:1). The consultation rates (i.e. the number of consultations per patient per year) can therefore be estimated approximately on the basis of the number of domiciliary visits. These are given in the following table:

Table: Consultation rates in the Highlands & Islands, 1917.

<u>Area</u>	<u>Consultation Rate (1917)</u>
Argyllshire	0.90
Caithness	9.69
Inverness-shire	0.68
Ross & Cromarty	0.60
Sutherland	0.79
Orkney	0.43
Shetland	0.52
Perthshire	1.05

Although these consultation rates are low by the standard of the 1980s, there was a marked increase in consultation rates at the start of the period involving the Highlands & Islands Medical Service, as is shown below:

Table: To show the increase in consultation rates between  
1917 and 1918

<u>Area</u>	<u>Change in consultation rate</u>
Argyllshire	+10%
Caithness	+43%
Inverness-shire	+43%
Ross & Cromarty	+28%
Sutherland	+30%
Orkney	+37%
Shetland	-23%
Perthshire	+ 2%

This increase, reflecting an increase in the accessibility of medical care in the islands, must be considered to be one of the achievements of the Highlands & Islands Medical Service.

The Highlands & Islands Medical Service proceeded alongside private medical care and club practice in the islands. Doctors working under the H.I.M.S. were required to submit a monthly return of all the patients they had seen, in order to support their claim for a share of the grant. The original returns for the practice at Scolpaig in North Uist survive for the period October 1928 to September 1935, although the data is incomplete, as shown in the accompanying table:



H.I.M.S. RECORDS

Availability of Returns for North Uist

Year	Month												No. of months
	J	F	M	A	M	J	J	A	S	O	N	D	
	1928									x	x	x	3
	1929	x	x	x	x	x	x	x	x	x	x	x	12
	1930	x	x	x	x	x	x	x	x	x	x	x	12
	1931	x	x	x	x		x	x					7
	1932												
	1933												
	1934					x	x	x	x	x	x	x	8
	1935	x		x	x	x*	x	x	x				8

50

\* Incomplete

In submitting their claims for a grant from the H.I.M.S. Fund, the doctors were required to classify their patients into the following categories:-

- 1) Poor Law patients, and their dependents, including pauper lunatics.
- 2) Patients insured under the 1911 National Insurance Act.
- 3) Highlands & Islands Medical Service patients.
- 4) Patients attended under arrangements with other public bodies, viz, Post Office, Home Office, Lighthouse

Commissioners, County Council, and members of the Seamen's National Insurance Society.

5) Club patients.

6) Private patients.

Old age pensioners, if attended under arrangements with the County Council were classed under Poor Law Patients.

Otherwise they were classed as H.I.M.S. patients.

An analysis of the records of North Uist show that over the period, 1928-1931, the respective classification of patients was as follows:

Table: Classification of Patients seen: North Uist, 1928-1931

<u>Classification</u>	<u>Percentage of all patients seen</u>
Club patients	36.3%
H.I.M.S. patients	35.5%
Insured patients	16.6%
Poor Law patients	5.6%
Private patients	4.7%
Other Public Bodies	2.3%

Over a third of all patients belonged to a medical club founded by the island's factor, for the professional services of a Dr. MacKenzie. However, by 1934, the North Uist Medical Association had collapsed, following the indisposition and later death of this doctor.

#### (5.6) REPORT OF THE COMMITTEE ON SCOTTISH HEALTH SERVICES

##### (Cathcart Committee)

The Highlands & Islands Medical Service was first reviewed in 1936, when the Cathcart Committee reviewed the

Health Services in Scotland. The Committee believed that:

The Highlands & Islands Medical Service has been an outstanding success and is universally approved. On the basis of the family doctor there has been built up by flexible central administration a system of cooperative effort, embracing the central department, private general practitioners, nursing associations, voluntary hospitals, specialists, local authorities, and others to meet the medical needs of the people.

The Committee believed that no change had occurred since the Highlands & Islands Medical Service had been set up to justify any interference with its normal development.

The Cathcart Committee listed two reasons for the success of the Highlands & Islands Medical Service. Firstly, in contrast to what existed before the fund was set up, there were no districts which were incapable of obtaining a doctor's services on reasonable terms. Secondly, with the guarantee of a reasonable income, a much better class of doctor was being attracted to the area. Prior to 1914, although there were practitioners of outstanding ability and merit, the tendency was for Highland practices to attract men who had proved unsuccessful elsewhere. However, by 1936, these areas were attracting young men of ability and energy, who had not enough capital to start a practice elsewhere, but who were regarding the Highlands as a starting-off point in their careers. The result was that there had been a marked improvement in the general standard



of the medical service available.

Objectively, evidence for improved medical care in the Highlands and Islands could be found in the reduction in the number of uncertified (and by implication, unattended) deaths. Whereas the Highlands and Islands still accounted for 90% of all uncertified deaths in Scotland, in these regions, the proportion of deaths which were uncertified had fallen from 10.54% in 1911-1913, to 4.51% in 1931-1933.

The Cathcart Committee concluded that the H.I.M.S. had fully justified its existence, and returned value for money. It had brought great benefits to the region, and indeed, this region was the only part of Scotland where a complete general practitioner service was available for all social classes in the community.

#### (5.7) THE NATIONAL HEALTH SERVICE

The demise of the Highlands & Islands Medical Service occurred with the National Health-Service (Scotland) Act of 1947. The N.H.S. Act repealed the Highlands & Islands (Medical Service) Grant Acts of 1913 and 1929. The scheme was fused into the National Health Service. Section 68 of the Act allowed for the transfer to the Executive Councils of the properties owned by the local governments in respect of doctors' houses and surgeries, and wound up the Highlands & Islands Fund, the balance of which was transferred to the Exchequer.

The medical service in the islands was to be managed along similar lines to the N.H.S. elsewhere in the country, which became

a free service at the point of use, and available to all. A vestige of the H.I.M.S. scheme still however remains, that of the Inducement Payment system for doctors in remote underpopulated regions.

#### (5.8) THE BIRSAY REPORT

The first major investigation of general practice in the Scottish islands, after the demise of the Highlands & Islands Medical Service, on its incorporation into the National Health Service was the Birsay Report in the General Medical Services in the Highlands & Islands, 1967 (Cmnd 3257). The Committee was set up in 1964 with the following terms of reference:

To consider the arrangements for the provision of general medical services in the Highlands & Islands, within the framework of the health services generally; and to make recommendations.

The Committee took evidence from a wide range of interested groups, individuals, and doctors, and travelled extensively in the crofting counties.

The Birsay Committee found that in Orkney, Shetland, Ross & Cromarty and Inverness-shire, there were 127 general practitioners, who each had an average list of approximately 1375 patients. Fifty percent of doctors were in single-handed practice, and nearly half dispensed drugs themselves.

The Committee was, on the whole, favourably impressed by

the general practitioner services in the Highlands & Islands.

They felt that:

The needs of the situation require that some doctors should practise in comparative isolation in remote areas, and the doctor so placed should possess experience, resourcefulness and initiative in greater degree in precisely those small and remote practices where the prospects of a truly stimulating range of professional work are least. It is this fact - that the practitioner in a small remote practice should ideally be an above-average doctor who is being unavoidably under-employed - which leads us to the conclusion that the continued justification for very small remote practices (there are seven with fewer than 200 patients, and 21 with fewer than 500) must always be kept under the closest scrutiny. In the public mind, the quality of the medical service tends to be equated with the proximity of the doctor. Any attempt to reduce the number of small practices will accordingly be unpopular, and seen as a curtailment of services, and a step towards undermining the viability of the communities concerned.

Nevertheless, provided other arrangements can be made to provide satisfactory medical care, we believe that it is ultimately in the best interests of the Health Service and of such communities themselves to keep the number of small isolated practices to a minimum. Only by offering active doctors



interesting work can first-class men and women be attracted and retained to give a lifetime of service at a consistently high level of efficiency. We do not suggest that it is possible for us to indicate with any accuracy those practices which have reached the point at which it is no longer possible to justify their continued separate existence; in most cases the withdrawal of the local doctor would depend on the strengthening of the local authority's nursing service, and also on the availability of suitable transport to enable the nearest alternative practitioner to make regular visits. But subject to these provisions, we think that the practices of Papa Westray, Flotta and the Small Isles (Rum, Eigg, Muck and Canna) are, prima facie instances of small practices for which arrangements other than the provision of full-time resident general practitioners would be sensible.

The Committee also felt that any suggestion to place a resident doctor on the Fair Isle, with a population of only about 60 was undesirable.

The Birsay Committee's Report also drew attention to many difficulties experienced by G.P.s in the Highlands & Islands, including transport; difficulties in attending postgraduate educational courses; the problems associated with professional isolation; the difficulty and expense of providing locums for periods of holiday or sickness; the difficulties of single-handed

practitioners in affording expensive apparatus such as ECG machines; the problems associated with obtaining paramedical staff; the complexity and inadequacy of remuneration.

The Birsay Committee's Report made a large number of recommendations pertinent to general practice in the islands. The Report was generally well received by both patients and doctors alike. The exception was already anticipated ; namely the removal of resident doctors from certain small communities. This received a vituperative response.

#### (5.9) THE PROBLEM OF THE SMALLER ISLANDS

The problem of servicing the smaller Scottish islands with an adequate medical service has existed since the middle of the nineteenth century. The problem is still unresolved.

On the one hand lies the right of all the inhabitants of the United Kingdom to an equal and adequate availability of medical care, irrespective of their geographical situation. On the other hand lie the pragmatic and logistic difficulties of providing an expensive service, which, owing to the small populations involved, would be insufficiently used to justify its existence.

Contributing factors are difficulties in communication, and the role of the doctor in these communities as perceived by the patients and the medical profession respectively. Small communities scattered sparsely over huge geographical areas can

be serviced adequately if facilities for communication are good. The role of the doctor, as viewed by patients and as viewed by doctors may be quite disparate. Indeed, it is likely, that the conflict that arises between the medical profession and the community in these isolated areas is largely due to different perceptions of their role.

No consistent pattern has emerged in the development of general practice in those Scottish islands with populations less than 150. Some islands, such as Egilsay in Orkney, Papa Stour in Shetland, and Vatersay in the Outer Hebrides (Stewart, D., 1981), have never had a resident nurse or doctor, but have been serviced by those living and working on adjacent islands. Other islands, such as the Fair Isle have possessed a resident nurse throughout, being serviced by intermittent visits by a doctor on a neighbouring island. Other islands which formerly possessed a resident doctor have been dispossessed of the latter, either permanently (viz. Papa Westray) or for a short period (viz. Flotta). Other islands such as North Ronaldsay, and Eday in Orkney have had a resident doctor throughout recent times.

This confused situation can be illustrated with reference to the islands of St. Kilda, Flotta, North Ronaldsay and Papa Westray.

### ST. KILDA

St. Kilda represents an island which eventually succeeded in obtaining a resident nurse. The nurse who was appointed met with the common problem of proud isolated communities - resentment



and distrust. It seems likely that the need for a nurse was perceived to be greater by outsiders, such as the proprietor's family, the ministers and visitors, rather than by the inhabitants themselves, who had a philosophical viewpoint as regards infant mortality, that outsiders found rather shocking.

St. Kilda never possessed a resident doctor, in spite of the islanders' wishes (Mackay, John, 1884 : Gillies, Angus, 1884). Prior to the appointment of a nurse, advice was sought from the minister or the island's handy-woman. Visits by the medical profession to the island were infrequent, irregular and undependable, and were often undertaken by military doctors sent in response to a crisis (Hall, R. V. B., 1913; Cristie, Capt., 1906; Shearer, A., 1920; Hawke, S., 1912; Taylor, Dr., 1912; The Times, 27.6.13), or by doctors amongst the summer visitors (Campbell, Archibald T., 1889), or by those who had come to vaccinate the population (Steel, T., 1975). After the Highlands & Islands Medical Service was instigated, there was a cursory annual visit to the island by a doctor from the Department of Health for Scotland.

The population of St. Kilda has been frequently recorded from 1697, until 1930 when the island was evacuated. The highest population was around 180-200 (Martin, 1697, Buchan, Alexander, 1705), but after the smallpox epidemic of the early eighteenth century, this was reduced to some 30 inhabitants, rising in the nineteenth century to an average of about 75 inhabitants. By the time of the islands evacuation, there were

less than 40 inhabitants.

St. Kilda was particularly liable to the effects of epidemic diseases, especially influenza-like illnesses (the 'boat-cold'), smallpox (Collacott, R. A., 1981), typhus (Dougall, John, 1892), mumps (Shearer, A., 1920) and whooping-cough (BMJ, 10.9.21). Neonatal tetanus led to high neonatal mortality (Collacott, R. A., 1981), owing to which, expectant mothers often travelled to Harris, rather than rely on the skill of the island's untrained midwife ('knee-woman') during their confinements:

Expectant mothers sometimes go to Harris to be confined, and they generally return with a strong baby, but it is exceedingly inconvenient to be so long absent - they leave with the factor's ship in September, and as there can be no conveyance in the winter, do not get home to the following June. They dislike it very much. (Macleod, Emily, 1877 (i))

As Miss Macleod, a relative of the proprietor, stated:

The real want of this island is a well-educated nurse, for the old woman who acts as such is thoroughly ignorant. (Macleod, Emily, 1877 (ii))

There were great difficulties in providing even this level of care in St. Kilda. Miss Macleod attempted to interest the St. Kildan women to go to Skye for nursing and midwifery training, but without success (Macleod, Emily, 1877 (ii)). The minister on the island reported:

I have spoken to some women here, asking them if any of them would be willing to go to Skye, as suggested

by the Honourable Mrs. Macleod of Macleod, in order to be educated and trained for a nurse and midwife, but none of them is willing to undertake such a responsible charge. You had better try to see if you can find any person about you in Duirinish, as the women there are more bold and courageous to leave home than the St. Kildan women, who are so much attached by long usage to their native place.

(McKay, John, 1877)

Miss Macleod therefore:

procured a nurse (Miss McAulay) who resided in St. Kilda for nine years at her (Miss Macleod's) expense, and succeeded after great fighting with the customs and prejudices of the people in saving, with one or two exceptions, all the children born while she was there. On her leaving, owing to many unpleasantnesses, to which Mrs. McAulay had been subjected, Miss Macleod thought that, as there are never more than 3 or 4 births in the year, it would be better to get one of the island women taught in Glasgow the duties of a nurse, and she offered to pay all the expenses, but she failed to persuade any of them to accede to her proposal. She then, after much difficulty, engaged another trained nurse (Mrs. Urquhart) who was in the island for a year, and was quite as successful as the previous nurse, but was not well received by the people, and therefore



declined to remain. On her leaving, Miss Macleod relinquished the hope of satisfying the islanders with a nurse, and she told them she thought it would be better, if they wanted another nurse, to try and provide one themselves. She also said that as they were in comfortable circumstances, they ought to pay her salary, and cease to be dependent on others for her remuneration. (Macleod of Macleod, 1890)

In the summer of 1890, the minister, Rev. Angus Fiddes applied to the Glasgow Sick Poor and Private Nursing Association for a nurse to assist in St. Kilda. As a result, Nurse Chisnhall went to St. Kilda in 1890, spending two years there. Nurse Chisnhall also received hostility from the islanders, as reported by the minister:

The nurse has been among them giving them medicines, and attending to them. I am sorry to say that they don't appreciate her services as they ought.

The last two mothers did not employ her (in childbirth), but took instead Donald Ferguson's wife, on account of a groundless feeling aroused against her. It's the old story.

Some of them would find fault with the most skilful person. Some of them threaten not to employ her over the winter, which is very hard upon me after taking her to the island for to keep them at home and be not under the necessity of going to Harris to get attended to.

The nurse thinks that I ought to use my authority

and put a stop to Mrs. Ferguson for interfering with her work. I said to her that it was not Mrs. Ferguson who was so much to blame as those who employed her, and that I could not force them to use her offices when they hated her ..... She is very hasty in temper and somewhat too ready to express her own opinions, which is the only fault they have against her.

(Fiddes, Angus, 1891)

In spite of petitioning Queen Victoria (Fiddes, Angus, 1890), no replacement for Mrs. Chishhall was forthcoming when she resigned, and St. Kilda was without the services of a resident nurse until 1914, when Mrs. M. E. Maclellan was sent to St. Kilda under the Highlands & Islands Medical Service Scheme (Maclellan, M. E., 1914; Hogge, James, 1914). Thereafter, the island possessed a resident nurse holding a biennial contract, until the island was evacuated (largely at the instigation of the nurse, Williamina Barclay) in 1930.

Thus, St. Kilda, although without a resident doctor at any stage of its history, was eventually, and with much difficulty, provided with a resident nurse, until the island was evacuated. A somewhat different series of events has occurred on the island of Papa Westray.

#### PAPA WESTRAY

Papa Westray represents a small island which possessed a resident doctor from 1897 until 1981, when its resident doctor was withdrawn. The population of this island rose to nearly

400 in the middle of the nineteenth century, only to fall progressively until its present population is less than 100.

Prior to 1897, Papa Westray was served by the doctor from the neighbouring island of Westray. The first doctor was appointed after the committee of the Papa Westray Medical Association had become dissatisfied with the infrequent visits of the Westray doctor. Dr. Ryan left the post after only a few months, thereby starting a tradition which has continued until 1980. The island of Papa Westray has become notorious in respect of the short length of time that the resident doctor has held the post.

Papa Westray was left for four months without a doctor until Dr. Ryan's successor was appointed in September, 1898. His successor stayed in post for only nine months, leaving the post vacant for five months. His successor in turn stayed in post for only 23 months (Macleod, Reginald, 1903). Between 1897 and 1915, Papa Westray had a succession of fifteen doctors. When Dr. Low retired in 1915, wartime conditions prevented the reappointment of a doctor, which again, had to rely on the Westray doctor. Papa Westray remained dependent on the Westray doctor until 1926, when Dr. Jean S. McPhaill was appointed. She remained in post until 1945. In the thirty-five years since her departure, there have been twelve other resident doctors, each holding the post for about three years only.

The Birsay Report suggested that on account of its limited population there were prima facie grounds for depriving Papa Westray of its resident doctor, and servicing the island medically in other ways.



In this respect, the Birsay Report received the hostility it expected. Protests were sent to the Scottish Secretary, Mr. William Ross, from Papa Westray and Flotta (Orkadian (1)) and from the Orkney County Council (Orkadian (2)), and angry letters were written to the national press (Pyle, L., 1967).

In 1974, the matter came to a head when Dr. Thomas Bryan retired. The Orkney Medical Advisory Committee recommended, on balance, that a doctor should be retained, in spite of the small size of the practice (Orkadian, (3)). Arguments voiced were that the island was often cut off by storm or fog, and that even the inter-island steamer had been unable to berth on many occasions. Depopulation of the island would almost certainly occur (Bryan, Thomas, 1974). But the committee stressed that a resident doctor was probably not the best use of medical manpower. The committee felt that if a doctor were not reappointed, a resident nurse should be appointed instead. After a delegation of Orkney Health Board to the island in June, 1974, the Orkney Health Board recommended to the Scottish Medical Practices Committee that a doctor should be retained on the island (Orkadian, (4)). The Scottish Medical Practices Committee, after visiting the island, however, recommended to the Secretary of State for Scotland that there should be no resident doctor on Papa Westray (Orkadian, (5)). The Secretary of State referred the matter back to Orkney Health Board for their detailed views.

In the meantime, vituperative correspondence appeared in the local press, urging that a resident doctor be maintained on the island (Firth, M. H. et al, 1974). Orkney County Council

made strong representations for the continuation of the existing service (Orkadian, (6)). Other doctors from the northern isles of Orkney, who had been absent from the Orkney Medical Advisory Committee meeting also wrote supporting the continuation of a resident doctor on Papa Westray (Bryan, T. B. L., et al, 1974; Strong, D. A., 1974). The member of parliament for Orkney and Shetland, wrote to Mr. William Ross, Secretary of State for Scotland "supporting in every way" the case for maintaining a doctor on the island. He wrote:

I can imagine few things which will depress morale more in the island than the withdrawal of a doctor from Papa Westray. (Orkadian, (7))

Orkney Health Board, having consulted Orkney County Council, the Orkney Council for Social Service, the Orkney Area Medical Advisory Committee, the Nursing Advisory Committee, the County Councillor for Westray & Papa Westray, and the retiring Papa Westray doctor, reiterated its view that a resident doctor should be retained (Orkadian, (8)). Late in August, 1974, the Secretary of State for Scotland, through a letter from the Scottish Home & Health Department to Orkney Health Board, rejected the recommendations of the Scottish Medical Practices Committee, and decided that funding should continue for a resident doctor on Papa Westray (Orkadian, (9)). Papa Westray had gained a respite, and Dr. John Spencer-Smith was appointed as successor to Dr. T. H. L. Bryan.

Less than eighteen months later however, Dr. Spencer-Smith resigned (Orkadian, (10)). In a letter addressed to the chairman



of Orkney Area Medical Committee, Dr. Spencer-Smith concluded:

The broad overall span of medicine is not present in sufficient quantity, and I feel that after 2 or 3 years, my quality as a doctor would have depreciated due to lack of experience and the stimulus of mixing with colleagues. I realise that my presence here is largely a psychological one to the islanders. It is quite obvious that they feel keenly the need for the presence of a resident doctor on this island. Should the question of a resident doctor or a resident nurse arise, in my opinion, an experienced nurse would be of greater practical value .... (Spencer-Smith, John, 1976)

The Committee, representing all the doctors in Orkney passed unanimously the following resolution:

That the medical interests of Orkney and Papa Westray could be better served by a district nurse resident on the island, and a doctor regularly visiting the island (Orkney Area Medical Committee, 1976)

Orkney Health Board reiterated its resolution that a resident doctor should be maintained on the island (Orcadian, (11)).

The Secretary of State for Scotland referred the matter to the Scottish Medical Practices Committee, following a letter from Orkney's member of parliament (Orcadian, (12)). Meanwhile the correspondence columns of the local paper were filled with letters advocating the retention of a resident doctor (Rendall, Jim, 1976; Flett, Frank, 1976). Virtually the whole population of the island petitioned Orkney Health Board and the Secretary of State (Orcadian, (13)). In April, the Secretary



of State again resolved to maintain a resident doctor on the island (Orkadian, (14)). Papa Westray had again won a respite.

Papa Westray was served by a number of locums until Dr. John Snowdon was appointed. Following his resignation in 1979, a further series of locums was employed until Dr. Alexander Robertson was appointed. Dr. Robertson held the practice for less than a year before he too resigned, in March 1980. The Secretary of State for Scotland, Mr. George Younger decided not to renew the practice of Papa Westray in May 1980, in spite of an appeal from Papa Westray to the Prime Minister, and a deputation from Orkney Health Board to the Scottish Home & Health Department.

The decision was taken to amalgamate the practice of Westray with that of Papa Westray, the Westray doctor being provided with a boat in which to cross Papa Sound between the islands (Orkadian, (15)). After consultations between Dr. Judson and Orkney Health Board, the Area Medical Committee and the Papay Community Council (Orkadian, (16)(17)), the details of the medical service in the combined practice were resolved, and after a few months were found to be generally satisfactory (Orkadian, (18)).

### FLOTTA

The situation in the island of Flotta has been different to that of Papa Westray. Flotta possessed a resident doctor from 1893 until recent years, when, with the fall of its population, its resident doctor was withdrawn. However, with the development of oil-exploration in the North Sea, and the construction of an oil storage terminal on the island, the population rose once more, and a resident doctor was reinstated.

In the nineteenth century, the island of Flotta was served by doctors from Kirkwall and Stromness, until Dr. James Dewar, MA, MB, CM, was appointed from Sanday to South Ronaldsay in 1875. Dr. Dewar was involved in visiting patients in Flotta, which he considered to lie in his practice area. The first resident doctor on Hoy was appointed by Walls parish in 1876, but the practice fell vacant soon afterwards, and remained unfilled until the turn of the century. (Taylor, Rex, 1976)

In 1893, Flotta ended its dependence on Dr. Dewar from South Ronaldsay and appointed Dr. W. C. Pieris, MB, CM as its first resident medical officer. Between 1893 and 1915 ten doctors held the practice in Flotta for an average of two years each. Between appointments, the island was often left without a doctor for periods of six months (Macleod, Reginald, 1903). During the early days of the Highlands & Islands Medical Service, the island of Flotta was served by Dr. Donaldson, whereas Walls District was served by naval doctors stationed at Longhope (HIMS 2nd Annual Report, 1916; HIMS 3rd Annual Report, 1917). After the Highlands & Islands Medical Service had been introduced, more stability was given to the practice, and only five reappointments were made in the subsequent 32 years.

In 1967, the Birsay Committee Report lumped Flotta with Papa Westray as an island which no longer merited its own resident medical officer. Lord Birsay gave Orkney his personal explanation for his committee's recommendation in the local press (Leslie, Harald R., 1967). The problem came to a head in June 1973 after Dr. Gibson, the Flotta G.P. had tendered his resignation.



The population of Flotta had fallen to some eighty patients. Mr. Hector Monro, Under-Secretary of State for Health and Education, after receiving advice from the Scottish Medical Practices Advisory Committee refused to provide funds for the reappointment of a doctor on Flotta (Monro, Hector, 1973). The Flotta practice was to be amalgamated with the Hoy practice (400 patients) based on Longhope. Flotta was to be provided with a resident nurse.

This decision was greeted with dismay by the local member of parliament (Grimond, Jo, 1973). A petition from practically the whole community in Flotta was submitted to the Under-Secretary of State (Traill, Ewen S. G., 1973 (i)). Angry letters appeared in the local press (Barnett, R. H., 1973, (i); Traill, Ewen, S. G., 1973 (ii); Barnett, R. H., 1973 (ii); Gibson, Hugh H., 1973). The question of providing a doctor for the island was raised in Parliament (Orcadian, (19)). The District Clerk of the island of Sanday also objected on the grounds that a precedent was being set (Orcadian, (20)). However, Mr. Hector Monro remained obdurate in his decision (Monro, Hector, 1973 (ii)). The rate-payers of Flotta went on strike (Rosie, R. S., 1973; Orcadian, (21)).

At the beginning of 1974, large tracts of the island of Flotta became involved in the construction of an oil-storage terminal on the island. There was an influx of several hundred construction workers to the island. Accordingly, the question of a resident doctor on the island was reopened (Orcadian (22)(23); Traill, Ewen, S. G., 1975; Wink, Bill, 1975). Orkney Health



Board however did not feel that an independent practice need be re-established (Orcadian (24)). However, the matter was brought to a head when with the oil boom, the population of the island rose to 1280 patients. Dr. Trickett, the Hoy doctor resigned his patients in Flotta (Orcadian (25)).

However, Dr. Trickett's resignation was modified by the appointment of an assistant to Dr. Trickett - the principal to attend to the island of Hoy, and the assistant to work the island of Flotta (Orcadian (26)(27)). Dr. R. V. Hazlehurst was first appointed as assistant, being succeeded by Dr. Ian McNicol. In 1980, the independent practice on Flotta was re-established, Dr. Ian McNicol being appointed the principal. After remaining as principal for eight months, Dr. Ian McNicol resigned, being replaced by Dr. John D. Huntley.

In Flotta then, the marked decline in the population left the island without its own resident doctor, in spite of much popular feeling against this. By the chance of finding economically extractable oil in the North Sea, and the planning and construction of an oil storage terminal on this island, the population rose (perhaps albeit temporarily). It is in response to this development only, that a resident doctor to the island was reappointed. However there is already a suggestion of this practice reverting to one with a rapid turnover of doctors, with its inevitable lack of continuity of care.

#### NORTH RONALDSAY

The island of North Ronaldsay, together with the island of Sanday make up the Parish of Cross & Burness. North Ronaldsay

is perhaps the most inaccessible island in the Orkney island archipelago, and represents an island which has had an uninterrupted succession of doctors since their first appointment under the Highlands & Islands Medical Service. This is in spite of the present very small population (just over 100).

Sanday was the first of the northern isles of Orkney to obtain its own doctor. A 'board of health' had been established in Lady parish (which includes North Ronaldsay and parts of Sanday) as early as 1832, and whilst its initial role was limited to obtaining contributions for the supply of medicines, it campaigned increasingly for a resident doctor (Taylor, Rex, 1976). In the late 1840's, Dr. Patrick Wood, LRCS, MD., was appointed medical officer to the parochial boards of Lady, Cross & Burness. Dr. Wood remained in Sanday until 1873, and during this time was called upon to see patients in North Ronaldsay and Stronsay, but even on these islands, recourse was more often had to the Kirkwall doctors.

The need for a more satisfactory arrangement for medical care became apparent at the turn of the century, when the ministers on the island, the Rev. Robert Grieve of the Parish Kirk, and the Rev. William MacPherson of the Free Kirk managed to obtain the services of a Queen's Nurse for the island. Nurse Noble was appointed in December 1900, being succeeded by Nurse Sandison in 1902. The North Ronaldsay Nursing Association subsidised the training of one of the islanders, Janet Tulloch, who was appointed nurse on the island in 1905, staying there until 1915. (Tulloch, Peter A., 1974; Scott, Mary A., 1967).



In 1912, the Highlands & Islands Medical Service Committee, after requests made by the minister, the Rev. William Forbes, recommended the appointment of a doctor to North Ronaldsay, but it was not until 1915 that Dr. A. Lees Low, MB, CM became the island's first medical officer. Since that time, North Ronaldsay has had over twenty doctors, each staying for approximately three years.

The problem of providing a medical service to the smaller islands has been treated in several ways- by providing the island with a resident doctor, or by providing the island with a resident nurse with visits from a neighbouring doctor, as required. These decisions have been made on an ad hoc basis, and the reinstatement of the Flotta practice demonstrates some degree of plasticity in decision-making. In 1979, a study group was set up by Orkney Health Board to examine the medical and community nursing requirements of the Outer Isles, and reported a general inclination to retain the present practice status quo (Orkney Health Board, 1980). However, with continuing depopulation of some islands (viz, Eday), it is likely that the future will bring the need for alternative medical arrangements. The basic difficulty - that of transport and communications - is in many ways unsolved, but for which, novel solutions have been proposed (vide infra).

#### (5.10) THE AIR AMBULANCE SERVICE

The development of the island air-services was a major factor in altering the character of general practice in the Scottish Islands, giving rise to a much less isolated medical service. Patients could be transferred from island to island,



and also from island to Mainland Scotland. General practitioners could summon the assistance of colleagues in other islands, with considerably more ease, increasing the effectiveness of specialist services in the main island townships of Kirkwall, Stornoway and Lerwick.

In Orkney, for example, the hospital in Kirkwall had been used practically entirely for the use of those patients who lived within easy reach of the hospital. During the hospital's first fifteen years' use (1877-1893), the number of patients using the hospital diminished remarkably the further the patient lived from the hospital. This is shown in the following table and accompanying map.

Table: Hospital admission rates per annum per thousand population,  
in Orkney, 1877-1893.

<u>Parishes</u>	<u>Rate</u>
Kirkwall, Shapinsay	> 3.00
Stronsay, Eday, Rousay, Egilsay .	2.00-2.99
Mainland, Westray, Papa Westray, Walls, Flotta, Sanday, North Ronaldsay	1.00-1.99
Hoy, Burray, Graemsay, South Ronaldsay	< 1.00

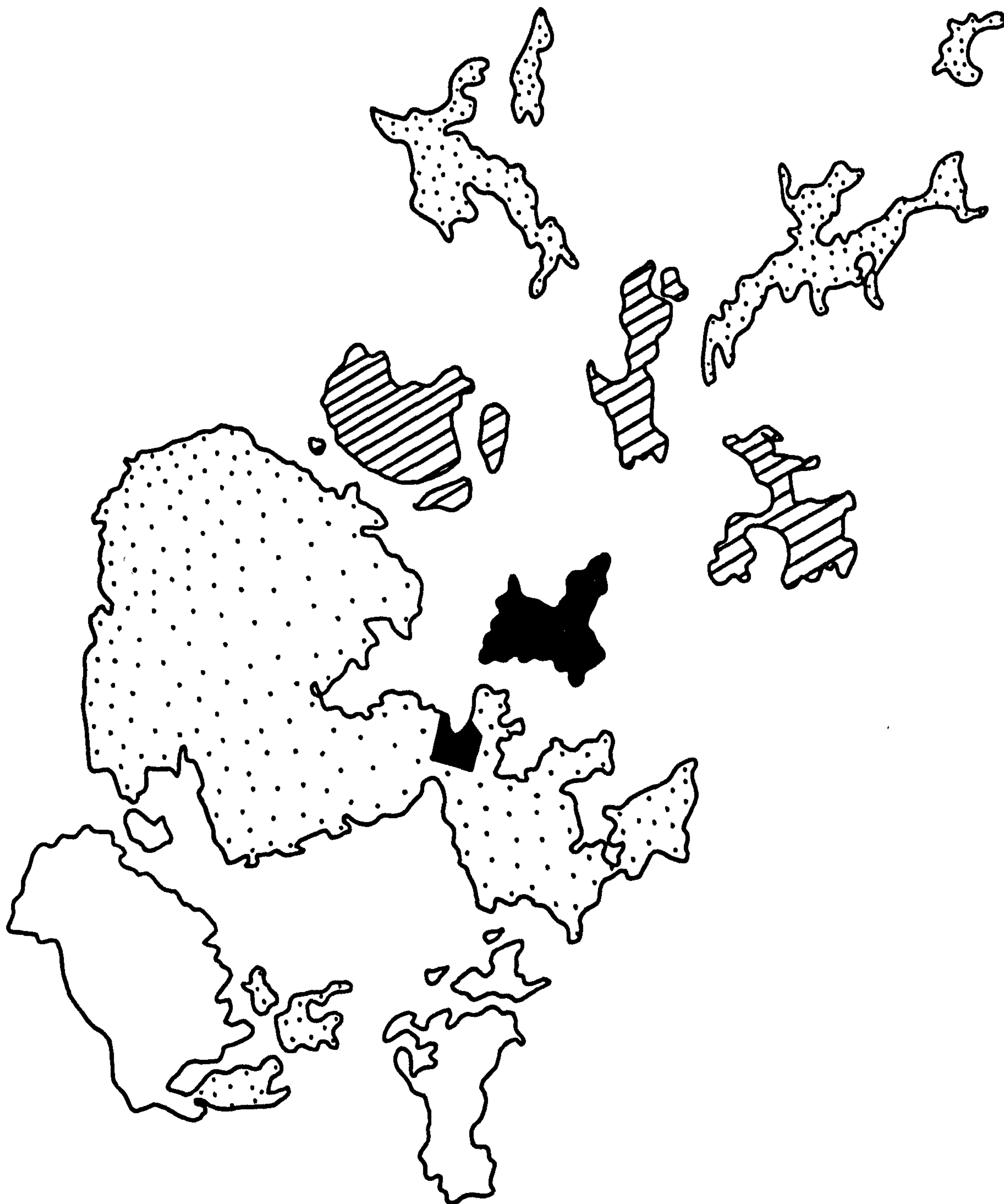
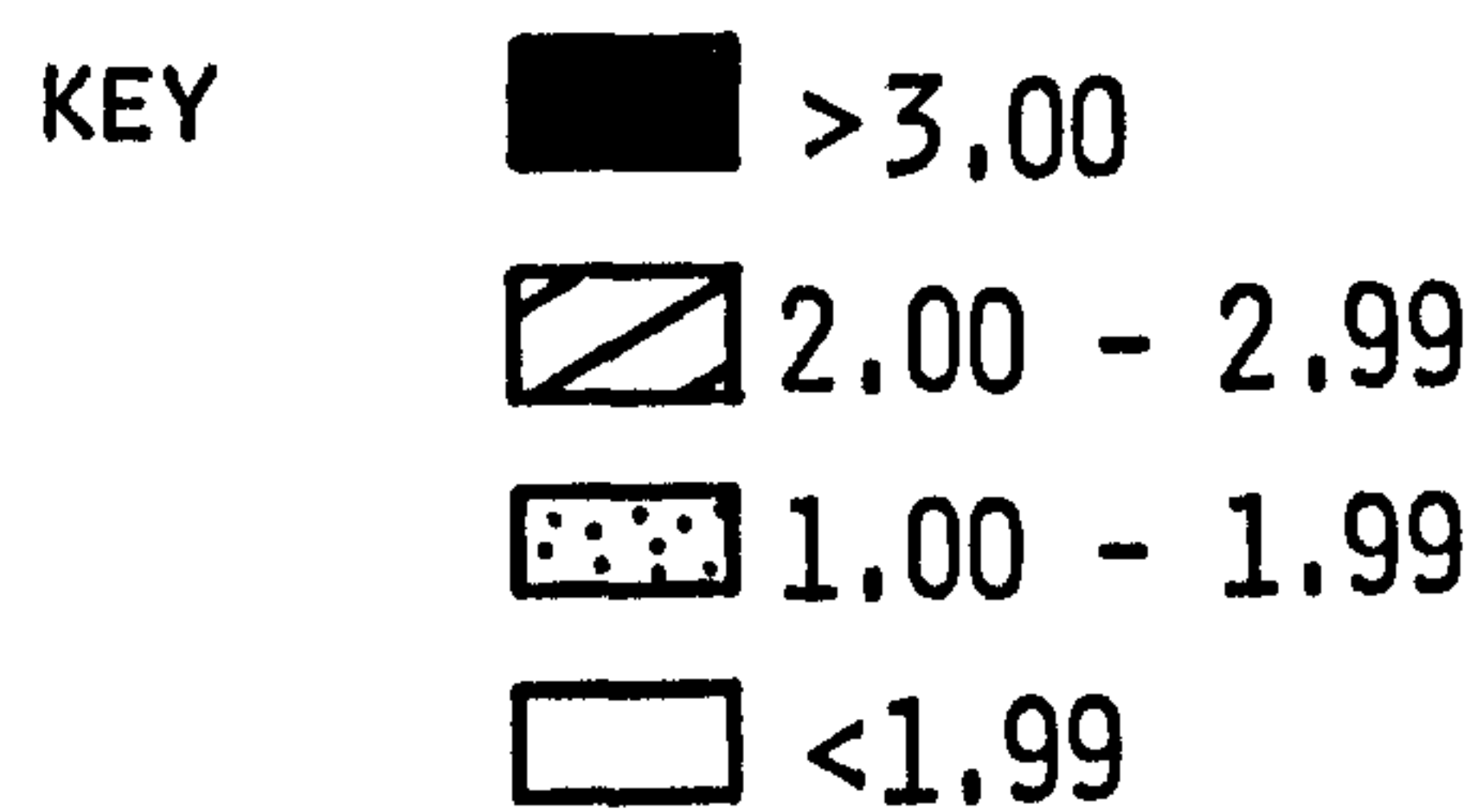


DIAGRAM: HOSPITAL ADMISSION RATES PER ANNUM PER THOUSAND  
POPULATION ORKNEY: 1877-1893



Patients could also more easily attend Regional centres such as Aberdeen, Inverness and Glasgow for medical treatment. This was because planes were faster and more comfortable for the patient, compared with a conventional journey by boat, and overland. For example, when Fresson commenced flights between Wick and Kirkwall, the journey undertaken by the St. Ola steamer, via Thurso, took four or five hours. By plane, the journey only took 35 minutes. The Pentland Firth is notorious for its stormy seas, and patients and their companions were often unpleasantly ill as a result of the journey alone. (Orcadian, (28)).

The development of the air services also changed the outlook of the islanders. No longer were they prepared to spend their entire lives on their island of birth, but travel increased, not only within their own island group, but also with the rest of the United Kingdom. The islands became much less isolated, and the medical problems, which had hitherto often been the result of imported epidemics, more closely paralleled those of the rest of the United Kingdom, as herd immunity increased.

The air services to the islands were introduced by aviation pioneers, such as Captain Fresson, who, in April, 1931, reconnoitred the Orkney Islands in a Gipsy Moth. Fresson's company, "Highland Airways Ltd.", commenced a commercial service carrying newspapers and mail on May 8th, 1933. Landing sites had been procured on most of the islands in Orkney, namely Mainland Sanday, Westray, Stronsay, Hoy, Flotta, Rousay and North Ronaldsay (Orcadian, (29)(30)). A similar development occurred in Shetland,



following a preliminary flight by Fresson to the Isle of Bressay in October, 1933.

In July, 1933, the surgeon at the Balfour Hospital, Kirkwall commissioned Highland Airways Ltd. to transfer a patient (David Knight of North Ronaldsay) from Kirkwall to the Northern Infirmary at Inverness. McClure, the Surgeon Superintendent of the Balfour Hospital wrote later to Highland Airways:-

My Dear Fresson,

Thank you very much for taking my patient to Inverness Infirmary. It will interest you to know that without very prompt facilities for taking him to the appropriate specialist, he would have had to undergo a serious operation entailing about two months' invalidism. I hear that the job was done this evening, and that he will be home perhaps at the end of the week.

(McClure, Ian H., 1933)

The suggestion of an inter-island air-ambulance service in Orkney appears to have been first suggested by an anonymous letter to the "Orcadian", by a Sanday reader:-

We were surprised yesterday (November 29th) to hear the drone of an airplane, not long before dark fell. With others, I hurried to the field and learned that the machine had been hastily chartered by a Kirkwall lawyer who was storm-stayed here in Sanday, and who had an appointment in North Ronaldsay. The plane came from

Kirkwall, took on its passenger, and proceeded to North Ronaldsay without trouble.

Later in the evening we learned that the passenger had been safely landed in North Ronaldsay, and that the plane had set off for Kirkwall again.

This flight, at a time when North Ronaldsay was cut off from us by sea, suggests to my mind, the possibility of establishing an air-service for hospital cases. We all know sufficient about the ordeal through which North Ronaldsay patients - and patients from other islands - must go when they have to be conveyed by sea to hospital in Kirkwall.

From time to time I read of patients being conveyed by air from the Western Isles to hospital in Glasgow. North Ronaldsay is in a worse position than we are in Sanday for North Ronaldsay is apt to be cut off by sea for weeks at a time. Sudden necessity to remove a person to hospital would be attended by serious consequences if arising during one of those storm-bound periods. (Orcadian (31))

Fresson, in his autobiography, describes the development of the inter-isles air-ambulance service:-

The final, and probably the most important boon that the air-service brought to the inhabitants came when the Orkney County Council, early in October, two months after the air service commenced, contracted with Highland Airways Ltd., to operate an air-ambulance

service. A great number of cases were flown to the Balfour Hospital in Kirkwall, and a number of lives were saved. (Fresson, E. E., 1963)

This service became operational in November, 1934, and was later expanded to carry urgent cases to Aberdeen for specialised treatment.

In August 1937, Highland Airways and Northern & Scottish Airways were welded into one company, known as Scottish Airways Ltd. This was an unfortunate amalgamation. Highland Airways Ltd., had always been a financially viable concern. Northern & Scottish Airways had been in a precarious commercial position for some months.

Plans had been formulated for an Inverness - Stornoway run, and an airfield prepared at Melbost, Lewis was finished in August, 1939. However, the Inverness-Stornoway service did not commence until after the Second World War, since, when war was declared, Scottish Airways Ltd., Allied Airways (Gandar Dower) Ltd., and North Eastern Airways were called upon to operate under Air Ministry direction. The island services were closed down by the Air Ministry, and the North Isles landing fields were immobilised by placing stone cairns over them. On September 4th, 1939, the Air Ministry ordered the cessation of all Scottish Airways air services, and withdrew radio facilities along their routes.

On February 1st, 1947, Scottish Airways was nationalised by the Labour Government, becoming a Scottish Division under the state corporation (British European Airways). This ruined the air-ambulance service, since services which had been commercially



viable under the auspices of Highland Airways, using small, economical Dragon aircraft, were served by expensive and unreliable restored Junkers aircraft.

When Orkney County Council requested BEA to evacuate an urgent surgical patient from Westray to Kirkwall at the end of March, 1947, Dr. Bannerman, the MDH for Orkney was told that BEA had no suitable plane available. With BEA's inability to undertake the ambulance flight, a steamer had to be despatched to Westray to bring the seven-year-old patient, Inga Brown, to the Balfour Hospital. The journey time took six hours against a flying time of fifteen minutes. Inga Brown had Acute Appendicitis. The girl was seriously ill when she arrived at Kirkwall, and the sea had been rough.

In 1948, Fresson outspokenly hostile to the nationalised corporation was ignominiously dismissed (Sunday Express, 22.2.48; Press & Journal 23.2.48; Glasgow Bulletin, 23.2.48)

Immediately after the collapse of the Orkney Inter-Island Air Services that occurred on the nationalisation of the air-services in the United Kingdom, Mr. J. G. Shearer, County Councillor for the Island of Eday, agitated for the restoration of the service (Orcadian, (32)). Although talks were held, and sympathetic noises emanated from the Ministry of Civil Aviation, restoration of the service was discounted on the grounds of expense .

At a meeting of the Highland Transport Board with Loganair Ltd.,

on February 25th, 1965, the question of an air service to the Northern Isles of Orkney was discussed, and the subject was examined in detail. The Orkney Inter-Island air service was recommenced under the operation of Loganair on September 27th, 1967. A service was initiated between Mainland Orkney and Stronsay, Sanday and North Ronaldsay, and later extended to include Westray and Papa Westray. At the same time, Loganair was commissioned to make ambulance flights between the Outer Isles and Orkney Mainland (Orcadian (33)).

The restitution of this service was much appreciated in the North Isles:

The air-service now plays a very important part in the lives of the North Isles people; they can now make day-trips to Kirkwall for shopping or business, while in the past this was only possible on a few days each year. Local Government officials, business people etc., can also visit the isles and return the same day, and that service is used by a number of itinerant school-teachers. The demand is such that it has been found necessary to extend the number of flights.

We wish to emphasise the very valuable nature of this small, though significant service, and the importance with which it is regarded, not only by the North Islanders themselves, but by everyone in Orkney, especially in respect of the efficient air-ambulance service provided. There is no doubt that the numerous visits by the 'Islander' each day has partly dispelled

the feeling of remoteness. (Committee of Inquiry on Civil Air Transport, 1968).

The air-services were further developed by regular flights to other islands in the North Isles group, including Eday and the Fair Isle (Orcadian, (34)(35)(36)). In the first five years of operating the air-ambulance service in Orkney & Shetland, Loganair made 329 ambulance flights as follows:-

Ambulance Flights by Loganair, 1967-1972:

<u>Orkney:</u>	Outer Isles to Mainland Orkney	176
	Mainland Orkney to Mainland Scotland	84
<u>Shetland:</u>	Outer Isles to Mainland Shetland	50
	Mainland Shetland to Mainland Scotland	19
Total	... ..	329

In 1973, Loganair took over from BEA the provision of ambulance flights throughout Scotland (Orcadian, (37)(38)).

HELICOPTER SERVICES

Alongside the development of an ambulance service using Islander aircraft, doctors in the Western Isles were keen to explore the possibility of using helicopters as ambulances, on account of their improved landing abilities on small islands which did not possess airfields. Indeed the possible use of helicopters had been considered in 1964, when Julian Amery, Minister of Aviation, was exploring proposals for an air-ambulance service in the Northern Isles (Anon, 1964); it was also considered



by the Scottish Office in 1967 (Buchan, Norman, 1967).

Dr. A. J. Macleod, the representative for the Outer Isles, requested the Council of the British Medical Association to pass a resolution supporting the development of a helicopter-ambulance service to serve the Outer Hebrides (Macleod, A. J., 1968; Stevenson, D., 1968). This proposal was discussed at length by other interested bodies, such as the Association of Municipal Corporations (Swaffield, J. C., 1968), the County Councils Association (Hetherington, A. C., 1968), the Highlands & Islands Development Board (Rollo, J. M., 1968), and the Scottish Home & Health Department (Miller, W. R., 1968).

However, the proposal to develop a helicopter ambulance service for the Outer Hebrides did not receive much support from these bodies, or even from the medical profession (Grey-Turner, E., 1968; Hadfield, Stephen, 1968). In times of dire emergency, service helicopters could always be called upon to assist. It was felt that the capital and running costs of helicopters - being considerably higher than that of fixed-wing aircraft, did not justify the implementation of the proposal.

Although the debate continued for a number of years, supported to some degree by the Royal College of General Practitioners (Taylor, Edward M., 1971; Gillibrand, P. A., 1973; Buckley, D. J., 1975), the helicopter ambulance proposal has not, to date, been implemented.

### (5.11) FLYING DOCTOR SERVICE IN THE SCOTTISH ISLANDS

In 1968, Dr. G. W. Mears, who had recently been appointed general medical practitioner in the island of Westray, Orkney, proposed to the Scottish Home & Health Department that the air service in Orkney might be developed to provide a 'flying doctor' service to the Outer Isles of Orkney (Mears, G. W., 1968; Mears, G. W., 1969; Orcadian, (39)). On receipt of this proposal, the Scottish Home & Health Department (SHHD), wrote to the Executive Council for Orkney and the Local Medical Committee asking for their views on this proposal, as follows:-

You will recall that the Birsay Committee, in their report suggested that, in the best interests of the Health Service and the community concerned, in certain remote areas, general medical services might well be provided otherwise than by resident family doctors. An essential factor would however be the availability of regular and reliable transport.

In the light of this recommendation, we have been giving some preliminary thought in the Department to the possible advantages of a flying doctor service. We have in fact received concrete proposals from a doctor on one of the outer islands of Orkney for such an arrangement in the northern isles where regular passenger services operate, and we have been considering the logical development of these proposals, i.e. a flying doctor service serving, as well as the northern

isles, the other five outer isles of Orkney, where there are resident doctors, but at present, no airstrip.

At this stage we have no preconceived ideas as to the ultimate form that any flying doctor service might most effectively take, but it seems to us, whatever the form, the acceptability of any such service would depend on:-

(a) Its ability to maintain a schedule of regular and frequent visits by the doctors to each island, and to deal with emergencies as they arose, so as to ensure a fully satisfactory standard of general medical care; and -

(b) The establishment of a close and harmonious relationship between the doctors, the nurses, the Executive Council, the County Council and others concerned in the flying doctor service.

The organisation and working of any such service, if decided upon, would of course be a matter for detailed consideration by the Executive Council and other interests concerned. It is felt however, that it might be useful to set out at this stage, very broadly, and as a basis for exploratory discussion, the general lines on which it appears to the Department that a service might operate.

The basic assumption might be that eventually the ten outer islands which now have resident doctors might be served by a group of doctors working from a



central location, probably Kirkwall, by air transport. They would be exclusively "island doctors", with no patients on the Mainland, and would hold regular and frequent consulting sessions on the islands, as well as making domiciliary visits in the usual way. In case of urgent request for a home visit, the doctor, if not already on the island, would be flown there in a very short time. (It is understood that the furthest island from Kirkwall is only some 18 minutes flying time distant.) The visiting doctor would of course work in close co-operation with the District Nurses resident on the islands.

On islands which now have no airstrips, the people would gain a valuable and economic link with the Mainland - a scheduled air service. This would enable much easier access to hospital facilities at Kirkwall, and domiciliary visits of consultants to patients' homes would become a simpler and more readily available service. With the islands being in effect less remote, district nurses would be able to have contact with their professional colleagues much more easily, and the evacuation of serious cases to hospital would be carried out by fixed wing aircraft, a much speedier operation, and one less distressing to the patient than the long and arduous sea-crossing or the necessarily long wait for helicopters from Leuchars.

As indicated above, numerous aspects of the question (e.g., the general flying timetables that

might be operated; arrangements for gradual transition to the new service) would need examination before any conclusion could be reached whether or not a flying doctor service was feasible and desirable. It would be very helpful, however, to the Department to have at this stage, the views of the Executive Council on the general concept, and I should be grateful accordingly if you would put this letter before them.

(Hamilton, F. A., 1969)

The original scheme envisaged that the islands of Flotta, Papa Westray, Westray, North Ronaldsay, Eday, Rousay, Shapinsay, Hoy, Sanday and Stronsay might be served in this way (Press & Journal 13.5.69; Orcadian, (35)).

This scheme however met bitter local opposition. The County Councillor for the Island of Sandy, Mrs. Christine Muir stated that because of bad weather, the flying doctor might not be able to land on Sanday or Eday (Press & Journal 16.5.69; Mackay, John, 1969). Marwick (Marwick, E. W., 1969) pointed out that depriving communities of their resident doctor would break the 'family-doctor link', i.e., the deep understanding of people and their medical and psychological background. The Secretary of the Orkney Council for Social Service, Mr. John Tower believed that depopulation of the Outer Isles would be encouraged. The Hospital Board pointed out that such a service would burden a lot more work on the hospitals, as doctors would be inclined to "play safe" with patients, and bring them to Kirkwall so that

they might be kept under observation (Orcadian, (40)). This proposal was also rejected by Orkney Executive Council.

Dr. Eric Hooker, in the minutes of a meeting held in 1969 is quoted:-

It was felt that, apart from his profession, a doctor played an important role in the life of an island community, and that all the efforts in providing light industries which have been and are being made to stem depopulation of the islands, particularly of young people, would be defeated, should resident doctors ever be removed. (Hooker, Eric, 1969)

Jo Grimond, the Member of Parliament for Orkney and Shetland was reported as saying:-

It would be mad to remove the doctors from the islands. So mad that some people might think the suggestion could be ignored.

He appealed for cooperation in stopping the tendency of stripping the islands of their services - the police and water had gone - partly through a failure of Orkney and Shetland to act together. The local government proposals would come soon - and would be of the greatest importance. It was more and more apparent that it was not enough to change the Government, the system itself needed changing.

Mr. Grimond also said that while it would be disastrous to withdraw the doctors in the islands, islands such as Fair Isle, which had no doctor, should be able to benefit greatly from air services for medical purposes. (Orcadian, (41)). Grimond raised



the question in the House of Commons, with Mr. Bruce Millan, Secretary of State for Scotland (Orcadian, (42)).

The possibility of a flying doctor service also alarmed the residents of Shetland (Shetland Times, 30.5.69), who felt the service might later be extended to them, although Shetland also saw advantages in such a scheme:-

By comparison with the smaller isles of Shetland, Orkney has been almost pampered in the provision of medical practitioners for its outer islands. We would not wish our neighbours to be deprived of good medical services, but we must bear in mind that Foula, Fair Isle, Papa Stour and Fetlar might be served by a flying doctor .... The landing strip at Fair Isle is now being used, but is in a poor state. If an investigation of the flying doctor scheme led to its early improvement, and to the creation of strips on the other isles, everyone would be grateful, not least the County Council.

In October 1969, it was reported that the Scottish Secretary, Mr. William Ross, had noted a general consensus of opinion against proceeding meantime with long-term planning for a centrally-based medical service for the islands'. He proposed that the whole question should be dropped. (Belfour, G. F., 1969)

### (6.1) CURRENT PROBLEMS OF GENERAL PRACTICE IN THE SCOTTISH ISLANDS

General practice in the Scottish Islands has developed considerably since the Poor Law Amendment Act of the mid-nineteenth century. Primary care has now become available to all those who live in the islands, and is free at the point of use. In many ways, medical practice in the islands has become analagous to that on the Mainland of the United Kingdom. However, problems remain to be solved. These problems affect the patients on the one hand, and the doctors on the other.

For many patients there is only the one doctor who resides on the island where they live. The patients have effectively no choice of doctor, and are at the mercy of the incumbent, however good, bad, caring or indifferent the patients may find him. Respect for the doctor by the patients, and vice versa, is largely enforced by the mutual dependence of the one upon the other.

In some islands, there is a marked lack of continuity of medical care, in view of the rapid changeover in resident doctors. This can be shown through an examination of the minutes of the meeting of Orkney Executive Council from 1963, where practice vacancies and appointments are recorded. The length of time that various doctors have been in post at certain dates can be calculated, and is shown in the following table:

Table: To show length of time that Orkney doctors had been in post.

<u>No. of years</u>	<u>1970</u>	<u>1975</u>
< 1 year	3	2
1-2 years	0	5
2-3 years	1	2
3-4 years	2	3
4-5 years	6	1
> 5 years	9	7

Thus in 1970 and 1975, 57% and 65% of doctors respectively had been in their current practices for less than five years.

To a degree these data hide the fact that there is considerable movement of island doctors from one practice to another within the same island group. For example, of three consecutive doctors who held the Westray practice, one was later appointed to Shapinsay (Dr. W. MacGregor), and the following two (Dr. N. Heywood & Dr. G. W. Mears) were appointed to Kirkwall practices.

A further illustration of this fact is given in the following table, where the movements of eleven doctors who changed their practices in the period 1963-1979 is given:



Table: To show movement of doctors within Orkney, 1963-1979

<u>Doctor</u>	<u>Practice</u>	<u>Date</u>
R. Broadhurst	North Ronaldsay	1973-1976
	South Ronaldsay	1976-present
M. Diament	Stromness	1970-1975
	Dounby	1975-1979
D. Fairley	Papa Westray	1963-1966
	Rousay	1967-1979
S. N. Heywood	Westray	1964-1966
	Kirkwall	1966-1974
S. Johnstone	Stromness	1964-1970
	Stromness	1975-present
W. M. McFarlane	Rousay	-1966
	Evie	1966-1972
G. W. Mears	Westray	1966-1974
	Kirkwall	1974-1977
M. Peace	Eday	1963-1966
	Rousay	1966-1967
	Dounby	1972-1977
S. Peace	Hoy	-1963
	Kirkwall	1963-present
D. Ramsay	Papa Westray	-1963
	Shapinsay	1963-1971
J. V. Violet	Papa Westray	1966-1970
	North Ronaldsay	1970-1972

For the doctor, there are other problems. Perhaps the most important was eloquently described as 'professional and social isolation for the doctor and for his family'. The basis of this may have been seen in the cultural and educational differences between the doctor and his patients. The island doctor is commonly single-handed, with little chance of deputising cover. He is commonly on duty for twenty-four hours a day, seven days a week for most of the year. He has an almost total care commitment for what is commonly an aged population. The cost of having a holiday is excessive owing to the high cost of travel from his island to the mainland, the disproportionately high cost of locums, and the cost of accommodation for the locum, and for the locum's travel to the island. The doctor will also face the difficulty of obtaining secondary education for his children, who will often have to leave home in their early teens.

Doctors need doctors. The problem of postgraduate education for single-handed doctors living in remote areas is almost insuperable. There are few practical opportunities for these doctors to rub shoulders with their colleagues, when compared to those of the mainland, and this may contribute to some degree, to the slow diffusion of ideas. On the other hand, the islands are capable of becoming refuges for individuals with their own personal and psychiatric disorders.

### (7.1) CONCLUSION & RECAPITULATION

This study of the development of general practice in the Scottish islands has traced the process of events since prehistoric times up until the present day. Its evolution from a haphazard situation into a coherent system of medical care has largely depended on governmental intervention, albeit influenced by social, economic and geographical factors.

The earliest recorded medical intervention in the Scottish islands was that of a skull trephination in the island of Bute during the Bronze Age. During the Dark Ages, recognisable medical care was in the hands of the Columban missionaries, who pervaded the Western Isles. Their healing works were seen as a propaganda exercise in furthering public awareness of the power of their monotheistic beliefs over and above the pantheon of pagan deities. To what extent their healing powers were called upon by the ordinary person is unknown. Certainly a rich and varied folklore of medical cures, involving witchcraft, sorcery and the use of charm-stones and healing waters, developed and persisted into the nineteenth century and beyond. Indeed, the 'wristing thread' to cure sprains was still used in Shetland in the 1950s, and silver coins, imbued with healing properties were applied to areas of inflammation at this time.

The first evidence of recognisably trained medical practitioners in the Scottish islands came in the thirteenth century, when hereditary clan physicians came to be appointed. The best known of these family physicians were the Beatons, who worked in many



of the islands off the west coast. Other families included the MacLachlands, the O'Conachers and the MacLeas. Their role was primarily to attend to the medical needs of the higher echelons of the clan hierarchy. Their influence persisted until the eighteenth century, when their influence began to decline with the fortunes of the clans themselves.

In the seventeenth century, the islands were frequented by mountebanks. These colourful characters made outrageously ambitious claims of their medical capabilities, selling substances like Orvietan, a panacea for disease, together with the 'elixir vitae', which was reputed to give ease to all parts of the body in a moment.

But the seventeenth century also saw the advent of orthodox medical practitioners to the islands. The earliest known was Dr. Matteu Mackaile, who came to Orkney in 1660, and stayed some five years. He was maintained through retainer fees from the landed gentry. Thereafter in both Orkney and Shetland, there was a succession of orthodox doctors in practice. These were men of university education, but their practise depended on humoral ideas of cure, with bleeding, vomiting, blistering and purgation as their standbys. They relied too on an extensive herbarium and their prescriptions by todays standards, were bizarre. But with these early practitioners began family medicine.

During the eighteenth century there appears a more constant supply of doctors to the islands, although their numbers at any one time were small. Since the major health problem of the period was that of the infectious diseases, it is hard to see their

work as having been overly effective. Much time was spent in attempting to control the epidemics of smallpox, and with the paucity of doctors, much inoculation was undertaken by lay persons, smiths, minister of religion, and howdies. Medical practice had indeed advanced little, being dependent on the same old humoral methods of treatment.

The nineteenth century was a period of unsurpassed turbulence in the social history of the Scottish islands. The population of the islands reached an all-time peak. The run-rig farming system gave way to sheep, and in its turn to deer-parks. Playboy landowners acted with total disregard for their dependents, and adopted the crofting system. Large numbers of islanders emigrated to North America. Whilst the landowners lived in huge mansions, such as Dunvegan and Balfour Castle, in the islands, or in the pleasure cities of Europe, the crofter eked out what living he could. His farm was an insufficient and indifferent patch, where he lived in a highly insanitary 'tigh dubh', and collected kelp and fished for his laird. His diet was impoverished, and famine struck with the failure of the potato crop.

By the standards of the rest of the United Kingdom, medical practice was an abomination, as is clearly and repeatedly shown by the Report of the Royal College of Physicians, and by the evidence given to the Royal Commission on the Poor Laws. Although attempts had been made by the Friendly Societies, various trade associations and by medical associations to attract more doctors to the islands, their attempts were frustrated.



Some twelve years after the introduction of the New Poor Law in England, the Poor Law Amendment (Scotland) Act was passed. By the use of the Medical Relief Grant, parishes were encouraged to appoint Parochial Medical Officers. In the islands however, most property was in the possession of a few wealthy landowners, well able to obtain medical treatment already. They saw the practice of assessing rates to provide a Parochial Medical Officer as an unnecessary tax on them, and managed to delay the implementation of the Act.

However, by the 1870s, there is definite evidence of an increase in the number of doctors in the Scottish islands. Although a start had been made in providing a comprehensive medical service, progress was still inadequate. The reports by the Local Government Board and by the Poor Law Commissioners at the beginning of this century showed how unsatisfactory this state of affairs was.

Lloyd George's National Health Insurance Act is a milestone in the development of medical and social welfare in England & Wales. But it was an irrelevance to the islands, the majority of whose inhabitants were outwith its terms. The Dewar Committee was appointed to examine this problem, and out of their findings was born the Highlands & Islands Medical Service.

The Highlands & Islands Medical Service permitted the appointment of doctors and nurses to areas which would not otherwise have received these services, and with it began modern general practice in the islands. Indeed, it was largely unchanged by the



coming of the National Health Service.

Problems still exist for the practise of primary medical care in the Scottish Islands, as detailed in the last chapter. But modern transport systems, such as the air-service and the air-ambulance have effectively curtailed much of the geographical remoteness and isolation of the islands.

### (7.2) A SPECULATIVE FUTURE FOR PRACTICE IN THE ISLANDS

The practice of primary medical care in the islands of Scotland is now as modern as elsewhere in the United Kingdom. History provides experience on which to make judgments for the future. In this final section, I shall attempt to make a personal speculation of the future development of practice in these islands. These developments resolve themselves into two categories -- one involves the social & environmental factors which affect the practice of medicine; the other involves the profession.

Although the population of the Scottish islands has remained static over the past decade (1971-1981), the tendency, since the nineteenth century, has been for the population of the islands to decline overall. Within this decline has been the migration of communities from the smaller islands towards the larger islands. With this migration has come the total depopulation of some small islands. This trend is likely to continue, and islands such as Papa Westray, Eday and North Ronaldsay

are likely to become deprived of their populations.

It must be borne in mind, that the economy of the islands has been a succession of slumps and booms. The oil-related industries of the 1970s have constituted just one boom in succession to those of the tweed industry, kelping, eggs, and beef-production. With these booms, the population either remains static, or rises temporarily. The oil-boom is now at an end, with the reduction of the work-force at Arnish, in Lewis, Flotta in Orkney, and Sullom in Shetland.

The medical profession will have to continue to cope with the problems of depopulation. At what point does the population of an island fail to justify the presence of a medical practitioner? How will the problem of serving the smaller islands in Orkney be resolved? I believe that it is inevitable that there will be a reduction in the number of doctors in practice in these smaller islands. Instead, the small islands will be grouped into larger practices, with the aid of an improved communications network. The slow speed of surface transport makes its use impracticable. Building causeways between the islands, like the 'Churchill Barriers' in the southern islands of Orkney, or those between Benbecula and North- & South-Uist in the Western Isles has been suggested, and although feasible, the cost is so prohibitively expensive, that it is unlikely. The further development of a medical air-service for Orkney is practicable and, in my opinion, a likely solution.

The reasons why the initial proposals failed were related to the human dimension and the entrenched views of proud, somewhat suspicious island communities, that it is only possible to provide an adequate medical service through the presence of a resident medical practitioner.



The per-capita cost of providing a medical service to the islands is bound to rise as the population diminishes. Even now, the cost of the medical services in the islands is excessive in relation to the number of patients served. A flying-doctor service is likely to reduce this cost, as several islands could be served by the one doctor. It is likely to provide an interesting and exciting job for the doctor, and would expose the doctor with a sufficient breadth of pathology as to maintain his standards. With the present national economic situation, and its probable continuation into the years ahead, such a service is likely.

Medical practice in the islands has been a political issue for over a century. To deprive the islands of their resident doctors is certainly no vote-catcher for the politicians. It is however, inevitable.

The division between primary and secondary medical care will, I believe, increase with the passage of time. There are a number of incomparably competent doctors in the islands, who, whilst undertaking general practice, also act as anaesthetists, obstetricians, general physicians, geriatricians, radiologists and casualty surgeons. Fewer practitioners feel competent in fields outside general practice, perhaps largely as a result of the growth of medical knowledge, and the growing rigidity in the divisions between medical specialties. I believe that there will be a greater development of secondary medical care in the islands.

Geographical factors make postgraduate education, both for the established principal, and for the trainee, both expensive and difficult to achieve. The growth of postgraduate medical education elsewhere in the country, has not been matched to the same extent in the islands. It seems likely that the use of specially prepared packages of educational material, either literary, or more likely, of videotape material, will become



available. There is a corporate sense of identity among island doctors, and this should be exploited by bodies such as the Royal College of General Practitioners, to further postgraduate education. Such bodies have few members in the islands.

Terms of service for island doctors will, I believe, be changed in the future. The Inducement Payment system is iniquitous. A change to a more simplified, voluntary, salaried service for island doctors -- currently anathema to the GMSC -- is likely. The Inducement Payment system is, after all, really a salaried service, but it is so encumbered by difficulties, iniquities and secrecies, that it should be abolished.

These developments are personal speculation. History leads me to believe that future change will take place only by statute.

(8.1) WESTERN ISLES HERBAL: BASED ON EXTRACTIONS FROM  
MARTIN MARTIN (1705)

<u>Alexander:</u>	Consumptions - added to lamb broth.
<u>Alga marina:</u>	Loss of appetite - infusion with butter.
<u>All-heal:</u>	Green wounds - applied with <u>Golden Rod</u> and butter as an ointment.
<u>Allium latifolium:</u>	Stone - drink infusion.
<u>Argatilis:</u>	Wind - root eaten.
<u>Betonica pauli:</u>	Fracture - applied together with other plants as an ointment based on sheep's grease or butter.
<u>Camomile:</u>	Stitches - used as linament, made with butter.
<u>Chick-weed:</u>	As hypnotic - the feet, knees and ankles were washed in water to which <u>Chick-weed</u> had been added. <u>Chick-weed</u> was then applied to neck and shoulders.
<u>Crowfoot:</u>	Sciatica - skin on thigh was blistered with crowfoot.
<u>Dulse:</u>	Headache - applied as a plaster to the temples. Megrim - applied as a plaster to the temples. As purgative - eaten raw or boiled. Visual difficulties - eaten raw. Cholic & Stone - infusion drunk. Worms - dried, pulverised and ingested. Iliac passion ("Twisting of the guts") - applied hot to lower abdomen. Retained placenta - applied hot to lower abdomen

Scurvy - eaten raw or boiled.

Fevers - infusion drunk.

Erica baccifera: As hypnotic - applied as plaster to crown & temples.

Fern: Bloodshot eyes - mixed with eggwhite and applied to face & brow.  
Blindness - mixed with eggwhite and applied to face.

Flamula jovis: Headache - applied to affected part.  
Pains in legs & arms - applied to affected parts.  
Sciatica - applied as blistering agent to thigh.

Toothache - applied to temples.

Flax: Bloodshot eyes - mixed with eggwhite and applied to face & brow.  
Blindness - mixed with eggwhite and applied to face.

Foxglove: Pains following fever - applied as plaster to effected part.

Golden Rod: Green wounds - mixed with All-heal and butter, and applied as an ointment.  
Fracture - made into an ointment with Sheep's grease or butter and applied.

Hartstonque: Coughs - boiled in wort and drunk.  
Consumptions - boiled in wort and drunk.

Jacobeas: Abscess - made into an ointment using butter, and applied warm.

Swelling & hardness of breasts - made into an ointment using butter, and applied warm.



<u>Lady-wrack:</u>	Stitch after a fever - boiled with <u>Red Fog</u> . The patient sits 'upon vessel and receive fume'.
<u>Linarich:</u>	Headache - applied as a plaster to the temples. Megrim - applied as a plaster to the temples. 'For drawing up the tonsels' - applied as a plaster to the temples and forehead. Defluxions - applied as a plaster to the temples and forehead. As hypnotic after fever - applied as a plaster to the temples and forehead. To heal skin after blistering with <u>Flamula jovis</u> - applied as a plaster to crown and temples.
<u>Maidenhair:</u>	Cough - boiled in wort and drunk. Consumptions - boiled in wort and drunk.
<u>Mertillus:</u>	Fluxes - spoonful of syrup from berries drunk.
<u>Molucca beans:</u>	Diarrhoea - powdered and drunk with mild or whisky.
<u>Nettles:</u>	As a hypnotic - mixed with eggwhite and applied to forehead.
<u>Plantain:</u>	Fluxes - Infusion drunk, after heating with 'hectic stone'.
<u>Red Fog:</u>	Stitch after fevers - boiled with <u>Lady-Wrack</u> . The patients sits 'upon vessel and receive fume'.
<u>Scurvy-grass:</u>	Constipation - a boiled infusion consumed with butter. Bastard scurvy (? Syphilis) - ? Stitches - linament made with butter applied to affected part. - drink infusion. Cholic - drink infusion.

Sea-ware: Worms in the hands - hands are washed in the burnt ashes of sea-ware mixed in salt water.

Shunnish: Consumptions - added to lamb broth and consumed.

St. John's Wort: Fracture - mixed into an ointment with sheep's grease or butter and applied.

Tansy: Worms - drink infusion.

Yarrow: Consumptions - boiled in milk heated with the 'hectic stone' and drunk.

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(8.2) PRESCRIPTION FOR GIORGE KIN, FROM JOHN WATT (EARLY 18th CENTURY).

Orkney Archives: File D13/4/9

Take a large handfull of maidenhair, as much harhound (?), as much trifoill and cut or clip it small, two ounces of good english liquoris ... and scraped and put it on ye fire in a quart of watter and boill it on a slow fire in to a 3 mutchkins and a half then strain all through a cloth and put in it two pounds of brown candy and boill it to a ... till it be boiled in to the consistence of a syrop and take a little of it now and then when the stomack is empty and of food, orall at night when you go to bed, and in the morning.

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(8.3) PRESCRIPTION FROM JOHN WATT, c. 1720.

Orkney Archives: File D13/4/9

Take half an ounce of wormseed and bruis it in a mortar, one ounce of rasons stone them, a quarter of an ounce of ... boill all these in a chopin of ale wort till the third part is boiled

away, then strain it through a cloth and keep it in an earthen pott.

Give the child three spoonfulls fasting and lett it fast an hour after if it give not two or three stools the first day give more the next, if above three give less, let the child take it as long as it lasts if it turn not sower.

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(8.4) AN ACOMPT FROM THE LADY SABA TO MR. WATT CHIRURGIION AT  
KIRKWALL, OCTOR THE 5TH, 1727

Orkney Archives: File D13/4/9

Imprimis for histerick plaister	£1.04.00
For 4 drams salarmoneacth	£1.04.00
For 2 potions of hissock (?)	£1.16.00
To 2 viall glass	2.00
	<hr/>
	£4.06.00

-- Sum of four pounds six shillings Scots money

Received the contents of the above account,

John Watt.

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(B.5) ACCOUNT JOHN TRAIL OF ELSNESS, ESQ., FOR MEDICINES AND  
ATTENDANCE ON HIS SISTER, MISS BETTY, BY H. SUTHERLAND, DR.

Orkney Archives: File D13/4/9

1747

Jan.	21.	To carminative ingredients for a bottle white wine	. 8
		To ingredients with ... for a bottle white wine	1. 0
		To half an ounce antiscorbutic ointment	. 4
		To ingredients for wine renewed. To loz steel & antimony	1. 0
Feb.	1	To a box of gum pills	
		To a scruple of camphor	1. 2
	10	To a purging potion & a drop saffron	.10
	22	To carminative ingredients renewed	. 8
		Ditto. To a glassfull of hartshorn and castor and handfull camomil flowers	. 9
Nov.	16	To a handfull sage, 30 aloes pills, 1½ oz. flowers of sulphur	.10

1748

Feb.	13	To a large glass Hartshorn and Castor	1. 2
		To 3 oz. soap linament. To a carminative and purging	1. 7
	15	To aloes pills with calomel	. 3
	29	To an Hysterick plaister for her side	. 8
March	3	To stomachick ingredients for bottle wine	1. 0
July	8	To castor pills (10) To 2 oz. anodyne balsam	. 9
Dec.	3	To aloes pills and handfull sage	. 6
	5	6oz. cordial jalap and 6 drops palm oil	2. 0

7	To loz. anodyne balsam	
	To an anodyne plaister	1. 4
14	To carminative ingredients renewed	. 8
18	Strengthening bitters for a bottle of wine	
	To 4oz. anodyne balsam	. 8
26	To a box gum pills	1. 3

1749

Jan.	9	To carminative ingredients renewed	
March	9	To 4oz. soap balsam (12) ditto, (14) ditto	2. 0
	15	To a dose of purgeing pills	
		To stomachick ingredients renewed	1. 6
		To 1½oz. sperma ceti	.
		To handfull camomile	. 5
	16	To 2oz. sweetening electuary	
	17	To a pectoral bolus (19) To ditto	. 8
	20	To pectoral bolus (25) To soap balsam renewed	1. 0
		To electuary ingredients for wine renewed	1. 8
April	2	To pectoral electuary (29)	
		To 2oz. stomachick tincture	1. 2
		To ingredients for wine renewed	1. 0
	3	To an anodyne plaister	. 8
June	12	To 2oz. sacred tincture. To a box gum pills	2. 0
Aug.	9	To a small glass Hartshorn & Lavender	. 8
		To a small glass Castor	
		To 6oz. anodyne jalap	1. 6
	10	To loz. tamarinds (12) To the julap renewed	1. 6
Aug.	22	To an anodyne plaister	
Oct.	16	To 4oz. sloctan (?)	

	To a glass cordial drops	.10
	To $\frac{1}{2}$ oz. flower of sulphur	
Dec. 13	To 2oz. mercurial ointment	. 9
Dec. 20	To a dose of purgeing pills, and to antiscorbutick and purgative ingredients for ale	1. 2

1750

Feb. 10	To 3oz. camphorated ...	
	To $\frac{1}{2}$ oz. palm oil	.10
	To a pectoral bolus. (12) To ditto	. 4
	To 12 aloes pills	
Feb. 17	To 1oz. Hungary Water	. 5
19	To an anodyne plaister and glass of cordial jalap	1. 0

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 £1.18.8
1750

March 20	2 drops smelling salts	
Nov. 25	An hysterick plaister	1. 0
	To a glass of stomachick tincture	. 6
Dec. 8	To 2oz. Hungary Water	
	To $\frac{1}{2}$ oz. Turner ceral	. 5

1751

Sep. 1	To 6 aloes pills. To a stomachick plaister	. 9
6	To 6 aloes pills. To 15 grains saffron	. 6
8	Ingredients for a cataplasm	
Dec. 1	Ceral renewed	. 5
4	To a paper sperma ceti and candy	
	$\frac{1}{2}$ oz. liquoris root	. 7



1752

Jan	3	To 2 drops vulnerary balsam	
	10	½oz. mercurial ointment	. 3
Feb.	6	To 1oz. sassafras	
March	2	To a purgeing bolus	. 8
		To 60 strengthening pills	2. 0

1753

Jan.	10	To a strengthening plaister	
May	4	To ½oz. Hartshorn	. 8
		To 4 drops stomachick tincture	
	16	To ingredients for wine	1. 0
June	20	To 4 drops palm oil	
		To a dose sacred tincture	. 8
		To ingredients for wine renewed	
		Anodyne plaister	1. 3
June	27	To 1oz. palm oil	
	28	To 12 aloes pills	
Aug.	13	To 6oz. stomachick tincture	. 9

1754

April	4	To 6oz. anodyne julap	
		To ½ handfull chamomile and mint	1. 6
	16	To 2oz. camphorated spirits	
		To a stomachick plaister	
June	17	To 12 aloes pills	
		To stomachick ingredients for wine	. 9
Sep.	15	To 2oz. camphorated spirits	. 3

1755

Jan.	7	To 12 drops cordial drops	
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	To a dose sacred tincture	. 9
	To ingredients for a cataplasma	. 4
	To 6 drachms of juniper on sugar	. 3
8	To 6oz. anodyne	
	To ½oz. liquoris root	1. 0
9	To ingredients for a clyster	
	To 4oz. anodyne julap	1. 0
	To 12 drops palm oil	
11	To 4 drops laudanum	. 6
12	To anodyne julap as before	. 9

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£2.16. 2

Kirkwall, March 15, 1755.

Received payment of the above,

H. Sutherland.

(8.6) INSTRUCTIONS TO PATIENT FROM DR. WILLIAM BUTTER, 1762

Orkney Archives: File D13/4/9

Sir/

I forward yours of the 12th instant and ... receive a box containing 7 pills which ... 4 of them at night and 3 next morning, let him take his brakefast a little after he takes his morning pills, because they work not well on an empty stomach.

Also receive a blistring plaister, apply it betwixt his shoulders near to his neck after the blisters are ripen, apply a colwort leaf with a little butter on it, which will draw and heal the blisters.

I am sir, your most humble servant.

William Butter

Kirkwall,

October 14th, 1762.

PS Before you apply the plaister be sure you hold it a little  
before the fire, otherwise it will brake.

(8.7) ACCOUNT LADY ELSNESS FOR ANDREW MUNRO, 1776.

Orkney Archives: File D13/4/9

1776

August 14th	To ... & strengthening embrocation for the side	01.02
15th	The same repeated with hartshorn for the side	01.03
	A glass with 3oz. spirits of wine of camphor	02.04
	2 oz bruised Jesuit's bark for infusion in brandy	01.06
	Miss Traill. ... & gum plaister for ...	.08
22nd	Laxative & Carminative ingredients for two doses	01.00
Oct. 30th	15 ... of potatoes bought. 8 ... of ditto for	
	... and 7 ... bought of ...	08.02
	Carriage of ditto to the shore	.02
Nov. 27th	Miss Traill. The plaister repeated	.08
	Ditto above. Salve for dressing	.06
	.....	07.08
	Chunder cabbag plants ... for you and ...	
	Whenevr called for at 2nd. ...	01.00

£1.06.01

To my journey from Kirkwall to Stronsay with attendance & stay upon

the way from Sunday to the Wedensday after ... got to town £1.01.00

£2.07.01



(8.8) DR. JOHN URQUHART ESQR. OF ELSNESS TO ANDREW MUNRO, SURGEON

Orkney Archives: File D 13/4/9.

1787

Jan.	27	To Mrs. Urquhart. Phyal strengthening balsam for thumb	£-. 1. 6
		Small bite strengthening plaister for ditto	
Feb.	20	Bleeding in the arm Ditto.	. 6
		A box linative electuary ditto.	1. 0
		Anodyne and stomach drops	. 6
March	15	The linative electuary repeated	1. 0
	21	The same repeated. 1 bottle Hungary waters	1. 6
	23	A bottle cooling & strengthening embrocation for head	1. 6
April	5	The electuary repeated with alteration	1. 4
May	17	The bleeding repeated. Mrs. Urquhart	. 6
June	14	The electuary repeated with more laxatives	1. 4
Sept.	19	A mixture of Caster & ... for assisting delivery	2.10
	21	Wax cloths for breasts twice @ 4	. 8
	22	A cooling mixture for preventing milk fever	1. 6
	23	The same repeated at 4 o'clock morning	1. 6
		Emollient and laxative materials for injection	1. 4
		Bagg & pipe	
	26	The cooling and emollient material for injection	1. 4
Oct.	4	Laxative and cooling materials for tea	. 9
	20	A box emolient liniment for breast	. 6
	21	The same repeated. More emolient	. 8
		A cooling and quieting mixture for side	2. 1
	22	The fever and quieting mixture repeated	2. 1
	23	The emolient and anodyne liniment for side	. 8

	The quieting and cooling mixture	2. 1
25	The mixture repeated with extra powder of Peruvian Bark for strengthening and assisting suppension	3. 6
	The emolient and anodyne liniment for side	. 8
	.... purifying Sperma ceti & white candy for cough	1. 0
27	The strengthening & bark mixture	3. 6
	Materials for emolient & cooling injection	1. 4
29	The cardiac and bark mixture repeated	3. 6
	Two gills olive oil for mixing in poultice	. 3
	The emolient liniment for reopening the side	. 8
30	A box degestive salve	. 6
	Cooling and laxative ingredients for tea	. 9
Nov. 4	The degestive salve for dressing sore	. 6
	The emollient liniment for rubbing	. 8
8	The degestive salve and, 10th, the emolient liniment	1. 2
12	The degestive salve repeated	. 6
13	An ipecacuan vomit. Chamomil flowers for tea	. 9
	7 oz bottle icterica tincture with cardiaces	2. 8
15	The same repeated, stronger	2. 8
	The vomit ipecacuan & Chamomile repeated	. 9
	A box pills for icterica	2. 4
16	Purgeing tincture, Rhubarb & Senna	1. 0
	The degestive salve & the emolient ditto for rubbing	1. 2
18	The pills repeated with more Rhubarb and Senna	2. 4
	The vomit ipecacuan & Chamomil repeated	. 9
22	The pills as formarly	2. 4
	The degestive salve & emolient liniment	1. 2
	.... bark and strengthening bitters with bark and Turkey Rhubarb for 3 medichkines	3. 8

	A box disolvent & saturne liniment for rubbing the	
	other breast with then hard & inflam.	. 9
24	The purgeing tincture of rhubarb repeated	1. 0
	The relaxing liniment rubbed on side	. 8
	The saturne liniment rubbed on the breast	. 9
28	The icteric pills with rhubarb repeated	2. 4
Dec. 7	The pills as formarly repeated	2. 4
	The bitter materials repeated with more bark	3. 8
22	Pills repeated as formarly	2. 4
30	A box relaxing liniment for the hard part of side	. 6

1788

April 24	A phyal Essence of Bergamot for pomatum	1. 0
	Laxative and carminative powder	
Aug. 20	Bleeding in arm. Mrs. Urquhart	. 6

To my personal attendances on Mrs. Urquhart, with laying the sore open etc.

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£4. 4. 5

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(9.1) REFERENCES

- Adomnan, (c.688 AD). Life of Saint Columba. Translated by Anderson, Alan (1961) in Adomnan's Life of Saint Columba. London: Nelson.
- Anderson, John (1795). Statistical Account for Scotland. Stronsay.
- Anon, (6th century). Old Irish Life of Saint Columba. Translated in Skene, W. F. (1877) Celtic Scotland, Volume II. Edinburgh: Douglas.
- Anon, (1866). Orcadian. August 21.
- Anon, (Initials AMB) (1906). Scotsman. July 10.
- Anon, (1913). The Times. June 27.
- Anon, (1926).Orcadian. November 4th.
- Anon, (1948). Sunday Express. February 22.
- Anon, (1948). Press & Journal. February 23.
- Anon, (1948). Glasgow Bulletin. February 23.
- Anon, (1969). Press & Journal. May 13.
- Anon, (1969). Press & Journal. May 16.
- Anon, (1969). Shetland Times. May 30.
- Argyll Synod Minutes, (1651). April 10th. National Library of Scotland.
- Baikie, Elizabeth (1729). Accompt of depursement. Orkney Archives, File D 13/4/9.
- Baikie, James (1844). Poor Law Enquiry (Scotland). Appendix, Part 4. House of Lords Sessional Papers, 29, 182.
- Baikie, William (1675). Quoted Graeme, H. Sutherland. (1954) Orkney Miscellany, vol 2, Orkney Herald; Kirkwall.
- Balfour, William (1844). Poor Law Inquiry (Scotland) House of Lords Sessional Papers, 29, 182.
- Barclay, James (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 439, Mid Yell.
- Barclay, Patrick (1795). Statistical Account for Scotland. Sandsting & Aithsting.
- Barnett, R. H. (1973)(1). Orcadian. June 28.

Barnett, R. H. (1973)(2). Orcadian. October 25.

Barry, George (1795). Statistical Account for Scotland. Kirkwall.

Beattie, W. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 377, Evie & Rendall.

Belfourd, G. F. (1969). Letter to Dr. G. W. Mears, dated October 28.

Bell, B. D. C. (1904). Report of the Departmental Committee to inquire into Poor Law Medical Relief. Cd. 2008. British Parliamentary Papers XXXIII. Para 5820 to 5822.

Bethune, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 365, Knock.

Black, G. F. (1892). Proceedings of the Society of Antiquaries of Scotland, 27, 433-526.

Blair, G. (1914). Glasgow Herald. June 6.

Boswell, James (1785). Journal of a Tour to the Hebrides with Samuel Johnson. National Illustrated Library: London.

Brand, Rev. John (1701). Brief Description of Orkney, Zetland, Pightland Firth and Caithness. Republished (1883), Brown: Edinburgh.

British Medical Journal, (1877). March 31.

British Medical Journal, (1891). August 1.

British Medical Journal, (1905), 2, 743.

British Medical Journal, (1906), 2, 527.

British Medical Journal, (1921), 2, 416.

British Medical Journal, (1926), 2, 80.

Brown, Thomas (1687). Diary entry dated January 3rd. Quoted by Archdeacon Craven in Book of the Balfour Hospital Bazaar (1923). Orcadian Office: Kirkwall.

Bruce, Dr. (1892). Annual Report of the Board of Supervision for Scotland.

Bruden, John (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 455, Sandsting.

Bryan, T. B. L. (1974). Orcadian. August 8.

Bryan, Thomas (1974). Medical Week. June 28.



Bryden, John (1844). Poor Law Enquiry (Scotland). Appendix  
Part 4. House of Lords Sessional Papers, 29, 182.

Bryden, J. (1841). Statistical Account for Scotland. Aithsting &  
Sandsting.

Buchan, Alexander (1752). A Description of St. Kilda.  
Republished (1974). Stansfield: Fortrose.

Buchan, Norman (1967). Letter to M. K. Macmillan, MP, dated  
August 30.

Buckley, D. J. (1975). Letter to Dr. A. J. Macleod, dated April 30.

Butter, William (1762). Letter. Orkney Archives, File D 13/4/9.

Cairne, ..... (1912). Report of the Highlands & Islands Medical  
Service Committee, Cd. 6559, HMSO.

Cameron, J. (1841). Statistical Account for Scotland. Stornoway.

Cameron, Father (1912). Report of the Highlands & Islands Medical  
Service Committee. Cd. 6559, HMSO.

Campbell, Archibald T. (1889). Oban Times. April 13.

Campbell, J. (1851). Return to the Committee of the Royal  
College of Physicians of Edinburgh on Medical Practice in  
the Highlands & Islands. 367, Uig.

Cartwright, F. F. (1977). A Social History of Medicine.  
Longmans: London.

Castiglioni, Arturo, (1958). A history of medicine. New York:  
Knopf.

Chudleigh, R. A. (1886). British Medical Journal. September 4.

Clark, Robert (1851). Return to the Committee of the Royal  
College of Physicians of Edinburgh on Medical Practice  
in the Highlands & Islands. 539, Lochmaddy.

Clerk, Archibald, (1841). Statistical Account for Scotland,  
Duirnish, Skye.

Clouston, William (1795). Statistical Account for Scotland.  
Cross, Burness & North Ronaldsay.

Clouston, William (1795). Statistical Account for Scotland,  
Stromness.

Clouston, Rev. (1851). Return to the Committee of the Royal  
College of Physicians of Edinburgh on Medical Practice in  
the Highlands & Islands. 395, Sandwick.

Collacott, Richard A. (1979). Unpublished DM Thesis. The  
Pattern of Hypertensive Disease in the Northern Isles of  
Orkney. Oxford University.



- Collacott, Richard A. (1981). Aberdeen Postgraduate Medical Bulletin, 15, 10.
- Collacott, Richard A. (1981). Scottish Medical Journal, 26, 224-227.
- Connell, Robert (1887). St. Kilda & the St. Kildians. Hamilton: London.
- Coombe, F. E. (1930). The Times, September 9.
- Corfield, W. H. (1871). The Times. August 23.
- Corfield, W. H. (1871). The Times. August 28.
- Cormick, A. & Cormick, Anne (1971). Days of Orkney Steam. Kirkwall Press: Kirkwall.
- Cowie, Robert (1874). Shetland - Descriptive & Historical. Second Edition, John Menzies: Aberdeen.
- Craig, D. (1920). The Times. May 1.
- Craven, Archdeacon (1923). Book of the Balfour Hospital Bazaar. Orcadian: Kirkwall.
- Creighton, C. (1891; 1894). A history of epidemics in Britain. Vols 1 & 2. Cambridge.
- Cule, John (1980). A Doctor for the People. Update: London.
- Curry, W. C. (1960). Chaucer & the Mediaeval Sciences. Allen & Unwin: London.
- Dishington, Andrew (1795). Statistical Account for Scotland. Mid & South Yell.
- Dixon, H. G. (1886). British Medical Journal. August 7.
- Dougall, John (1892). British Medical Journal, 2, 1388.
- Drummond, C. G. (1965). Scottish Genealogist, 12, i, 1-10.
- Easson, D. E. (1957). Mediaeval Religious Houses: Scotland: Longmans: London.
- Edmonston, Arthur (1809). A View of the Ancient & Present State of the Zetland Islands. Longman: Edinburgh.
- Edmonston, L. (1841). Statistical Account for Scotland. Shetland.
- Elder, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 457, Walls.
- Eunson, George (1788). The Ancient & Present State of Orkney. Privately Published: Newcastle.
- Fea, Allan (1912). Real Captain Cleveland. Secker: London.

- Fenton, Alexander (1978). The Island Blackhouse. HMSO: Edinburgh.
- Ferguson, Thomas (1958). Scottish Social Welfare. Livingstone: Edinburgh & London.
- Ferguson, T. (1958). Scottish Medical Journal, 3, 140.
- Ferguson, T. (1960). Scottish Medical Journal, 5, 107.
- Ferguson, T. (1962). Scottish Medical Journal, 7, 16.
- Fiddes, Rev. Angus (1890). Letter to H. M. Queen Victoria, dated September 3. St. Kilda Muniments, SR0. Box 1/Section 3. No. 6/3.
- Fiddes, Rev. Angus (1891). Letter to Miss E. S. Macleod, dated September 12. St. Kilda Muniments, SR0. Box 1/Section 3. No. 6/4.
- Fiddes, Rev. Angus (1894). Letter to Dr. G. A. Turner. August 6.
- Firth, John (1974). Reminiscences of an Orkney Parish. Rendall: Stromness.
- Firth, M. H. et al. (1974). Orcadian. July 18.
- Flett, Frank (1976). Orcadian. March 11.
- Flett, James (1976). Kirkwall Kilwinning No. 38: The Story from 1736. Shetland Times: Shetland.
- Flinn, Michael (1977). Scottish Population History. University Press: Cambridge.
- Fraser, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 433, Lerwick.
- Fresson, E. E. (1963). Air Road to the Isles. David Rendell: London.
- Gane, D. M. (1930). The Times. September 10.
- Gardener, James (1844). Poor Law Enquiry (Scotland). Appendix Part 4. House of Lords Sessional Papers, 29, 182.
- Gardner, J. (1841). Statistical Account for Scotland. Bressay.
- Garson, George (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 555, Stromness.
- Gibson, George (1926). Caledonian Medical Journal. April. p50.
- Gibson, R. H. (1973). Orcadian. November 22.
- Gifford, Arthur (1844). Poor Law Enquiry (Scotland). Appendix, Part 4. House of Lords Sessional Papers, 29, 182.



Gifford, Thomas (1725). Compend of the Country Acts for Directing the Ranclemen, and Society for Regulating of Servants.

Gifford, Thomas (1786). Historical Description of the Zetland Islands. Nichols: London. Reprinted (1976) Thuleprint: Shetland.

Gillibrand, P. A. (1973). Two letters to Dr. A. J. Macleod, dated December 18.

Gillies, Angus (1884). Evidence to Committee of Inquiry on Crofters and Cottars in the Highlands & Islands of Scotland. C3980.

Gillies, H. Cameron (1902). Caledonian Medical Journal, 5, 39-86.

Gillies, H. Cameron (1909/1911). Caledonian Medical Journal, 8, 102-118.

Gillies, H. Cameron (1911). Regimen sanitatis: The Rule of Health. Maclehose: Glasgow.

Gilmour, Dr. (1894). Fourth Annual Report on the Health & Sanitary Conditions of the County & Districts of Argyll.

Gordon, James (1795). Statistical Account for Scotland. North Yell & Fetlar.

Gosden, P. H. J. H. (1961). The Friendly Societies in England, 1815-1875. University Press: Manchester.

Gosden, P. H. J. H. (1973). Self-help: Voluntary Associations in the Nineteenth Century. Batsford: London.

Graeme, P. N. Sutherland (1954). Orkney Miscellany: Orkney Record & Antiquarian Society Papers, 2, 34-46.

Graham, H. G. (1899). Social Life of Scotland in the Eighteenth Century. Black: London.

Greig, P. W. (1892). Annals of a Shetland Parish: Delting. Lerwick: Sandison.

Grey-Turner, E. (1968). Letter to Dr. A. J. Macleod, dated July 29.

Grigor, Ian F. G. (1979). Mightier than a Lord. Acair: Stornoway.

Grimond, J. (1969). Orcadian. June 5.

Grimond, J. (1973). Letter to Hector Monro, MP. Quoted in Orcadian (1973) June 21.

Grimond, J. (1974). Orcadian. August 8.

Hadfield, Stephen (1968). Letter to Dr. A. J. Macleod, dated July 31.



- Hall, R. W. B. (1913). Account of the Visit of HMS Active to St. Kilda. SRO File AF/57/14.
- Hamilton, David (1979). Scottish Medical Journal, 24, 64.
- Hamilton, David (1981). The healers: History of medicine in Scotland. Canongate: Edinburgh.
- Hamilton, F. A. (1969). Letter to Dr. G. W. Mears, dated May 1.
- Hamilton, M. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 423, Bressay.
- Hamilton, Z. M. (1841). Statistical Account for Scotland. Bressay.
- Hand, W. D. (1971). Journal of the History of Medicine, 26, 263-275.
- Hansard (1879). April 22.
- Hartigan, J. (1884). American Journal of the Medical Sciences, January.
- Hawke, Stanhope (1912). Report of Visit of HMS Achilles to St. Kilda. SRO File AF/57/10.
- Hetherington, A. C. (1968). Letter to Dr. D. Stevenson, dated May 14.
- Hibbert, Samuel (1822). Description of the Shetland Islands. Appendix XIII. Transcript of the Indictment of Marion Peebles, 1644.
- Hodgkinson, R. (1967). The origins of the National Health Service. Wellcome Historical Medical Library; Monograph XI.
- Hogge, James (1914). Parliamentary question to Secretary for Scotland, February 17. SRO File AF/57/16.
- Hooker, Eric (1969). Minutes of Orkney Executive Council. June 26.
- House of Commons Return, (1903). August 13. 349.
- Hunter, James (1976). The Making of the Crofting Community. John Donald: Edinburgh.
- Hutton, Thomas (1844). Poor Law Inquiry (Scotland) House of Lords Sessional Papers 29, 182.
- Ingram, James & Ingram, John (1841). Statistical Account for Scotland. Unst.
- Kearton, Richard & Kearton, Cherry (1899). With Nature & a Camera. Cassell: London.

- Keillor, John (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 407, North Ronaldsay.
- Kirk Session Records, (1708). Stromness, Orkney. Process anent washing diseased people and telling out disease. Quoted in Low, George (1774).
- Kirk Session Record, (1724). Canisbay. February 18. SRD.
- Lancet, (1867). August 10, 161-162.
- Lancet, (1868). January 4, 16-17.
- Lancet, (1868). March 28, 424.
- Lancet, (1868). May, 646.
- Learmonth, P. (1841). Statistical Account for Scotland. Stromness.
- Leighton, Kenneth M. (1982). British Medical Journal, 284, 561-562.
- Leslie, Harald R. (1967). Orcadian. August 31.
- Lhuyd, Edward (1699). In Campbell, J. L. & Thomson, Derick (1963). Edward Lhuyd in the Scottish Highlands. Clarendon, Oxford.
- Liddell, Rev. (1795). Statistical Account for Scotland. Orphir.
- Lloyd, G. R. (1978). The Hippocratic Writings. Penguin: Harmondsworth.
- Logie, W. (1841). Statistical Account for Scotland. Kirkwall.
- Logie, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 421, Papa Westray.
- Low, George (1774). A Tour through Orkney & Shetland. Republished (1978), Melven: Inverness.
- Low, George (1795). Statistical Account for Scotland. Birsay & Harris.
- Lyne, R. N. (1930). The Times. September 11.
- Macaulay, Rev. Kenneth (1764). A History of St. Kilda. Reprinted (1974), Mercat Press: Edinburgh.
- Macaulay, Dr. (1892). Annual Report of the Board of Supervision for Scotland.
- McBain, A. (1887). Transactions of the Gaelic Society of Inverness, 14, 232-272.
- MacBain, A. (1890). Transactions of the Gaelic Society of Inverness, 17, 222-266.
- MacCallum, Rev. Hugh (1907). Caledonian Medical Journal, 7, 18.



- MacCulloch, John (1824). The Highlands & Western Isles of Scotland. Longman: London.
- MacDonald, Coll. (1841). Statistical Account for Scotland. Portree, Skye.
- MacDonald, C. R. (1886). British Medical Journal, 2, 160.
- MacDonald, D. (1795). Statistical Account for Scotland. Orphir.
- MacDonald, Dr. (1909). Report of the Royal Commission on the Poor Laws and Relief of Distress. Cd. 4922. British Parliamentary Papers, XXXVIII.
- Macdonald, John (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 539, Lochmaddy.
- Macdonald, Thomas (1972). MA Thesis: Practices of Inoculation and Vaccination in Scotland, 1750-1850. Edinburgh University.
- MacGregor, J. D. et al (1981). British Medical Journal, 282, 434-436.
- MacIvor, Alexander (1841). Statistical Account for Scotland. Sleat, Skye.
- Mackay, Angus (1906). The Book of Mackay. Edinburgh.
- Mackay, Frank (1955). MacNeill of Carskey: His Estate Journal. Macdonald: Edinburgh.
- Mackay, George (1904/1905). Caledonian Medical Journal, 6, 34-45.
- Mackay, Rev. John (1884). Evidence to Committee of Inquiry on Crofters and Cottars in the Highlands & Islands of Scotland. C3980.
- Mackay, John D. (1969). Orcadian. May 29.
- Mackay, William (1905). Chronicles of the Frasers. Scottish History Society, Vol. 47. Edinburgh.
- MacKenzie, C. (1798). Statistical Account for Scotland. Orphir.
- Mackenzie, H. (1904). Report of the Poor Law Medical Relief Committee & Local Government Board.
- Mackenzie, H. (1912). Report of the Highlands & Islands Medical Service Committee. Cd 6559, HMSO.
- Mackenzie, Sir Kenneth (1904). Report of Departmental Committee to inquire into Poor Law Medical Relief. Cd. 2008. British Parliamentary Papers XXXIII. Paras. 4076.
- Mackenzie, N. (1830-1846). Parochial Registers. Register House, Edinburgh.
- Mackenzie, W. C. (1919). The Book of the Lews. Gardner: Paisley.



Mackinlay, J. M. (1893). Folklore of Scottish Lochs and Springs.  
Glasgow.

Mackinnon, David (1889). Transactions of the Gaelic Society of  
Inverness, 16, 285-309.

Mackinnon, Donald (1912). A descriptive catalogue of the Gaelic  
manuscripts in the Advocates' library, Edinburgh. Edinburgh.

Mackinnon, Donald (1912/1914). Caledonian Medical Journal, 9, 128-136.

MacLagan, R. C. (1902). Evil Eye in the Western Highlands.  
Nutt: London.

Maclean, John (1834). Analecta scotica: Collections illustrative  
of the civil, ecclesiastical and literary history of  
Scotland. Edinburgh.

Maclean, Roderick (1851). Return to the Committee of the Royal  
College of Physicians of Edinburgh on Medical Practice  
in the Highlands & Islands. 543, South Uist.

MacLennan, M. E. (1914). Letter to Scottish Office. July 3.  
SR0 File AF/57/17.

Macleod, A. J. (1968). Undated letter to Dr. D. Stevenson.

Macleod, Emily (1877)(1). Letter to Mrs. Robert Ferguson, dated  
June 19. St. Kilda Muniments, SR0. Box 1/Section 2. No. 1/4.

Macleod, Emily (1877)(2). Letter to Mrs. Robert Ferguson, dated  
June 28. St. Kilda Muniments, SR0. Box 1/Section 2. No. 1/10.

Macleod, J. (1795). Statistical Account for Scotland, 10, 342.

Macleod, John A. (1981). Personal Communication, dated November 9.

Macleod, Norman (1851). Return to the Committee of the Royal  
College of Physicians of Edinburgh on Medical Practice  
in the Highlands & Islands. 347, North Uist.

Macleod of Macleod, (1890). Letter to Under-Secretary of State  
for Scotland, dated September 20. SR0 File AF/57/1.

Macleod Papers, (1654-1693). Accounts Box 2, Folder 8.  
John Macleod of Dunvegan. SR0.

Macleod Papers, (1672-1693). Bond by John Macleod of Dunvegan  
to James Ross, Surgeon in Skye. Box 37. SR0.

Macleod, Reginald (1903). House of Commons Return, 349, August 13.

Maconochie, James Allan (1837). Miscellany of the Abbotsford  
Club, 1, 135. Transcript of the Indictment of Marable  
Couper, 1624.

Maconochie, James Allan (1837). Miscellany of the Abbotsford  
Club, 1, 143. Transcript of the Indictment of Anio Tailzeour, 1624.

- Maconochie, James Allan (1837). Miscellany of the Abbotsford Club, 1, Transcript of the Indictment of Marrione Richart, 1633.
- MacPhail, J. R. N. (1914). Caledonian Medical Journal, 10, 27-33.
- MacPhail, J. R. N. (1916). Highland Papers of the Scottish History Society, 2, 73.
- MacPherson, John (1768). Critical dissertations on the origin of the Ancient Caledonians. Quoted Thomson, Derick (1968) Scottish Studies, 12, 57-78.
- MacQueen, A. (1798). Statistical Account for Scotland, 13, 300.
- Macrae, Charles (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 545, Stornoway.
- MacRae, D. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 361, Cross.
- Macrae, Finlay (1841). Statistical Account for Scotland. North Uist.
- MacRae, W. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 355, Barvas.
- Macrae, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 359, Stornoway.
- Manson, Dr. (1864-1950). Shetland Almanac. Shetland Times: Lerwick.
- Martin, Martin (1697). Philosophical Transactions of the Royal Society, XIX, 6, 727.
- Martin, Martin (1698). A Late Voyage to St. Kilda. London. Reprinted (1818), Wylie: Glasgow.
- Martin, Martin (1705). A Description of the Western Isles of Scotland. Republished (1716). Republished (1976), Mercat Press: Edinburgh.
- Martin, Martin (1706). Transactions of the Royal Philosophical Society.
- Marshall, J. D. (1960). Transactions of the Thoroton Society of Nottinghamshire, 64, 56-74.
- Marwick, Ernest M. (1969). Orcadian. May 22.
- Matthews, Leslie G. (1964). Journal of the History of Medicine & Allied Sciences, 19, 30-45.



- McClure, Ian H. (1933). Letter to Capt. E. E. Fresson, dated July 26.
- McConaghey, R. S. (1961). Evolution of Medical Practice in Britain. Pitmans: London.
- McEwen, John (1981). Who Owns Scotland? Polygon: London.
- McIntyre, John (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 447, Delting.
- McKay, Rev. John (1877). Letter to Mrs. Emily Macleod, dated August 29. St. Kilda Muniments, SRD. Box 1/Section 1. No. 6/2.
- McNeill, Roger (1893). Third Annual Report on the Health & Sanitary Conditions of the County & Districts of Argyll.
- McNeill, Roger (1894). Fourth Annual Report on the Health & Sanitary Conditions of the County & Districts of Argyll.
- Mears, George W. (1968). Proposals for Medical Services for North Isles of Orkney. Paper submitted to the Scottish Home & Health Department.
- Mears, George W. (1969). Orcadian May 22.
- Menzies, John (1795). Statistical Account for Scotland. Burra & Quarff.
- Millar, Mr. (1909). Report of the Royal Commission on the Poor Laws and Relief of Distress. Cd 4922. British Parliamentary Papers, XXXVIII.
- Miller, W. R. (1968). Letter to Dr. E. Grey-Turner, dated July 18.
- Mills, John (1740-1803). Diary. In Scottish History, 5, (1889).
- Mitchell, A. (1865). Edinburgh Medical Journal. April. p899.
- Mitchell, William (1795). Statistical Account for Scotland. Tingwall.
- Monro, H. (1798). Statistical Account for Scotland, 19, 280.
- Monro, Hector (1973) (1). Letter to Jo Grimond, MP.
- Monro, Hector (1973)(2). Letter to Jo Grimond, MP, dated August 31.
- Moorman, W. (1869). Lancet. February 29, p304.
- Morgan, John E. (1862). British & Foreign Medical & Chirurgical Review, 29, 176.
- Morgan, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 435, Lerwick.



- Morison, J. (1798). Statistical Account for Scotland, 1, 385.
- Mouat, Cameron (1844). Poor Law Enquiry (Scotland). Appendix 4. House of Lords Sessional Papers, 29, 182.
- Mouat, T. & Barclay, J. (1797). Statistical Account of Scotland: Unst.
- Mowat, John (1921). Viking Society Old Lore Miscellany, 9, 14-23.
- Mowat, John (1922). Viking Society Old Lore Miscellany, 10, 245-251.
- Munro, Andrew (1786). Journal of a journey to North Ronaldsay. Quoted Graeme, P. N. S. (1954).
- Munro, G. (1798). Statistical Account for Scotland, 13, 292.
- Munro, Robert (1891). Proceedings of the Society of Antiquaries of Scotland, 26, 5-33.
- Murray, George (1886). St. Kilda Diary. (Bute Collection, Edinburgh).
- Murray, Dr. (1911). Annual Report of the Public Health in the County of Ross & Cromarty.
- Murray, W. H. (1973). The Islands of Western Scotland. Methuen: London.
- Neill, Patrick (1806). A Tour through some of the Islands of Orkney & Shetland. Constable: Edinburgh.
- Nichol, Archibald (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 401, Walls.
- Nicholls, George (1856). History of the Scotch Poor Law. Murray: London.
- Nicholson, Alexander (1841). Statistical Account for Scotland. Barra.
- Nicol, Alexander (1844). Poor Law Enquiry (Scotland). Appendix, part 4. House of Lords Sessional Papers, 29, 182.
- Nicol, Thomas (1931). By Mountain, Moor & Loch to the Dream Isles of the West. Mackay: Stirling.
- Orkney Area Medical Committee, (1976). Minutes. February 10.
- Orkney Executive Council, (1963-1974). Minutes of meetings.
- Orkney Health Board, (1980). Report of the study group examining the medical and community nursing requirements in Orkney.
- Otter, Henry C. (1871). The Times. August 31.

Parman, Susan (1977). Folklore, 88, 107-109.

Parry, T. Wilson (1916). Journal of the British Archaeological Association, 22, 33-69.

Pennie, Ian D. (1958). Scottish Medical Journal, 3, 398-408.

Peterkin, W. A. (1893-4). Forty-ninth Annual Report of the Board of Supervision.

Pyle, L. (1967). Scotsman. August 29.

Ranni, John (1844). Poor Law Enquiry (Scotland). Appendix Part 4. House of Lords Sessional Papers, 29, 182.

Reece, Richard (1981). Excavations in Iona, 1964-1974. Occasional Papers, No. 5. Institute of Archaeology: London.

Rendall, Jim (1976). Orcadian. March 4.

Rettie, A. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 375, Evie & Rendall.

Rilatt, W. (1913). Daily Mirror. June 21.

Risse, Guenter B. (1974). Bulletin History of Medicine, 48, 338-351.

Ritchie, George (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 413, Rousay & Egilsay.

Robertson, James (1767). Journal. MS 2507, National Library of Scotland.

Rollo, J. M. (1968). Letter to Dr. A. J. Macleod, dated August 26.

Rorie, David (1911). Caledonian Medical Journal, 8, 410.

Rosie, R. S. (1973). Orcadian. December 6.

Ross, Mr. (1904). Report of the Departmental Committee to inquire into Poor Law Medical Relief. Cd 2008. British Parliamentary Papers. XXXIII. Para. 5167-9.

Ross, Anne (1976). Folklore of the Scottish Highlands. Batsford: London.

Ross, John (1892). Annual Report of the Board of Supervision for Scotland.

Royal College of Physicians of Edinburgh, (1852). Statement Regarding the Existing Deficiency of Medical Practitioners in the Highlands & Islands.

Salaman, R. N. (1949). The History & Social Influence of the Potato. University Press: Cambridge.



Sands, J. (1798). Statistical Account for Scotland, 3, 414.

Sands, J. (1878). Out of the World, or, Life in St. Kilda.  
Maclachlan & Stewart: Edinburgh.

Scott, Mary (1967). Island Sage - The Story of North Ronaldsay.  
Reid: Aberdeen.

Scott, Rev. (1851). Return to the Committee of the Royal College  
of Physicians of Edinburgh on Medical Practice in the  
Highlands & Islands. 415, Shapinsay.

Scottish Records Office (1663). S.R.O. GD 217/905.

Scottish Records Office (1664). S.R.O. GD 217/992.

Scottish Records Office (1679). S.R.O. RS 45/3.

Shand, Alex (1851). Return to the Committee of the Royal College  
of Physicians of Edinburgh on Medical Practice in the  
Highlands & Islands. 453, Nesting & Whalsay.

Shaw, Frances J. (1980). The Northern & Western Islands of  
Scotland: Their Economy & Society in the Seventeenth  
Century. John Donald: Edinburgh.

Shearer, A. (1920). Account of the Outbreak of Influenza on  
St. Kilda SRO File AF/57/22.

Shearer, A. (1921). British Medical Journal. September 10.

Simpson, James Y. (1872). Archaeological Essays. Edmunston &  
Douglas: Edinburgh.

Sims, Marion (1846). American Journal of the Medical Sciences.

Sims, Marion (1848). American Journal of the Medical Sciences.

Simson, A. (1798). Statistical Account for Scotland, 19, 274.

Smith, G. Elliott (1916). Journal of the British Archaeological  
Association, 22, 69-70.

Spencer-Smith, John (1976). Letter dated January 1st to P. G. Konstam.  
Minutes of Orkney Area Medical Committee, 1976, February 10.

SSPCK (1729). The State of the Society in Scotland for Propogating  
Christian Knowledge. Quoted Steel, T. (1975).

Stanley, E. S. (1874). Reports of the Assistant Commissioners  
of Friendly & Benefit Societies Commission. Parliamentary  
Papers, XXIII.

Stark, Alexander (1844). Poor Law Enquiry (Scotland). Appendix Part 4.  
House of Lords Sessional Papers, 29, 182.

Steel, Tom (1975). The Life & Death of St. Kilda. Fontana: London.



Stevenson, D. (1968). Letter to R. Marshall, Secretary, St. Andrew's Scottish Ambulance Service, dated March 15.

Stewart, Donald (1981). Stornoway Gazette. July 11.

Strong, D. A. (1974). Orcadian. August 15.

Sutherland, Hugh (1730). Letter to Lady Elsness. Orkney Archives, File D 13/4/9.

Sutherland, James (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 441, Northmavine.

Swaffield, J. C. (1968). Letter to Dr. D. Stevenson, dated April 25.

Taylor, Dr. (1912). Daily Mirror. May 23.

Taylor, Edward M. (1971). Letter to Robert MacLennan, MP, dated July 15.

Taylor, Harry Pearson (1909). Report of the Royal Commission on the Poor Laws and Relief of Distress. Cd. 4922. British Parliamentary Papers, XXXVIII.

Taylor, Harry Pearson (1948). A Shetland Parish Doctor. Manson: Lerwick.

Taylor, Rex (1976). Unpublished paper entitled 'Doctors, Paupers & Landowners'.

Thin, R. (1964). Book of the Old Edinburgh Club, 22, 132-159.

Thompson, David (1795). Statistical Account for Scotland. Walls & Sandness.

Thompson, F. (1968). Harris & Lewis, Outer Hebrides. David & Charles: Newton Abbott.

Thomson, D. (1798). Statistical Account for Scotland, 20, 97.

Thomson, Derick (1968). Scottish Studies, 12, 57-78.

Thomson, William P. L. (1969). Shetland Times. October 17.

Tolmie ..... (1912). Report of the Highlands & Islands Medical Service Committee, Cd. 6559, HMSO.

Traill, Ewen S. G. (1973)(1). Orcadian. June 28.

Traill, Ewen S. G. (1973)(2). Orcadian. October 18.

Traill, Ewen S. G. (1975). Orcadian. June 5.

Traill, Samuel (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 381, Birsay & Harray.

Tulloch, Peter A. (1974). A Window on North Ronaldsay. Orcadian: Kirkwall.

Turnbull, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 431, Sandwick & Conningsburgh.

Turner, G. A. (1895). Glasgow Medical Journal, 3, 161.

Turner, G. A. (1896). British Medical Journal. October 24. p1191.

Walker, John (1764/1771). Report on the Hebrides. Republished (1980). John Donald: Edinburgh.

Watson, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 369, Uig.

Watson, Rev. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 437, Fetlar & North Yell.

Watt, John (c.1720)(1). Prescription. Orkney Archives, File D 13/4/9.

Watt, John (c.1720)(2). Prescription for George Kin. Orkney Archives, File D 13/4/9.

Watt, John (1727). Account to Lady Saba, October 5. Orkney Archives, File D 13/4/9.

Webster, A. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 425, Quarff & Burra.

Wells, Calvin (1981). Excavations in Iona, 1964-1974. Occasional Paper, No. 5. Institute of Archaeology: London.

White, Adam (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 385, Birsay & Harray.

White, Peter (1880). Mortality & Medical Attendance in Shetland. Privately published.

Wilson, J. (1841). A Voyage Round the Coasts of Scotland. Edinburgh.

Wilson, R. (1851). Return to the Committee of the Royal College of physicians of Edinburgh on Medical Practice in the Highlands & Islands. 409, North Ronaldsay.

Wink, Bill (1975). Orcadian. July 31.

Wood, Dr. (1836). Manuscript quoted in Orkney & Shetland Miscellany (1908), 1, Part VI, 198-200.

Wood, P. (1851). Return to the Committee of the Royal College of Physicians of Edinburgh on Medical Practice in the Highlands & Islands. 559, Sanday.

Zetland Presbytery Records, (1700). September 27; September 29. Microfilm at Scottish Records Office, Edinburgh.

THE ORCADIAN NEWSPAPER (RECENT ISSUES)

- (1) 1967. August 31.
- (2) 1967. November 2.
- (3) 1974. May 30.
- (4) 1974. June 6.
- (5) 1974. July 4.
- (6) 1974. July 25.
- (7) 1974. August 8.
- (8) 1974. August 1.
- (9) 1974. August 22.
- (10) 1976. February 5.
- (11) 1976. February 19.
- (12) 1976. March 4.
- (13) 1976. March 25.
- (14) 1976. April 29.
- (15) 1980. December 25.
- (16) 1981. July 2.
- (17) 1981. July 16.
- (18) 1981. September 3.
- (19) 1973. July 12.
- (20) 1973. July 26.
- (21) 1973. December 6.
- (22) 1974. May 30.
- (23) 1974. July 4.
- (24) 1975. May 1.
- (25) 1976. June 3.
- (26) 1976. June 24.
- (27) 1976. October 28.



- (28) 1933. May 11.
- (29) 1933. September 7.
- (30) 1934. April 26.
- (31) 1933. November 31.
- (32) 1950. April 13.
- (33) 1967. September 28.
- (34) 1970. July 2.
- (35) 1969. May 15.
- (36) 1969. January 2.
- (37) 1973. February 1.
- (38) 1973. March 15.
- (39) 1969. May 22.
- (40) 1969. June 26.
- (41) 1969. June 5.
- (42) 1969. May 29.
- (43) 1967. November 2.

ACTS OF PARLIAMENT

Poor Law (1424). James I, cap. 7, May 26,7.

Poor Law (1449). James II, cap. 22, January 1,9.

Poor Law (1503). James IV, cap. 70, March 20,14.

Poor Law (1579). James VI, cap. 74, October 26,12.

Poor Law (1661). Charles II, cap. 38, July 9,338.

Act for the Amendment and Better Administration of the Laws  
Relating to the Relief of the Poor in Scotland (1845).  
8+9 Vict. cap. 83.

National Health Insurance Act (1911). 1 & 2 Geo 5.Ch.55.

Highlands & Islands (Medical Services) Grant Act, 1913.  
3 + 4 Geo 5,Ch.26.

Highlands & Islands (Medical Service) Additional Grant Act (1929).  
20 & 21 Geo 5.Ch.13.

National Health Service (Scotland) Act, (1947). 10 & 11  
Geo 6.Ch.27.

GOVERNMENTAL REPORTS AND REGISTERS.

- (1) Report of Poor Law Inquiry (Scotland) Commissioners (1844).  
House of Lords Sessional Papers, 29, 182.
- (2) Board of Supervision for Scotland (1861). Fourteenth  
Annual Report.
- (3) Report of the Royal Commission appointment to inquire  
into Friendly and Benefit Building Societies, 1871.  
Parliamentary Papers, XXV.
- (4) Ditto (1872.) Parliamentary Papers, XXVI
- (5) Ditto (1873.) Parliamentary Papers, XXXII
- (6) Ditto (1874.) Parliamentary Papers, XXXIII
- (7) Report of Committee of Inquiry on Crofters and Cottars in  
the Highlands and Islands of Scotland. (1884). C3980.
- (8) Report of the Departmental Committee appointed by the  
Local Government Board for Scotland to inquire into  
the system of Poor Law Medical Relief. (1904).  
Cd. 2008. British Parliamentary Papers XXXIII.
- (9) Report to the Local Government Board for Scotland on the  
Sanitary Conditions of the Lews. (1905). Cd. 2616.
- (10) Report of the Royal Commission on the Poor Laws and  
Relief of Distress. (1909). Cd. 4922. British  
Parliamentary Papers, XXXVIII.
- (11) Report of the Highlands & Islands Medical Services Committee,  
1912. (Dewar Committee). Cd. 6559.
- (12) First Annual Report of the Highlands & Islands Medical  
Services Board (1915). Cd. 7977. BPP XXIII, 265. -
- (13) Second Annual Report of the Highlands & Islands Medical  
Services Board (1916). Cd. 8246. BPP IX, 299.
- (14) Third Annual Report of the Highlands & Islands Medical  
Services Board (1917). Cd. 8519. BPP XIV, 313.
- (15) Fourth Annual Report of the Highlands & Islands Medical  
Services Board (1918). Cd. 9060. BPP X, 539.
- (16) Fifth Annual Report of the Highlands & Islands Medical  
Services Board (1919). Cmd. 169. BPP XXII, 611.
- (17) Report of the Committee on Scottish Health Services (1936)  
(Cathcart Committee). Cmd. 5204. BPP XI, 577.
- (18) Report of the Committee on the General Medical Services  
in the Highlands & Islands (1967). cmd. 3257.  
BPP XXXV (Birsay Report).



- (19) Report of the Committee of Enquiry on Civil Air Transport (1968): Written submission by Orkney Council of Social Services.
- (20) Parish Register (Burials). St. Kilda (Register House, Edinburgh).
- (21) Parish Register (Baptisms). St. Kilda (Register House, Edinburgh).
- (22) Register of Births, St. Kilda. Registrar General for Scotland.
- (23) Register of Deaths, St. Kilda. Registrar General for Scotland.
- (24) Register of Deaths (1900-1974). Sanday, Orkney.
- (25) Register of Deaths (1900-1974). Westray, Orkney.
- (26) Registrar General For Scotland (1971). County Report. Orkney.
- (27) Registrar General For Scotland (1971). County Report. Zetland.
- (28) Registrar General For Scotland (1971). County Report. Inverness.
- (29) Registrar General For Scotland (1971). County Report. Ross & Cromarty.