Medical knowledge, medical education, and the career choices of women doctors c.1860-1920: An Edinburgh case study

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#### Introduction

Accounts of women's entry to the medical profession are dominated by the feminist politics of the late nineteenth century, and by the personalities of individual campaigning women, most notably Elizabeth Blackwell, Elizabeth Garrett Anderson, Sophia Jex-Blake and Elsie Inglis (Blake 1990; Glynn 2008; Levin 2002; McLaren, 2009; Mount 2013; Roberts, 2014; Todd, 1918). These narratives ignore the changing nature of medical knowledge in this period and the way this impacted upon women's medical education. They also say little about the strategies medical women adopted to forge careers for themselves once their education was complete. Yet as a group who were initially isolated within, and resented by, the medical profession, the ways and means by which the first generations of female doctors in the UK created a role for themselves needs to be addressed (Kelly, 2013). In this chapter these inquiries are located in the history of a women-run hospital, the Edinburgh Provident Hospital for Women and Children (hereafter the Edinburgh Hospital), the first hospital in the United Kingdom to be founded and run by women, for women. The analysis is supported by prosopographical evidence, which helps to shed light on the education, and career choices, of the female physicians who trained and worked there.

#### **Beginnings: the ideology of separate spheres**

'Tis a beautiful thing, a woman's sphere! She may nurse a sick bed through the small hours drear, Brave ghastly infection, untouched by fear, But she mustn't receive a doctor's fee, And she mustn't (oh, shocking), be called an MD, For if woman were suffered to take a degree, She'd be lifted quite out of her sphere! ("Her Sphere", 1875, p. 429) Historians, as well as Victorian commentators, have frequently drawn attention to the notion that there was a distinct 'ideology of separate spheres' at work in middle-class Victorian social life. Women were to remain in the home and were concerned with all things domestic, whilst men dealt with the public world of business, commerce and the professions (Gleadle, 2001; Rowold 2010).

That woman was best fitted for motherhood and domestic life was insisted upon by various influential media throughout Victorian society. The journals of the period were well stocked with articles admonishing women to stay at home and insisting that it was inappropriate and unseemly for ladies to engage in public or paid work ("A Woman's View", 1867; "The True Rights", 1869). "If she fails as a mother, she fails as a woman and as a human being", thundered Chambers's Journal in 1884 ("Girls, wives", 1884, p. 35). The womanly ideal was clear: "[t]he domestic sphere - all that concerns the care of the house and the household and the management of the children - pre-eminently is the woman's kingdom" ("Higher education", 1887, p. 134). Clearly, the rhetoric and vehemence of the popular press reveals the patriarchal nature of Victorian society in the second half of the nineteenth century. At the same time, however, it implies the shoring up of an ideology which was increasingly being challenged. From mid century onwards the public world actively sought to convince women of their natural fitness for the role of wife and mother. The most powerful and influential means through which this ideology was articulated were education, science and medicine. "Overtaxing" of the brain during study, for example, was frequently pin-pointed as a cause of middle class women's "deficiency in reproductive power", along with "infertility", "flatchestedness ... extreme sensibility of nerves ... irritability of temper ... attacks of disease ... dullness of the brain", "weakness" and "degeneracy" (Spencer, 1867, p. 486; "Sex in Mind", 1874, p. 749). Women were biologically determined, it was argued, and their reproductive organs meant that they were 'naturally' destined for motherhood (Laqueur, 1978; Rowold 2010).

Considered physiologically incapable of rational thought, women were frequently described as possessing various 'special' and 'womanly' virtues, such as "delicacy of perception, quickness of insight, grace, gentleness, and a self control wonderful to think of" ("What woman", 1887, p. 71). Dr Thomas Laycock summed up the situation: "women's excellence over man is ... in the sphere of wisdom, and love, and moral power" (Laycock, 1869, p. 483). Woman was "considered by nature to be the guardian of infancy, childhood and youth," wrote Phoebe Blythe of the Edinburgh Ladies Debating Society. "[S]hould she ever withdraw from one or other of these high functions, it will be well neither for herself nor for society" (Blythe, 1875, p. 185). This was a widely held opinion, and by the mid nineteenth-century "a powerful discourse of feminine domesticity had emerged which attempted to confine women to the house" (Rose, 1990, p. 396).

As the century progressed, however, the ideology of separate spheres became increasingly incompatible with the realities of daily life: Victorian society encouraged and applauded social mobility, individual development and dedicated hard work, yet these liberal values were antithetical to the stay-at-home ideal and "confirmed idleness" of a "novel-reading" and "piano-playing" wife or daughter ("Girls, Wives", 1884, p. 33). Middle class women, anxious to shake off the shackles of domesticity and the ennui of a life of enforced idleness, took up these arguments and turned them to their own advantage: surely the caring, nurturing qualities they were purported to posses might benefit society more if they were allowed to be exercised outside, as well as inside, the home? Such arguments had justified women's involvement with various philanthropic causes since the early nineteenth century (Elliott 2002; Prochaska, 1980). What was new, however, from the 1860s, was the way in which these ideals informed aspects of the women's movement.

The struggle for the medical education of women represents just one campaign, albeit the most high-profile, of what has been termed 'first wave feminism' (Moynagh and Forestell, 2011). The battle, in Edinburgh, for women to gain entry to the medical profession has been chronicled in numerous publications, as well as dramatised for film and television, and the precise chronology of events need not be repeated here (Blake, 1990; Jex-Blake, 1886; Roberts, 2014). To understand the longer term consequences of the medical women's struggle, however, it is important to realise the significance of the prevailing ideologies concerning women and their place in society. The notion that women had a special and unique role to play in the public sphere was based on what were understood to be women's innate, caring, moral qualities. These ideas determined the nature of the debates over women's right to receive medical education and to practice as physicians. Throughout the 1860s and 1870s "[w]omen argued not for equal rights to compete with men in the public sphere, but for access to it in order to better pursue their feminine interests and talents" (Jex-Blake, 1886, p. 130).

Sophia Jex-Blake, Edinburgh's most uncompromising campaigner for women's entry to medical education, set out her arguments clearly in her book *Medical Women: A Thesis and a History*, published in 1872 and reprinted in 1886. Principally, it was for the sake of the health of women at large that there was a crying need for physicians and surgeons of the female sex. Women doctors were badly needed to preserve women's modesty from the probing and lascivious fingers of male doctors. Many women, she argued, found the attentions of male doctors both invasive as well as deeply embarrassing and distressing. This was especially the case when dealing with obstetrical and gynaecological matters. Although women accepted the services of male doctors at these times, this did not mean that they would not prefer to be attended by a doctor of their own sex. Indeed, she went on, women were often so reluctant to be examined by a male doctor, that they often let serious gynaecological disorders remain untreated, or sought medical advice only when the illness or disease was far advanced. Much pain and misery, even death, could be avoided, she concluded, if women were able to be attended by fully qualified female doctors.

If women had a special mission in society to guard women and children against ill-health, dirt and immoral behaviour – included in this was the need for women to be attended by a doctor of their own sex. As women themselves, it was only they who could do this work properly and successfully. As everyone already knew, "loving care and kindness ... [was] one of the highest forms of women's work" (Simpson, 1895, p. xvii). It was, therefore, "only natural, and in accordance with the order of the world, that women should share in the ... management and welfare of the sick" (Twining, 1901, p. 101). The understanding that women were the traditional carers in society, as well as the guardians of the physical and moral health of the family, supported the argument that women should be doctors to those whose lives were based in the family (Jex-Blake, 1872). It was this concern for the modesty of women and the belief that female doctors had a special role to play in preserving the health of other women, which emerged as one of the most persuasive arguments in favour of the need for female doctors. Indeed, it has been suggested that the notion of "women's mission to women" informed and inspired the first generation of medical women, rather than any concern with equality with men and individual or collective careerism (Elston, 1986, 261-2). Overall, however, what concerns us here is that fact that it was "the ideology of separate spheres [that] set the overall terms of the debate" for and against female doctors (Elston, 1986, p. 132). It was to infiltrate their education, and impact upon their career choices and opportunities, for generations.

### Opportunities for women: physiology and hygiene in nineteenth

### century medical education

To understand the medical specialisms pursued by the first generations of medical women, as well as the strategic nature of these early career choices, we must consider the changing nature of medical knowledge in this period. In particular, the development of physiology, a discipline central to the reorientation of medicine's scientific foundations, had profound consequences for the self-definition of female medical practitioners. On a popular level, throughout the nineteenth century physiology was perceived to be the branch of medicine which provided knowledge of the 'laws of health' and hygiene: understanding of the interconnected functions of the human body and the laws which governed those functions (Bennett, 1871). Disease was to be prevented and eradicated through attention to aspects of 'regimen', that is to say, by attention to diet, environment, exercise, sleep and rest and the functions and emanations of the body (Wear, 1994). Since the classical period, hygiene had been understood to be an aspect of medicine crucial to the preservation of health and well-being. The six 'non-naturals' - "air, aliment, exercise and rest, sleep and wakefulness, repletion and evacuation, the passions and affectations of the mind" - which had been set down by Galen as constituting the crucial categories which made up hygiene, were still cited by authors in the mid and later nineteenth century (Parkes, 1891, p. xv).

The importance of physiological knowledge for the general public and for women in particular - had been widely accepted throughout the early Victorian-century. In Edinburgh, interest in such matters had flourished. From the 1820s, popular science in the city had emphasised the links between physiology and hygiene, and the subject had been widely discussed in a variety of public tracts, pamphlets and books (Combe, 1833; Fletcher, 1836; Smiles, 1838).

That women were allowed, and even encouraged, to attend these lectures is interesting to note. It provided them with an "opportunity of receiving instruction which ... [was] denied them in nearly every other institution for education", and the women of Edinburgh had, in turn, "largely availed themselves of the advantages presented to them" (Combe, 1833, pp. 67-8). Specifically, the importance of physiological knowledge for women was emphasised in order that they might better fulfil their traditional domestic obligations as wives and mothers (Combe, 1840).

As public health measures took off in Edinburgh with the appointment of Henry Littlejohn as Medical Officer of Health in 1862, the application of the principles of hygiene as a means of reducing and controlling disease and ill-health became more widespread. The efforts of central and local government to improve public health, however, were understood to be hindered in their success by the ignorance of the public with regard to basic physiological principles and matters of hygiene (Bennett, 1868). As the experts in health, both curative as well as preventative, doctors were the only people adequately qualified to educate citizens in those aspects of public and private hygiene which would improve the health of the nation (Thomson, 2001a).

It was in this same period that arguments concerning the importance of physiological knowledge for women re-surfaced. With the dissemination of medical knowledge becoming increasingly unacceptable to Victorian audiences unless it carried the weight of a doctor's authority and expertise, it became possible to argue that there was a need for medically trained women to impart the principles of physiology and hygiene to women at large (Warner, 1995). That the health and well-being of women and children, and of the family in general, was seen as the natural constituency of women physicians added weight to these arguments.

Of particular interest here is the attitude of Dr John Hughes Bennett, professor of the Institutes of Medicine at Edinburgh University Medical School, and one of those who supported the medical education of women. In Scotland, the Institutes of Medicine was the discipline which took account of the action and interaction of the different body parts and organs; the functions of the body in health and disease; its responses to different external and internal conditions and the actions of different drugs on different sites of disease. Inspired by continental methods of teaching and research, under the aegis of Dr Bennett the study and practise of the Institutes increasingly became laboratory-oriented (Thomson, 2001a; Warner, 1980). Even so, as much as the discipline was moving towards a reliance on scientific findings, it still retained a strong emphasis on the value of clinical experience and the practical understanding of the laws of hygiene (Bennett, 1868).

The dual nature of the Institutes of Medicine - as a laboratory based science, as well as a discipline which could be used in clinical practice for the prevention, diagnosis and treatment of illness - was seized on by the Edinburgh medical women. It provided them with the opportunity to appropriate an aspect of medicine - hygiene - which they could argue was especially suited to women physicians. Furthermore, the shift in the physiology paradigm away from holistic conceptions of the body and towards a more organ-centric view of disease, meant that an area of medical expertise - the practical application of physiological knowledge in the form of hygiene - which, from the late 1870s, male doctors increasingly marginalised in their rush for the laboratory, was open to colonisation by the new generation of medical women. "There is no subject of which the public are so ignorant as that of the functions of their own bodies and how to preserve their health", observed Bennett (Bennett, 1871, p. 4). Who better, therefore, to impart this life saving knowledge to women, than women doctors (Jex-Blake, 1875)?

Many of the medical women's arguments built upon those expressed by Bennett. It was in the field of preventive medicine, especially those aspects of it which pertained to a woman's own body, that one of women's primary vocations within the medical profession lay (Blackwell, 1889; Jex-Blake, 1886). The impact on women's health would be immeasurable. Jex-Blake described the vision: I look forward to the day when ... the 'poor health' which is now so sadly common in our sex, and which so frequently comes from sheer ignorance of sanitary laws, will become rather the exception than, as now, too often, the rule... women doctors can, in time, succeed in ... raising the standard of health among their sister women. (Jex-Blake,1886, p. 50-51).

Throughout the later years of the nineteenth century, the new women doctors carved out a place for themselves as the instructors of women in matters of health and hygiene. Jex-Blake lectured on Hygiene at the London School of Medicine for Women from 1878 to 1891 (*London School*, 1878-1981). "[E]asy lectures on physiology and hygiene" amongst working class women were a part of this remit (Dunbar, 1888, p. 9). In 1872 Edith Pechey (one of the original 'Edinburgh seven' who campaigned to gain entry to Edinburgh University Medical School in the late 1860s and early 1870s (Blake, 1990)) lectured to the Ladies Education Associations of Leeds, York and Halifax on physiology and the laws of health and hygiene.

Frances Hoggan, also one of the first generation of medical women, who undertook her early medical education on Edinburgh, gave lectures on physiology and hygiene in London in 1875, and Dr Alice Ker (who attended Bennett's physiology classes in 1871) lectured on personal health and hygiene to the women of the Manchester Ladies Domestic Economy Class in the 1880s (Elston, 1987; Hoggan, 1878, 1879; Ker, 1884). In 1884 Jex-Blake published a small book - entitled *The Care of Infants: A Manual for Mothers and Nurses* - in which the principles of hygiene for the care of infants and children were outlined (Jex-Blake, 1884). The reader was referred to Parkes for greater detail on the subject of hygiene, whilst the importance of physiology was also repeatedly acknowledged, with references to the works of Carpenter, Dalton, Foster and Huxley.

After Bennett's retirement in 1874, the study and practice of physiology at Edinburgh University became increasingly focused on laboratory research. It developed to rely heavily on vivisection, elaborate technical equipment and experiments, focusing on single organs, rather than on the body as a whole (Butler, 1982). As these aspects of the discipline were cultivated, environmental, social and personal factors were increasingly excluded from physiological interpretations of the body. This on-going re-definition of physiology meant that from being a medical discipline which seemed to have a special significance for women practitioners through its connection with hygiene, domestic duties and family health, it became an "elite and manly discourse ... from which women were ... excluded" (Appel, 1994, p. 33).

# Physiology, hygiene and institutional care: the Edinburgh Hospital for Women and Children

How did this emphasis on physiology impact upon the career opportunities for the first generations of medical women practicing in Edinburgh in the late nineteenth and early twentieth centuries? Notes from private practice do not exist, so historians are restricted to institutional case notes. In particular, the patients' records and annual reports from the Edinburgh Hospital can provide some insights.

The Edinburgh Provident Dispensary for Women and Children was established by Sophia Jex-Blake in 1878 at 73 Grove Street and was expanded to become a cottage hospital containing six beds in 1883 (Thomson, 2001b). Using the patients' records from the Edinburgh Hospital we can see that the women doctors at work in this institution employed a holistic therapeutic approach to the treatment of illness. That is to say, emphasis on various hygienic principles - 'regimen', diet, rest, environment, and a smooth and regular functioning of the whole metabolism - formed the basis of their therapeutic method. Regimen, as an aspect of medical therapeutics, was clearly linked to holistic conceptions of the body which understood health to be achievable through a state of equilibrium between its different parts. Air, water, environment, employment, temperance, exercise and moderation in the health of the individual were singled out as especially important (Clouston, 1882).

One of the main therapeutic applications of regimen was a correct and regular diet. This was understood to affect the whole of the mind and body, and was "the most powerful and indispensable of all remedies in the treatment of many diseases" (Christison, 1874, p. 1). At the Edinburgh Hospital, emphasis was laid on the correction of bodily imbalance - the regulation of the bowels, the digestive system and the menses. Malnourishment, bodily exhaustion, overwork, and general debility - all common ailments at the Hospital, were treated with strict attention to the diet - milk, eggs, beef tea in great quantities, fruit, vegetables and meat, even claret, being administered as an important aspect of treatment, along with sleep, rest and quietness, walks, fresh air and recommendations to change profession. Use of drugs was kept to a minimum, most commonly amounting only to laxatives of varying strength, tonics, mixtures to calm indigestion, and sleeping draughts (Thomson, 2001b).

The first patient to be treated at the Hospital, for instance, suffered from "pain ... varying in position". Diagnosed as being mainly troubled with constipation and a slight uterine disorder, she was ordered to rest and to "go out when [the] weather [is] good". At the same time she was dosed with laxatives and tonics to purge the system and build her strength; given a sleeping pill and made to take a hot bath every night. Another typical example is patient 23, who suffered from "over fatigue and exhaustion" due to "insufficient food and hard work". She was also afflicted with anaemia and constipation. Treatment consisted of a two week stay in the Hospital, with plenty of rest, and tonics to reduce anaemia and restore vitality. Great attention was paid to her diet, with "meat daily for dinner, fish or eggs for supper". Similarly patient 5. This patient was admitted with an assortment of functional complaints: constipation, flatulence, a "history of vomiting all food", headache, anaemia, dyspepsia and sleeplessness; an organic complaint, rheumatism; and a minor gynaecological problem, leuchorrhoea. She was given sulphonal (a sedative), laxatives, a sleeping draught, hot milk, daily massage, iron tonic and "liberal diet" (*Register of Patients*, 1879-1883, n.p.).

Throughout the case notes from the Edinburgh Hospital the same pills and tonics are dispensed again and again for what are evidently judged to be similar kinds of illnesses. These preparations were almost always "blood tonics" for treatment of anaemia; tonics for nerves or digestive system; and laxatives of varying strength. Gastric sedatives, such as pepsin or bismuth, and sleeping draughts, were also regularly employed (Thomson, 2001b).

"[R]est and tonic treatment" formed a central aspect of the medical women's approach to curing the weak, overworked and generally run down women who attended the hospital in this early period. For some, simply the basic aspects of regimen - rest or a good diet - were sufficient to restore health, with no medications being prescribed at all. Patient 281, aged only 28 but married with nine children and two miscarriages behind her, was simply "admitted for a rest", and Patient 48's debility was noted as requiring "no treatment by medicine ... [just] good food" (Register of Patients, 1879-1883, n.p.). Bennett's claim that "of all the causes of disease, irregularity of diet is the most common" and that "of all the means of cure at our disposal, attention to the quantity and quality of the ingesta is by far the most powerful", was adhered to by the medical women (Bennett, 1847, p. 227). Beef tea, eggs, milk, milk puddings and custards, fish, mutton, beef, fresh vegetables and fruit, even "brandy in milk" and claret were introduced into the patients' diet if they were considered necessary, and the results of this closely observed. "Much improved ... looking fat and well fed up generally", is a typically satisfied reflection on the effectiveness of this treatment. Menstrual problems too were treated with attention to diet, purgation and rest, the regularity of the menses being regarded as a crucial part of the ordered female metabolism. Fresh air, exercise and the free movement of the bowels were also fundamental to good health (*Register of Patients*, 1879-1883, n.p.).

It is worth pausing here to consider the implications of this prescriptive hygienic 'advice', and to ask what might be the significance of the application of the 'laws of health' in therapeutic practice. Is it possible to evaluate the professional activities of the first generations of women doctors without acknowledging the moral connotations of those activities? Frank Mort's work on the linkage between ideas of health and disease and moral and immoral notions of behaviour, suggests that no such As Mort has pointed out, "the loose and differentiation is possible. expansive use of the term 'moral' often makes it difficult to deconstruct its fields of reference" (Mort, 1987, p. 9). Morality encompasses all aspects of social norms, codes and practices with regard to what is perceived to be correct and virtuous living, and the proper conduct of the individual. Even if not explicitly stated the rhetorical and morally prescriptive nature of nineteenth-century therapeutics is implicit in both its language and its practice.

According to Mort, such prescriptions stemmed from middle-class concern about ill-health engendered by the habits of the working classes. Holistic physiology, the acceptance of which justified the use of regimen in therapeutics, forms a part of this 'medico-moral' rhetoric, as it criticised the working class mode of living and imposed upon them a bourgeois view of the correct habits of cleanliness in mind and body. Such social norms - care of the body through diet, sleep and fresh air, and general temperance in all things - were sanctioned by middle class experts, the most powerful of these in this context being the medical profession.

The hospital has been pin-pointed as representing a bastion of middle class values and social control (Foucault, 1973; Davidson, 1994). In treating ill-health through prescriptive hygienic therapeutics, therefore, the work of the medical women at the Edinburgh Hospital acted as the corrective of bad working class habits and, by implication, of 'immoral' behaviour (Davidson & Hall 2011). The notion of moral discipline, as implied by the use of the principles of hygiene, was also put into practice outside of the Hospital by the medical women in the special role which they claimed for themselves in the medical profession as lecturers to women at large on the subject of hygiene, physiology and preventive medicine. As we shall see below, these themes underpinned the medical women's professional choices well into the twentieth century.

#### Women's professional role in early 20th century medicine

By 1900, women were still not accepted with equanimity by the majority of the medical profession. Although both the Royal College of

Surgeons of Edinburgh and the Royal College of Physicians of Edinburgh opened their licenses to women in 1885, it was not until 1894 that Edinburgh University Medical School agreed to admit women to its degree examinations (Todd, 1918). Once this had been conceded, women were still unable to attend the medical courses offered by the University, but had to take their classes at the Extra-Mural Medical School (MacNicol, 1835). They were not permitted to attend classes in the Medical Faculty of the University until 1916, and even at this late date many of the lectures were held separately from the men's classes (Hutton, 1960).

In addition, "there was ... a marked prejudice" against women undertaking medical education (Herzfeldt, 1957, p. 245). Only those medical women who were going abroad to act as missionaries (and therefore did not pose a professional threat) were spared the hostility of the male medical students. "We others", Hutton remarked

> seemed to be considered traditional enemies by the men and were the constant targets of their criticism and even hostility, though this was veiled, and did not take the anti-social form that it had done twenty years earlier ... We still studied under a good many disadvantages and observed that the women doctors had to put up with very cavalier treatment by their men colleagues, who criticised, patronised, or were even blatantly rude to them. If we were feminine in attire ... it was deemed that we could not be serious ... Plain, dowdy women students were ... preferred, for the men could then hoot with laughter and label them all as freaks, jokes or monsters. (Hutton, 1960, pp. 30-40).

Clinical training also re-inforced the separateness of the Edinburgh medical women as it continued to be held in separate cliniques to the men. Although Herzfeld reported that this had the advantage of allowing the women students to work in smaller groups, thereby providing more opportunities for direct involvement in practical work, it still left women outside the mainstream of teaching and training (Hertzfeld, 1957, p.246). Medical experience, once education was complete, was also hard to come by, and the hospitals founded and run by medical women remained the most important source of training opportunities. As late as 1922 it was still felt necessary to remark, with regard to the work of the house physicians at the Edinburgh Hospital that "work of this kind is an essential part of professional training for women, as the tendency of the larger hospitals is to give preference to men" (*Annual Reports*, 1922, p. 6).

Once education and training were completed, professional opportunities for medical women in the city also remained limited. In 1912 the Edinburgh Medical Journal was pleased to point out that the thirty five years which had passed since women had gained access to the medical profession had simply served to demonstrate that there was even less of a demand for the services of women doctors than had been supposed (and of course, this anonymous commentator rather smugly observed, it had always been suspected that the demand would be small) (*Edinburgh Medical Journal*, 1912, p.102). Although women doctors were a growing presence within the medical profession, therefore, it was clear that the battle for work and opportunities was to continue long after they gained the right to medical education. By 1895 there were 200 women on the medical register, though many of these were working abroad. (Blake, 1990, p. 193)

In addition to opportunities in hospital medicine, private practice was also difficult to come by, and restricted in scope. Medical women went into partnership with one another: Elsie Inglis ran her private practice with Jessie MacGregor, for example, and Isabel Venters, who took over Jex-Blake's practice in 1899, worked in partnership with Alexandra Lothian (Balfour, 1918, p.111). Many went worked overseas as missionaries. Those who did not, found that their training and career opportunities were largely confined to the small institutions which had been founded by medical women themselves.

The professional difficulties faced by the medical women in Edinburgh in the early years of the twentieth century were expressed clearly by those involved and are worth quoting at length. The matter was noted in detail in the minutes of the Edinburgh Hospital executive committee: "Every woman physician in Edinburgh who is dependent on her practice for her income must devote herself to general medicine, but in addition, must have an intimate knowledge of the diseases of her own sex". There was no equivocation.

> There is no demand in Edinburgh for women specialists in other departments of medicine or surgery ... These departments are already more than amply provided for, and are likely to continue so, since there seems to be no cogent reason why any demand for women as specialists in these branches should ever arise. Even were such a demand to arise, the opportunity for specialisation must, at best, remain extremely limited, since a large and ever increasing number of able men are attracted to Edinburgh by the fame of the medical school, while the opportunity for practice has not been found to increase correspondingly. This fact must be borne in mind when comparisons are

drawn between Edinburgh on the one hand and London, New York and other large cities on the other ... In Edinburgh it is only in gynaecology and obstetrics that women are required as specialists, and women doctors practising here are expected ... by those who consult them to have a thorough knowledge of these subjects. These two subjects, in short, in Edinburgh form the women's speciality (*Executive Committee*, 1904, pp. 149-50)

Virginia Drachman has observed, with reference to the careers of women doctors in America in the later nineteenth century and the first half of the twentieth century, that despite the increase in the integration of women in the medical profession, women doctors "congregated ... in the low status areas of 'female' specialities and social medical services" (Drachman, 1981, 1986, p. 71). The separatism of medical women has been the subject of American scholarship, although it has received little academic interest at the hands of British historians (Elson, 1986). However, in the case of Edinburgh, in the early twentieth century medical women were well aware of the limited nature of their opportunities, and were concerned that a positive effort had to be made to advance themselves in the practice of medicine amongst their chosen constituency of women and children.

#### **Opportunities in domestic hygiene: Infant welfare**

In the early 1900s two issues of 'national importance' arose which provided opportunities for the medical women to build up their role as experts in hygiene, and claim for themselves an invaluable role in the health of the nation.

The first of these was the defeat of the Imperial British troops in the Boer War (1899 – 1902), a conflict which had revealed the poor health of conscripts, as well as highlighting the feeble intellectual capabilities of their commanders (Dwork, 1986). Flat feet, rickets, bad teeth, poor eye-sight, respiratory problems, malnourishment - meant that recruits had been all but useless in their defence of the Empire. Infant mortality and morbidity were perceived to be at the root of this problem (Thomson, 2003). Over the first decade of the new century, this growing concern with the health of the nation's babies validated infant and child welfare as a branch of preventive medicine. It also enlarged the role of the physician, who was increasingly relied upon to provide crucial advice on matters of health and hygiene. Women doctors were able to secure a prime place in this movement, and it was undoubtedly in their professional interests to encourage it: the means by

which the quality of infant life was to be improved was through an emphasis on the role and health of the mother, and such views clearly played into the hands of women doctors' ambitions. As we have seen, they had long advocated the importance of such hygienic advice - such as how to keep one's house clean and feed and clothe one's baby properly - to working class women.

Anxious to find a serious role for themselves within the medical profession, the 'cult of motherhood' which developed in the early twentiethcentury provided the medical women with an ideal opportunity. In Edinburgh, women doctors emerged immediately at the vanguard of infant and maternal welfare (Thomson, 2003). In 1905, they opened a Milk Depot, "the only one of its kind in Edinburgh", for the distribution of sterilised milk to the mothers in the poorest districts of the city (Annual Reports, 1919, p. Infant clinics were established in the same areas for the weighing of 2). babies and the dissemination of advice on feeding and general hygiene. A "baby dispensary" was put into operation, where "troubled and anxious mothers" were able to "get advice". A team of "lady visitors" was employed to support the doctors in their hygienic efforts, inspecting the homes of mothers and making suggestions for improvement (Walker, 1921, pp. 1-2).

From 1908 Edinburgh Town Council became involved in schemes for child and maternal welfare. The medical women were vindicated in their early advocacy of the importance of milk distribution and health visiting, and were pleased to point it out in their Hospital's Annual Reports. "Now that the Public Health Department of Edinburgh has taken up the question of Infant Mortality, this part of the work [the distribution of milk] promises to be even more useful in the future that it has been in the past" it was announced in the Annual Report of 1908. The medial women were also quick to observe that it was they who had begun the work of health visiting which the Town Council was now joining in with, and they welcomed "most heartily this great development of the work which they first set on foot amongst their own patients" (*Annual Report*, 1908, p.1).

In co-operation with these weekly clinics, there began the "scheme for the feeding of expectant and nursing mothers in poor circumstances to avoid the disastrous effects of insufficient nutrition on the infants" (*Executive Committee*, 1914, p. 172). Over the course of 1915, "2000 dinners were given... to expectant and nursing mothers ... [and] 17 babies under one year, suffering from malnutrition, were taken in for feeding treatment". By 1919, four infant clinics and three ante-natal clinics were in operation in four locations about the city, all run by medical women and funded by Edinburgh Town Council. The main aim was "to educate the mothers in the simple rules of infant hygiene" (*Medical Officer*, 1919:22-3). On 21st January 1916 Dr. Haig Ferguson, professor of obstetrics and gynaecology at Edinburgh University, delivered an address to the Edinburgh Women's Medical Society. Although praising the achievements of the medical women in general, he went on to suggest that one particular branch of medicine was especially suited to medical women: "one of the most important metiers in which they could be of supreme use to the community, and to the nation, is the special help they could give in the campaign directed against infantile mortality". Infants could "only be saved by the mother" who could, in turn, be "taught by the state" - a task which would be admirably suited to medical women, especially as they had already done so much in that particular arena (Ferguson, 1916, pp. 76-78 and pp. 88-90)

In many respects, Haig Ferguson's comments are typical of orthodox medical opinion in the Edwardian period. Arguing that infant mortality was best remedied by educating the mothers with regard to infant feeding and domestic hygiene was not a new idea. Advocating the crucial role which medical women could play in the education of mothers and related aspects of preventive medicine, however, was more of a novelty. What is particularly interesting, however, is the response of the medical women to Haig Ferguson's pronouncements. The minute from the Edinburgh Women's Medical Society, which recorded their observations after his speech, is quoted in full below. It is perhaps the most eloquent statement of optimism at the opportunities in medicine which seemed to be opening up for the Edinburgh medical women through their involvement with maternal and child welfare. The excitement is palpable:

> We had visions of the great possibilities ahead of women doctors: as health visitors, as teachers of young mothers, as lecturers at baby clinics. We saw them settling such problems as the Domestic Training of Girls at School, the feeding of poor mothers without thereby pauperising them, the establishment and right use of maternity hospitals whenever required, the rearing of a race of supermen, and finally, we saw them admitted by a grateful country to the sacred precincts of a future ministry of health (*Edinburgh Women's Medical Society*, 1916, np).

## **Opportunities in sexual hygiene: treatment and prevention of venereal diseases**

In 1914, with the outbreak of war, the possibility of the moral and physical decay of the British 'race' was brought to the forefront of political attention once again. This time the bringer of the nation's doom was to be the unchecked spread of venereal diseases, which it was feared would follow the demobilising of the troops once hostilities had ceased (Bland 1995; Bland and Mort, 1984; Davidson, 1993, 1994, 2000; Thomson, 2002). Once more, the medical women were able to take advantage of their medico-moral position as the providers of hygienic knowledge to women at large (Thomson, 2002).

The Royal Commission on Venereal Diseases, established in 1916, recommended the establishment of treatment centres for the cure of venereal diseases (*Report*, 1916, p. 322). This was to be achieved though the attentions of specially trained physicians, as well as the dissemination of advice on 'social hygiene'. The latter was a complementary measure aimed at changing attitudes and discouraging practices which were believed to increase the spread of the diseases. No one was better qualified than the medical women to administer this information. The working classes – in particular the medical women's usual constituency of working class women – were to be the sole objects of this campaign.

Developments in chemical therapeutics meant that successful, systematic VD treatment at hospitals and clinics was now a valid proposition. If this treatment was offered at no cost to the patient, it was argued, there would be no reason why those infected would not take advantage of it. VD would be treated discreetly at special centres at the voluntary hospitals. Out-patient clinics should also be established "at hours convenient to the working classes", and "cards of instruction and warning" should be handed out to all patients (*Propaganda Committee*, 1916, p. 323).

In Edinburgh the anti-venereal disease 'propaganda' was run by the Scottish Branch of the National Council for Combating Venereal Diseases (NCCVD) and financed by Edinburgh Town Council. Women doctors, including a number of those who were, or had been, involved with the Edinburgh Hospital, were prominent in the orchestration of this propaganda campaign.

Rather than encourage the use of prophylactics, the NCCVD encouraged individuals to lead chaste sexual lives, and to regulate themselves and their own sexual behaviour. "Venereal Disease ... can be conquered in two ways, by cure and by prevention, and the latter is the best way" urged Dr. Mary Douie, one of the first eight women to graduate from Edinburgh University in 1893 (Douie, 1918a, p.33). This prevention was to be achieved through the dissemination of moral and health advice via public lectures and films, and the distribution of pamphlets and posters. Leaflets were circulated, written by medical women, with such instructive titles as *Ignorance, The Great Enemy; England's Girls*; and *Sex in Life: Young Women*. Other, less circumspect, titles included *How Girls Can Help in the Fight Against Venereal Disease; VD and its Effects* and *Dangers of VD (Public Health Committee*, 1919). Women doctors were enlisted to lecture

in the city on such subjects as "Responsibility of Citizenship", "Love, Marriage, Parenthood" and "Renewal of Life" (*V.D General File*, 1919).

Many women doctors in Edinburgh found a role for themselves in the anti-VD campaigns. One of the first public lectures by the NCCVD was given by Dr. May Thorne, the daughter of Isabel Thorne, who had been one of the original 'Edinburgh Seven' (Roberts, 2014). Dr. Mary MacNicol, also in charge of the VD ward at the Edinburgh Hospital, lectured for the NCCVD from 1918 (Douie, 1918b; 1918c). The honorary secretary of the medical section of the 1924 Imperial Social Hygiene Congress was Dr. Mary Douie (*Edinburgh Women*, 1919). Dr. Chalmers Watson, Honorary Secretary of the Scottish Branch of the NCCVD, and the main spokesperson who liaised with the Town Council with regard to the lectures, films, pamphlets and books which were distributed throughout the city from 1918, had been one of the first two medical women to graduate from Edinburgh University in 1898 (Venters, 1936, p. 23).

In tandem with propaganda, of course, there was treatment. The Edinburgh Hospital, with its all female staff, was singled out by the Town Council in Edinburgh as the ideal institution for the treatment of VD amongst married women and children in the city. By April of 1919, "the lower ward had been converted into a special ward under the VD scheme of the city" with funds supplied by the Council (Propaganda Committee, 1919, p. 267). Its intended in-mates were to be "married women with their infants, young girls and expectant mothers, innocent victims of venereal disease". Dr. Mary MacNicol was appointed to take care of this branch of the Hospital's work (*Annual Reports*, 1919, p. 4).

In the first year of its involvement with the scheme the Hospital was so inundated with desperate women that it was "unable to cope with the number of cases requiring institutional treatment" (*Annual Reports*, 1919, pp. 5-6). As the *Scotsman* reported, "[w]omen, who are generally innocent victims, resented being attended at an ordinary department among patients of doubtful character" (*Scotsman*, 1927, p.5). Such was the demand for the services of the VD department at the Hospital that by 1923 the number being treated there exceeded the number of patients who were treated there for other medical problems (*Annual Reports*, 1923).

Throughout the 1920s and 1930s, the medical women of Edinburgh were involved in various activities promoting the sexual health of women. In 1828 Dr. Chalmers Watson, spoke in favour of legislation and compulsory controls as the best means to tackle the continuing problem of venereal diseases at a "propaganda meeting" of the Edinburgh Women Citizens Association (*Edinburgh Women's*, 1923-4, p.4). Drs. MacNicol and Chalmers Watson (as well as Dr. Douie) petitioned the city's Public Health Committee for a refuge home for 'single girls' (a common euphemism for prostitutes). Accommodation was found at the Edinburgh

Rescue Shelter, founded in 1920. Executive Committee members of the Shelter included Dr. Mary MacNicol, from the Edinburgh Hospital, and Dr. Mary Liston, the latter acting as "medical advisor" there throughout the 1920s. VD work was also continued at post and ante-natal clinics conducted by the medical women at the Edinburgh Hospital (*Town Clerk*, 1923, pp. 4-5). "All mothers will be welcome, and will be able to obtain medical treatment, and learn the value of fresh air and sunshine and proper food and clothing in the prevention of disease" announced the Hospital's annual report. The mothers were to be taught physiology, hygiene and the "laws of health": the very subjects which the medical women had advocated in the 1870s and 1880s as being vital knowledge for working class women. "Preventable diseases," of course, by the 1920s, also included venereal diseases (*Annual Reports*, 1925, p. 10).

By the early twentieth-century the involvement of the Edinburgh Hospital with the Public Health Department's VD schemes meant that the medical women had actively extended their sphere of influence into peoples' homes. Social and sexual behaviour which was deemed to be unacceptable and likely to lead to infection and disease could be monitored and corrected. As Armstrong puts it, the Dispensary was no longer simply a place where people came for treatment, but "radiated out into the community. Illness was sought, identified and monitored by various techniques and agents in the community; the dispensary building was merely the co-ordinating centre" (Armstrong, 1983, p. 8).

With their out-patient and Dispensary work – both for the treatment and surveillance of venereal diseases, and for the surveillance of the health and welfare of babies – the medical women monitored working class women's behaviour and sought to impose a middle class morality on practises of child care and sexual behaviour. As we have seen above, when they first entered the medical profession the Edinburgh medical women were concerned with the dissemination of hygienic knowledge, and implicitly, therefore, with the correction of certain aspects of working class lifestyles. The moral content of this attitude is clear, and it is perhaps not surprising to find women doctors at the forefront of the campaigns for infant welfare, and for the eradication of venereal diseases, which swept the country in the early to mid twentieth-century.

Furthermore, as noted above, the medical definition of what actually constituted preventive medicine, and what was meant by the principles of hygiene, had expanded in scope in this period to include all aspects of social life. As a result, more aspects of people's behaviour, including their sexual habits, were open to scrutiny, criticism, and correction by doctors. Social and sexual behaviour which fell outside of what was accepted by the medical profession were implicitly, and often explicitly, criticised as being incorrect. Disease and ill-health, for example, were due to 'ignorance' of the correct ways to live, and could be eradicated only if the advice of middle class doctors was followed, and the results monitored. With their knowledge of science, medicine, health and disease legitimising their professional opinions, doctors were then able to prescribe certain changes in behaviour, such as sexual abstinence, self restraint and moderation in all things, which were more in line with middle-class notions of social and sexual correctness. The justification for advocating these changes of behaviour was the assumption that this would then lead to better health, or at least the absence of certain diseases. 'Dangerous sexualities', or those forms of sexual behaviour (such as sexually active unmarried women) which did not conform to the prescribed middle class norm were, thus, branded as putting the health of society at risk. They were then stigmatised, deemed to be in need of correction, and subjected to rigorous scrutiny and harsh medical treatment (Armstrong, 1983; Davidson, 2000; Mort, 1986; Thomson, 2002). Medical women, as middle class doctors, subscribed to these practises and attitudes and, in Edinburgh at least, found a special place for themselves within this particular 'medico-moral' discourse.

#### Conclusions

This chapter began with a discussion of the nineteenth century ideology of 'separate spheres' and the roles prescribed for women in an overtly patriarchal society. Women's entry to the medical profession depended upon arguments that females would make the most suitable physicians amongst the constituency of women and children. As women, they were also the most appropriate ambassadors for the dispensing of advice on hygiene, general health, and domestic management. As doctors, it was implied, women would have the knowledge, the expertise, the sensitivity and the authority to effect great change in the health and habits of the nation. As we have seen, changes in physiological knowledge and a shift in emphasis towards the laboratory meant that hygiene as a branch of medicine could be colonised by women doctors, even as it was abandoned by their male colleagues as being of marginal interest to the more scientific orientation medical practice and education were undergoing at this time.

The task of finding a place for their services within the medical profession in Edinburgh, however, was not easy. Women remained very much a minority within the profession for many years after they gained the right to have their names put on the medical register. Different interest groups use medical knowledge for political ends. In this case, as a new interest group within the medical profession, women were quick to emphasise and appropriate knowledge of physiology, hygiene and the 'laws of life' as a means of creating a role for themselves within medicine.

The moral content of much of the medical women's practice is clear, and the inculcation of middle-class standards of hygiene and propriety were implicitly, and persuasively, present throughout their work. As the advocates of a knowledge of physiology and hygiene for women; as physicians practising a holistic method of therapeutics in their own institution; as the dispensers of milk and advice to young working-class mothers; or as the agents of the Public Health Department's crusade against the spread of venereal diseases.

By the early twentieth century women doctors found that they were increasingly accepted by the male medical profession due to their involvement with such government bodies as the NCCVD and the Edinburgh Town Council Public Health Department. And yet, as a final point, it might be argued that this acceptance by the male medical profession was at the expense of their feminist commitment to their "sister women" in the working class (Jex-Blake, 1886, p. 51), a commitment that had coloured the rhetoric, and shaped the career choices, of the very first generation of medical women.

Over one hundred and fifty years have passed since Elizabeth Blackwell became the first woman on the medical register in Britain (1<sup>st</sup> January 1859). Fifteen years later the Russell Gurney Enabling Act (1874) gave women in the UK the right of access to a medical education. Women's entry to medicine subsequent to this was slow, but steady. From 1948, with the establishment of the National Health Service requiring more general practitioners, women's presence in the medical profession grew rapidly (Thomson, 2001c, p. 155). As we head into the new millennium, female medical students now outnumber men, at Edinburgh University Medical School and elsewhere, and have done so for a number of years (Radcliffe, 2013). Now, throughout the world we find women in branches of medical education and practice formerly occupied solely by men. This includes laboratory-based physiology and anatomy, as well as the more 'heroic' branches of medicine and surgery such as cardiology, neuro-surgery and orthopaedics.

Despite these in-roads, however, women remain clearly in a minority in these particular fields (Connolly and Holdcroft, 2009). In medical education, women are also significant by their absence, with only 11% of professorial level clinical academics in UK medical schools being women (Women in Academic Medicine, 2007, p.2). So, in the 21<sup>st</sup> century, in what medical specialisms *do* we find women doctors? Perhaps not surprisingly, women's role in medicine today remains largely circumscribed by their early experiences, dictated by a patriarchal ideology that continues to direct

women towards those aspects of the profession considered most 'appropriate' for them. Thus, women congregate in those areas of the medicine characterised by the tenets of 'hygiene' prescribed by their pioneering sisters: areas dominated by the dispensing of advice about health and well-being, most notably public health (health promotion, sexual health) as well as general practice (Connolly and Holdcroft, 2009; Roberts, 2005). As Roberts has noted, when describing the general position of women in British medicine, "[w]omen continue to be over-represented in the lower paid, less technically focused specialties, which are often more patient centred" (Roberts, 2005, p. 13). Amanda Howe, professor of primary care at the University of East Anglia concurs, adding "it is interesting that having a high proportion of women in a particular specialty is often associated with that specialty losing its high status and popularity." (Roberts, 2005, p. 14). These remarks clearly resonate with our Edinburgh case study: those areas of medicine not favoured by men become areas favoured by women. Howe goes on to suggest that those areas of the profession where women predominate are regarded as lower status. The reasons for this continuing inequality are many and varied, and it is not within the purview of this chapter to consider them. Without doubt, women have come a long way since their early years struggling to be accepted within medicine. It is a disappointing, but perhaps inevitable, conclusion to say that progress in numbers has not been matched by equal representation throughout the different branches of the profession.

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