

**INFANT MORTALITY: A STUDY OF THE IMPACT OF SOCIAL
INTERVENTION IN BIRMINGHAM 1873 TO 1938.**

By

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Abstract

Following the appointment of a Medical Officer of Health for Birmingham, concern was frequently expressed by the Council regarding the high infant mortality rate, although it was only in 1899 that municipal action was taken to address the issue. This study reviews the context in which infant deaths occurred in Birmingham, presenting an analysis of the statistics provided by the Medical Officer of Health from 1873 to 1938, and making an assessment of the main causes of infant deaths. Interventions, both voluntary and municipal, which were implemented in the city, are investigated and their impact evaluated. It will be shown that health visiting and maternal and child welfare centres developed city wide, contributing to a decline in deaths due to diarrhoea and debility, while having no apparent impact on deaths due to prematurity. By using the municipal and voluntary agency reports, this study will show that initially there was a want of care shown by the local authority, with statistical change occurring only after the introduction of health visiting, although by initiating a culture of intervention the voluntary sector can be considered to have made a contribution to the reduction of infant mortality in Birmingham.

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INFANT MORTALITY: A STUDY OF THE IMPACT OF SOCIAL INTERVENTION IN BIRMINGHAM 1873 TO 1938.

“If we would solve the great problem of infant mortality, it would appear that we must first obtain a higher standard of physical motherhood.”

George Newman 1907¹.

INTRODUCTION

This study was motivated in particular by three articles on social intervention and the decline of infant mortality, two by Galley and one by Drake². Galley, using the cities of Birmingham and Sheffield as his case studies, examined the extent to which local initiatives were capable of influencing the infant mortality rate (IMR) in the period before the First World War³. He concluded that infant mortality decline was a complicated process and considered that, although Birmingham appointed its first Medical Officer of Health (MOH), Alfred Hill, in 1872, any efforts he undertook to reduce infant mortality in the city were largely in vain. Whereas social intervention by itself was not responsible for the turning point in national infant mortality, he considered that it became increasingly important as the twentieth century progressed. In his response to this article, Drake felt, by not providing quantitative

¹ G.Newman, *Infant Mortality, a social problem* (New York, 1907) p.258.

² C.Galley, `Social Intervention and the decline of infant mortality` *Local Population Studies*, 73 (2004) pp 29 – 50

M.Drake, `Surely they made a difference`. *Local Population Studies* 76 (2006) pp 63 – 69

C.Galley, `Health Visitors. How much difference did they make?` *Local Population Studies* 76 (2006) pp 69 - 75

³ Infant mortality rate (IMR) refers to the number of infant deaths per thousand births in the same year. Newman. *Infant Mortality, a social problem.* p 1

evidence of the nature and enormous amount of work carried out by a relatively small number of health visitors, Galley`s argument “lacked depth”. In order to add depth to the debate on the value of social intervention, this study will consider the qualitative and quantitative evidence for the work carried out in Birmingham by both voluntary and municipal agencies, including that of the health visitors.

Aim of study

The object of this study is to consider the experience of Birmingham, regarding the level of infant mortality, the underlying causes and the methods of social intervention which were used to address this issue over the period 1873 to 1938, and by evaluating their impact on the infant mortality rates of the city, this study will contribute to the debate of Galley and Drake⁴.

Drake proposes that, in order to supplement studies at the macro-level previously undertaken, there is a need for a micro-level approach. Whereas some historians, considering the broader picture, suggest that the decline in infant mortality began prior to the dates covered by this study, evidence would suggest that Birmingham experienced a later change⁵. Although all Medical Officers of Health had the responsibility of producing annual reports for the Local Government Board, some were not published, or may not have been written, and others have not survived. Following the appointment of Alfred Hill as MOH for Birmingham, detailed annual reports covering sanitary and health issues were provided for the next sixty-seven

⁴ The period 1873 – 1938 has been used for this study as there is a continuous run of Birmingham Medical Officer of Health Annual Reports for this period.

⁵ C.H. Lee. `Regional inequalities in infant mortality in Britain, 1861-1971: patterns and hypotheses`. *Population Studies*.45. (1991).p.56, and Chapter 3, p.49 of this study.

years, until the work load and paper shortages created at the commencement of the Second World War prevented the production of the 1939 report. It is this run of consecutive reports which makes Birmingham a useful study and also enables the time frame to be extended almost thirty years beyond that considered by Galley. In order to set the reports in a local context, the Health Committee minutes, local press reports and voluntary sector annual reports will also be reviewed.

The aim of this study is to consider the resources available to families within their community, without medical referral or medical intervention, and therefore the work of the Birmingham Children`s Hospital (est.1861) and the Women`s Hospital (est.1871) have not been considered in this work⁶. Whilst recognising that sometimes the informants were themselves medically qualified, this study will focus on social intervention provided in the form of advice and support available to families of the period, outlining the nature and significance of the support, together with the outcomes and implications for infant mortality⁷. An assessment will be made as to whether action could have been taken earlier to address infant mortality in Birmingham and to what extent Hill, as MOH, failed to implement effective interventionist measures. The contribution of the voluntary sector, whether in fact social intervention had an impact on infant mortality in the city, and the extent to which Birmingham adopted the models of intervention established elsewhere, will be assessed.

⁶ See J.Reinarz. *Health care in Birmingham: the Birmingham teaching hospitals, 1779-1939*. (Woodbridge, Boydell Press, 2009) and R. Waterhouse. *Children in hospital: a hundred years of child care in Birmingham*. (London, Hutchinson, 1962)

⁷ For example see Dr J. Duncan Chapter 7, p.131, of this study.

Structure

To set the experiences encountered in Birmingham in a wider context, a literature search will consider the trends in, and review some of the causes of, infant mortality over the period, showing how in the later years of the nineteenth century considerable focus was placed on the unsanitary urban conditions. While the issue of poverty was acknowledged by some, the importance of breast feeding and the perceived failure of many mothers to undertake this care of their infants were considered by others to have been major factors, leading to the development of interventionist services on a national basis. Although views differed as to the level of blame to be apportioned to the lower classes for their circumstances, it will be shown that, amongst the more fortunate of society, there was a general opinion that infant mortality could be attributed to the ignorance and carelessness of the poor. The development of Birmingham and its housing situation, together with the level of poverty found there, will be outlined to illustrate the circumstances in which the majority of population of the city were living over the period.

An analysis will be made of the statistical data provided in the annual reports showing the major causes of infant deaths in the city throughout the period, the causes of death by area from 1912 to 1935, and the rate of decline which occurred in the central, middle and outer rings of the city⁸. Statistics regarding the development of the municipal welfare services will also be presented, together with information regarding breast-feeding studies in Birmingham.

⁸ See Appendix 1.

This study will then consider the different methods of intervention proposed and initiated in Birmingham. Although Hill suggested that a voluntary home visiting service should be instigated, for most of his period of office the method of intervention used to combat infant mortality was education in the form of health lectures. The range and location of these will be assessed. The extent to which the strong philanthropic ethos and the `civic gospel` approach in Birmingham could have prevented the instigation of more direct intervention as proposed by Hill in 1877 will be considered, and whether this could be seen to have delayed the commencement of infant mortality decline in the city⁹. Further philanthropic work in the form of voluntary run maternal and child welfare centres will be reviewed, considering their impact on the IMR, and also an assessment made as to what extent they provided a model for a future municipal service.

The work undertaken by the health visiting service from 1899 will be considered, an evaluation made as to the contribution it made to the decline in IMR and an assessment made as to whether Galley`s view that the impact of this intervention was minimal can be upheld. The final intervention to be considered will be the municipal maternal and child welfare centres. This model built directly on the service provided by the voluntary sector, and worked together with the health visitors, making it difficult to provide a separate assessment of the work of the two models and to attribute specific achievements to them.

⁹ `Civic gospel` was a view put forward by leading Birmingham Nonconformist ministers, particularly George Dawson, who, contrary to the prevailing attitude of `laissez faire` considered that a town council should be responsible for the welfare of the local community. E.Hopkins. *The Making of the Second City 1850 – 1939*. Tempus Publishing. (Stroud, 2001) p. 52

The study will assess whether there was indeed a want of care shown in Birmingham when addressing infant mortality and, if this was the case, to what extent this can be considered a failure by mothers or, alternatively, a local authority responsibility. The approaches to the problem over the period, philanthropic and municipal, will be considered in depth, evaluated, and a conclusion will be drawn as to the impact and effectiveness of the differing approaches both individually and collectively on the level of infant mortality in Birmingham.

Defining the issue

Before considering the effect of intervention on the infant mortality rate of Birmingham over the later years of the nineteenth century and the years leading up to the Second World War, it is first necessary to establish why the level of infant mortality came to be viewed as a problem, both nationally and locally. The issue was not only experienced in Britain, and some of the models of intervention, initiated abroad and later adapted to local needs in England, will be considered.

Two differing positions were taken regarding the increasing population during the nineteenth century. The Malthusian view held that excessive population was dangerous and would result in the exhaustion of resources, leading to war and disease, thereby naturally impeding growth¹⁰. Alternatively Kingsley (1858) considered that over population was impossible “in a country that has the greatest colonial empire the world has ever seen”¹¹. He urged the importance of increasing

¹⁰ A. Davin, ‘Imperialism and Motherhood’ *History Workshop*, 5 (1978) p.9

¹¹ *Ibid.* p.10

the English race, and wrote that the dominions “if notoccupied by people of British stock would sooner or later be occupied by other people”¹².

It was only with the commencement of the registration of births and deaths that the statistical information necessary to give a picture of both population growth and infant mortality could be collated on a regular basis. The official registration of births in England and Wales began on 1 July 1837 as a result of the Births and Deaths Registration Act 1836. This established both the General Register Office and provided for the appointment of a Registrar General, who in turn appointed local Superintendent Registrars and Registrars¹³. The Act required the local Registrar of Births to inform himself within forty-two days of any birth occurring within his district, and obliged the parents (or failing them the occupier of any tenement within which a birth took place) to provide the local Registrar with such particulars about the birth as were required under the act. However, the act did not impose any penalty for failure by the parent to register a birth, an omission rectified by the Births and Deaths Registration Act of 1874 which made such a failure punishable by a fine of two pounds¹⁴. Arthur Newsholme considered that prior to this act there had been a failure to register approximately five per cent of live births¹⁵. The act therefore enabled the MOH to assess more accurately the IMR of Birmingham, although the notification of still births over twenty-eight weeks gestation was not to become compulsory until 1 September 1915.

¹² Ibid p.14

¹³ 7 Will. IV

¹⁴ 37 Vict.

¹⁵ D. Dwork, *War is good for babies and other young children: a history of the infant welfare movement in England. 1898 – 1918* (London,1987) pp.3-4

Infant mortality had also been seen as an issue elsewhere. France experienced a decline in birth rate, and an increased IMR which, together with the impact of the Franco-Prussian War, raised concerns regarding the problem of depopulation a generation earlier than in England¹⁶. While the IMR of much of Europe was greater than that found in Britain, in Sweden, Norway and Denmark, together with that of Australia and New Zealand, the rate was considerably lower¹⁷.

It was recognised that infant mortality in Britain was a greater issue in urban areas. Although immaturity was a factor in both rural and urban communities and all diseases of infancy had a higher impact in towns, infantile diarrhoea was seven times as fatal in areas of high population density¹⁸. At the same time, the birth rate per 1000 population had shown a period of steady decline from an average of 35.5 in 1871-75 to 29.6 in 1896-1900 and anxieties regarding implications of a declining population, together with the physical and mental welfare of future generations, gave impetus to the infant welfare movement¹⁹.

The growing recognition of infant mortality as a significant public health issue, together with the methods which were instigated to address the problem and the availability of relevant resources, justify the focus of this research.

¹⁶ Ibid. p.94

¹⁷ Newman. *Infant mortality, a social problem*, pp.8-10

¹⁸ Ibid., p.42

¹⁹ C. Dyehouse, 'Working-class mothers and infant mortality in England. 1895 -1914', *The Journal of Social History*,12 (1978), p.248

CHAPTER 1: CURRENT HISTORICAL THINKING

“It was this almost universal maternal awakening which really began to change the outlook of child health.....Best and most effective of all was the wide extension of maternal knowledge, understanding, aptitude and practice of infant nurture and management.”

Newman, G. 1939²⁰

Commencement of the decline in infant mortality

In the eighteenth century levels of infant deaths of 200 to 300 per 1000 live births were recorded in France, Sweden and England²¹. Although both urban and rural rates in England experienced a decline during the second half of the century, this was followed by an uneven trend throughout the early nineteenth century²². After the introduction of civil registration in 1837, data at local level shows considerable variation in different districts, and Huck found that the rates of infant mortality were increasing as populations grew in industrial towns. By the 1840s the figure stood at approximately 150, and throughout the second half of the nineteenth century infant mortality in England and Wales remained at this level²³. The IMR attracted little attention while general death rates remained high, but by the early 1900s this had shown a significant decline, together with that of children aged one to five which was reported by the Registrar General in 1907 to have fallen by thirty-three per cent over the previous forty years. This emphasised the sustained high rate of infant

²⁰ G. Newman, *The Building of the Nation's Health* (London, 1939), p.318

²¹ R. Millward and F. Bell, 'Infant mortality in Victorian Britain: the mother as a medium', *Economic History Review*, 4 (2001) p.699

²² P. Huck, 'Infant mortality in nine industrial parishes in northern England, 1813 – 1836', *Population Studies*, 48 (1994), p.513

²³ Millward and Bell, 'Infant mortality in Victorian Britain', p.699

mortality²⁴. It had been assumed as the environment became healthier and the general death rate declined, together with the reduction in death rate from the more preventable diseases, that the infant death rate would follow the same trend, but this had not proved to be the case, with the IMR actually showing an increase in some areas²⁵.

There has been considerable debate as to when infant mortality began to decline. While stating that between 1876 and 1899 the IMR either failed to decline, or actually increased, Woods et al suggest that if the diarrhoeal component of infant mortality is discounted as being as a result of short-term meteorological variations, then the underlying downward trend of infant mortality began in 1891, or possibly earlier²⁶. In contrast, Millward and Bell considered that, while there was a downward trend in some causes of infant mortality, it was the deaths from diarrhoeal related diseases, particularly in the last decade of the nineteenth century, which impacted on the statistics, preventing an overall decline, and they suggest that the long-term decline for Britain should be put at the beginning of the twentieth century²⁷.

Lee, looking at evidence for each of the fifty-five counties of England, Wales and Scotland, suggests that the regional IMRs did not occur uniformly, with the point of change showing considerable variation. He demonstrates that IMR peaked as early as 1861 in some counties, including Buckinghamshire, Cambridgeshire and Dorset,

²⁴ Dyehouse. `Working-class mothers`, p.248

²⁵ Newman, *Infant mortality*, p.2

²⁶ R. Woods, .P, Watterson and J. Woodward, `The Causes of Rapid Infant Mortality Decline in England and Wales 1861 – 1821 Part 11`, *Population Studies*, 43 (1989), p.122

²⁷ Millward and Bell, `Infant mortality in Victorian Britain`, p.699

with some others, such as Hertfordshire and Rutland peaking in 1871²⁸. Although the annual reports and quarterly returns of the Registrar General show an increase in IMR during the last decade of the nineteenth century, Williams and Galley argue that too much attention has been given to the national picture which can be affected by the experiences of large urban areas²⁹. They suggest that while there is no doubt that infant mortality declined in all areas after 1900, some towns were more severely affected than others by the unusual weather conditions of the 1890s, possibly due to local public health management. They also consider that the beginning of the decline in infant mortality should be extended backwards to the 1860s.

Given this local variation, it is critical to establish the context for Birmingham, and the statistical information provided by the MOH annual reports will be used in chapter 4 to determine the point at which the decline in infant mortality commenced in the city. This will help demonstrate to what extent the different methods of intervention may be considered to have had an impact on the IMR of the city.

Causes of IMR decline

Explanations for trends in infant mortality are complex, due to the many and varied economic and social factors which may be considered to have contributed to the changes which occurred, and a range of views as to the key issues have been proposed. A large proportion of infant deaths were recorded as being due to developmental and wasting diseases, however these were largely ignored as it was considered that deaths in the first month were due mainly to inherited weakness and

²⁸ Lee. 'Regional Inequalities in Infant Mortality in Britain 1861 – 1971', pp 55-65.

²⁹ N. Williams and C. Galley, 'Urban-rural differentials in infant mortality in Victorian England', *Population Studies*, 49 vol. 3, (1995) pp. 401-412.

such deaths were therefore a form of natural selection. As a result health officials concentrated on the prevention of the diarrhoeal diseases which they concluded could be achieved by improved feeding and hygiene. In the Annual Report of the Local Government Board for 1909 -1910, Sir Arthur Newsholme, Medical Officer to the Board and previously Medical Officer of Health for Brighton, highlighted the poor standards of sanitation, defects which he considered could be remedied. He stated that "Thus local sanitary authorities are largely responsible for the continuance of excessive infant mortality, and until they fulfil satisfactorily their elementary tasks, efforts in the direction of domestic hygiene can only be partially successful"³⁰. He later argued that little was achieved in the nineteenth century towards the reduction of infant mortality and he suggested that the distribution of information leaflets were easily misunderstood and had little impact. He considered that the decline in infant mortality which occurred in the early years of the twentieth century could be attributed to the development of child welfare work together with the general education of the population regarding personal hygiene and the improvement in domestic sanitation³¹.

While acknowledging the link between infant deaths from diarrhoea and poor sanitary conditions, Millward and Bell state that there remained a large number of deaths from other causes and suggest that the downward trend in both urban and rural areas could not simply be due to improvements in the urban environment³². Although some progress was made in slum clearance, together with improvements in the supply of water and disposal of waste, the laying on of water and sewers was piecemeal. At

³⁰ Ibid., p.114

³¹ A. Newsholme, *Fifty Years in Public Health* (London, 1935) p.335

³² Millward and Bell. 'Infant mortality in Victorian Britain', p.699

the same time some environmental aspects deteriorated as air pollution worsened with the development of industry, and the removal of sewage and industrial processes increased the pollution of water courses³³. While mortality rates in urban districts were higher than in rural areas, Woods demonstrates that the move to towns and cities which exposed a larger proportion of infants to an adverse environment did not result in a corresponding increase in the national IMR which remained relatively steady³⁴.

Szreter suggests that the overall exposure of the population to airborne diseases would have been affected by the general level of overcrowding and lack of ventilation in living, sleeping and working environments which became more prevalent as industrialization and urbanization intensified³⁵. In this he supported the view of McKeown, who, while acknowledging that breast-feeding would give some protection in the first months before weaning, considered the cause of infants' vulnerability and the high level of infant mortality to be the unhygienic living conditions of the urban working-class home, which he considered to be virtually inevitable in small overcrowded houses lacking their own water supply and water closet³⁶. Such conditions continuously introduced infants to bacterial organisms which, although not harmful to the more developed digestive system of older children and adults, could produce fatal diarrhoea attacks in infants.

³³ P. Huck, 'Shifts in the seasonality of infant deaths in nine English towns during the 19th century: A case for reduced breastfeeding?' *Explorations in Economic History*, 34 (1997) p.379

³⁴ R. I. Woods, 'The effects of population redistribution on the level of mortality in nineteenth century England and Wales' *Journal of Economic History*, 45 (1985) p.649

³⁵ S. Szreter, 'The importance of social intervention in Britain's mortality decline c. 1850 – 1914: a re-interpretation of the role of public health', *Social History of Medicine*, 1 (1988) p.13

³⁶ *Ibid.*, p.31

McKeown considered that “Improvement in nutrition was a necessary condition for a substantial and prolonged reduction of mortality and growth of the population”³⁷. A fifty per cent rise in real wages over the period 1870 to 1914, together with an increase in the availability and quality of food, resulted in the consumption per head and quality of working class diet showing some signs of improvement in the last quarter of the nineteenth century³⁸. The falling death rate for children and young adults, and the rise in average heights for cohorts born after the 1860s, indicate “significant improvements” in the nutritional status of the British people, although it is not known how these gains were distributed within the family³⁹. By suggesting that improvements in health and welfare were achieved by economic growth and the general improvement in living conditions, McKeown supported a laissez-faire position of government policies. Szreter takes a contrary view that real wage gains were no guarantee of higher life expectation, and that it was social and medical intervention, although variably implemented, which was the principal source of the nation’s health improvements before the First World War⁴⁰.

Pember Reeves’ research would indicate that, in order to maintain the health of the bread winner within a household, the father had the first call on the food available, leaving the remainder to the mother and children. Her research amongst families in Lambeth in 1910 to 1911 included an assessment of family budgets, which suggested that a working man required 3s 6d per week for his food, whereas that

³⁷ T. McKeown. *The modern rise of population*. (London, 1976) p.129

³⁸ Millward and Bell. ‘Infant mortality in Victorian Britain’, p.705

³⁹ Huck, ‘Shifts in the seasonality of infant deaths’, p.380

⁴⁰ Szreter, ‘The importance of social intervention’, p.37

allocated for the wife and children was more likely to average 1s 5d per week⁴¹. This would indicate that a significant increase in family income would have been required in order to improve the dietary standards experienced by many women, and to provide a subsequent impact on the health of infants in the family. It may be considered that an increasing standard of living was not sufficient to significantly affect IMR thereby adding weight to Szreter's view of the value of proactive intervention.

Maternal responsibility

When, in the last years of the nineteenth century, it became apparent that despite improvements in sanitation, and the decline in the general mortality rate, the IMR had not responded similarly, new thinking proposed that maternal responsibility and breast feeding, together with higher standards of domestic hygiene, were key to reducing infant mortality. Early in the search for a cause for infant mortality blame was apportioned to mothers who undertook outside employment in order to contribute to the family income⁴². Sir John Simon, the Medical Officer of the Privy Council, in his investigation into the sanitary condition of England 1859 to 1865, stated that "in proportion as adult women were taking part in factory labour or in agriculture the mortality of their infants rapidly increased" and "certain large towns where women are greatly engaged in branches of industry away from home; where consequently, the home is ill kept; where the children are little looked after; and where infants who should be at the breast are improperly fed or starved..."⁴³.

Although Newsholme agreed that the industrial employment of mothers was a

⁴¹ M. Pember Reeves, *Round About a Pound a Week*. (London, 2008) p.125

⁴² Newman. *Infant mortality, a social problem*, p.92

⁴³ Woods, Watterson, & Woodward, 'The Causes of Rapid Infant Mortality Decline', p.113

“serious evil”, he recognised that the money earned, by increasing the income, and therefore the standard of living of a family, may have a greater influence in reducing infant mortality.

Dyehouse, in her study of working-class mothers reviews two predominant theories. Firstly, that the employment of married women was an important cause of infant deaths, and secondly that the ignorance of working-class women in matters of infant care was responsible for the high IMR⁴⁴. George Reid, MOH for Staffordshire, in a paper presented to the British Medical Association in 1892, illustrated his view by comparing three districts within the county with high, medium and low levels of employment of married women. These showed IMRs of 195, 166 and 152 and he therefore concluded that working mothers were synonymous with high infant mortality. His findings were challenged by Mr Noel Humphreys who felt Reid had insufficient evidence for his assertion, quoting South Wales and Durham, where few women worked outside the home, which had markedly higher IMR than areas such as the West Riding of Yorkshire where large numbers of women worked.

However, the Interdepartmental Committee on Physical Deterioration reporting in 1904 adhered to the issue and argued that the facts seemed to point to the conclusion that “the loss of infant life was greater where women went out to work”, and in 1907 a conference of Medical Officers agreed to undertake a systematic enquiry into the question. Dr John Robertson, MOH for Birmingham, instigated a survey in the St Stephen`s and St George`s wards of the city of all infants born in

⁴⁴ Dyehouse. `Working-class mothers`, p.251

1908. The results showed that where mothers went out to work the IMR was lower (190) as against the rate where mothers did not undertake outside employment (207). Robertson commented on the importance of earnings, and that rather than neglecting their families, working mothers sought to provide extra nourishment for their children. Newsholme was dismissive of this study, and opposition to married women`s work became widespread in England, although Dyehouse concludes that no convincing evidence can be offered to support the theory⁴⁵. This she attributes to contemporary views on social class and to the nature of family life, with the middle-class ideal of the wife at home supported by a husband working for the family income, while at the same time there was working-class opposition to women as a source of cheap labour competing for employment.

Dyehouse suggests that the explanation of infant deaths due to the ignorance of mothers was equally controversial. While, the view was maintained by Newman, who urged the need for the teaching of mothercraft and domestic hygiene in elementary schools and the establishing of Schools for Mothers, by the time of World War 1 it was coming under increasing attack. A comparison between infant mortality figures in towns with welfare education and health visiting, and those without, showed similar trends and fluctuations, and Newman was criticised for failing to recognise the significance of environmental factors and the impact of zymotic diseases. Dyehouse adds that little attention was paid to wasting diseases, which accounted for a large proportion of infant deaths. The number of deaths due to these causes in

⁴⁵ Ibid., p.260

Birmingham will be assessed in chapter 4, and the impact of interventions evaluated in chapters 7 and 8.

Breast feeding

Studies in the 1890s and early 1900s show eighty per cent of women in the wage earning population breast fed their infants, whereas those in higher social classes were found more likely to be resorting to artificial feeding from birth. Mothers in poorest areas had the highest level of breast feeding, but also the highest incidence of early supplementation and premature weaning, which was due primarily to their own poor health and nutritional status. The immune system of an infant is particularly dependent on antibodies passed on by the mother through breast feeding and even infants only breast fed for a few weeks had increased chances of survival over those artificially fed from birth⁴⁶. Woods *et al* considered that mothers were more likely to be unable to start breast feeding than to abandon it in the first six months, and that many were unable to breast feed their infants up to the later months of the first year rather than being unwilling to do so⁴⁷. Concluding that there is little reason to suppose that either the incidence or duration of breast feeding increased during the first decade of twentieth century when infant mortality rates declined everywhere, they suggested that breast feeding practices helped keep the IMR down rather than contribute to a further decline. In the second half of the nineteenth century it was believed by many of the medical profession that breast feeding was declining⁴⁸. Contrary to this view, Szreter suggests that despite the very

⁴⁶ V. Fildes, 'Infant feeding practices and infant mortality in England, 1900 – 1919', *Continuity and Change*, 13 (1998), p.253

⁴⁷ Woods, Watterson, and Woodward. 'The Causes of Rapid Infant Mortality Decline', p.119

⁴⁸ Fildes. 'Infant feeding', p.252

considerable attention given to the issue of artificial feeding at the time, it seems probable that breast feeding was still normal practice for the majority of the working-class population⁴⁹.

As a result of his work on nine industrial parishes, Huck put forward the view that a major change in IMR was the transition from a peak in the first quarter to one in the third quarter of the year⁵⁰. Using burial registers of parishes to calculate the IMR for the early years of the nineteenth century, and the matched registration sub-districts for the later years, he demonstrated that the level of infant mortality recorded in the last half of the century was approximately the same as that which had prevailed early in the century. The early data showed the IMR as peaking in winter quarters and declining in summer quarters for all nine parishes, whereas that of the later years showed a peak in eight out of nine parishes in the summer / autumn quarters, demonstrating a change in the seasonality of infant deaths which he attributed to an increase in summer / autumn deaths rather than a decline in those in the winter quarter⁵¹.

In the late nineteenth century approximately fifteen per cent of all infant deaths in England and Wales were attributed to diarrhoea, and contemporary health authorities remarked on the increased number of deaths from this cause in hot dry summers, resulting in simultaneous peaks in the IMR in towns throughout the country⁵².

However Huck calculated that the mean summer temp for 1870 to 1899 was only 0.1

⁴⁹ Szreter, 'The importance of social intervention', p.30

⁵⁰ Huck, 'Shifts in the seasonality of infant deaths', p.369

⁵¹ Ibid., pp.372 -373

⁵² Ibid., p.374

degree above that of 1813 to 1836, a figure which he considered would result in an increase of in IMR of only 2.2 instead of the 41 as observed, and therefore he suggested that the peaks in summer / autumn infant deaths could not be solely attributable to high temperatures. He argued that if worsening environment due to increased population were the cause of a rise in summer mortality it would be reasonable to expect that, due to respiratory diseases, winter mortality would also have been raised. As he has shown that this was not the case, Huck did not consider the observed changes in the seasonality of IMR to be attributable to the effects of an increased population.

Whilst concurring with Szreter that breast feeding was generally practised, Huck calculated that a relatively small amount of infants not breast fed had a disproportionate effect on the overall IMR, and suggested that a small shift in feeding practices could cause changes in seasonality peaks. Huck concluded that the incidence and duration of breast feeding may have fallen during the later years of the nineteenth century, and that the use of cows` milk and other substitutes for breast milk became more common⁵³.

Milk supply

Beaver claims that the improvements in the safety of infant foods combined with the increasing cleanliness, availability and cheapness of cows` milk which were the main reasons for the decline in infant mortality after 1900⁵⁴. However, an editorial in the *British Medical Journal* of 1904 stated that "At present cows` milk is too often, when it

⁵³ Ibid., p.382

⁵⁴ M.W. Beaver, `Population, Infant Mortality and Milk` *Population Studies*, 27 (1973), pp.243 - 54

reaches the houses of the poor, in a state which renders it dangerous to life". The article continued that, this being the case, the high IMR was not surprising, a situation which would continue until a clean milk supply was ensured⁵⁵. Atkins suggests that improvements in milk quality before the First World War were limited and may have made a considerable contribution to mortality⁵⁶. He states that much of the milk production was unsanitary, with data from the bacteriological examination of fifty samples of milk in St Pancras in 1899 showing that only thirty-two per cent could be described as `normal`. As early as 1871 Dr Selby Norton had argued that milk was likely to be a key factor in infantile diarrhoea, and later Dodd stated that "the milk supply is the main cause of this waste of [infant] life"⁵⁷. Although Woods *et al* argue that levels of breast feeding remained high, and propose that IMR was affected more by poverty, mother`s education, overcrowded housing and sanitary reforms, Atkins considers there to be reason to suspect that infected milk was strongly linked to diarrhoeal deaths which accounted for ten to twenty per cent of infant mortality throughout the period 1871 to 1920.

Dried milk was not used in any great quantity before the First World War, and cows` milk was unlikely to be pure or clean, being contaminated by unsanitary conditions on farms and in milk shops⁵⁸. There was often a shortage in the production of milk as pasturage diminished in late summer and Atkins suggests that this fact tempted

⁵⁵ D. Dwork, `The milk option. An aspect of the history of the infant welfare movement in England 1898 – 1908`, *Medical History*, 31 (1987), p.55

⁵⁶ P.J. Atkins, `White Poison? The Social Consequences of Milk Consumption 1850 – 1930` *Social History of Medicine* (1992), p.208

⁵⁷ *Ibid.*, p.219

⁵⁸ J. Lewis, `The social history of social policy: infant welfare in Edwardian England`, *Journal of Social Policy*, 9 (1980) p.474

dealers to dilute their supplies with water, which itself was often contaminated⁵⁹. An investigation by Newman of milk available in Finsbury in 1903 showed twenty-one per cent of samples to be adulterated. The National Clean Milk Society was founded by Winifred Buckley in 1915, but improvements in the cleanliness and quality of milk only came about in the early 1920s, when a voluntary bacteriological quality grading of milk, giving licences for Grade A Tuberculin Tested milk was introduced by the Sale of Milk Act 1927. It was not until the 1920s that most milk was sold in bottles. Although a small amount of milk which had been subjected to heat treatment, in order to eliminate harmful bacteria, had been sold in England from the 1880s, there was concern regarding the reduction in the nutritional value this caused and, together with the increased cost, prevented the increase in treated liquid milk as an infant food⁶⁰.

The production of condensed milk, which had been introduced about 1870 and was by the 1890s commonly used for infant feeding, doubled from 545,394 to 919,319 hundredweight by 1901⁶¹. Fresh cows' milk was expensive and often of poor quality, making condensed milk, which had a longer shelf life than liquid milk, a preferred alternative, particularly in urban working-class households. There was considerable controversy over the use of condensed milk as an infant food amongst the medical profession, with some doctors believing it safe for infant feeding while others did not, suggesting that mothers would have received a diverse range of advice. Increasing amounts of machine-skimmed condensed milk were sold and, due to its containing very little fat, and subsequently being low in vitamins A, C and D, together with

⁵⁹ Atkins, 'White Poison?', p.222

⁶⁰ Ibid., p.225

⁶¹ Dyehouse. 'Working-class mothers', p.256

having a deficiency in calories, infants fed on this became severely malnourished⁶². An analysis of leading brands in 1911 showed that none was sterile, and the conclusion was drawn that the canning process was insufficient to kill bacteria present in the milk⁶³. Once a can was opened, the contents were at risk of contamination in the home, with the high sugar content making it attractive to flies, particularly in warm weather. This therefore presented issues between the quality of milk for artificial feeding and the affordability of the milk, together with difficulties of storing it under hygienic conditions in the home. Despite such problems, in an article in *The Lancet*, Robertson, MOH for Birmingham, was quoted as saying “Babies did not die because they got bad milk”, and attributed their deaths to the carelessness on the part of mothers⁶⁴.

Fildes suggests the most important single factor affecting the IMR is the way in which infants were fed, and suggests the use of the long-tube bottle, introduced in the 1860s and widely used amongst all classes, had a detrimental effect⁶⁵. A circular flattened bottle with a screw top through which passed narrow rubber tube of lengths up to two feet long, it enabled an infant to be fed without being picked up, a method of feeding which became popular with both mothers and nurses. However, the difficulty of cleaning resulted in bacteria in the tube being ingested by infants even with hygienic and correctly made up feed. The boat shaped bottle, with an opening at each end thereby allowing water to be flushed through, was introduced late 1890s, and from the early 1900s a campaign was instigated, primarily through health

⁶² Atkins. `White Poison?` p.222

⁶³ Fildes. `Infant feeding`, p.268

⁶⁴ *The Lancet*. Vol.177, Issue 4565, 25 February 1911, p. 543

⁶⁵ Fildes.p.264

visitors, to alert mothers to the dangers of long-tube bottles. Although cheaper than boat shaped bottles, and despite some being handed down within families, their use rapidly declined, and by the end of 1920s medical texts journals and reports ceased to mention long tube type⁶⁶.

Despite the problems attached to alternative milk supplies available for an infant who was not breast fed, the evidence that a higher level of infant mortality was to be found in bottle-fed infants led to attention being focussed on the mother, and in 1913 Newman wrote that the problem of infant mortality was “mainly a question of motherhood and ignorance of infant care and management”⁶⁷. This view was reinforced by Pearson, Professor of Eugenics at University College London, in the Chadwick Lecture of 1913, where he purported to show that maternal habits were more important than any other variable in the issue of infant mortality. Most MOHs concurred with this opinion, differing only in their belief that these habits were susceptible to change. Lewis suggests that it was this belief which made concentration on maternal efficiency so attractive to child and maternal welfare workers⁶⁸. Robertson believed that “certain methods of feeding and rearing infants being handed down from mother to daughter in particular areas, which probably exert a powerful influence for good or evil as the case may be”, and the MOH for Sheffield wrote “that a very large amount of carelessness exists in the feeding and rearing of infants”⁶⁹.

⁶⁶ Fildes. `Infant feeding practices`, p.267

⁶⁷ Lewis. p.465

⁶⁸ Ibid. p.469

⁶⁹ Galley. `Social intervention`, p.39

Newsholme also stressed the importance of infant-feeding practices, suggesting that in addition to the need to make available a safe and accessible supply of milk, the issue of maternal ignorance and feckless mothers needed to be addressed⁷⁰.

Education of mothers

The education of mothers by health visitors became established in the early years of the twentieth century. Charitable visiting to relieve the needy poor had long been established in England, but the earliest organised health visiting scheme, originally staffed by volunteers, was set up by the Ladies Sanitary Reform Society in Manchester and Salford in 1862⁷¹. Failing to achieve the desired improvements in IMR by handing out leaflets and giving health lectures, the association hired a “respectable working woman” to visit the poorer classes in their homes “to teach and help them as opportunity offered”⁷². By 1890, when eleven paid visitors were employed, the supervision of these staff and the directing of their work was taken over by Manchester Corporation. A similar model of health visiting was implemented by Buckinghamshire (1892) and Worcestershire (1897) with Birmingham following suit in 1899.

The primary aim of home visitors was to encourage breast feeding to discourage early use of supplements or premature weaning⁷³. Where exclusive breast feeding was not possible, their role was to advise on the safe preparation, storage and administration of substitutes. While many MOHs produced printed leaflets, most

⁷⁰ Woods, Watterson, & Woodward, ‘The Causes of Rapid Infant Mortality Decline’, p.115

⁷¹ F. Prochaska, *Women and Philanthropy in Nineteenth-Century England* (Oxford, 1980) p.101

⁷² Dwork. *War is good for babies*. p.125

⁷³ Fildes. ‘Infant feeding practices’, p.253

were convinced that mothers did not read them, relying instead on the advice of neighbours and relatives and indeed the directions for artificial feeding when it became necessary were often regarded as a recommendation of artificial rather than breast feeding⁷⁴. At a time when advertising of patent foods led mothers to believe them superior to breast milk, Fildes considers clinics and consultations played an important role in suggesting suitable foods for infants, and educating mothers regarding the value of different infant foods, some of which were deficient in protein and fat some easily contaminated in preparation⁷⁵.

Huddersfield is regarded as a pioneer in the provision of infant welfare having established a model in 1905. A local act of parliament was introduced to ensure the compulsory notification of a birth within forty-eight hours, enabling home visits to be made by a health visitor within the first ten days of the life of an infant, when instruction and information would be most beneficial⁷⁶. Two medically qualified health visitors were employed to work together with local voluntary organizations, but Marland, while suggesting that effective visiting did lead to improvements in the care and feeding of infants, considers that the Huddersfield scheme had a limited effect on mortality⁷⁷. However the impact of the scheme was far reaching, doing much to promote the development of the infant welfare movement, and Marland considers it was the combination of early notification and education through health visiting which explains its influence.

⁷⁴ A. Newsholme, *Fifty years in public health* (London 1935) pp.321-346

⁷⁵ Fildes, 'Infant feeding practices', p.267

⁷⁶ A. Reid, 'Health visitors and child health: did health visitors have an impact?' *Annales de demographie historique*, 1 (2001), p.119

⁷⁷ H. Marland, 'A pioneer in infant welfare: the Huddersfield scheme 1903 – 1920', *Social History of Medicine*, 6 (1993), p.48

A similar act was passed nationally in 1907 and, although initially permissive, was adopted by the majority of authorities and later made compulsory by the Notification of Births (Extension) Act 1915. Reid suggests that considering the mother and child health movement was one of the major initiatives to combat infant mortality there have been few attempts to quantify its success or failure⁷⁸. Newsholme, by comparing Bristol, which did not appoint health visitors until 1912, and Huddersfield, which introduced them in 1906, showed that the IMR in both towns declined at similar rates, which would, he suggested, indicate that this type of intervention had little or no impact⁷⁹. This variation shows the significance of local studies and the importance of Birmingham as another, different, context to contribute to the evaluation of interventions instigated to address infant mortality.

The slow impact of the intervention provided by health visitors may be explained as many were only partially engaged in infant welfare, covering other roles such as TB visiting, Mental Deficiency Act visitors and assistant inspectors of midwives, and no clear information is available as to hours committed solely to infant welfare work. There is also a lack of data on both quantity and quality of visiting, although it was generally understood that health visitors were for mothers in poor neighbourhoods, concentrating on the poorer classes⁸⁰. There is little information on the advice given and how this was acted upon, which Reid suggests, creates difficulties in assessing whether health visiting had any impact on child health and mortality. She considers that, due to their poor living conditions, mothers would often have been unable to carry out the advice given and therefore suggests whereas health visitors were

⁷⁸ Reid, 'Health visitors and child health', p.120

⁷⁹ Newsholme, *Fifty years*, p. 335

⁸⁰ Reid, 'Health visitors and child health', p.123

unlikely to have made short-term changes, the awareness they raised, together with other changes led to better health in the long term.

Lewis offers evidence to suggest that some mothers resented health visitors, whereas other sources suggest that, after initial hostility, they were welcomed and their advice was heeded⁸¹. Dr Sidney Barwise, MOH for Derbyshire wrote in his 1918 Annual Report, “the Health Visitors have been extremely well received”⁸².

In Derby Nolan found that the most important identifiable factors responsible for the reduction in infant mortality after 1900 were better feeding practices promoted by health visitors, and, to a lesser extent, urban improvement⁸³. An alternative view from an unpublished study by Peretz suggests that “rates of infant mortality were determined more by social and environmental factors than the quality of medical care and the provision of welfare clinics”⁸⁴. Newman, one of the most important contemporary commentators, focussing particularly on motherhood, considered the `problem` to be one of maternal ignorance, and therefore considered that the issue of infant mortality, could be tackled by the appointment of women health visitors, the instruction of mothers, and the education of girls in domestic hygiene⁸⁵.

⁸¹ J. Lewis, *The politics of motherhood: child and maternal welfare 1900 – 1939* (London,1980) p.107

⁸² Reid, `Health visitors and child health`, p.120

⁸³ Szeleter, `The importance of social intervention`, p.32

⁸⁴ E. Peretz, `Maternal and Child Welfare in England and Wales between the Wars: a Comparative Regional Study` in Reid, *Health visitors and child health*, p.121

⁸⁵ Newman, *Infant mortality*. p.262

Birmingham

In his assessment of social intervention in Birmingham, Galley saw the work carried out while Dr Hill was MOH for Birmingham (1873 – 1903) to have been `largely in vain` as the IMR did not begin to decline until 1901⁸⁶. The municipal approach to the problem of infant mortality in Birmingham in the last quarter of the nineteenth century was addressed through general sanitary improvements and directions for the prevention of diarrhoea were posted in the courts. Hill also suggested that the problem could be prevented by increased breast feeding, although Galley comments that, in the MOH Annual Report for 1877, there is no indication how this could be promoted. While acknowledging that Hill had identified an appropriate strategy, he suggests Hill did not have the resources `or perhaps sufficient will` to implement interventionist measures. However, Galley later notes Hill`s suggestion that “an organised society of ladies to visit low class homes and instruct women in a simple manner on the best mode of feeding and nursing children would be of immense service..”. This was a service which he considered could not be provided by a sanitary authority.

Citing Hill`s studies into IMR, which were undertaken in Birmingham in 1877 and 1891, and Duncan`s later work in two deprived wards of the city, Galley concluded that Birmingham was more proactive in implementing interventionist policies than Sheffield⁸⁷. However, when the IMRs for both cities are compared the overall patterns of decline are seen to be virtually identical, which he suggested indicated that factors other than purely local ones must have had a bearing on the situation.

⁸⁶ Galley, `Social intervention`, p.30

⁸⁷ Galley, `Social intervention`, p.40

Alternatively it could be proposed that, while both cities implemented a health visiting service in 1899, it was therefore the impact of intervention which was having a similar effect on the IMR of both cities.

Galley, in summarizing his assessment of social intervention in Birmingham, considers that after 1900 slow progress was made in reducing the IMR at the same time as greater efforts were being made by the MOH and the health visitors⁸⁸. He notes that the IMR was declining at a faster rate in the outer wards where little intervention was taking place, although Drake suggests the middle-class and upper working-class mothers in these wards obtained their information from other sources such as doctors, newspapers, and books⁸⁹. Galley concludes that “intervention can provide, at best, only a partial explanation of Birmingham’s declining IMR”, and Drake suggests this view is probably correct as it is unlikely that there is in fact a mono-causal explanation for the decline in IMR⁹⁰. Drake proposes that the macro-level approach, covering improvements in sanitation and water supply, which had succeeded in reducing the general death rate from 1870, was then supplemented by a micro-level approach based on a one-to-one relationship between the health visitor and the mother of an infant. He considers that three questions need to be asked in order to assess the effectiveness of this type of intervention: what changes in behaviour were being attempted, how quickly could such changes occur, and were there sufficient health visitors for the task? In answering these queries Galley concludes that, while the advice given was appropriate, it took time to become fully assimilated and that it needed more health visitors than were employed before 1914

⁸⁸ Ibid., p.35

⁸⁹ Drake, ‘Surely they made a difference’, p.66

⁹⁰ Ibid., p.63

to make a difference⁹¹. As the numbers of health visitors continued to increase it must be concluded that the Health Department acknowledged the need for more workers, and this would support the view of this study that in order to assess the value of this method of intervention a longer study than that undertaken by Galley is justified.

These relatively recent debates show that there is still uncertainty as to the impact health visiting made on the decline of infant mortality. The aim of this work is to consider the interventionist approaches which were implemented in Birmingham throughout the period, by both philanthropic agencies and the local authority, and to assess their effectiveness. This question, together with Galley's view of the lack of change brought about by Hill during his period as MOH, as well as his opinion that IMR declined in the outer wards of the city despite intervention being focussed on the inner areas, are all issues which will be addressed by this study and conclusions drawn in chapter 9.

⁹¹ Galley, 'Health Visitors', p.74

CHAPTER 2: LOCATION OF THE STUDY: BIRMINGHAM IN CONTEXT

“Wealth can always take care of itself, but poverty cannot; and surely it is the duty of a wise local government to endeavour to surround the humbler classes of the population with its benevolent and protecting care.”

Thomas Avery⁹²

By the early 1900s, following a sustained period of declining birth rate, from an average of 34.1 per thousand population in 1851-60 to 29.9 in 1891-1900, and with infant mortality rates for England and Wales at 154 for both time periods, there were increasing concerns regarding the physical deterioration of the nation⁹³. Over 146,000 infants under the age of twelve months died in Birmingham between 1873 and 1938⁹⁴. The IMR ranged from a peak of 214 in 1898, to 60 in 1937 and 1939, while the birth rate, 40.8 in 1873, reached a maximum of 42.5 in 1876 and then followed a continuous decline to 29.2 in 1905.⁹⁵

By the early Victorian period, Birmingham had become one of the most important manufacturing centres in Britain, specialising particularly in brass and small metal products, both for domestic and engineering purposes. Commonly described as ‘the city of a thousand trades’, Birmingham was noted for its large number of small firms. The transferability of skills across the range of hardware and engineering industries enhanced the employment prospects of the working people and the generally

⁹² V. Skipp, *The Making of Victorian Birmingham* (Studley, 1986), p.104

⁹³ Newman, *Infant Mortality*. p.3

⁹⁴ Calculated from the statistical returns in the Birmingham MOH Annual Reports 1873 - 1938

⁹⁵ Birmingham MOH Annual Report (1905), p.9

buoyant level of economic activity made Birmingham attractive to inward migration⁹⁶. Many of the incomers found work as poorly paid labourers and were often on the borderline of poverty, but the jobs, unlike much of the work in surrounding rural areas, were not seasonal⁹⁷. Although many of the population were from the surrounding rural areas, there were also new arrivals from the wider UK and Europe⁹⁸. The availability of a supply of skilled labour meant that the town was also attractive to potential employers, and Birmingham became known as a centre of higher value, highly skilled trades such as jewellery, gun making and button making.

Local Government

Unrepresented in Parliament until 1832, and unincorporated until 1838, it was not until 1889 that city status was conferred upon Birmingham. In the mid nineteenth century, following incorporation, Gill considered there was a “negative and grudging state of mind which hindered the Council’s work”⁹⁹. Having failed to attract leaders of quality, the council, lead by Joseph Allday, believing all reforms to be expensive, followed a policy of strict economy. The council refused to appoint a Medical Officer of Health, drainage and sewage facilities were cut, and a project for a public bath was rejected. When Thomas Avery replaced Allday in 1859 some improvements were to be seen, although the tone of his address to the British Association in 1865 suggests that he too erred on the side of financial caution¹⁰⁰. In 1864 George Dawson, originally a Baptist Minister, but later minister to his own church, the Church of the Saviour, put forward his conviction that local government must assume wider

⁹⁶ R. Ward, *City-State and Nation: Birmingham’s Political History 1830 – 1940* (Chichester, 2005), p.2

⁹⁷ 35 per cent gave their occupation as ‘labourer’ in the 1851 census

⁹⁸ C. Upton, *A History of Birmingham* (Chichester, 1993), pp.100-106

⁹⁹ C. Gill. *History of Birmingham. Vol.1. Manor and Borough to 1865.* (Oxford. 1952), p.413

¹⁰⁰ *Ibid.*, p.51

responsibilities for the welfare of the local community and that the upper-classes should show a personal interest in those less fortunate than themselves.

Chamberlain said of Dawson that he was `one who perhaps more than any other, had set his mark upon modern Birmingham` and his way of thinking regarding the role of municipal government became known as the `civic gospel`¹⁰¹.

It has been suggested that the number of Nonconformist families who settled themselves in Birmingham in the seventeenth and eighteenth centuries were attracted by the more open society of Birmingham as a non-corporate town, and that for this reason many Nonconformists established businesses in the town¹⁰². The religious census of 1851 showed that many other towns had a higher proportion of Nonconformists in their population, and a further census in 1892 showed there had been little change in the strength of the various religious groups. From the late eighteenth century Unitarians had seen education as the means by which the religious, social and political changes they sought could be effected, and were foremost in advocating education for both sexes. However, the striving by Unitarian men to achieve `gentleman` status and positions of leadership within the new urban middle-class inhibited the development of equal opportunities for women Unitarians. From their perspective of a respectable middle-class identity, a strong emphasis was placed on the domestic role of women, while at the same time encouraging practical Christianity, supporting well organised good works¹⁰³. Similarly, in Quaker communities, girls received a more academic education, whether at home or at

¹⁰¹ Skipp, *The Making of Victorian Birmingham*, p.158

¹⁰² Ward, *City-State and Nation*, p.13

¹⁰³ H. Plant, Ye are all one in Christ Jesus: aspects of Unitarianism and feminism in Birmingham, c1869-90. *Women's History Review*, 9.no.4 (2000), p.723

denominational schools, than was generally found at the period. Both sects produced women active within their community, but Bartley suggests that while women contributed significantly to the development of the `civic gospel`, their role, being informal and philanthropic, was distinctly different to that of men who were involved in the formal municipal government¹⁰⁴.

By the nineteenth century the population of Birmingham had grown away from the Anglican parochial ministry, and Nonconformist denominations, such as Quakers and Unitarians, where women could take a more active role, were foremost in social influence amongst the poorer classes¹⁰⁵. The female members of prominent business and political families of the town, including those of the Quaker families of Barrow, Cadbury and Lloyd, and the members of the Unitarian Church of the Messiah, such as Beale, Chamberlain and Kenrick, were particularly active in philanthropic work¹⁰⁶. Such was the culture of middle and upper-class Birmingham at the time Hill was appointed as MOH in 1873. It is this link between those Nonconformist men in the role of city councillors, and their female relations and social contacts fulfilling an active philanthropic role, which may have impacted on the municipal approach taken to the issue of infant mortality in Birmingham in the last quarter of the nineteenth century and therefore warrants detailed investigation.

¹⁰⁴ P. Bartley, `Moral regeneration: Women and the Civic Gospel in Birmingham. 1870 – 1914`, *Midland History*, 25 (2000), p.143

¹⁰⁵ Prochaska, *Women and Philanthropy*, pp. 8 - 16

¹⁰⁶ Skipp, *The Making of Victorian Birmingham*, p.119

Housing

During the 1820s the population of Birmingham had grown by forty-two per cent, and between 1841 and 1851 it rose by a further twenty two-per cent, resulting in a high demand for homes. This encouraged landlords to subdivide properties and speculative builders to develop housing of insubstantial materials and inferior workmanship for short term gain, filling in open spaces and creating new slums¹⁰⁷. The number of dwellings on a small area of land was maximised by the building of back-to-back houses, 39,000 by 1871, and by the First World War the city had 43,366 properties of this type, grouped in approximately 6,000 courts¹⁰⁸. Most back-to-backs were constructed in terraces running at right angles to the street, sharing their backs with a parallel line of houses, from which they were separated by a wall only the thickness of one brick. Approached by narrow entries, each row faced a courtyard which had communal facilities, lavatories, wash houses and rubbish heaps. The building of back-to-back houses was discontinued in Birmingham under local by-laws in 1876, and prohibited nationally by the 1909 Housing and Town Planning Act¹⁰⁹.

Three national enquiries into local sanitary conditions were carried out in the 1840s. The *Report of the Health of Towns Select Committee* (1840) noted the `miserable and neglected state of the dwellings of the poor` of some industrial towns such as Liverpool and Manchester¹¹⁰. Alternatively, that Birmingham `... appears to form

¹⁰⁷ C. Chinn, *Poverty amidst Prosperity. The urban poor in England, 1834-1914*, (Lancaster, 1995) p.63

¹⁰⁸ Skipp, *The Making of Victorian Birmingham*, p.167

¹⁰⁹ Upton, *A History of Birmingham*, p.6

¹¹⁰ R. Rodger, *Housing in Urban Britain 1780 -1914* (Cambridge, 1989), p.1

rather a favourable contrast with some other large towns... the general custom of each family living in a separate dwelling is conducive to comfort and cleanliness¹¹¹. There were no cellar dwellings and the back-to-back houses were not necessarily of poorer quality than other houses. However, Chadwick's Report of 1842 put a much greater emphasis on the poor state of some of the older courts, which were described as narrow, poorly ventilated, filthy and badly drained. Rawlinson's 1849 report on the sanitary condition of Birmingham noted the unacceptable state of the older courts where the water was drawn from wells which were 'impregnated with offensive matter', and with privies described as 'a frequent source of nuisance'¹¹². Some clearance of slum properties in the city had been carried out as a result of the development of the railways, and some by the Improvement Scheme carried out under the Artisans Dwelling Act of 1875¹¹³. Birmingham City Council identified a ninety-three acre site between New Street and Aston Road for redevelopment, approximately half of which was covered by back-to-back houses which were poorly ventilated and badly drained¹¹⁴. Of the 1,335 dwellings acquired by the Council, 697 were improved and remained occupied, but critics of the scheme claimed insufficient attention had been paid to the housing of the working classes. A committee of enquiry, set up by the Council to ascertain the adequacy of housing for the artisan and labouring classes, reported in June 1884 that there were 2,773 un-let houses available at a rent of under 3s 6d per week and a further 2,500 between 3s 6d and 7s

¹¹¹ Hopkins, *The Making of the Second City*, p.28

¹¹² C. Chinn, *Homes for People: Council Housing and Urban Renewal in Birmingham 1849-1999*. (Studley, 1999), p.3

¹¹³ Known as the Cross Act, the Artisans Dwellings (Extension) Act enabled local authorities in towns with a population over 25,000 to compulsorily purchase unsanitary areas and to remove buildings unsuitable for habitation (after examination by the MOH), to carry out improvements and to arrange for the building of dwellings, although they were not allowed to build working class houses themselves without permission of the Local Government Board. Upton, *A History of Birmingham*, p.152

¹¹⁴ Ward, *City-State and Nation*, p.76

per week, concluding there was sufficient accommodation for the working-classes in Birmingham¹¹⁵.

By the early Victorian period many businessmen were beginning to invest part of their growing profits in residences away from their places of work. The absence of leases precluding industrial use, together with the spread of working-class housing had resulted in the rapid deterioration of previously select residential areas and many prosperous families moved away from the industrial development in the town. On the Calthorpe Estate, which covered most of the parish of Edgbaston, systematic development began in the early nineteenth century, with leases which guaranteed the total exclusion of sub-standard housing and all forms of industrial and commercial activity. Although not all of the upper middle classes of Birmingham moved to this area, many of the influential families of the town took up residence there¹¹⁶. Two other areas, Harborne and Moseley, had a mainly middle-class population, and the majority of housing elsewhere in the city may be considered under a broad description of `working-class`. The development of such suburban middle-class areas resulted in more rigid demarcation between the social classes, whereas previously employers had tended to live in close proximity to their business and have close contact with their employees.

In 1891 the city increased by almost fifty per cent, extending its boundaries to include Saltley, Little Bromwich, Harborne and Balsall Heath, and by the 1901 census the population rose to 759,063. Further expansion brought Quinton within the city

¹¹⁵ Upton, *A History of Birmingham*, p.82

¹¹⁶ Skipp, *The Making of Victorian Birmingham*, p.79

boundary in 1909, and in 1911 the Greater Birmingham Scheme resulted in the incorporation of Aston Manor, Erdington, Handsworth, Kings Norton, Northfield and Yardley¹¹⁷. In the suburbs considerable private housing was developed over the later years of the nineteenth and early twentieth centuries, expanding the better working-class housing into the middle and outer rings of the city wards¹¹⁸. In 1913 an inquiry set up by the City Council to investigate the housing conditions of the poor, and to make recommendations as to future action, found the central areas, consisting of the seven wards of St Martins and Deritend, Market Hall, Ladywood, St Paul`s, St Mary`s, Duddeston and Nechells, and St Bartholemew`s, to have problems of both quantity and quality, with mean streets of terraced houses and dark, unsanitary, and badly ventilated courts¹¹⁹. Under the 1890 Housing Act thirty-three courts had been opened up by removing properties on one side to improve light and ventilation, but even measured by the low standard of working-class housing, most houses in this area of the city, occupied by those for whom low rent was essential, were considered unfit for habitation¹²⁰.

The Council`s housing policy up to 1914 was one of private building in the suburbs, while the Ministry of Health reported that, of the 150,000 working-class houses in the city, many were unfit for habitation, and that in fact 145,000 new houses would be needed in three years¹²¹. In 1918 the Government accepted the recommendations of the Tudor-Walters Committee on Working-Class Housing. Building was to be

¹¹⁷ A. Briggs, *The Making of Victorian Birmingham, History of Birmingham, vol. II.* (Oxford, 1952), pp.143 - 147

¹¹⁸ Appendix 1

¹¹⁹ Bournville Village Trust, *When we build again* (London, 1941), pp.12-25

¹²⁰ Upton, *A History of Birmingham*, p.7

¹²¹ J. McKenna, *Birmingham. The Building of a City* (Stroud, 2005) p.95

encouraged at no more than twelve houses per acre, with a minimum of seventy feet between opposing houses to allow for adequate natural light, and the recommendations of the committee resulted in three bedrooms, a kitchen cum living room, a parlour, separate bathroom, larder and scullery, a coal store and an inside toilet being laid down as the minimum standard for an average family¹²².

The Housing and Town Planning Act of 1919 ended an era of permissive housing legislation and introduced a new policy of municipal house building aided by the state. By 1930 30,000 council houses had been built in the city but little had been done regarding slum clearance, and, although approximately 8,000 houses were demolished in the central wards, by 1938 the housing difficulties of the lower income groups remained. In 1935 there were still 38,773 back-to-back houses, 51,794 houses without a separate toilet and 13,650 without their own water supply¹²³.

In total over 110,000 houses, both council and private, were built in Birmingham in the inter-war period but a major difficulty was the cost to individual householders. Both income and rents varied considerably but the proportion of income absorbed by rent was much greater for the poorest than for the better off working-class. Despite efforts to improve the situation by 1938, 18.8 per cent of workers still lived in the central wards, with 49.6 per cent of the properties having only three rooms in total, and the MOH estimated there were still 175,000 houses in these wards unfit for habitation¹²⁴. While the houses in the middle ring rarely had bathrooms, they did have sinks, running water and flushing toilets, and by this time approximately half of

¹²² Chinn, *Homes for People*, p.35

¹²³ Briggs, *The Making of Victorian Birmingham*, p.234

¹²⁴ Hopkins, *The Making of the Second City*, p.154

the working class population of Birmingham lived in the newer properties in the outer ring¹²⁵.

Although the high elevation, together with the porous sub soil of gravel or sandstone on which Birmingham was built, suggested that the town should be healthier than many large towns, the death rate in Birmingham in 1899 was slightly above the average. Vince, as official historian of the Corporation suggested that those earning good regular wages and “leading wholesome and orderly lives” migrated beyond the municipal boundary, leaving the idle and careless to live within the city ignoring the laws of health and sanitation, and thereby to raise the death rate¹²⁶.

Poverty

Mrs Catherine Osler spoke in 1890 of the appalling infant mortality rate in Birmingham which she attributed to the ignorance of mothers and their improper feeding of their children. Contrary to this view, the statistics for 1891 show that the highest number of deaths in infants, as with adults, occurred as a result of the classic illnesses of poverty, bronchitis, pleurisy and pneumonia,¹²⁷. The level of poverty in Birmingham may be seen by the increase in out-door relief under the Poor Law, which stood at 3.7 per cent of the population in 1886, rising to 6.5 per cent in 1905¹²⁸. Although reference was made to the depressed state of trade in 1904 and 1905 in the Annual Reports of the Birmingham Women`s Settlement, which would suggest the cause of this increase, Mr (later Sir) Frank Tillyard, organising secretary of the

¹²⁵ Ibid., p.138

¹²⁶ C. Vince, *History of the Corporation of Birmingham*. Vol.3. (Birmingham, 1902) p.128

¹²⁷ J. Rimmer, *Troubles Shared. The story of a settlement 1899- 1979* (Birmingham, 1980) p.19

¹²⁸ Ibid., p.19

local branch of the Charity Organisation Society in 1904, connected poverty with intemperance¹²⁹. The 1907/08 Annual Report for the Birmingham Crippled Childrens` Union, on considering the cause of there being so many crippled children in the city, suggests that charitable assistance would not have been needed if the parents had been able to give their children “ordinary care and comforts”, such as good food, fresh air and healthy surroundings and concludes that the chief cause was poverty¹³⁰. The report continues by saying that it was impossible to expect labourers, unskilled workers and those in reduced circumstances to raise healthy children, with ignorance, thriftlessness, poverty as a result of drink, and mothers going out to work also being given as causes of the poor health of children and the high infant mortality rate. By the second half of the nineteenth century there was increasing criticism of the Poor Law, and the system of relief established in the sixteenth century, although considerably revised was felt to be no longer relevant to urban society¹³¹.

Over the period of this study, Birmingham had expanded, both geographically and demographically with housing development encouraging both in-migration and migration within the city boundaries. The approach of both national and local government had changed from non-interventionist to a more proactive stance, resulting in extensive environmental changes for much of the population of the city. However, some, particularly the poorest living in the inner ring of city wards, remained in accommodation which differed little in 1938 from that experienced 65 years previously.

¹²⁹ F. Tillyard, `Poverty in Birmingham`, *Women Workers*, 16 no.4 (1906)

¹³⁰ Birmingham Crippled Children`s Union. Annual Report (1908), p.7

¹³¹ Rimmer, *Troubles Shared*, p.2

Research carried out elsewhere by social investigators, such as Charles Booth and Seebohm Rowntree, had concluded that the majority of the poor were not to blame for their poverty, but struggled to overcome the circumstances in which they found themselves. It was feared that the residential segregation to be found in most towns and cities in the second half of the nineteenth century meant that the working-classes were lacking the positive influence of the upper and middle-classes and in order to address this problem it was felt necessary to re establish contact between the classes¹³². Early methods of intervention implemented to address the high IMR in Birmingham will be seen to be based on this view.

The period under consideration commences in 1873, when as a consequence of the 1872 Public Health Act, a Medical Officer of Health (MOH) in Birmingham was first appointed. One of the responsibilities of the MOH was to produce an annual report for the Local Government Board and although these were not published by all authorities, and some have not survived, those for Birmingham are available, containing both demographic information and details of developments and initiatives undertaken under the auspices of the local authority¹³³. From the first Annual Report produced in 1873, the three successive holders of this post presented reports regarding a wide range of aspects of the health of the city on an annual basis until 1938. In addition quarterly reports were produced until 1911¹³⁴. Only a very brief

¹³² C. Chinn in J. Glasby. *Poverty and Opportunity: 100 years of the Birmingham Settlement* (Studley, 1999), Forward.

¹³³ The Local Government Board was a Government supervisory body overseeing local administration in England and Wales from 1871 to 1919. It was created by the Local Government Board Act 1871 (C. 70) taking over the public health and local government responsibilities of the Home Secretary and the Privy Council and all the functions of the Poor Law Board, which was then abolished.

¹³⁴ Dr Alfred Hill 1873 – 1903, Dr John Robertson 1903 – 1927 and Dr Henry Newsholme 1927 - 1950

report was made for 1939 due both to the pressure of work upon the staff of the department, which had become responsible for such wartime issues as the evacuation of children, and also to the shortage of paper. This continuous period of reports has therefore provided the time frame for this study, a period over which infant mortality, unlike the general death rate, appears to have failed to respond to sanitary improvements made in the city in the later years of the nineteenth century, but which from the beginning of the twentieth century followed a steady decline.

Using the statistics provided in the reports, this study will demonstrate the extent of infant mortality in Birmingham, assessing the characteristics and factors which influenced the issue, which therefore caused it to be seen as a problem.

CHAPTER 3: AN ANALYSIS OF THE STATISTICAL INFORMATION REGARDING INFANT MORTALITY PRESENTED IN THE MEDICAL OFFICER OF HEALTH REPORTS.

"The wonder is, not that so many die, but that any live."

"An interested reader" Birmingham Daily Post 10 February 1893¹³⁵

The statistics presented in the MOH reports for Birmingham 1873 to 1938 are extensive, allowing both detailed demographic analysis and investigation of IMR trends over time¹³⁶. Although it is possible to collate much of the information given, some issues do occur. Whereas the information regarding IMR and causes of death is given annually, some other data, such as that regarding the employment of women, or the overcrowding of accommodation, is presented on an occasional basis, thus preventing a full picture being drawn. The usefulness of information may also be limited by the variation in the manner of presentation, as in the case of data regarding breast feeding collated in 1903. No age of the infants is given, nor is there any indication as to how long breast feeding was continued, which limits how this data may be compared with information on breastfeeding collected at later dates.

From the beginning of 1873 to 1911 the reports were presented by the MOH to the Health Committee of Birmingham Council quarterly, giving the number of infants born in the quarter and the number of deaths of infants under one year in that quarter, from which the IMR was calculated as the number of infants dying in the quarter per

¹³⁵ *Birmingham Daily Post*, Issue 10809 (10 Feb 1893)

¹³⁶ Appendix 2

1000 live births. Using the figures presented in each quarterly report, it can be seen that the IMRs given in the Annual Report for 1904 are correct to the nearest whole number for only twenty-four of the years, whereas for the seven years 1874, 1875, 1878, 1881, 1891, 1892 and 1900 there is a discrepancy, ranging from 1 in 1892 to 22 in 1900. In five cases the IMR given is lower than that calculated from the quarterly figures. A comparison of the stated IMRs given in the MOH reports for 1904 to 1911 with those gained by totalling the quarterly figures shows a variation in three of the eight years, with that of 1911 producing an IMR of 20 less than the official given figure. In 1900 the addition of the four quarter figures gives a total of 15,941 live births and 3,366 infant deaths producing an IMR of 211. However a misreading of the live births as 16,941 could give the IMR of 199, the official figure given. Similarly a misreading of the infant deaths in 1911 as 2,708, rather than the actual figure of 2,408, would account precisely for the 20 point difference observed in that year and suggesting that the figures presented by the MOH were in fact susceptible to transcription errors. The key trends are broadly the same, but such discrepancies make attention to specific years less credible, when spikes could be seen as statistical errors rather than indicating actual change.

In November 1911 Birmingham increased in size, taking in Handsworth, Erdington, part of Aston, Yardley and Kings Norton under the Greater Birmingham Act, and the MOH acknowledges within his report the difficulty of presenting like-for-like figures which may account for some confusion and inaccuracies for that year¹³⁷. In the report for 1911 the IMR is given as 184, whereas in the summary of statistics it was

¹³⁷ Birmingham MOH Annual Report (1911) p.5

said to be 172, however from the figure obtained by totalling the deaths in each quarter of that year the IMR can be calculated as 164¹³⁸. In 1891, Harborne, Balsall Heath, Ward End and Sattley were included within the city boundaries and could be considered responsible for variations in data in that year. However no such changes occurred in the other years when differences are noted, and no discrepancy is seen in 1909 when Quinton was incorporated as part of the city. The expansion of the city in 1911 lead to a variation in the IMRs recorded between 1906 and 1911 in later reports. In early reports the IMR is given referring to the borough of the time, but in later years the figures from 1906 have been amended to refer to the pre 1911 borough plus the additional wards which were incorporated as part of the expansion of the city¹³⁹. This has the result of reducing the IMR with the figure for 1906, originally given as 168, reduced to 157 and that for 1909 from 145 to 121, suggesting that the outer areas had a lesser IMR, which then contributed to the apparent more rapid reduction for the city as a whole.

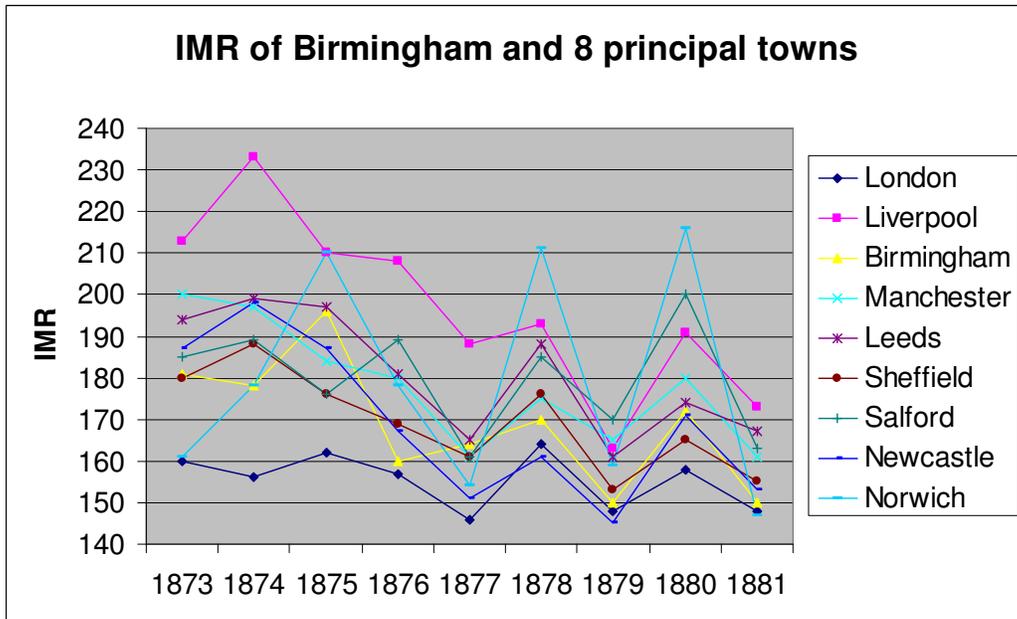
Other statistical discrepancies which may be attributed to the boundary changes which occurred in 1891 may be found by considering Hill's 1885 report. In this report the population per acre from 1871 to 1885 is given, demonstrating the increasing density from 41.1 to 50.9 per acre. Although the actual population figures continued to increase, by 1895 Hill reported the number of persons per acre as ranging from 36.1 in 1886 to 39.1 in 1895. Such variations as have been highlighted show that it is necessary to use the information presented in the MOH reports with caution, particularly where details are given on one occasion only, allowing no comparisons

¹³⁸ R. Pedley (ed.). Abstract of Statistics No.1 (Birmingham,1950)

¹³⁹ For example the Birmingham MOH Annual Report 1920

to be made or trends to be drawn, that would allow greater validation and corroboration of the interpretation offered.

Birmingham and other cities



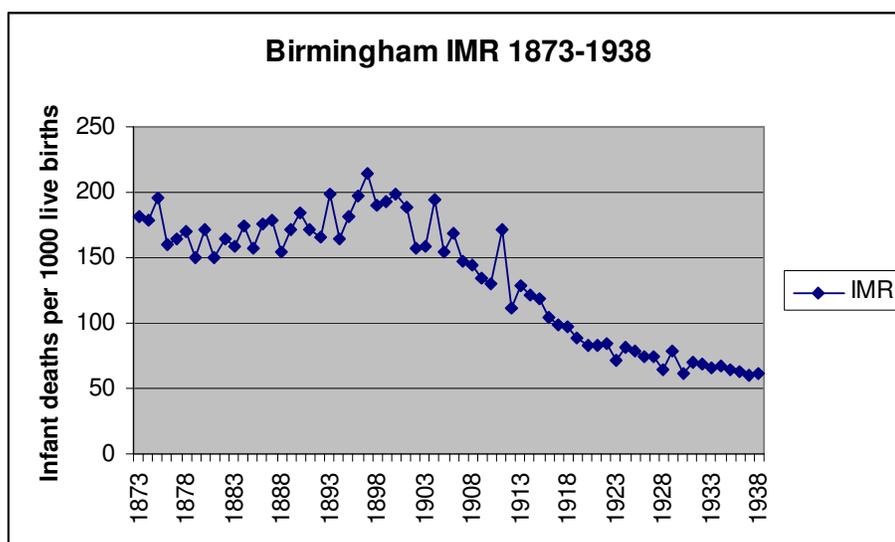
Graph 1. Compiled from data presented in Birmingham MOH Annual Report 1881

A comparison between the Birmingham IMR statistics and those of other large towns was regularly presented by Hill in his annual reports, an approach which may have been employed to reassure the members of council. While it must be recognised that the data was dependent on the accuracy of other local authorities, it can be seen that, with the exception of 1875, over the years presented in the above graph, the IMR of Birmingham remained lower than the majority of other principal towns. The observation that Manchester, despite having instigated a health visiting scheme as early as 1862, continued to report a higher IMR than that of Birmingham, may have influenced the thinking of the Health Committee regarding the effectiveness of this

interventionist approach to addressing infant mortality. It will be seen that in 1877, contrary to a suggestion by Hill to follow this model, the committee chose a less direct method of intervention in the form of health lectures given by a voluntary agency, only changing their views in 1899 when the first health visitors were appointed in Birmingham¹⁴⁰. Although Hill's successors must have been aware of developments elsewhere, comparison tables were not presented in later reports.

Birmingham IMR

Using data from the MOH reports, the graph of the IMR for Birmingham shows a downward trend for the whole period, although by considering the IMR in two sections it can be seen that from 1873 to 1900 the city experienced a slight increase, whereas from 1900 to 1938, despite some peaks, there was an overall downward trend.



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Graph 2

¹⁴⁰ Chapter 4, p.74

¹⁴¹ Graph based on data collated from Birmingham MOH Reports 1873 – 1938 in Appendix 2

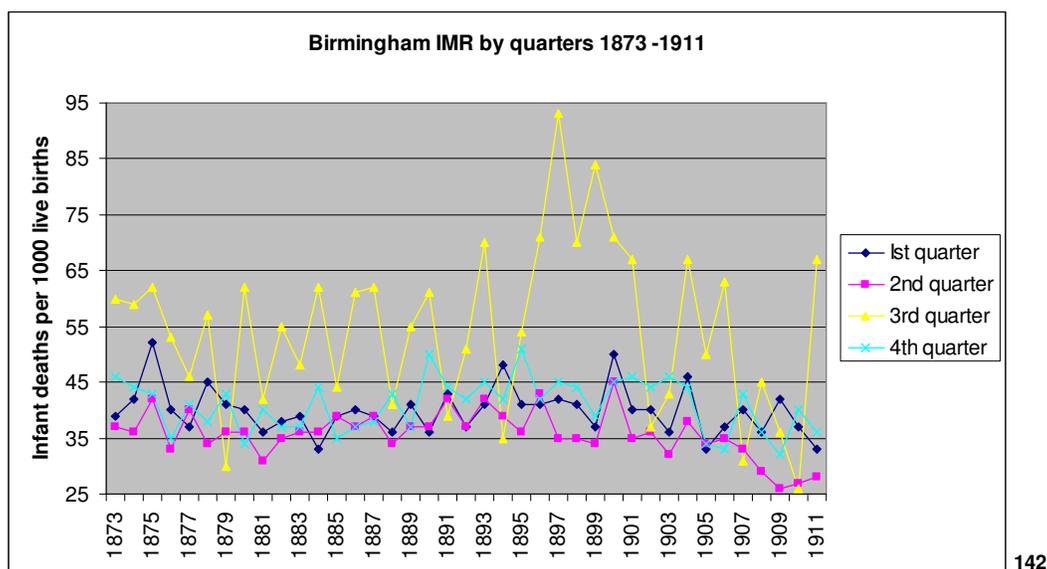
A further breakdown of the IMR shows that for the period 1873 to 1890, the rate remained fairly level, with the upward trend occurring only in the last decade of the century, peaking in 1897. In 1891, Hill reported a reduction of deaths due to diarrhoea, but this was then followed by a series of hot summers, and in 1894 the MOH stated "Birmingham suffers more from diarrhoea than the great majority of large towns", and it is to this that the increase in IMR was attributed in subsequent reports.

Quarterly Analysis

In addition to the annual returns, from 1873 to 1911 the IMRs are given by quarter from which the following graph has been produced, demonstrating that the IMR in most years was higher in the third quarter than the first, second or fourth and although subject to fluctuations attributed to the temperature level for the season the linear trend shows no decline over the period. The trend over the first and fourth quarters, when it could be assumed that infants would have been at risk of respiratory infections, appears to have been less susceptible to variation, and with the exception of the third quarter of 1911, it is only towards the very end of the period that the beginning of a decline in all four quarters be observed. For the majority of the period the IMR for the second quarter remained lower than that of the other three quarters, and it can be seen that it is in the third quarter, with a few exceptions, that the greater number of infant deaths occurred. This quarter also provides the largest variables, ranging from an IMR of 26 in 1910 to a maximum of 93 in 1897.

While the IMR over the period 1873 to 1906 can be seen to fluctuate between 150 and 214, from 1907, with the exception of 1911, the IMR followed a steady downward trend, reducing from 147 in 1907 to 61 in 1938, showing an overall decline of 59 per

cent over 32 years. The greater proportion of the decline (72 per cent) can be seen to have occurred between 1907 and 1922, and the remaining 28 per cent between 1923 and 1938, suggesting that something of particular significance impacted on the IMR of Birmingham in the early years of the twentieth century.

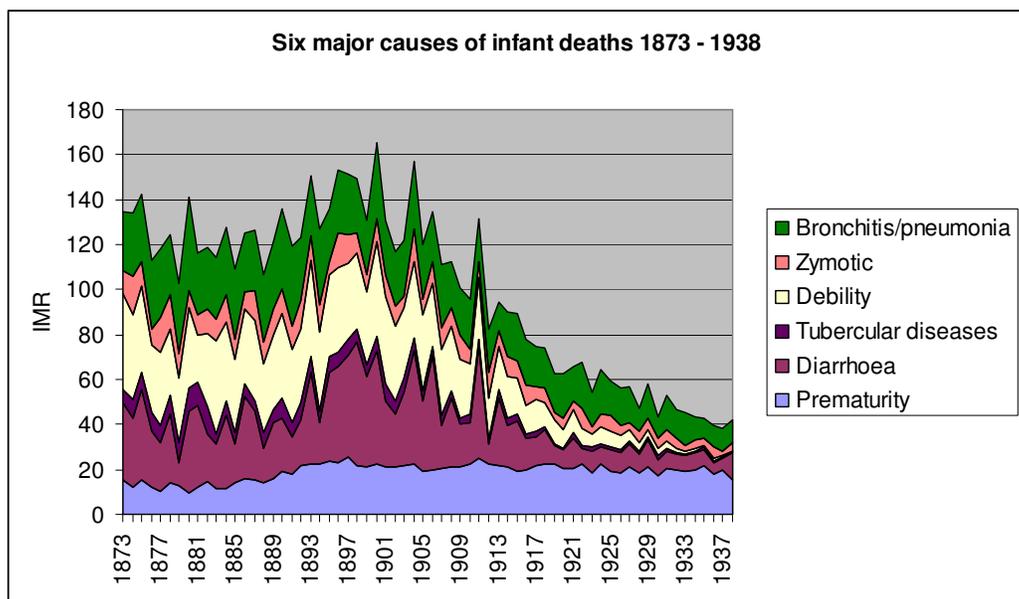


Graph 3

From the first MOH annual report, and throughout the whole period, an analysis is given regarding cause of, and age at, death, and although there are some variations in terminology, it is possible to tabulate the major causes of infant deaths. However, on totalling the deaths attributed annually to the different causes there is a discrepancy between this and the total infant deaths given for each year, a deficit which ranges from 6 per cent in 1880 to 23 per cent in 1901. There is no apparent

¹⁴² Data collated from the Birmingham MOH Quarterly Reports 1873 - 1911

explanation for this, although it could be assumed that not all infant death certificates gave a clear cause of death. The classification of diseases changes from time to time, as in the case of diarrhoea and enteritis, given as two separate figures from 1873 to 1880 and 1893 to 1911, but given as a combined figure for the rest of the period. Neither injury at birth nor congenital malformation is listed as a cause of death prior to 1912, with deaths due to influenza being given from 1892 to 1901, but then not listed again until 1918. As it is unlikely that there were no deaths due to these causes in any of the other years, it would seem reasonable to infer that they have been listed under an alternative diagnoses, or would come under that proportion of unclassified deaths, suggesting that the figures presented can be affected by the interpretation or the custom of the medical practitioner signing the certificate.

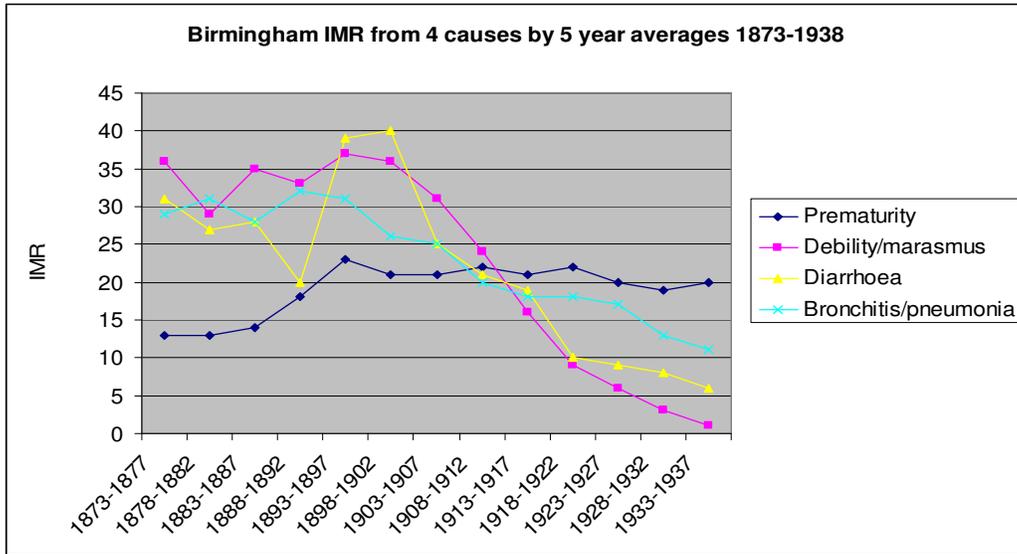


Graph 4

¹⁴³ Data collated from Birmingham MOH Annual Reports 1873 - 1938

By using the figures presented in the MOH reports the IMR for the six main causes of death may be calculated and the above graph produced. This indicates that while the trend for the overall IMR declined over the period, the changes for the various causes occurred at different times. It can be seen that deaths due to the zymotic diseases, including smallpox, measles and whooping cough, appear to have declined slightly throughout the whole period of the study while tubercular diseases reduced to an almost insignificant figure. The five year average IMR of each of the remaining four major categories which were the cause of infant death in 1873, may be calculated and the point at which changes occurred may be defined. The two causes showing a significant decline over the period can be seen to be debility and diarrhoea, both of which could be influenced by the infant care and level of hygiene in the home, factors influenced by advice and education, and both showing a decline from the late 1900s. Whilst the instances of bronchitis and pneumonia appear to have experienced some level of decline, these diseases remained a significant cause of infant deaths until the end of the 1930s. However, prematurity presents a contrary pattern in that, of the other five causes considered, it was the only one to show an increase, rising from the mid 1880s and with some variation maintaining this higher level until the end of the period.

The following graph shows that while deaths due to diarrhoea reduced considerably, those attributed to debility made the most dramatic decline, and by the end of the period debility was no longer a significant cause of infant deaths.



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Graph 5

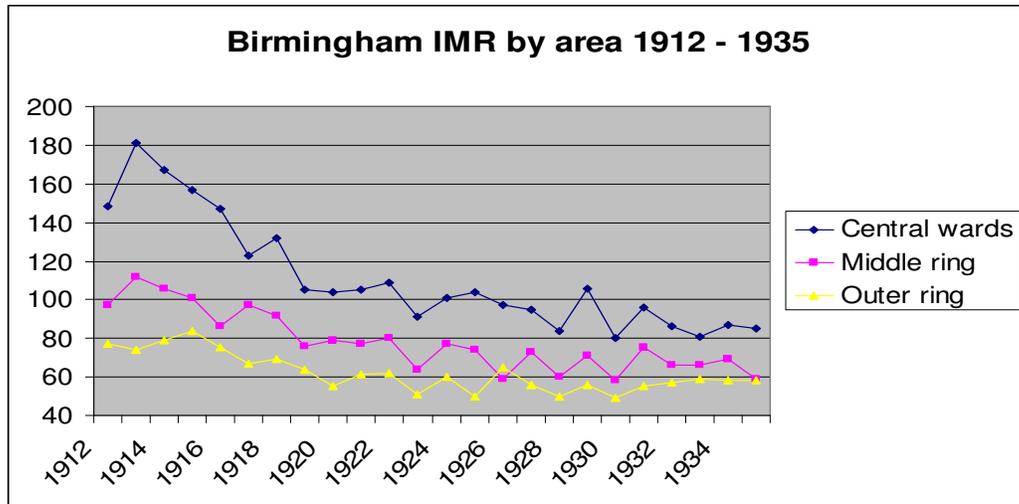
By plotting the five year averages for the four major causes on a line graph, the point of change for each cause can be seen with bronchitis and pneumonia experiencing the earliest decline from the mid 1890s. In the early years of the twentieth century debility and marasmus began to decline, and the drop in deaths due to diarrhoea followed within the next five years. It would seem reasonable to consider that the reduction in the latter two causes could in some part be attributed to the interventions developed by both voluntary and municipal agencies at this period.

Causes of death by area

Although from 1904 the IMR per ward is presented in each MOH report, the causes of death per ward are not given, information which would have enabled variations in IMR to be related to changes occurring in more local areas. From 1917 the wards of the city were divided into three areas, central wards, middle ring and outer ring, with

¹⁴⁴ Data collated from Birmingham MOH Annual Reports 1873 - 1938

the IMR given for each area. As the wards were consistent with those from 1912, the IMR for the areas in the years 1912 to 1916 have also been calculated, but ward changes from 1935 as the city expanded prevent clear comparisons being made after this date. From this data the following graph has been drawn¹⁴⁵.



Graph 6

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The IMR of each of the central wards may be seen to have started in 1912 at a point generally higher than that of any of the middle ring wards, and higher than the IMR of all wards of the outer ring. No one ward was consistently better or worse than others within the area and the deviation between the highest and lowest ward IMRs reduced from 151 in 1913 to 70 in 1935. The IMR for the central wards ranges from a peak of 181 in 1913 to a lowest point of 80 in 1930, a decline of over 55 per cent, and from 1930 onwards these wards show a fairly level trend. The middle ring shows all ten wards experienced a peak in IMR at the beginning of the period and then followed a

¹⁴⁵ Appendix 3

¹⁴⁶ Data collated from the Birmingham MOH Annual Reports 1912 - 1935

gradual decline until 1930, a drop of approximately 47 per cent, and like the central wards from this point the trend in IMR remained roughly even.

The IMR of the outer ring peaked in 1915, slightly later than the central wards and middle ring, but then also followed a downward trend to 1930, a decline from the peak of 42 per cent. However, unlike the other areas the outer ring, where 58,390 new houses had been built between 1920 and 1934, demonstrated a slight upward trend in IMR from 1930 to 1935. This would suggest that the new estates, while providing a higher level of sanitation and accommodation than many of the residents would have previously have experienced, and which could be assumed to have made a contribution to the decline of infant mortality in the city, did not provide a complete answer to the issue.

Following the development of the Kingstanding and Kettlehouse estates in the ward in 1929, the first IMR for Perry Barr was given in 1930 as 63, a figure similar to that of several of the middle ring wards, despite the new housing stock ¹⁴⁷. If improved housing could be considered the single major factor in the decline in IMR, the figure for this ward should have been considerably lower. However, in the wards of major housing development, the IMR was less than that found in the central wards with its old housing stock, despite the significant reduction experienced there. As many of the families moved to the new estates from poorer areas, some of the issues affecting IMR may have improved with the better quality housing, but the life-style previously experienced in areas of poorer quality housing had had a long-term effect

¹⁴⁷ McKenna, *The Building of a City*, p.100

on the mothers thereby affecting subsequent children. However, as has been stated there is no analysis by ward of the causes of death which may have helped to clarify this point. Newsholme, in his report for 1931, noted that Perry Barr, with a population which had risen to 20,700 and of whom 90 per cent were living in new corporation housing, had an IMR of 57 which he compared favourably with several other working class wards, mainly in the central area, where the IMR was over 100.

Despite the IMR for the central wards continuing to be higher than those for the middle and outer rings, the overall rate of decline in IMR for this area was greater than that of the other two. A contributory factor to this may have been the changing demography of the area as young families moved out to new estates, although the 1932 report notes that the distribution of women of child bearing age was fairly even in the central wards and middle ring, being 25 per cent of the total population. In the outer ring where corporation estates had been developed this figure rose to 27 per cent.

Although causes of death are not given for individual wards, the MOH report for 1922 gave a five year analysis by area of major causes of infant deaths for 1918 to 1922.

This demonstrates that deaths due both to bronchitis and pneumonia, and diarrhoea and enteritis, varied significantly according to area, showing that both environmental and socio-economic factors had an impact on the IMR due to these causes.

However the deaths grouped together with debility, and particularly those caused by prematurity, were much less affected by location, suggesting that socio-economic factors had little impact on this cause.

Infant mortality per 1000 live births in Birmingham 1922.¹⁴⁸

Cause	Central wards	Middle Ring	Outer Ring	Whole city
Measles	2	1.1	0.5	1.3
Whooping cough	5	3.8	2.1	3.8
Tuberculosis	1.7	1	1	1.2
Bronchitis/Pneumonia	25.7	17.5	9.4	18.2
Diarrhoea/enteritis	15.2	9.4	4.5	10.2
Congenital malformation	3.7	3.9	3.9	3.8
Prematurity	23.9	20.2	20.1	21.4
Atrophy/debility/marasmus ¹⁴⁹	11.4	8.8	7.3	9.3
Suffocation	1.9	1	0.4	1.2
Other	18.1	15.1	12.9	16.1
All	108.6	81.8	62.1	86.5

Table 1.

Infant mortality per 1000 live births in Birmingham 1931¹⁵⁰

Cause	Central wards	Middle Ring	Outer Ring	Whole city
Measles /whooping cough	7.7	4.4	3.4	5.2
Tuberculosis	1.4	1.1	1.6	1.4
Bronchitis / pneumonia	24.1	17.2	8.6	16.6
Diarrhoea / enteritis	12.3	9.1	4.4	8.6
Malformations	5.5	5.0	6.7	5.7
Prematurity	21.4	23.1	19.0	21.2
Debility /marasmus	4.3	3.0	3.0	3.4
Atelectosis	2.5	1.1	1.9	1.8
Injury at birth	3.0	3.0	2.1	2.7
All	96	75	55	75

Table 2

¹⁴⁸ Birmingham MOH Annual Report (1922), p.39. The data under the heading of `Other` has been calculated and added for clarity

¹⁴⁹ Marasmus is defined as `The wasting away of the body, especially in undernourished children`. *Oxford English Dictionary*. Vol 1X . (Oxford, 1989)

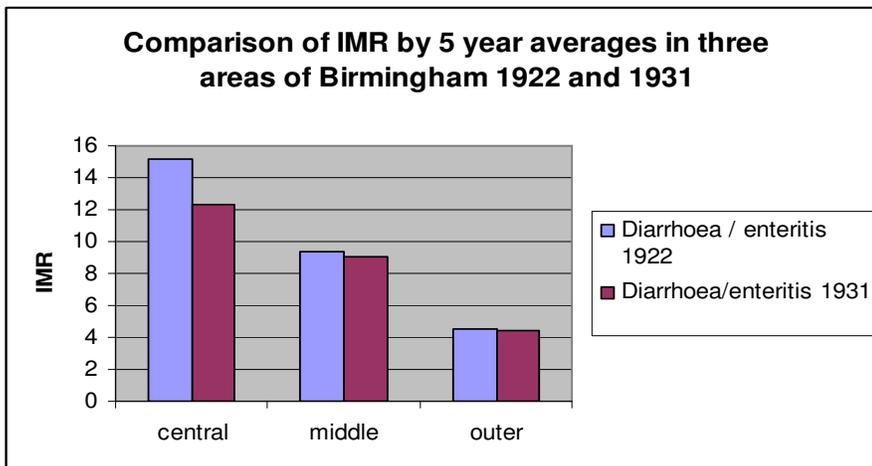
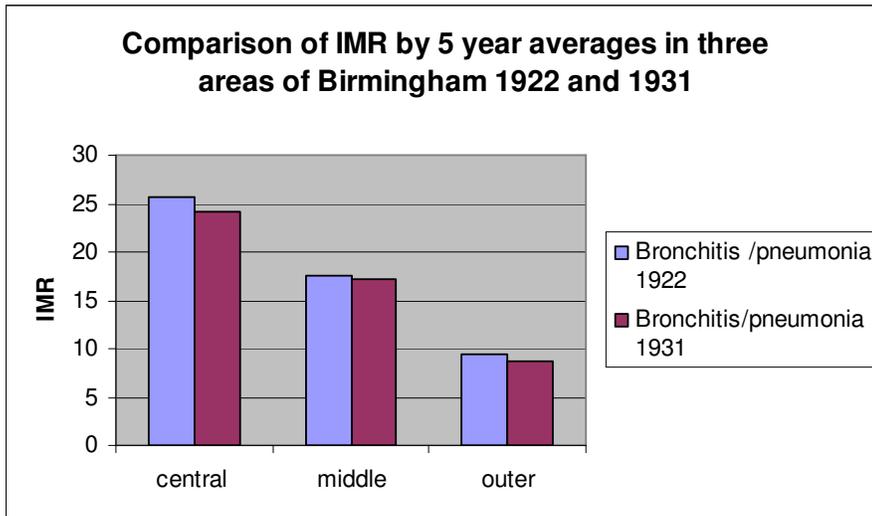
¹⁵⁰ Birmingham MOH Annual Report (1931), p.93 The data under the heading of `Whole city` has been calculated and added for clarity and to assist comparison

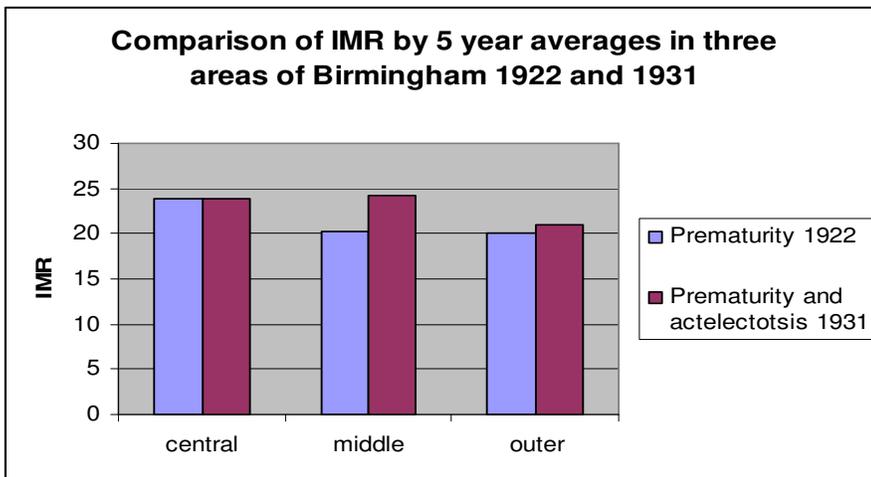
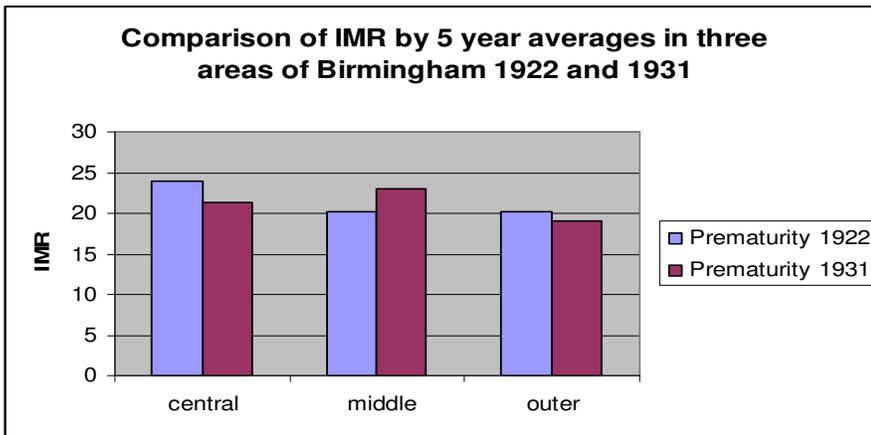
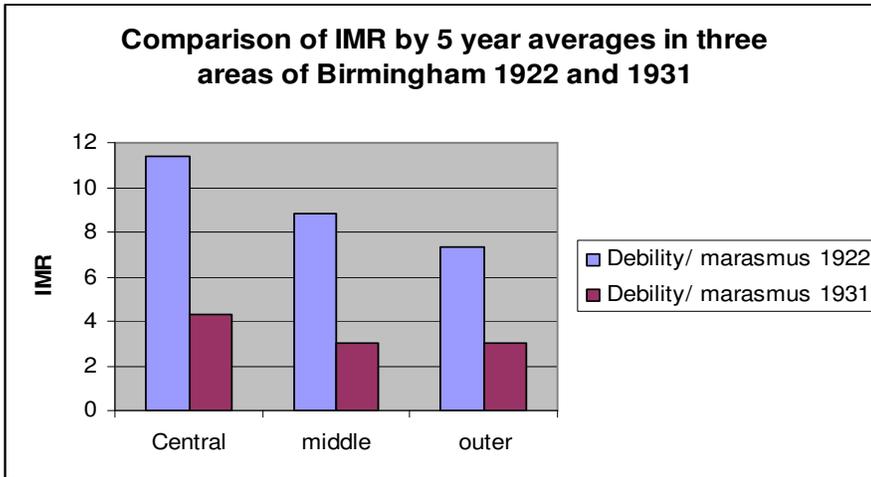
A similar table was produced in the 1931 report enabling comparisons to be made, although slight variations may have occurred due to changes in diagnoses. However much of the data appears to have followed the same pattern, with bronchitis and pneumonia continuing to make a major contribution to the IMR particularly in the central wards and the middle ring. While deaths due to prematurity appear to have fallen between the two tables, it can be seen that the new cause of actelectosis was included in 1931¹⁵¹. This condition, where the lungs fail to expand normally at birth, is frequently associated with prematurity and it is likely that deaths in this category would previously have come under the prematurity heading. If the figures for these two causes are combined, an upturn in the figure results in prematurity becoming the prime cause of infant deaths in all areas of the city. Changes presented in the two tables regarding deaths due to prematurity are of note as, while the figure for the central wards declined, a 15 per cent increase was to be found in the wards of the middle ring. However, as no change was noted in the city wide figure for prematurity, it would appear that this variation may be attributed to population migration within the city.

A notable change over the two sets of figures is the city wide decline in deaths attributed to debility and marasmus, which was distributed fairly evenly across the three areas, with the central wards falling by 62 per cent, the middle ring by 66 per cent and the outer ring by 59 per cent. By the end of the period of this study this cause of infant deaths had been almost totally eradicated. It will be seen that while there was little change in the distribution of the IMR due to bronchitis and pneumonia

¹⁵¹ This change may have been as a result of medical developments, or may be that, with an increasing number of diagnoses due to actelectosis, it warranted an additional classification.

throughout the city and the reduction in deaths due to diarrhoea and enteritis occurred only in the central wards.





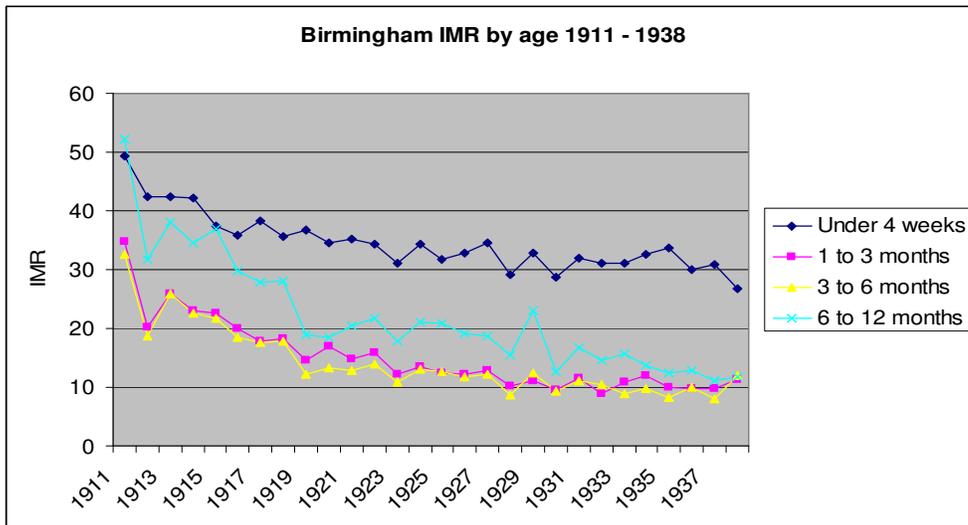
152

Graph 7

¹⁵² The data for these comparisons was drawn from the two tables presented on page 58 of this study

Infant deaths by age

The City of Birmingham Abstract of Statistics No.1 for 1931 - 49 provides a table of the number of deaths under one year including the age at death from which the following graph has been produced. It demonstrates that although the IMR declined in each of the age groupings, infants were more likely to die in the first four weeks of life than at any other point of their first year. The greatest rate of decline can be seen in the following graph to have taken place in the infants of six to twelve months of age¹⁵³.



Graph 8

¹⁵³ Pedley, Abstract of Statistics No.1, Table 46.

Infant deaths by age and stated causes.

Cause	Wk 1	Wk 2	Wk 3	Wk 4	Total 1 mth	2 mth	3 mth	4 mth	5 mth	6 mth	7 mth	8 mth	9 mth	10 mth	11 mth	12 mth	Total
Measles			1		1		3			1	5	6	8	17	12	10	63
Scarlet fever										1		1	2			1	5
Diphtheria/croup													1	1		3	5
Whooping Cough			1		1	2	2	3	1	4	4	10	3	1	4	4	39
Diarrhoea	3	2	5	13	23	47	69	63	64	38	59	51	38	30	36	20	538
Enteritis	1	2	7	2	12	21	25	25	18	16	15	17	11	13	8	15	196
Gastritis	1	2	1	3	7	6	7	5	3	5	1	2	1	4	2	2	45
Prematurity	243	36	31	22	332	21	6	1	1					1			362
Congenital Debility	114	34	36	18	202	32	8	5	5	1	2			3			258
Birth injury	12				12												12
Want of breast milk		1	1		2	6				3	1						12
Debility/marasmus						42	45	29	31	11	15	11	15	11	11	8	229
Tuberculus meningitis									2		3			1	3	2	11
Tabes meninges						4	3	4	2		1	1	3	2	3	2	25
Other TB							1	2		1	2		4	2	1	2	15
Erysipelas			1		1					2							3
Syphilis		1	3	1	5	4	2	2	1	1						2	17
Ricketts									1		1		1			1	4
Meningitis		1			1	6	3	3	3	6	1	2	3	9	4	2	43

Table 3. Birmingham MOH Annual Report 1911 p.15

The table illustrates that 33 per cent of infant deaths in that year occurred in the first month, 90 per cent of which were as a result of prematurity and congenital disability, with 67 per cent of these deaths taking place in the first week following the birth. It is unlikely that any intervention would have impacted on this figure, as, for example, following the notification of Births Act 1907(adopted by Birmingham in 1908), health visitors were required to make an initial visit to the home by the end of the second week. It can be seen that deaths due to diarrhoea peaked at three months, and, with the exception of a small dip in the sixth month, showed a gradual reduction over the following months. No instances of death due to debility/ marasmus were recorded in infants in the first month, but 64 per cent of these deaths occurred between the ages of one and five months, with numbers then levelling out over the remainder of the first year. The table illustrates the fact that different causes, which have already been shown to have declined at different times, also affected infants at different stages throughout the first year of life.

Infant deaths by age and area

Age of infant	Central wards	Middle ring	Outer ring
First week	26.2	26.7	23.8
2 nd ,3 rd and 4 th weeks	7	8.6	5.7
1 to 3 months	15.7	12.4	8.4
3 to 6 months	14.8	13.3	7
6 to 9 months	15.7	7.4	5.9
9 to 12 months	15	7	4.6

Table 4. Birmingham MOH Annual Report 1931 p.93

The 1931 MOH report provides the above breakdown of IMR by age and by area

which demonstrates that the distribution of deaths in the first week after birth followed a similar pattern across all three areas of the city, which would appear to be accounted for by the fairly even distribution of deaths due to prematurity.

The figure for all three areas, and particularly in the central wards for the remainder of the first month, together with the low diarrhoea figures in the first month, would suggest that breast feeding was a common practice in the early weeks, providing protection from diarrhoeal infection caused by poor feeding practices. After the first week the life chances of infants in the outer ring were consistently higher than those in either the central wards or the middle ring, and after 6 months, those of the infants in the middle ring also made a considerable improvement, whereas those of the central wards maintained a similar level throughout the whole of the first year. The change by the 1 month to 3 month figures, especially in the central and middle ring wards could be accounted for by early weaning, or changing from breast to bottle feeding, due either to mothers returning to work or their inability to sustain breast feeding, thereby placing their infants at risk of death due to diarrhoeal infection or debility.

It can be seen that the IMR of Birmingham varied over time, while showing an overall decline, and the figures show the IMR of the city differed according to the four quarters of the year. The impact of the different causes of death, and their rate of decline, can be seen to have changed at different points of time, and also to have varied according to the three defined areas of the city. Although the IMR refers to all infants under the age of one year, it has been shown that different causes affect

infants at different stages of the first year of life, and the data available suggests that the method of feeding affected infants chances of survival. It may be concluded that no one factor could have addressed this number of variables, and the impact of any environmental change or intervention would only have made a partial contribution to the decline in infant mortality in Birmingham. However, it has been shown that there were dramatic changes in some causes of infant deaths at particular points in time.

Attendance at welfare centres

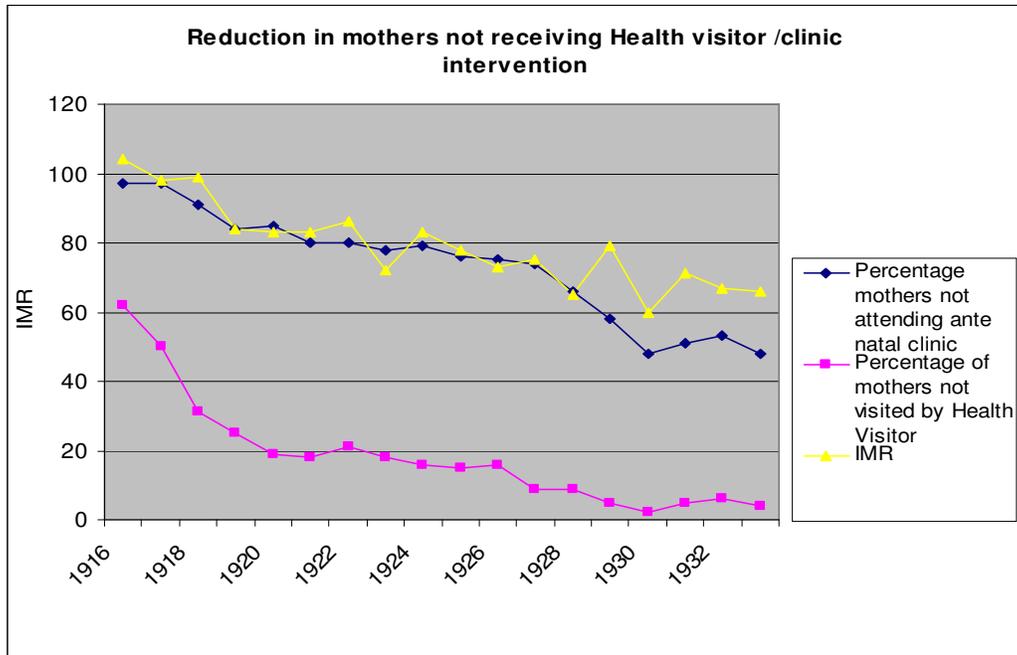
The MOH reports provide statistical information regarding maternal engagement with public health provision for welfare support and on the response of the population to the introduction of welfare centres` interventions. The 1928 Annual Report showed that twenty-five centres were spread across the city. A note is appended to the effect that, “The percentage of mothers attending the ante-natal clinics is based on the total births in the area of a social class suitable for attendance at a Welfare Centre and for home visiting”. While this was the accepted view there would always be a proportion of households where interventions would not be expected.

A table presented in the 1933 report giving the number of new births home visited, and the number of clinic attendances, has been used to calculate the changes in the levels of intervention from 1916 to 1933¹⁵⁴. On average each mother made approximately two visits up to 1923, following which the average number of visits increased to three, and of the total number of mothers giving birth in Birmingham only three per cent had attended ante natal clinics in 1916, a figure which rose to 52 per

¹⁵⁴ Birmingham MOH Annual Report (1933), p.117

cent in 1933. At the same time, the percentage of mothers visited by a health visitor following a birth was shown to rise from 38 per cent in 1916 to 96 per cent in 1933.

These figures provide the basis for the following graph which demonstrates the decline in mothers not accessing ante natal clinics, together with a reduction in those not home visited, and while the IMR can also be seen to be following a downward trend this does not show the same rate of change as the two interventions. If increased attendance at child welfare clinics were a major factor in the decline of infant mortality in Birmingham, the doubling of percentage attendances between 1924-26 and 1927-28, as shown on the 1928 MOH report, would lead one to expect a significant decline in IMR at this time. A correlation may be seen between the changes in attendance at clinics together with improved levels of home visits to new mothers, and the IMR of the city. By 1928 these changes would appear to have achieved their maximum impact, and the fact that the figures then begin to diverge would suggest that the continued impact of other factors on prematurity, and bronchitis and pneumonia, were unaffected by such interventions.



Graph 9

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Collation of information

The visits made by health visitors provided an opportunity for the collection of information regarding the care and welfare of infants, although this data does not appear to have been recorded annually, it enabled occasional studies to be carried out.

Breast feeding

The limited figures which are available in the MOH reports regarding breast feeding are provided in a manner which does not allow for any useful comparison to be made. In 1903 a study was made of 1,200 healthy babies from a total of 16,866 live births that year, which showed 56 per cent to be breast fed only, 28.7 per cent to be both breast and bottle fed, and 14.8 per cent to be only bottle fed. Of the 462 infants

¹⁵⁵ Data collated from Birmingham MOH Annual Reports 1916 - 1933

who died that year from epidemic diarrhoea information was collated on the feeding of 236, of whom only 10 per cent were breast fed, 10 per cent both breast and bottle fed and 80 per cent bottle fed only. No information is available as to the age of infants at death or the length of time breast feeding was continued. In 1912 Dr MacCallum, working in the three areas of St George`s and St Stephen`s, Duddleston and Nechells, and St Martin`s and Deritend, reported that of non-working mothers 85 per cent breast fed their infants for six months, which she stated was an increase of 6 per cent on the previous year. However, of the mothers working in factories, 94 per cent were found to be breast feeding in the first month, but by the second month this had reduced to 45 per cent.

Two studies of breast feeding carried out by health visitors were reported in the 1930s.

Health Visitor enquiries into breast feeding 1934

Total live births	15681	
Reports on	13703	
Total Breast fed	12613	92%
Up to 2 weeks	1473	12%
Up to 1month	2421	19.30%
Up to 2 months	2036	16.20%
Up to 3 months	1643	13%
Up to 4 months	1102	8.70%
Up to 5 months	942	7.30%
Up to 6 months	3002	23.80%
Never breast fed	1090	8%
Not visited frequently	12	0.10%

Table 5. Birmingham MOH Annual Report 1934 p.120

From this table the following data has been calculated:

Duration of breast feeding

Length of time breast fed	Number	Percentage of total breast fed
Up to 2 weeks	12613	92
Up to 1 month	11140	81
Up to 1 month	8719	63.3
Up to 3 months	6683	48.5
Up to 4 months	5040	36.4
Up to 5 months	3938	28.5
Up to 6 months	2996	23

Table 6

This enables a comparison to be made with a subsequent study whose data was presented in a different format.

Breast feeding enquiry of children born between January and June 1937 and still alive in January 1938

Total in study			4378	
Breast fed for				%age all infants
1 month	wholly	3398	} 3829	87%
	partly	431		
1-2 months	wholly	2517	} 3151	72%
	partly	634		
2-3 months	wholly	2008	} 2607	60%
	partly	598		
3-6 months	wholly	1632	} 2251	51%
	partly	619		

Table 7. Birmingham MOH Annual Report 1938 p.60

By comparing the percentage of those in each study who were breast fed over the first three months of life it can be seen that there is a considerable difference between the studies to be found in each month. It would appear unlikely that such an increase occurred over a relatively short period of time, but no other studies are reported which could help to confirm the norm. Some difference in data may be due to the 1938 study only including those children who had survived between six and twelve months, suggesting that breast fed babies were more likely to survive. However, the data indicates there was an increase in the number of infants breast fed over a longer period of time, which may be related to the increasing level of intervention.

The statistics presented in the MOH Annual Reports demonstrate that there was an increasing acceptance of social intervention and there would appear to have been some behavioural changes regarding the feeding of infants. This study will review the interventions, both voluntary, in chapters 5 and 6, and municipal, in chapters 7 and 8, which developed throughout the period, and assess to what extent each could be considered to have influenced these changes.

CHAPTER 4: EARLY PHILANTHROPIC INTERVENTIONS: 1873 - 1900

“As society is at present constituted, a lady may do almost anything from motives of charity or zeal...but so soon as a woman begins to receive money... the heroine is transformed into a tradeswoman.”

*Sarah Ellis. 1869*¹⁵⁶

Prochaska suggests that it was the profession of charity which created the opportunities for many for whom financial rewards were of secondary importance. A statistical survey of women`s work carried out in 1893 concluded that about 500,000 women laboured `continuously and semi-professionally` in philanthropy, and in the same year, Emily Janes, Secretary of the National Union of Women Workers, said “...hardly a girl leaves some of our women`s colleges without interesting herself in some aspect of philanthropy”¹⁵⁷. Although women in late Victorian society had very many more opportunities and considerably more freedom of action than their grandmothers had, for much of the nineteenth century there was little employment available to middle-class women, and it was considered that a lady should not work for profit as by undertaking any paid occupation she would invade the realms of the working classes¹⁵⁸. Christian denominations, particularly Nonconformists, who saw the need for women to be well educated, both for their own development and to fulfil their traditional roles, saw philanthropy as the obvious outlet for women of the middle and upper classes, whatever their marital status.

¹⁵⁶ Prochaska, *Women and Philanthropy*, p.6

¹⁵⁷ *Ibid.*, pp.224 -5

¹⁵⁸ *Ibid.*, p.5

The early Victorians considered poverty as largely due to individual weakness, and that, as British society depended upon the working-classes, they needed to acquire the virtues of thrift, temperance, industry and family responsibility¹⁵⁹. The Charity Organisation Society was formed in London in 1869 and established in Birmingham by 1874, at a period when there were growing doubts as to whether private almsgiving, however well administered, affected the perceived growing problem of pauperism. Local offices were created where applications for assistance could be received, investigated and, where considered appropriate, referred to other charitable agencies, thereby creating categories of `deserving` and `undeserving` poor¹⁶⁰. The Charity Organisation Society argued that if the poor could be trained to be self sufficient, and weaned from habits of dependence and improvidence they would no longer need the support of charities or the state. In order that this should be achieved, it was intended that all help should be as constructive and character building as possible, with financial and material aid being provided only as a last resort¹⁶¹.

Booth and Rowntree concluded that the majority of the poor were not to blame for their poverty, but struggled to overcome the circumstances in which they found themselves, and it was feared that the residential segregation to be found in most towns and cities in the second half of the nineteenth century meant that the working classes were lacking the positive influence of the upper and middle classes. In order

¹⁵⁹ D. Owen, *English Philanthropy 1660 -1960*, (London, 1965), p.136

¹⁶⁰ *Ibid.*, pp. 218 - 220

¹⁶¹ S. Burman, *Fit Work for Women*, (London, 1979), p.59

to address this problem it was felt necessary to re-establish contact between the classes¹⁶².

Despite the statistical evidence of a high infant mortality rate in Birmingham presented in both quarterly and annual reports from 1873, it was not until 1877 that any causal analysis was made, when Hill was asked by the Health Committee to produce a report on the matter. Hill considered the issue to be a social problem, being a result of the inadequate feeding of infants and their being deprived of breast milk, and not one to be remedied by his department. He made no suggestion that action should be taken by the local authority, but proposed that the situation should be addressed by the education of mothers. This could be undertaken by voluntary agencies in two ways; firstly, by 'an organised society of ladies to visit low-class homes and instruct women in a simple manner on the best method of feeding and nursing children', and secondly, by establishing nurseries where working mothers could leave their children¹⁶³. Although there is no information available as to what led Hill to this proposal, the culture of philanthropy, together with the influence of the recently established Charity Organisation Society, may have been contributory factors. Additionally, as has been noted from his annual reports, Hill presented the Birmingham councillors with data from other towns, including Manchester¹⁶⁴. It may reasonably be surmised that his thinking was influenced by the developments regarding home visiting of the poorer classes in that city. By way of response to these recommendations, the Health Committee approached the Ladies' Association for Useful Work (LAUW), previously known as the Ladies' Education Association,

¹⁶² Chinn in Glasby. *Poverty and Opportunity*, Forward.

¹⁶³ Birmingham MOH Annual Report (1877), p.10

¹⁶⁴ Chapter 3, p.48

who had already delivered a series of twenty-five courses of health lectures on sanitary and social subjects in the town. No other organisation appears to have been approached or even considered to undertake the role, and no consultation undertaken with other local authorities.

As a result of an initial consultation it was decided to call a public meeting, chaired by the mayor, Alderman Kenrick, on 23 November 1877. A circular was issued prior to the meeting by William Cook, Chairman of the Health Committee, together with Caroline Kenrick, President of the LAUW, which noted the high number of infant deaths, half of which, it stated, were due to diarrhoea and other diseases associated with nutrition¹⁶⁵. From this it was concluded that “..a very large proportion of this mortality must be caused by the ignorance of the mothers as to diet and management”¹⁶⁶. The detailed report of the meeting portrayed the views which appear to have been held by many of the upper classes at the time¹⁶⁷. It was suggested by Dr Heslop that progress in sanitary matters was prevented by the intemperance of working class men, and the “practice of gossiping and tittle-tattling” which it was considered prevailed amongst the women¹⁶⁸. The meeting highlighted the amount of sanitary improvements carried out to the town, although Alderman

¹⁶⁵ William Kenrick (1831 – 1919), brother-in-law of Joseph Chamberlain, and Caroline Mary Kenrick (1835 – 1894) were brother and sister, born in West Bromwich, children of Archibald Kenrick, later of Berrow Court, Edgbaston. Sources: William`s obituary *The Times*, issue 42167, col A (1 August 1919) p.14 and Caroline`s obituary, *Birmingham Daily Post*, issue 11383 (12 December 1894)

¹⁶⁶ *Birmingham Daily Post*, issue 6041 (19 November 1877)

¹⁶⁷ *Birmingham Daily Post*, issue 6046, (24 November 1877)

¹⁶⁸ Dr. Thomas P. Heslop (1823-1885) spent most of his working life in Birmingham, at Birmingham General Hospital and later as a physician at Queen`s Hospital and a lecturer in physiology at Queen`s College. With C.E. Matthews he founded the Free Children`s Hospital in 1861 of which he remained a medical officer. The Women`s Hospital was founded in 1871 through his initiative. J Reinartz, ‘Heslop, Thomas Pretious (1823–1885)’, *Oxford Dictionary of National Biography*, Oxford University Press, 2004 [<http://www.oxforddnb.com/view/article/13131>, accessed 11 April 2011].

Chamberlain considered that “unless they had the co-operation of the classes chiefly involved they would fail in their object”. During the course of the meeting, Chamberlain referred to a letter which had been received, which stated that they were beginning `at the wrong end` and stressing the need to improve the conditions of the life of the poor. An item in similar vein appeared in the *Birmingham Daily Post*, questioning whether the authorities had done as much as they could to improve the environment in which many were living¹⁶⁹. Despite this, the suggestion by Heslop of the need to establish `well-organised provident dispensaries` for children, where mothers could obtain both medical and nutritional advice, and Hill`s proposal of home visiting by a society of ladies, the outcome of the meeting appears to have been an agreement to extend the health lectures given by the LAUW, in order to educate the working classes regarding the care and nutrition needs of infants. While it could be suggested that the reasons for this decision may have been the cost of implementing any other intervention, a wish to value the work of women with whom the council had many family and social relationships, or a genuine belief that this was the best approach and that the poor would respond to the lectures of the upper classes, there is no reported discussion available to enable clear conclusions to be drawn on the matter. However, it would appear that, contrary to Galley`s view that Hill did not have the will to carry out his proposals, in fact he did not have the power to instigate the changes he felt would have had an impact on the IMR of Birmingham¹⁷⁰.

¹⁶⁹ *Birmingham Daily Post*, issue 6047 (26 November 1877)

¹⁷⁰ Galley, `Social intervention`, p. 31

Health Lectures

It can be seen in the *Birmingham Almanack*, a local directory published at the time, there was a broad range of philanthropic organisations in the town, with those in which women were active being predominantly focussed on the traditional women's roles of servants and children¹⁷¹. Perhaps inevitably, due to the close relationship between William and Caroline Kenrick, it was the Ladies Association for Useful Work to whom the Birmingham Council turned to stop the 'terrible sacrifice of infant life' in 1877¹⁷². Originally established as the Ladies' Educational Association, the movement promoted the higher education of young men and women, providing classes in a range of subjects including French, history, arithmetic and the theory of music, and through arrangements with Cambridge and Oxford Universities, examinations could be taken. In the winter of 1872/3, as a result of visiting the homes of patients from the Children's Hospital, and replicating a similar model in Leeds, their work was extended to provide health lectures to the poorer classes of the town. Following the take over of much of their examination work by the Higher Education Association in 1875, the LEA reformed into the LAUW, one of whose objects was the continuation of the lectures on health and sanitary matters to working women and girls over the age of fifteen¹⁷³. However, this did not remain the sole focus of the association's work and by 1889 they were again reporting on work regarding the university local examinations for girls, together with country holidays for

¹⁷¹ *Birmingham Red Book and Almanack* 1877

¹⁷² *Birmingham Daily Post*, Issue 6041 (19 November 1877)

¹⁷³ Ladies Association for Useful Work Annual Report (1876) p.4

deprived children, a club room run for working girls, as well as the lectures delivered by the sanitary committee¹⁷⁴.

The information provided in the annual reports is not consistent, preventing an accurate analysis and comparison being made of the work undertaken by the LAUW. However by collating a data base of the available details, together with that gained from items in the local press of the time, impressions may be gained of the amount of work carried out by the association¹⁷⁵. While every endeavour has been made to ensure the accuracy of this, it is apparent that not everyone involved was named in reports. For example in 1884 when, following a list of those giving lectures, the sentence is completed by `and others`, and in 1893 a list of venues includes `occasional lectures at other places`¹⁷⁶. Sometimes venues are named without a specific lecturer being mentioned, and sometimes vice versa, and as annual reports refer to a period of time made up of two part years absolute accuracy as to date has not always been possible. However, within the limitations of the sources, a clear account can be developed of the nature of philanthropic engagement by this organisation, its motivation and impact on maternal care.

The first course of health lectures were given by Miss Kenrick at St Barnabas`s Church, attracting an audience of 120 `attentive` women and girls, and this was followed by a similar and equally well received course at the school room of Immanuel Church. Two further courses were delivered by Miss Kenrick the following

¹⁷⁴ *Birmingham Daily Post*, issue 9639 (17 May 1889)

¹⁷⁵ Appendix 4

¹⁷⁶ *Birmingham Daily Post*, issue 10893 (19 May 1893)

winter, when she was joined by a second lecturer, Mrs C.J. Bracey¹⁷⁷. Prior to the arrangements made with the Health Committee in late 1877, courses had been delivered in seventeen identifiable locations within Birmingham, with an unspecified number reported as being held in `poor suburbs`, and the remainder falling beyond the boundaries of the town. Seven courses were arranged in 1878, in direct response to the meeting of 23 November 1877, in addition to others already planned, although no details were provided as to the lecturer or the number of attendees. From information presented in the annual reports, 1878 appears to have been the year when the greatest amount of work was undertaken by the association. Following courses delivered in Wolverhampton and Coventry in 1879, the focus would seem to have remained within the Birmingham boundaries for most of the 1880s, with the exception of an eight session course delivered by Mrs Bracey in West Bromwich in 1886.

There is little indication as to what training the lecturers had themselves received, or to what extent they were qualified, although a letter to the *Birmingham Daily Post* stated that `An educated woman, with a little time for study, would not find it hard to master sufficient physiology...`, and an item in the same paper stated that the Health Committee considered the role of educating mothers should best be done by others of the same sex who have `the needful power and education`¹⁷⁸. In the article the name of Miss Hill is followed by (Wilton House), a girls' school in Edgbaston, and

¹⁷⁷ Edith Bracey was the wife of C.J. Bracey, one of the first Joint Professors of Anatomy at Queen's College, Birmingham, and was largely responsible for the foundation of the Samaritan Fund providing surgical appliances for his patients. She was one of the few women Poor Law Guardians and devoted much of her time to improving the health of the children of the city. Rimmer. *Troubles Shared*. p.29

¹⁷⁸ *Birmingham Daily Post*, issue 6041 (19 November 1877)

although she cannot be traced on the 1881 census, it is possible that she may have been a school teacher, although this does not necessarily indicate that she had received what would now be considered an appropriate level of education. In 1888 the name of Miss Youngerman is accompanied by the comment `an experienced nurse`, although, again this does not specifically relate to any academic standards. Other lecturers included Mrs RW Dale, the wife of the Minister of Carr`s Lane Congregational Church, and Mrs CJ Bracey, whose husband was a general practitioner in the town and a Member of the Royal College of Surgeons¹⁷⁹. It is likely that the standard of the lectures delivered varied from one lecturer to another, and for some the work may have focussed more on the wish to undertake an acceptable philanthropic role rather than on a high standard of delivery suitably pitched to the abilities of the audience. It would be reasonable to conclude that it was their position in local society, their family links and social networks, together with their willingness to undertake philanthropic work, rather than their higher academic qualifications or even personal experience, which was considered to entitle some women to undertake this work, suggesting a rather paternalistic attitude towards those of the lower classes. Nevertheless, the meeting of November 1877 concluded that there was no better agency to undertake the work of educating mothers in Birmingham than the lecturers of the LAUW.

In later years, following an appeal for additional ladies to become involved with the work in 1893, a course of ten lectures were delivered by medical practitioners. These covered `Physiology and Hygiene`, `The Care of Women`s Health` and `The Care of

¹⁷⁹ 1881Census

Children` and were delivered to a class of thirty, with those who intended taking up the work of teaching writing papers for examination, although the number who did so is not given¹⁸⁰.

Other public lectures were presented by professionals. A course of lectures on sick nursing by Mrs Russell Grant, the resident House Surgeon (pro tem) at the Women's Hospital, together with demonstrations by two nurses was delivered in 1877, filling the lecture theatre at the Midland Institute on three successive Mondays. Dr Hill and Mr Wright Wilson FLS (honorary surgeon, to Midland Counties Ear & Throat Infirmary) offered classes for instruction in Elementary Physiology and Sanitary Science, although it was later reported that the attendance at these was disappointing¹⁸¹. By the early 1890s many of the lectures undertaken appear to have been carried out by qualified medical personnel, to audiences of those wishing to teach or to work with the poorer classes rather than as a direct method of intervention¹⁸². While these lectures may have been deemed worthy of note in the reports, other routine lectures may have continued but failed to cause comment.

However, this would suggest the work of the LAUW underwent a change of emphasis and a greater professionalizing of the work undertaken by women, possibly indicating a move from voluntary to paid employment in the welfare sector.

¹⁸⁰ LAUW Annual Report (1894) p.7

¹⁸¹ LAUW Annual Report (1879) p.5

¹⁸² LAUW Annual Reports (1894) p.7

Little written evidence can be found to substantiate the view that mothers, particularly of the lower classes, were ignorant regarding the care of their infants, although this cannot be taken to suggest that the problem did not exist. Brief comments can be found in the LAUW annual reports, such as that concerning a lecture to mothers in 1880 which involved an explanation regarding the structure of the skull. The lecturer related that nearly all present said they had tried to close their babies skulls by pressure as they thought if a baby's head was washed water would penetrate the skin, causing water on the brain. Another described a young mother wanting to feed her baby only on milk as directed by the lecturer 'battling against the prejudice and practice of older neighbours', urging her to soak bread in the milk to feed her baby. Reflecting on the work of the association the annual report expressed the hope that in time mothers would come to know that feeding their babies on 'pork and apples' and 'just what they eat themselves' would cause them to suffer and die¹⁸³. While the accuracy of such anecdotes cannot be verified, they are indicative of significant groups thinking in this way, and therefore underlining the value of the lectures in raising awareness of infants' dietary and welfare needs. This research shows that large numbers attended many of the courses, particularly in the early years, which would show that the audience had a wish to learn and found the sessions to be interesting and informative.

The LAUW Annual Reports themselves give a minimum of detail as to the contents of the lectures, much being classed as 'sanitary instruction', although the original lectures, regarding the body, its functions and needs, were described as being given

¹⁸³ LAUW Annual Report (1887) p.8

in 'an easy conversational way, interspersed with home thrusts as to the mismanagement so common in all classes'. In addition simple experiments were shown, and patterns for children's clothes and cheap recipes provided, suggesting a practical focus was found to be more effective¹⁸⁴. Later topics such as 'food' and 'care of children' appear to have attracted a considerable audiences as in very poor district in St Asaph's parish in 1881, a course which also highlighted the risks to children of burns and scalds and the need for strong fireguards. The last lecture of a series of eight given by Mrs Bracey in West Bromwich Town Hall was entitled 'On childbearing; its troubles and difficulties' (1886), Miss Youngerman covered 'Digestion and wholesome food', as well as 'Children, how to rear and nurse them' and Mrs WH Ryland the broader topic of 'Mothers and children'¹⁸⁵. Cookery classes also formed a regular component of the work undertaken by the association, but were delivered by experienced lecturers and appear to have related to a standard of living beyond many of the families of Birmingham, being advertised as 'for those directing servants' and for those 'occasionally preparing meals themselves'. In 1878 a level of cookery lectures described as 'artisan' were delivered to young women at the factories of Messrs Chance and Joseph Gillott & Sons, following which an unnamed lady arranged for twenty more to be given free of charge to employees of various large factories in the town¹⁸⁶.

The academic focus of much of the work of the association is demonstrated by the format of lectures, each normally being followed by the distribution of question sheets

¹⁸⁴ *Birmingham Daily Post*, issue 4811 (15 December 1873)

¹⁸⁵ LAUW Annual Report (1888) p.6

¹⁸⁶ LAUW Annual Report (1878) p.11

which the audience were encouraged to complete to show the level of knowledge and understanding they had gained¹⁸⁷. It would be reasonable to assume that this could have been a deterrent to potential attendees without literacy skills, although a newspaper report of a meeting held to conclude a course run by Mrs Bracey in 1877 says there were approximately 200 attendees of whom forty-nine provided written answers¹⁸⁸. The 1882 LAUW report comments on the small number of written answers received following a lecture given by Mrs Bracey, due to the fact that many of the working people who attended were not able to read and write, although, considering the high number of attendees, this does not seem to have been a deterrent. No further comment was made in the report regarding this or to suggest that this may have been the basis of the apparent ignorance of the lower classes, it appears to be merely a statement of fact. Following a lecture given by Miss Hadley to an audience of very poor mothers at Bordesley Street Chapel in 1880 the report commented that 'the few women who could write answers to the question papers did their work with intelligence and care'.

With the exception of the lectures given in Lawrence Street and Fazeley Street, in 1879 it was noted that the audience were chiefly drawn from the well-to-do artisan and lower middle classes, who it was considered were more likely than the very poor to profit from them. In 1883 Mrs A.Osler lectured to a 'high class and intelligent audience of over one hundred', and a course was held at Wynn Street which attracted 'an intelligent and well-to-do audience' although even they found the content of the lectures 'comparatively new'. The report for that year went on to say:

¹⁸⁷ LAUW Annual Report (1876) p.5

¹⁸⁸ *Birmingham Daily Post*, issue 5847 (6 April 1877)

‘The women who seem to be effectually reached are those whose minds have some degree of cultivation; those who, not being too much engrossed in the struggle to obtain daily food, are able to give time and attention to higher things’¹⁸⁹.

Despite this opinion the association made some attempts to reach the poorer sections of the community. This would suggest that while no formal evaluation of the work of the association appears to have been undertaken, some consideration was given as to the accessibility of the lectures, and possibly recognising that some of the aims of the LAUW agreed with the council in 1877 were not being met, an assessment was made as to the sections of the community which appeared to present the greatest level of need. At the suggestion of Mrs Bracey, ‘cottage lectures’ were instigated, taking the information to those who were unlikely to attend lectures by borrowing a room in a court on Tennant Street¹⁹⁰. The women living nearby were invited and teaching provided on health subjects in the simplest possible language, showing a willingness to adapt the model to suit the needs of the community. This work seems to have met with some success as the amended model was repeated in both Aston and Bishopgate Street, with further sessions held at Mothers` Meetings. The imparting of knowledge appears to have been a two-way process, as the 1885 report notes that the four simple lectures given by Mrs A Southall to a group of very poor mothers in Severn Street ‘showed the difficulties under which a poor mother labours to keep her home clean and tidy’¹⁹¹.

¹⁸⁹ LAUW Annual Report (1883) p.8

¹⁹⁰ LAUW Annual Report (1884) p.6

¹⁹¹ LAUW Annual Report (1885) p.8

An alternative approach can also be seen in the lectures given at factories to the female employees. These may also have occurred as a result of some informal evaluation, or as part of a paternalistic approach by the factory owners, possibly in response to a more casual discussion with those delivering the lectures, or as a method of overcoming the difficulties in finding free premises for the LAUW to further their work. In 1879, in what would seem to be a strategy to enhance access to their teaching, the LAUW provided sessions to the Cadbury factory girls and women and the annual report noted that 250 attended, half the time, although unpaid, being part of their working hours, and ten years later Miss Southall was delivering two series of half-hour lectures to factory girls during their dinner break.

The location of the venues used differed from year to year. In September 1882 a letter sent by the secretary of the association to the *Birmingham Daily Post* appealing for applications from clergymen or manufacturers who could offer free use of suitable rooms 'in order that the committee may select places which will afford the widest scope for this valuable instruction'¹⁹². Although locations were selected from the offers made, the whereabouts depended upon the offers received, therefore attracting the random rather than targeted audiences which must also have failed to capitalise on previous successful courses. Despite this drawback, the early annual reports show the courses being attended by considerable numbers, audiences of between sixty and 280 in 1877, with a course in Aston in 1887 drawing 350 to 400. However, by 1900 the association was reporting 'the audiences in most cases have been small', and 'attendances not large, never exceeding forty'. The association also

¹⁹² *Birmingham Daily Post*, issue 7547 (11 September 1882)

sold leaflets or 'sanitary tracts', nearly 900 following a series of lectures at New Hall Hill schoolroom in 1878, and 4500 over the eight sessions delivered by Mrs Bracey in West Bromwich in 1886¹⁹³. Mrs Dale reporting one woman as saying she still had a tract bought two years previously, although it was almost worn out as it had been loaned to so many to read¹⁹⁴. This would suggest there was a certain ripple effect as the information provided by the association was disseminated amongst friends and family, and that written information was more effective than previously as education improved. Therefore the attendance and distribution figures alone underestimate the real impact of this work.

The advertisements placed by the LAUW in the local press show that the admission to lectures given by members of the association was free, but for the lectures by Mrs Russell Grant the charge was two shillings, or for a course of six lectures by Miss E Peachy MD, on 'Hygiene – or the art of preserving Health', a fee of 10s 6d was charged¹⁹⁵. Cookery lectures also incurred a charge, with Miss Cocks from the National School of Cookery delivering evening sessions at a cost of two pence per attendee 'in order that wives of artisans may have the advantage of the lessons'.

Following the decline of the public lectures of the LAUW in the 1890s there appears to have been no interventionist work regarding the prevention of infant mortality carried out under the auspices of voluntary agencies in Birmingham for some years. Only the Birmingham Women's Settlement appears to have been involved in work

¹⁹³ LAUW Annual Reports (1878) p.8 and (1886) p.6

¹⁹⁴ LAUW Annual Report (1878) p.8

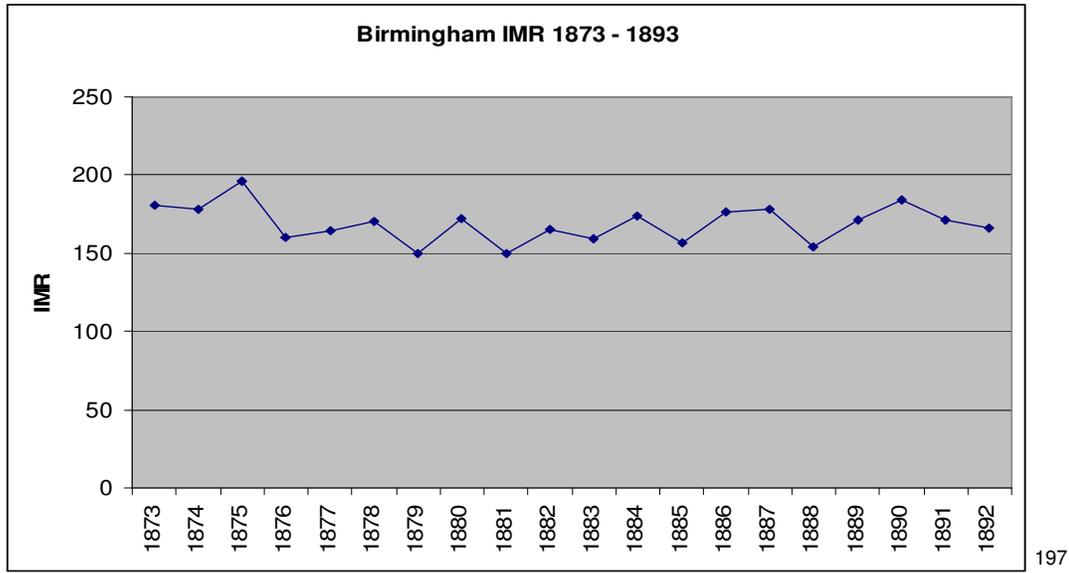
¹⁹⁵ *Birmingham Daily Post*, issue 7068 (1 March 1881) and issue 7883 (8 October 1883)

which could be classified as family support at the beginning of the twentieth century, although this was not focussed on any particular age group and did not specifically aim to address the issue of infant mortality. The voluntary sector would seem to have welcomed the advent of the Health Visiting service in the city, seeing them as educators in the matter of hygiene, and a link between the needy and the existing charities. In an interview with Mrs Beale, the Lady Mayoress, Health Visitors were encouraged to refer necessitous cases to the Charity Organisation Society suggesting a positive working relationship was maintained between the voluntary sector and the emerging professional workers, which later enabled the smooth transfer of work between the two¹⁹⁶.

Impact of health lectures

The lack of statistical information and detailed records of the work of the LAUW together with the lack of any formal evaluation makes it difficult to assess the true impact of their work on the IMR of Birmingham in the last quarter of the nineteenth century. Most of the lectures given directly to the general public were delivered over the years 1873 to 1893, and by using the IMR for this period to create the following graph, it can be seen that there was no significant change in infant mortality experienced in the city over that period. However, the information collated shows that a proportion of work of the LAUW was undertaken outside the city boundaries and of the ninety-three identified locations of lectures approximately twenty-five per cent would not be expected to affect the city IMR.

¹⁹⁶ Women Workers 3 (1901), p. 64



Graph 10

The work of the LAUW, by attracting a wider range of socio-economic groups to their lectures, could have contributed to a cultural change, opening the private world of child care, with the assumption that `mother knows best`, to a more public model delivering professional advice. An alternative view could be proposed that, by continuing to be the model of choice to address the IMR of Birmingham, the health lectures may have prevented the instigation of other models of intervention in the city at a much earlier date.

Although the numbers of attendees given appear to be approximate, the association's lectures often attracted large audiences, particularly in the early years, and it could be suggested that without the input of the LAUW the infant mortality figures may have been considerably higher throughout the period. Most of the lectures formed part of a series and, where information is available a high level of

¹⁹⁷ Data collated from Birmingham MOH Annual Reports 1873 - 1892

attendance appears to have been maintained throughout, suggesting the lecturers continued to interest their audiences. This is particularly noteworthy when, in 1880, the audience attending a series of six lectures by Mrs Dale in the Priory Rooms were reported as having travelled considerable distances¹⁹⁸. In addition to the lecture, the sessions provided an opportunity to sell written information in the form of tracts, or leaflets. The 1876 annual report noted that the sale of books and papers on sanitary and domestic subjects was unusually large, and that of 1887 stated that `the papers published by the authorities of the Children`s Hospital entitled “Rules for the management of infants” were supplied for distribution with good effect`. To what extent such information affected the behaviour and practice within families is open to question.

Despite the Health Committee identifying the health lectures of the LAUW as a method of combating infant mortality, there is no indication that at any time the work was focussed specifically on prospective or new mothers, although it was reported that a small audience in Harborne in 1878 was made up of women, all of whom were mothers, and in 1880 and 1884 sessions were held at mothers meetings. The aim of the LAUW was to deliver courses to women and girls over fifteen, which would indicate that a considerable period of time could elapse before some of the audience were likely to put any knowledge gained into practice, and that much of the information was general rather than specific to the needs of infants.

¹⁹⁸ LAUW Annual Report (1880) p.6

The LAUW annual reports contain little information regarding the views of the attendees, or to what extent the education received was valued by the public. The 1877 report stated that, following a course delivered by Mrs Dale at Carr's Lane Church to women from a poor district, ladies visiting in the area found the advice given had been heeded. The report went on to say that the women were pleased that anyone should take the trouble to teach them, and expressed a desire for more similar lectures. In 1900, when the work of the association was in decline, the annual report notes that although the audiences had never exceeded 40 those who did attend were `appreciative`. Some additional comment is to be found in the local press. At a public tea held following another course by Mrs Dale in 1882, a Mr J. Empson, described as `a working man`, testified that the series of lectures `had commenced a great and good work in the neighbourhood` and that they had already had an impact¹⁹⁹. The views of some of the medical profession regarding the information being imparted to their patients were included in the LAUW report of 1884 which stated:

“Many medical men in the town say that they now find amongst the women who come to them intelligent appreciation of their instructions”.

The interest of women in attending health lectures would seem to have declined by the 1890s, a decade which experienced several hot summers in which infant mortality in Birmingham attained particularly high levels. At the same time the association experienced considerable problems in finding sufficient ladies to carry out lectures, and it is difficult to assess which factor could be considered to be the prime

¹⁹⁹ *Birmingham Daily Post*, issue 7410 (4 April 1882)

cause of the reduction in this area of the work of the LAUW. Statistically it would appear that no positive impact on the infant mortality rate was apparently made by the work of the LAUW, and unfortunately the IMR by ward, which may have allowed for an assessment of more localized impact, was not presented in the MOH annual reports until 1904. By 1903 the annual report noted “Nearly all lecturers are now engaged in other work”. This would suggest that there had been a cultural change, and that for many who would previously have accepted an unpaid role in the field of welfare work, paid employment had become more acceptable. Far from resenting this professionalizing of their voluntary role, many women must have welcomed such a change which presented opportunities hitherto denied their class, and endorsed the 1899 LAUW annual report which stated “We have much pleasure in noting that four women Sanitary Inspectors or Health Visitors have been appointed by Birmingham City Council”²⁰⁰.

As has been shown, the conclusion that there was a need for sanitary lectures was based on the assumption that IMR was as a result of the ignorance of mothers, rather than on any detailed study or statistical evidence, and it would appear that no alternative methods of providing information were considered at the time. Although some attempts were made to provide information to women in areas of perceived need, the work was not sustained over time and was dependent on the motivation and ability of women themselves to attend. This model of intervention can therefore be seen to have been a random model, lacking in universality, and offering no continued support to mothers of infants.

²⁰⁰ LAUW Annual Report (1899) p.5

Nevertheless, while producing no apparent direct statistical benefit to the IMR of the city, the work of the LAUW can be seen to have raised the profile of health issues with a considerable number of the population, and the association experimented with different methods of providing information in both work and social settings. While lectures to the general public declined over the 1890s, some of the work at this time was focussed on delivering instruction leading to examinations for those wishing to take up teaching health subjects or working in the field of health and welfare, thereby contributing to the development of paid work for women. Although this would suggest that this training provided by the LAUW may have had a long term impact on infant mortality, there is nothing to confirm that the students took up employment and if so in what location. In the final annual report in 1903, while acknowledging that the Health Visitors could reach a different class of persons to those who attended the LAUW lectures, and provide more real practical sanitary instruction, the members of the association saw themselves as having been the forerunners of the developing health and welfare services.

CHAPTER 5: LATER PHILANTHROPIC INTERVENTIONS: 1900 - 1938

“Perhaps benevolent women did lose something of their reputation for retirement and modesty...Society accepted this state of affairs because it had encouraged their work and felt the benefits.”

F.K. Prochaska. 1980²⁰¹

In 1892 Pierre Budin, Chef de Service at the Charite Hospital in Paris established the first ‘consultation de nourrissons’, where women who had delivered their babies at the hospital were asked to attend a weekly clinic. Their infants were weighed and examined, with records being maintained regarding methods of feeding, quantity of milk, growth and development, information which was shared with the mothers in order to interest them in the welfare of their infants. In 1904 L’Oeuvre Du Lait Maternal, an organisation whose object was to promote breast feeding, opened in Paris, providing free meals for nursing mothers and by the following year four more centres had been established. At the same time, in Ghent a programme had been developed which included medical supervision of children, a medical insurance plan, the provision of milk for either nursing mothers or their infants if weaned, classes on various aspects of child care as well as training for health visitors. Various aspects of these schemes were later adapted to suit local needs in England²⁰².

²⁰¹ Prochaska, *Women and Philanthropy*, p.226

²⁰² Dwork. *War is good for babies*, pp.104 -113

In order to supplement home visiting which commenced in 1905, a clinic was established in Marylebone where infants could be referred for medical inspection, advice and treatment²⁰³. A more influential development was that in 1907, by the St Pancras Mothers and Infants Society, of the Mothers and Babies Welcome. For one penny per week women could join the club, attend consultations run twice weekly by a lady doctor, and to join any of the classes which were designed to give practical instruction. In 1908 an article entitled `The Children`s Age`, Miss MC Matheson, then Warden of the Birmingham Settlement, outlined the work of the St Pancras School for Mothers, where babies were weighed, and a careful record kept on children`s progress²⁰⁴. Classes for mothers were also provided, designed to give practical instruction, including simple cookery lessons, needlework, hygiene, and health talks given for both mothers and fathers. Miss Matheson described the walls of the school as being covered with charts and pictures in order to inform and interest mothers while they waited for appointments. All the work was accompanied by regular friendly home visiting carried out by a body of visitors working under the supervision of, and making regular reports to, the Superintendent. Both the doctors carrying out the consultation sessions, and the home visitors, urged the value and importance of breast feeding, and when medical treatment was needed mothers were referred to hospital. In addition the school ran a Provident Club, and dinners were also provided for those mothers in need at a charge of 1 1/2 pence.

In 1905 the sanitary authority in Huddersfield approved `a scheme of work against infant mortality`, which proposed that all newly born infants should be visited by a

²⁰³ Dwork, *War is good for babies* p.145

²⁰⁴ *Women Workers*, 2 (1908) p. 80

woman doctor immediately after birth, and thereafter by voluntary workers²⁰⁵. In order to facilitate this work the corporation obtained a special Act of Parliament (1 November 1906) allowing them to make the notification of a birth to the MOH within 48 hours compulsory. In the following year a further bill proposed this legislation should be extended to cover England and Wales, but following parliamentary debate the bill was amended to propose an optional measure which local authorities could adopt within their area. The regulations specified that the responsibility for notification lay with the father `if in residence` or, in his absence, `any person in attendance upon the mother at the time of birth or within six hours thereafter`, with failure to comply being punishable by a fine of 20s. Despite objections by the medical profession the Notification of Births Act was passed and received Royal Assent on 28 August 1907²⁰⁶. This measure was adopted by Birmingham in 1908.

Voluntary Maternal and Child Welfare Centres in Birmingham

The first infant welfare centre in Birmingham was established by the Birmingham Infant`s Health Society in premises rented from the Medical Mission in Floodgate Street, Deritend. Based on the same model as that of the St Pancras School, at the time Miss Matheson wrote her article the centre had just completed its first year. Official records of the Society are no longer available, but in some years their work is mentioned in the Annual Reports of the Medical Mission, although it is clearly stated that the two were quite distinct agencies. The 1911 Report referred to the weekly gathering of more than 70 mothers who, with their babies, attended infant consultations and classes of various kinds, and said that since the Society

²⁰⁵ Marland. `A pioneer in infant welfare`, pp 33-34

²⁰⁶ 7.Edw. c40

commenced 950 mothers had sought advice on infant feeding and child management²⁰⁷. The Medical Mission Report went on to describe the welfare centre as `this splendid work` which had met with `marked success` and considered that `the whole standard of infant life in the district has been noticeably raised`.

In addition homes were visited, either by the Superintendent, Mrs Peace, or by a number of ladies from Edgbaston and Moseley who assisted her. However recruiting and maintaining sufficient volunteers to respond to the volume of work would seem to have presented difficulties and, by 1913, the report stated that `many more lady visitors are needed`²⁰⁸.

A year following the inception of the Floodgate Street centre a similar service was established by the Women`s Settlement known as the Guild of Mothers. Mothers of children attending the Settlement Kindergarten were invited to classes on childcare, and other mothers, not only those attending the women`s meetings, were invited and encouraged to attend lectures given by Dr Violet Coghill and Health Visitors. By late 1908 an organiser for the Guild had been appointed, with Mrs Fowles becoming the Superintendent in March 1909²⁰⁹. Regular meetings known as `At Homes` held at the Settlement were attended by Doctors Pemberton Fooks and Furneaux Jordan, who were available for consultation and advice and in addition the visiting of mothers with young babies was undertaken by Mrs Fowles and a team of lady volunteers.

²⁰⁸ Birmingham Medical Mission Annual Report (1911) p.8

²⁰⁹ Birmingham Women`s Settlement Annual Report (1909) p.9

By 1912 the Guild had its own committee consisting of an honorary secretary and treasurer, in addition to eight committee members, and a visitation sub committee had been formed to enquire into and re-organise the visiting²¹⁰. Previously twelve visitors had been `watching` 130 babies in 25 streets in the ward, with the remaining 160 babies in 21 streets to the care of the superintendent in addition to all the sickly babies and those deemed unsuitable for untrained supervision. Following strenuous efforts to recruit more visitors the committee informed the annual general meeting there was now a visitor for each street in the ward, leaving Mrs Fowles free for the organisation of the Guild, as well as the visiting of difficult cases. In 1913 it was felt necessary to move the Guild to premises in a more central location within the ward and in April a house was taken at Gosta Green. The work continued but little mention of the Guild was made in later annual reports save for a statement in 1915. This explained the new development of their work which consisted of visiting and weighing the `old children` between 18 months and school age, although it was noted that difficulties were again being experienced in maintaining the visiting due to lack of helpers²¹¹. This issue was resolved by a grant from the Board of Education which enabled the appointment of an assistant superintendent.

Other voluntary Schools for Mothers were established over the pre-war and war years which, it must be assumed, were run by voluntary committees. To what extent these stood alone, or whether they were grouped together under the management of one body, cannot be determined as none of their records can be traced. Some brief reports by the voluntary committee of the Kings Heath Infant Welfare Centre,

²¹⁰ Birmingham Women`s Settlement Annual Report (1912) p.33

²¹¹ Birmingham Women`s Settlement Annual Report (1915) p.31

developed a decade later, remain, although it is unclear whether this was run by the Health Department with additional work being undertaken by volunteers, or whether in fact it was run independently using premises bought by the Health Department. The first report states that there had been appeals for a centre for some years as new houses in the Billesley area of the Kings Heath ward were rapidly filled with young families escaping from the overcrowding of rented rooms in the city²¹². By 1929 a further branch was opened in Billesley, providing a service for more than two thirds of the population of the ward. Though Kings Heath was not considered a poor area, in the 1930 report it was described as widespread and thinly populated with families badly housed in bungalows with caravan dwellers on the outskirts. The report went on to say there were often many sad cases, where help in the form of milk, clothing, and assistance to go to the mother and baby convalescent home at Pype Hayes were considered `a real boon`²¹³.

Outputs

The fragmentary nature of the records of the mother and child welfare centres provided by the voluntary sector means that the statistical information is also rather limited. The statement that a visitor was allocated to each street in the ward would suggest that all infants born in the St Mary`s ward were visited by the Guild of Mothers, although whether in fact this is correct cannot be ascertained as the statistics provided by the MOH give the total births for the city and not for individual wards²¹⁴. In total 573 babies were visited, and 135 new babies attended the consultations over the year, although it was not specified as to whether these were

²¹² Kings Heath Infant Welfare Centre Annual Report (1927)

²¹³ Kings Heath Centre, Voluntary Committee Report (1930)

²¹⁴ Birmingham Women`s Settlement. Annual Report (1912) p.33

all infants under one year of age. A table of statistics provided in the MOH Annual Report for 1917 provided information regarding the nine voluntary centres open at the time. Of these the Floodgate Street centre, together with the Settlement Guild, based then at Staniforth Street, had been in existence for several years whereas those in Handsworth, Harborne and Northfield were much more recent establishments. Only two of the centres were located in the central area of the city, and of the remainder six were serving areas of the outer ring. The location of the Latimer Street centre has not been precisely defined although it may be assumed that, as it was known as the South Edgbaston School for Mothers, it served an area of the middle ring of the city. This would challenge Galley's view that "...all the efforts to reduce IMRs were targeted at the inner wards.." and that the outer wards "were virtually ignored"²¹⁵.

Where figures are given regarding visits to children by both paid and voluntary workers it is not clear as to whether all these were new born infants, or whether a family moving into the area with a child over twelve months of age would be visited and included in these figures. As has been shown, by 1915 the Guild of Mothers, then at Staniforth Street, were extending their work beyond the first year of a child's life and this would suggest that the figure of total attendances at the centre of 2406 did not relate solely to infants. To what extent this was the practice elsewhere is not apparent.

²¹⁵ Galley. 'Social intervention', p.35

While bearing in mind such possible discrepancies, the table shows that 2,519 first visits were made by the voluntary centres, approximately twelve per cent of the total 20,618 births in the city that year. The majority of these visits were made by paid staff, with only the voluntary workers at the Stirchley and Cotteridge centre undertaking a significant role in this area (44 per cent). Of the re-visits, only at Sparkhill and Greet were the greater proportion carried out by volunteers (64.5 per cent)²¹⁶. Although the centres were managed by the voluntary sector, it would seem that there was seen to be a need to make professional judgements, particularly at an initial visit, showing the interdependence of the voluntary and professional sectors.

It is difficult to ascertain how many visits were made to individual families, although the Settlement considered that visits should be made each week, and no less frequent than fortnightly, in order that a continuous record of progress should be maintained²¹⁷. On this basis the level of service provided by the staff and volunteers of each centre has been calculated. If the number of families is considered on a roll on roll off basis, and the number worked with in the previous and the succeeding years remained constant, the number of families with whom the centres were involved at any one time would be approximately half that of the primary visits undertaken over the year.

²¹⁶ I have made these calculations using the table provided in the Birmingham MOH Annual Report 1917

²¹⁷ Women Workers, 3 (1909) p.89

Statistics of work by voluntary Maternity and Child Welfare Centres 1917

	Floodgate St	Selly Park	Stirchley & Cotteridge	Staniforth St	Latimer St	Sparkhill & Greet	Handsworth	Harborne	Northfield	Total
Primary visits to children by paid workers	508	262	182	267	332	334	363	161	110	2519
Primary visits by Voluntary workers	0	0	132	0	0	0	20	0	0	152
Re visits by paid workers	8162	280	1257	10587	3710	746	948	933	690	27313
Re visits by voluntary workers	970	257	332	3898	287	1293	172	0	0	7209
Total visits / re visits	9640	799	1903	14752	4329	2373	1503	1094	800	37193
Primary ante natal visits	87	24	21	168	42	38	111	8	10	509
Ante natal re visits	435	101	80	1625	79		0	7	40	2369
Fresh children attending centres	448	158	238	158	476	221	609	47		2355
Total attendances	2922	1128	1336	2406	1884	2093	3341	187	623	15920
Fresh mothers ante & post natal	106	12	3		21	31	20	2		195
Total attendances	106	20	29		47	62	77	13	56	410
Number of child consultations held	75	46	89	63	48	65	92	22	34	534
Number of mothers consultations held	27	2	45		8	10	30	22	34	178
Attendances at classes										
Sewing	2688	88	154	718	270	545	474		84	5021
Cookery	816	0	0	183	0		41	0	0	1040
Health lectures	0	454	1585	319	0	1340	415		84	4179

Table 8. Birmingham MOH Annual Report 1917 p.11

By using the number of re-visits undertaken over the year, the number of families which could have been visited either weekly or fortnightly may be calculated, and a comparison may be made with the estimated number on the books at any time. This would suggest that only Floodgate Street, Staniforth Street and Latimer Street were achieving the level of visiting as had been considered desirable when the maternity and child welfare centres were initiated in the city.

Overall 7,361 visits were undertaken by voluntary workers in the year reported, but the extent of voluntary work carried out within centres by volunteers was not recorded, although the value of their work was obliquely referred to by a Ministry of Health circular in 1921 which stated "Every effort should be made to reduce the cost of maintaining existing centres by the encouragement of voluntary service..."²¹⁸.

The figures relating to classes provided by most centres show that either sewing classes were more popular with the mothers, or in fact the centres found it easier to provide the facilities for sewing rather than cookery classes. Six of the nine centres delivered health lectures, and the number of attendances ranged from 84 in Northfield to 1,585 in Stirchley and Cotteridge, a figure which, when considered in relation to the number of first visits reported, appears to be particularly high. It is possible that the number of attendances related to the number of mothers who attended classes, or alternatively to the total number of individual attendances. The wide variation in the figures presented could also suggest that different centres were calculating their statistical information in different way.

²¹⁸ Birmingham Maternity & Child Welfare Committee Minute Book no. 3, circular 182

The table clearly shows there were centres being run by voluntary bodies, each employing some paid workers, and all except two of the centres, Harborne and Northfield, show that home visits were being made by volunteers. In addition the centres were well attended with many mothers taking children for repeat visits. Although the number of mothers making ante and post-natal attendances were very small, the table shows that the voluntary centres were beginning to address this area of work.

Family view of intervention

The lack of written information regarding the work of the voluntary sector limits any opportunity for an understanding of families' views on the service provided by the Schools for Mothers, the home visiting they undertook, and the consultations and classes they provided. To what extent families saw the home visiting aspect of the centres' work as intrusive can only be imagined. In a study carried out in a working class area of London almost forty years later, a resident was quoted as saying, "I don't invite anyone here. I'm not invited into anyone else's home either. It doesn't seem right somehow. Your home's your own"²¹⁹.

It would seem likely that, to anyone with this regard for their privacy, the home visiting could have felt intrusive and unacceptable. Steinbach suggests that many of the poor and working-class women who were at the receiving end of the visiting may

²¹⁹ M. Young, and P. Willmott, *Family and Kinship in East London* (London, 1990), p.108

have felt more judged than helped²²⁰. Certainly in Miss Matheson`s description of the work of the work of the Birmingham Infant Health Society in Floodgate Street she stated, “Every infant born is visited and *watched*.”²²¹ Later the Settlement report for 1912 referred to the visitors *watching* the babies they visited, and in the following year, when reporting on the savings made by the thrift club, stated that “more than 30 of the 49 expectant mothers *under observation* are club members”²²². Was this attitude apparent to the mothers, and to what extent did they resent this approach?

In practice the centres provided a hitherto unavailable resource for mothers, and any negative feelings may have been out-weighed by the benefits which the centres provided. The figures provide by the 1917 MOH Report are not sufficiently detailed to enable precise calculations to be made, however, it is apparent that many, although not all, mothers who were visited at home subsequently attended the centres with their children, suggesting that many mothers valued the services provided for them and their children. The centres appear to have provided a positive social environment, with it being reported that 400 mothers took their babies to the first annual meeting of the Floodgate Street centre.²²³ While this aspect of the centres` work may not be considered to have had a direct impact on the IMR of a district, it must have helped to embed the service as part of the local network. By creating a positive working relationship between mothers and the staff of the centres, when problems occurred this would have eased their resolution.

²²⁰ S. Steinbach, *Women in England 1760 – 1914* (London, 2004), p. 59

²²¹ *Women Workers*, 3 (1908), p.83

²²² Birmingham Women`s Settlement Annual Report (1912) p.83 The italics are mine

²²³ *Women Workers*, 3 (1908), p.84

Move from voluntary to municipal centres

A key role of the committee of any charity is to access sufficient funding to maintain the work of the organisation, and Prochaska suggests that women preferred to contribute to those charities which dealt with pregnancies, children, servants and the problems of aging and distressed females²²⁴. The source of funding for charitable organisations was clearly described in the Treasurer`s Report of 1908 presented at the Annual General Meeting of the Birmingham Women`s Settlement, when stressing the need for an increase in subscriptions “which form the *mainstay* of such institutions as the Settlement”²²⁵. In addition Prochaska suggests that many philanthropic organisations depended upon bazaars and sales of work for annual funds²²⁶. Without the annual reports of the voluntary Maternal and Child Welfare Centres the sources of funding cannot be stated definitely, but it may be assumed that a mixture of subscriptions and local fundraising enabled the early centres to become established.

In response to the Notification of Births Extension Act of 1915 a sub- committee was appointed to oversee the work in Birmingham relating to infant welfare. The minutes of 12 November 1915 show that a small grant of £25 per annum was being paid to the Floodgate Street centre and to the Settlement Guild of Mothers by the City Council and in addition the services of a lady doctor were made available to the South Edgbaston School for Mothers on one afternoon a week by the Public Health Department. The sub-committee recommended that, in order to encourage such

²²⁴ Prochaska, *Women and Philanthropy*, p.30

²²⁵ Birmingham Women`s Settlement Annual Report (1908), p.29

²²⁶ Prochaska, *Women and Philanthropy*, p.47

effort, council grants equal to two thirds of their running costs should be made available to the voluntary centres, on condition that a medical officer and an adequate number of trained women workers should be based at each centre. In addition, the premises and equipment of each should be deemed satisfactory, to be ascertained by two lady members of the sub-committee who would visit and make a full report. It was estimated that each contribution from the council would be approximately £200, half of which, under the 1915 Act, would be reimbursed by the Local Government Board. By March of the following year, four of the voluntary centres, Floodgate Street, the Settlement Guild, Stirchley, and Selly Oak School for Mothers, had notified their intention to apply for grants and the sub-committee considered it likely that South Edgbaston, together with two new centres at Greet and Handsworth, would also apply²²⁷.

The initiation of municipal grants to the voluntary agencies would suggest that the previous funding methods were no longer sufficient to support a service which was becoming increasingly professionalized. In late 1920, a letter from the Minister of Health referred to the 50 per cent grant made to institutions for maternity and child welfare maintained by voluntary agencies, indicating that either the running costs of centres increased in the intervening five years whilst grants had remained fixed, or that grants had been reduced by sixteen per cent at some point. The Minister noted that, owing to the reduction in voluntary subscriptions, a general rise in prices and the development of their range of activities, many voluntary agencies involved in maternal and child welfare work were facing serious financial difficulties, and some

²²⁷ Birmingham Notification of Births Act Sub-Committee minutes. (10 March 1916)

were facing closure. Concerned that the alternative was for local authorities to take over the centres, together with full financial responsibility, the Minister urged councils to consider providing further financial assistance, with the caveat that any proposal would need to be sanctioned by the Ministry²²⁸.

Such recommendations would appear to have come too late for some Birmingham centres. In March 1921 the Report of Sub-committee to the Public Health Committee noted the receipt of letters from both the Greet and Selly Oak centres stating they were unable to continue financial responsibility for their work after 31 March 1921. It was proposed that the issue could be resolved by the centres continuing to manage their work until end of April during which time the city council would contact the Ministry requesting permission to take over full responsibility of both centres. This was in fact approved, and both centres taken over as municipal services, demonstrating the value placed upon the services provided, and of particular note occurring in a period of national recession and deflation following World War 1²²⁹.

Financial difficulties were also being experienced by the Guild of Mothers, which by this point was based at Aston Street, Gosta Green and appears to have become a stand alone organisation independent of the Women`s Settlement. It was reported to the sub-committee in July 1921 that two of the doctors who gave their services to the centre, Drs Furneaux Jordon and W P Fooks, had approached the chairman of the

²²⁸ Birmingham Health Sub-Committee minutes (11 March 1921)

²²⁹ In 1921 the Liberal Coalition Government were under considerable pressure to reduce taxes and public expenditure and a committee under Sir Eric Geddes recommended sweeping cuts in some social welfare and pension provision. M. Pugh, *State and Society. A Social and Political History of Britain since 1870* (London 2008) p. 199

sub committee regarding the financial difficulties of the Guild which, it was stated, was running at a deficit of about £60 per quarter, had an overdraft exceeding £100, together with a mortgage of £300. It was agreed that the city council, with approval of the Ministry should take over the lease, with the voluntary committee continuing to be responsible for the work of the centre.

Other difficulties may also have faced voluntary committees, as could be assumed from a brief item in the minutes of October 1917 which stated that the voluntary committee of the South Edgbaston Welfare Centre, Latimer Street was unable to continue, although no reason was given for this. The recommendation was made by the sub-committee that it should be taken over to be run together with the growing number of municipal centres by the Public Health Department²³⁰. Whatever the issues faced in this particular situation, it is reasonable to suppose that voluntary committees were not always able to maintain an active working group to carry out their role.

By 1930, of the twenty-eight centres referred to by the MOH, Dr Newsholme, in his annual report, twenty-seven were municipal centres, and, to the end of the period under consideration, reports refer to there being only one voluntary centre alongside the municipal provision. It is possible that the last voluntary centre in the city was that at Hall Green, referred to as a `Weighing Centre` in the 1928 report, although it is not referred to by name.

²³⁰ Birmingham Health Sub-Committee minutes (12 October 1917)

Impact of intervention

It can be seen that the voluntary sector made a major contribution to the development of maternity and child welfare centres, being responsible for the first two established in the city, and in the first decade provided an equal number of centres as that established by the health department. Although the first voluntary centres were located in the central wards, the work of the remainder was focussed on the outer ring, thereby contributing to the view that social intervention was not only for the poorest section of the community²³¹.

To what extent did the work of the Schools for Mothers contribute to the decline of infant mortality in Birmingham? Again, no formal evaluation appears to have been undertaken of the work of the voluntary establishments working on the School for Mothers model. However, there seems to have been a general acceptance that this was the method to address the issue of infant mortality, whether managed and funded on a voluntary or a municipal basis. On a national level, the Minister of Health attached great importance to their work and stated that, if they were to close, their work would need to be taken on by institutions totally financed by the local authorities²³².

²³¹ Appendix 5. Only one voluntary Maternity and Child Welfare Centre was established in the central wards after 1909. This was created when the work of the Guild of Mothers became independent of the Birmingham Women's Settlement, founding the Aston Street centre in 1920. No voluntary centres were established in the middle ring.

²³² Birmingham Maternity and Child Welfare Sub-Committee minutes, Letter from Ministry of Health (12 November 1920)

On a local level, the financial support which became available, while partially reimbursed by the Local Government Board, would indicate there was approval and agreement with the level of work being carried out. The initial grants of £25 per annum may be seen as tokenistic, but by 1915 the Settlement was reporting the receipt of a grant from the Board of Education which enabled the appointment of an assistant superintendent for the Guild of Mothers²³³. In the following year they were able to report that, after an enquiry into the work of the Guild, the Health Department had agreed a grant of two thirds of the expenses, on condition that better premises were obtained²³⁴. No other condition appears to have been imposed, suggesting overall approval of the work.

A key aspect of the School for Mothers model was the provision of weekly consultations with a qualified medical practitioner. Although the details of the working relationships are not specified, the Guild listed three honorary medical advisors in its 1912 report, Dr W Pemberton Fooks, Mr J Furneaux Jordan and Mr AW Nutall, from which it may be concluded that they took no financial remuneration for their involvement²³⁵. As it would seem that such men would be careful of their reputation in the city, this would indicate that these professionals had a positive opinion of the work undertaken.

²³³ Birmingham Women`s Settlement Annual Report (1915) p.32

²³⁴ Birmingham Women`s Settlement Annual Report (1916) p.35

²³⁵ Birmingham Women`s Settlement Annual Report (1912) p.32

Perhaps one of the most important messages of the Schools for Mothers, as stated by Miss Matheson, was the encouragement of breast feeding²³⁶. Unfortunately, in the brief documentation now available regarding the work of this model in Birmingham, no reference was made to the numbers of mothers who breast fed their infants or how long this was sustained, and it can only be presumed that this was encouraged by both the visitors and the doctors at consultations when giving advice regarding the feeding of infants.

The IMR of the city as a whole had already started to decline before the first School for Mothers was established, which indicates that other factors were having an impact on infant deaths. It was not until 1919 that the IMR for the St Mary`s ward, the location of the Settlement Guild for Mothers, underwent a significant alteration, although such change may be seen to have started in St Bartholomew`s ward by 1916. By 1913, in addition to the voluntary provision, municipal Maternal and Child Welfare Centres had been established in each of the remaining central wards, thus preventing a comparison being made with a similar ward without such a service in order to assess the impact of the model.

It can be considered that the establishment of the School for Mothers model by the voluntary sector introduced to the city a service offering local, free, weekly consultations with a qualified doctor for infants, children, and later their mothers. It encouraged the professional approach to the care and welfare of infants, which had

²³⁶ *Women Workers*, 3 (1908) p.83

previously been totally home, family and close community based. The situation was succinctly summarised by Miss Matheson when she ended her article by saying:

“The state has legislated; volunteers have evolved new methods and made experiments.”²³⁷

Although the establishment of the first welfare centres may be attributed to the voluntary sector, this model of intervention depended upon mothers making a positive effort to access the service offered. It was the development of a city-wide health visiting service which took advice and education directly into homes and it is this model of intervention which will next be assessed.

²³⁷ *Women Workers*, 3 (1908) p.84. It is assumed that Miss Matheson was referring to the Notification of Births Act 1907, which was adopted by Birmingham later in 1908.

CHAPTER 6: THE DEVELOPMENT OF MUNICIPAL INTERVENTION

‘In this new departure of carrying sanitation into the home I believe we have not only an important but almost the only means of improving the health of the people’.

Professor Bostock Hill. 1903²³⁸

When considering the role of the local authority in the reduction of infant mortality, there are several different approaches to be assessed. Although direct intervention was not perceived to be the role of the Health Department for much of Hill’s time as MOH, the work initiated by the department to raise the standard of public health had been expected to impact on the well being of the whole population, including that of infants. Later a more focussed approach to improving the standards of health, particularly amongst the poorer sections of the community, came about with the development and distribution of informative literature. However it was the introduction of a health visiting service, and its later expansion into welfare clinics, which created a major change in council responsibility, with a clear aim of reducing the level of infant mortality in the city. In this chapter consideration will be given to the models of municipal intervention employed in Birmingham and an assessment made as to how effective they were.

Early methods of intervention

Despite the fact that the statistics relating to infant mortality were provided to the council in both quarterly and annual reports, Birmingham followed a minimal interventionist approach to the issue throughout the first twenty-five years in which a

²³⁸ B.Hill, Warwickshire MOH Annual Report (1903), in Newman, *Infant Mortality*, p.263

MOH was in post in the city. As the council appears to have been concerned regarding the high level of infant mortality, it raises the question: why was no action taken over the last quarter of the nineteenth century? It is possible the answer lays in the 1888 MOH annual report. Hill described the city at the time of his appointment in 1873 as having very few paved streets, many lacked sewers, with courts and yards which were generally dirty and unpaved²³⁹. The system of privy accommodation was almost universally that of middens which Hill said were often of immense size. Where there were sewers, the soil pipes of closets, yard drains and sinks were almost without exception in simple direct connection with sewers, being untrapped, or with an imperfect trap, and domestic water supplies were in the majority of cases obtained from unsafe shallow wells. There was no provision for isolating cases of infectious diseases, and the voluntary notification of diseases by the medical profession was hardly ever carried out. The inference of this account is that Hill, by reminding his audience of the circumstances found in the city prior to his appointment as MOH, was justifying his work over the subsequent fifteen years. Changes in all these areas had been undertaken during Hill's period of office, with the expectation of improving the health and reducing the general mortality rate of the population of Birmingham. However, in 1901 the MOH himself described many of the houses as old, dark and dirty, and in 1905 Nettlefold considered that in order to improve the living conditions of many of the city's population, houses needed to be made dry, and capable of being kept dry, ash bins provided for dry refuse, and the 'filthy' pan system removed²⁴⁰. These remarks would suggest that, whereas some improvements had occurred, they were not universal and had not gone far enough.

²³⁹ Birmingham MOH Annual Report (1888) p.10

²⁴⁰ J.S.Nettlefold, *A Housing Policy* (Birmingham, 1905)

In his 1904 report on infant mortality Robertson referred to the general sanitary work which had been undertaken in the city, which while having succeeded in reducing the general death rate, he was surprised to find that all efforts had resulted in practically no reduction in IMR²⁴¹. While Robertson may have been stressing the lack of change in IMR without overtly criticising his predecessor, from his experience in Sheffield, where he had held the post of MOH from 1897 to 1903, and where the IMR maintained a similar level to that of Birmingham, it would appear that he was in fact genuinely surprised that the improvements in the sanitation of Birmingham had failed to reduce the IMR²⁴².

However, as had been stated in a discussion regarding the rate of infant mortality at a council meeting in 1892:

“It was true modern sanitation had lengthened the lives of survivors but hitherto it had seemed to make no impression whatever on the rate at which young children died”²⁴³.

Although the report of the council meeting made no criticism of the achievements of the health lectures carried out by the LAUW, a new method of intervention was proposed in the form of the provision of leaflets, written information, and notices to be posted in courts. Mr Osler, while considering that ignorance was gradually being reduced, suggested that the Health Committee “should put out such publications as would force their way into the minds of the community and especially of the more

²⁴¹ J. Robertson, *Special Report of the medical officer of health of the city of Birmingham* (Birmingham. 1904), pp 16-20

²⁴² Galley, ‘Social intervention’, p.38

²⁴³ *Birmingham Daily Post*, issue 10513 (2 March 1892)

ignorant part of it.” However he did stress that this would not be achieved by “three-syllabled handbills”²⁴⁴. This would indicate a change in approach by the council, from supporting the work of a voluntary organisation, to undertaking the responsibility for direct intervention themselves for the first time, a method which was used over much of the remainder of the period of this study.

In a description of the duties of the first health visitors in 1899, they were required to explain leaflets issued by the health department, which were described as “at present little read and less acted upon”. In 1900 the hand bills were listed as concerning the management of house and yard, feeding of infants, precautions to be taken against measles, diarrhoea, typhoid and consumption, all issues current at the time. In addition, when describing the methods being used to address infant mortality, Robertson referred to leaflets being issued to encourage mothers to breast feed²⁴⁵. The quantity of information made available was shown in 1906, when high temperatures and reduced rainfall in the third quarter of the year lead the Health Department to expect a major outbreak of diarrhoea. As part of the work of the health visitors, 10,000 posters were displayed in courts and 50,000 copies of cards with advice to mothers were distributed. Although diarrhoea was given as the cause of 667 infant deaths that year, an IMR of 28, the MOH report described this as “less than several previous years”, suggesting that the health department responded to the threat of a specific crisis and that increased awareness had some impact on the issue. This method of distributing information to mothers was again referred to in 1914, when leaflets were distributed at the beginning of the hot weather, resulting in

²⁴⁴ Ibid.

²⁴⁵ Robertson, *Special Report*, pp16-20

an IMR for diarrhoea of 18. However, the literacy levels of those for whom the information was intended may have prevented the full benefit of this method of intervention being achieved.

The 1908 MOH Report, describing how the education of mothers was being addressed by various organisations, stated in that year midwives had distributed 10,000 copies of an information booklet to mothers after their confinement. This, Robertson considered, was "being done as well as can be expected", the issue being that some of the women could not read the booklet, although it is not clear as to whether this only referred to the mothers, or included the midwives themselves. No examples of these early leaflets and hand bills have been traced, although a booklet dated 1928 entitled "To the expectant mother", containing a range of information including breast feeding, the care of a young baby and hints on washing together with a list of the Maternal and Child Welfare centres in the city, shows that this method of providing information was considered to be effective and continued over a long period²⁴⁶.

A model of intervention known as the `goutte de lait`, or Infants` Milk Depot, from which infants who could not be breast fed were fed on sterilised milk under medical supervision, was established in Fecamp in 1894 by Dr Leon Dufour. Unlike the French depots which were mostly provided by voluntary organisations, the first of these was opened in England in St Helens in 1899 with approximately twelve other local authorities, including Liverpool, Brighton and Finsbury, following suit, although

²⁴⁶ National Association of Maternity and Child Welfare Centres. *To the Expectant Mother*. 1928

Newman considered that these municipal depots were more expensive to run than the original model²⁴⁷. In considering the issues relating to infant mortality in his 1904 report, Robertson noted that the provision of a supply of clean milk had been suggested. However, he felt that the full benefit of this could not be achieved if the `general dirtiness` was not addressed. Nettlefold also dismissed the suggestion, considering that infants would suffer an equal amount of harm from sucking dirty fingers, toys and clothes²⁴⁸. No further discussion on this matter appears to have taken place and no Infant Milk Depot was established in Birmingham, possibly because the city was already committed to the health visiting model of intervention by this time. Despite success in France, milk depots were not readily accepted in England and in 1913 Janet Lane-Clayton stated "The star of the milk depot... is now waning"²⁴⁹.

Home Visiting

Charitable visiting to relieve the needy poor, which played an increasingly important part in the nation`s health and well-being, particularly in the rapidly expanding cities, had been long established in England²⁵⁰. The earliest organised health visiting scheme, originally staffed by volunteers, was set up by the Ladies` Sanitary Reform Society in Manchester and Salford in 1862. Failing to achieve the desired improvements in IMR by handing out leaflets and giving health lectures, the association hired a `respectable working woman` to visit the poorer classes in their

²⁴⁷ Newman, *Infant Mortality*, p.288

²⁴⁸ Nettlefold, *A Housing Policy*, p

²⁴⁹ Dwork, `The milk option`, p. 67. Janet Lane-Clayton was Lecturer on Hygiene at King`s College for Women, University of London.

²⁵⁰ Prochaska, *Women and Philanthropy*, pp.101 - 2

homes 'to teach and help them as opportunity offered'²⁵¹. In 1890, by which time eleven visitors were employed, the supervision of these staff and the directing of their work was taken over by Manchester Corporation. A similar model of health visiting was implemented by Buckinghamshire (1892) and Worcestershire (1897) with Birmingham following suit in 1899.

In response to a request by the Health Committee of the City Council in May 1893, Hill produced a special report on infant mortality in Birmingham²⁵². The report concluded that the IMR was due to personal circumstances, rather than being influenced by the external sanitary conditions, for which the Public Health Department of the council had responsibility. As in 1877, Hill again suggested that the perceived cause of infant deaths, the ignorance of mothers as to the care and feeding of infants, could be addressed by their being visited by ladies giving simple advice and practical instruction but this was not seen to be a responsibility of the council and no action was taken. In 1899 four Health Visitors were appointed in the city, which raises the question: what had caused a complete reversal of views on this matter by the city council?

As has been shown, despite improvements in sanitation and water supplies, together with the continued efforts of the LAUW, the IMR for Birmingham in the 1890s was considerably higher than that experienced in previous years, and in 1897 reached the highest point recorded since Hill's appointment in 1873. Although the issue of infant

²⁵¹ Dwork, *War is good for babies*, p.125

²⁵² *Birmingham Daily Post*, issue 10903 (31 May 1893)

mortality in the city `had long occupied the thoughts of the Birmingham Health Committee`, no further action appears to have been taken until October 1898 when the Sanitary Committee of the LAUW sent a resolution to the Council, asking them to consider an abstract of a paper on the `better protection of infant life` which had been presented at a recently held `Conference of Ladies on Domestic Hygiene`²⁵³.

Describing the work of Miss Ashwell, an officer of the Infant Life Protection Society working in Chesterfield, this paper, in the opinion of the LAUW, suggested the introduction of health visitors would provide the best solution to the problem of infant mortality in Birmingham, and that this should be the priority of the council.

Hill, asked to look into the work being carried out in Chesterfield, together with similar projects being undertaken in Manchester, Glasgow and Liverpool, provided a detailed report to the sub committee in December 1898, and by January 1899 the Health Committee made a proposal to the Council that four women officers should be appointed²⁵⁴. The Committee minutes provide no detail of any discussion of this subject, but the long working relationship between the LAUW and the Health Committee, together with the personal links between councillors and the members of the LAUW, suggest that the recommendation of the LAUW carried considerable weight in the matter.

In the early years there appeared to be some merging of roles and a lack of clarity as to the definition of the title of Health Visitor, some of which related to training and the

²⁵³ Birmingham Health Sub-Committee Minutes (21 October 1898)

²⁵⁴ *Ibid.*, (9 December 1898)

educational requirements of women appointed to these positions. This was illustrated by Miss C.Cochrane in an article published in 1908 where she explained that although the work of a woman health visitor was more or less similar to that of the sanitary inspector, it was not the same. She went on to say that “There are sanitary inspectors who are also health visitors, health visitors who assist in the supervision of midwives and inspectors of midwives who devote a large amount of time health visiting”²⁵⁵. The difference between the roles of sanitary inspector and health visitor was summed up in a letter written to the *British Medical Journal* which stated that “one inspects... the other is a qualified nurse, the health visitor`s position is one of a friendly visitor not an inquisitorial official”²⁵⁶. This confusion over both title and role is likely to have arisen as, until 1908 when London County Council sponsored a bill to legalize the position, local councils had no statutory authority to appoint health visitors²⁵⁷. Initially the Birmingham Health Committee minutes referred to the role as `women sanitary officers`, but by 10 February 1899 when the advertisement was approved by the committee, the position was referred to as that of health visitor²⁵⁸. However, those undertaking a more specific role, working with mothers and children under the age of one year, were later referred to as `infant visitors`, whereas the work of health visitors, while including dealing with infants, also involved work regarding the cleanliness of houses, as well as dealing with childhood illnesses such as measles, whooping cough, ringworm and scabies²⁵⁹.

²⁵⁵ C. Cochrane, `Women Health Visitors`, *Journal of the Royal Society for the Promotion of Health*, 29 (1908) p.549

²⁵⁶ W. Warner, *British Medical Journal* (22 April 1911) p. 958

²⁵⁷ G. Rosen. *History of Public Health* (New York, 1958), p.353

²⁵⁸ Birmingham Health Sub-Committee Minutes (24 January 1899) and (10 February 1899)

²⁵⁹ Birmingham Maternity and Child Welfare Sub-Committee Minutes (9 June 1922)

Rosen suggests that nationally there was little uniformity in the qualifications required of early health visitors, with some coming from the same social class as those among whom they worked, whereas others were `ladies` with, or without, some special training²⁶⁰. Some health visitors were women doctors, others nurses or midwives, and in due course experience showed that higher education was desirable to fulfil the role. In Birmingham eighty-seven applications were received in response to the first advertisement for health visitors placed by the Health Committee in 1899, eleven short listed and four were appointed²⁶¹. Although the criteria by which the applicants were judged are not available, it would seem reasonable to assume that, from such a large number of applicants, it was possible to select four with all the desired attributes. The advertisement did not specify any particular requirements, although applicants were asked to give full particulars of qualifications and experience, except that they were not to exceed 35 years of age.

Of those appointed, while two came from the local area and one from within the county, one was from London and an unsuccessful candidate from Edinburgh, suggesting that the council were able to select the best qualified from a broad spectrum of applicants. Three of the appointees were at the upper age limited specified, with the age of the fourth given as 21 years, and of the four ladies, three were unmarried²⁶². The social acceptability and interest in work with mothers and infants would seem to have continued. In 1916, 140 applicants were received for six positions of infant welfare workers, although in the same year the minutes show that

²⁶⁰ Rosen, *History of Public Health*, p.353

²⁶¹ Birmingham Health Sub-Committee Minutes (10 February 1899)

²⁶² Birmingham Health Sub-Committee Minutes (15 March 1899) and Health Committee Minutes (28 March 1899)

much difficulty was being experienced in recruiting voluntary workers, indicating that, by this time, more women were looking for paid employment.

The number of health visitors working in the city increased considerably over the period up to 1938, but in addition to the recruitment necessary to address the expansion of the service, there appears to have been regular need to re-place those who left, either to marry, to take up a new position or due to health issues, and in 1920 the MOH Report stated that between twelve and sixteen health visitors were needed per year to fill vacancies²⁶³. Attracting the `right class` of more professional workers also appears to have presented problems, and by 1925 a Ministry of Health circular laid down that health visitors must be trained nurses, holding a Midwives Certificate and have had six months training in public health work, or have undertaken a two-year health visitor training, approved by the Board of Education, together with six months hospital experience²⁶⁴.

In order to address the issue of training in 1925 the Health Committee approached Birmingham University to deliver a course of lectures for prospective health visitors and although this took some time to become established, by 1928 the Health committee together with the university had inaugurated a training course for nurses wanting to obtain a Health Visitor`s Certificate. With the permission of the Ministry of Health it was decided to appoint twelve pupil health visitors annually on half salary, six months to be spent on the course and six months on work placement, following

²⁶³ Ibid., (13 March 1925)

²⁶⁴ Maternity and Child Welfare Sub-Committee Minute Book 4. Ministry of Health circular 557 (9 February 1925)

which permanent posts would be offered²⁶⁵. Although there is no assessment of this training method available, it may be assumed that it contributed to maintaining a full team of health visitors in Birmingham for the remainder of the period.

The outline of the work of the first health visitors appointed in Birmingham was drawn from the information Hill obtained from Manchester and Salford, Glasgow, Chesterfield, and Liverpool. Health visitors were required to visit all houses where a birth had occurred within their specific districts, making repeat visits where necessary, enquiring into the circumstances of all infant deaths and reporting any cases of cruelty. Health visitors were to distribute or sell cleaning materials and disinfectant powder supplied by the health department, and to loan maternity bags, sheets, pillowcases and other such necessities to the sick, help in home nursing and to report all nuisances²⁶⁶. The MOH 1900 report explains the duties of the health visitors in Birmingham as 'primarily to show people how to make the best of the existing conditions of their homes', noting lack of ventilation, want of cleanliness as well as failure to empty bedroom slops. Hand bills were distributed in the course of visiting, together with a verbal explanation on topics relating to the management of house and yard, precautions to be taken against measles, diarrhoea, typhoid and consumption as well as the feeding of infants. However, by 1902 a much more detailed summary of the role included the instruction 'Infants are to be suitably fed, best of all at mother's breast', although where hand feeding was being undertaken

²⁶⁵ Birmingham MOH Annual Report (1928), p.110

²⁶⁶ Birmingham Health Sub-Committee Minutes (9 December 1898)

they were required to give special attention as to the quality of the milk and the cleanliness of the bottles, suggesting the role was becoming more focussed²⁶⁷.

A summary of the work of the first health visitors in Birmingham shows their visiting was initially concerned with the streets of poorest housing, defined as those where the largest proportion of houses were let at about 3s 6d per week, in which unhealthy conditions were most common and the death rates were high²⁶⁸. As early as 1900 the MOH reported that the work done by the health visitors in the city was exciting a considerable amount of interest from MOHs in other parts of the country, enquiring as to the manner of the work and their level of success²⁶⁹. However, no evaluation of the work appears to have been undertaken, and as by this time only four health visitors had been working in the city for a few months it would seem likely that this response was as a result of more informal reporting. An increase in staff in 1901, and again in 1902, enabled the city to be divided into twelve districts, each containing approximately 3000 homes of three rooms or less, to be visited by each health visitor. This addressed the MOH's concerns regarding such areas as Winson Green, Saltley and Small Heath, which he considered to be in as much need as the older areas of the city. In the early years this model of intervention, still working on the assumption that the numerous causes of infant deaths were mainly as a result of the ignorance and carelessness of parents, can be seen to have targeted the areas of greatest deprivation, suggesting that it was considered that those higher on the

²⁶⁷ Birmingham MOH Annual Report (1902), p.35

²⁶⁸ Birmingham MOH Annual Report (1900), p.28

²⁶⁹ Ibid.

social scale had a superior knowledge of the care and welfare of infants²⁷⁰.

However, within these given limitations, by 1902 Birmingham could be said to have a city wide, although not universal, health visiting service, in that the poorest residents across the city had some contact with a health visitor.

Unlike the practice in Huddersfield where the work of the `lady superintendent` was supported by a group of `lady helpers`, the health visitors in Birmingham undertook home visiting without any voluntary assistance²⁷¹. Marland suggests that home visiting could only realize its full potential if the visitor was able to devote sufficient time to each case and to re-visit families if necessary. What was perceived as sufficient time for each visit is unclear and in practice appears to have varied considerably. Whereas in Hull eleven visitors were `struggling` to visit between 500 and 1000 infants a year, in Huddersfield in 1907 each visitor was seeing fifteen babies, making 60 visits per year²⁷². However, in Warner`s letter to the *British Medical Journal* in 1911 she states that, as each baby required at least two visits, if these were to be profitable each visitor should not attempt to cope with more than 1,000 infants thus limiting the number of visits to 2,000 to 3,000 visits per year²⁷³.

A total of 17,832 primary visits were reported as having been made in the first year of the service in Birmingham, requiring each worker to make approximately 100 visits per week, a number which far exceeded Warner`s recommendation, and which

²⁷⁰ Birmingham MOH Annual Report (1907) p.16

²⁷¹ Marland, `A pioneer in infant welfare`, p 39

²⁷³ Warner, *British Medical Journal*. (22 April 1911), p.968

inevitably must have been extremely brief. In the first few years of the service, where statistics are available, it can be seen that the number of primary visits by health visitors to children exceeded the number of births by a considerable margin, with those made in 1906 being almost double, showing that considerable proportion of the work involved visiting those over the age of one year, possibly in response to specific health issues²⁷⁴. However, it would appear that the number of visits made by each health visitor was approximately 2,000 per annum, a figure which Warner later considered to enable an effective service to be delivered. Although the number of health visitors was not given each year, by 1914 the total was given as 31, although, with the development of welfare centres, the role of the health visitor was not totally focussed on home visiting, preventing any accurate assessment on the amount of time spent on individual visits being made in later years.

In addition to explaining the handbills, and encouraging breast feeding, it could be presumed that the health visitors in the city gave mothers similar advice to that by their counterparts in Huddersfield: not to use soothing syrups or powders, not to use a long tube feeding bottle, never to give a baby skimmed milk, and to send for a doctor if the baby was ill²⁷⁵. In the early months of their employment, the chairman of the Birmingham Health Committee found it necessary to impress on the new health visitors the necessity of refraining from making any gifts to the families they visited,

²⁷⁴ Appendix 4.
²⁷⁵ Marland p.40

although he reported that he believed the health visitors were `working in the right direction`²⁷⁶.

Following the Notification of Births Act of 1907, which was adopted in the city in 1908, and at a time when recruitment was needed to fill vacancies in the number of health visitors, the Health Committee initiated an experiment based on the health visiting model of intervention. By appointing a lady doctor together with two health visitors to work more intensively in St Stephen's and St Georges, two of the wards with the highest IMR, an assessment was made as to whether skilled and frequent visiting would impact on the mortality figures. Dr Jessie Duncan made an initial home visit at the end of the first week following a birth, and thereafter weekly visits were made by the health visitors, being gradually reduced to monthly until the end of the first year of the life of the child. Visits made so early provided the opportunity to encourage mothers to breast feed their infants, but if a child was being hand fed instructions were given as to the preparation and administering of the feed, printed information was provided to support the information given and where necessary demonstrations as to preparation were also given. Where a child was seen to be failing to thrive, or particular concerns were raised, the doctor undertook the regular visits herself.

The regularity of visits allowed the health professional to observe difficulties sufficiently early to respond to issues and to enable changes to be made. Dr Duncan reported that where breast fed infants were not thriving it was often found they were

²⁷⁶ Birmingham Health Committee Minutes 13 June 1899

being given irregular feeds but, with advice and encouragement, it was felt that the fault could be corrected and the health of the infant often improved, and in 1909 a system of regular weighing of infants was developed, encouraging mothers to refrain from supplementing breast feeding²⁷⁷. Duncan`s report showed that this more intensive model enabled health visitors to address established methods of infant care such as the `devotion` of mothers to the unhygienic long tube bottles, rather than the boat shaped type which required the trouble of superintending infant feeds. The practice of the constant use of comforters was also prevalent; usually dirty and a common cause of digestive troubles, the report notes out of 49 fatal cases of diarrhoea there were only three where no comforter was used.

The on-going contact between health workers and parents also provided the opportunity to gather information regarding the care of living infants, the circumstances of the family, and details regarding infant deaths. These could probably be considered to be more accurate than those collected by unknown officials as part of Hill's enquiry of 1892, and which had occurred some months after an infant death. From the information gathered by health visitors Duncan concluded that, contrary to widespread belief, the undertaking of factory work by mothers was not injurious to children and she recognised the importance of the additional income for the household. Noting that the IMR was greater in houses where the rent was less than 5s per week she suggested that it was poverty which had a marked influence on the life of an infant. While she acknowledged that it was not easy to determine the causes of infant mortality, from personal observation Duncan also

²⁷⁷ Report of Dr J Duncan presented in the Birmingham MOH Annual Report 1910

considered that ignorance was the greater factor and that the remedy for this was education of the mother. Although women were not always ready to change their ways, she felt that, after the time she had worked in the wards, the women were more willing to be taught. In addition she suggested that as a child born to an underfed mother in poor health had less chance of survival, it was important to provide care for mothers in pregnancy.

The impact of the work undertaken in the St George's and St Stephen's wards was assessed by Robertson following the very hot summer of 1911, when the IMR of the whole city increased by 13 per cent. In St George's the rate was 22 per cent above, and that of St Stephen's one per cent below, the preceding five year average, which could be favourably compared with St Paul's (+36 per cent), Ladywood (+ 42 per cent) and St Mary's (+ 46 per cent)²⁷⁸. This showed a marked change in the pattern of IMR previously experienced in the two wards and would suggest that, within the limits of the available resources, many mothers had changed their child care practices.

Galley stated that Duncan was moved from St George's and St Stephen's to undertake more general infant health work throughout the city, suggesting the 'slow results' were a 'set back', inferring a perceived failure of her work in the two wards²⁷⁹. Contrary to this view, the evidence suggests that Duncan's work, in a particularly challenging area, was in fact a success, and Robertson stated "I feel that

²⁷⁸ Birmingham MOH Annual Report (1911) p.16

²⁷⁹ Galley, 'Health visitors', p.73

by limiting Dr. Duncan to the present area we are not getting the maximum of good from her services”²⁸⁰. The MOH explained that the model trialled in the two wards was to be broadened into three additional areas, Deritend, Nechells and part of Ladywood, where the health visitors were felt to be overburdened. Duncan, together with those health visitors in post, plus three additional visitors, to take cases where infants were failing in health due to defective feeding and management, were to expand the scheme, at a cost of £320 for the first year²⁸¹. In each of the proposed areas, Duncan was to make home visits on one morning per week, and to provide a consultation service for mothers and their infants in an afternoon. This would indicate that in fact the more intensive home visiting, together with doctor`s consultations were seen to be a positive approach to the IMR of the city.

The decision to develop the health visiting service was taken by the health committee and the city council. However the model required the co-operation of the families as the recipients of the information and advice in order that it should function to its maximum potential and contribute to a decline in the infant mortality experienced in Birmingham. Robertson believed that customs and methods of feeding and rearing infants were handed down from mother to daughter, and felt that the older generation had a powerful influence²⁸². This raises the question: did the families value the work and advice of the health visitors? Lewis suggests that home visits were often

²⁸⁰ Letter from Robertson to the Public Health and Housing Committees appended to the Report on Infant Mortality in the St George`s and St. Stephen`s Wards. p.4 in Birmingham MOH Annual Report (1911)

²⁸¹ Ibid.

²⁸² Robertson, *Special Report*, p.6

resented and that mothers found the scrutiny of official visitors unwelcome²⁸³. She considers that the advice health visitors provided was often impractical and unrealistic, with their intrusion being seen by mothers as undermining their domestic authority. While aiming to improve the mother craft of the poorest sections of the community, the pioneering work of health visitors did not take into account the real concerns and difficulties experienced by the slum dwellers they sought to assist. However, Dale and Mills consider that while some health visitors might have been officious, creating tensions with the families they visited, others were welcomed as sources of potentially useful advice, material aid and mediation in neighbourhood disputes and landlord tenant issues²⁸⁴. These varying views of health visiting would suggest that mothers` experiences also varied, possibly depending on the manner, sensitivity and experience of individual health visitors.

To what extent the role of health visitors was seen by mothers as one providing information and friendly support, rather than a judgemental inspection cannot be determined, but the perception of the recipients may have impacted upon the efficacy of the service. The voice of the families is rarely heard, and when relayed through official documents, suggest that, although they may initially have been wary of officialdom, mothers fairly quickly came to co-operate with the professionals. Duncan noted that mothers were grateful for suggestions and advice, always being ready to admit their previous ignorance²⁸⁵. The impression that there was a gradual acceptance of the service was given in her report of 1912 where she commented that

²⁸³ J. Lewis, *Labour and Love: Women`s experience of home and family*. (Oxford,1986) pp 109 - 115

²⁸⁴ P. Dale and C. Mills, `Revealing and concealing personal and social problems`, *Family and Community History*, 10 (2007), p.113

²⁸⁵ Birmingham MOH Annual Report (1908) p.23

“Women in this district are proving more willing to be taught and it is now easier to get rid of the long tube bottles”²⁸⁶. This increased acceptance of professional advice and acceleration of progress may be considered to be the impact of the early health visiting service, preparing the way for the development of the welfare clinics.

Although the initial work of the health visitors was focussed on the poorest areas of the city, by 1921 the statistics suggest that the majority of infants born in the city received at least one home visit from a health visitor, indicating that this had become a universal, non stigmatizing service, which mothers would have come consider the norm. By establishing this method of intervention, the Health Department had created a process by which an early assessment of the well being of an infant could be made by a qualified professional, and which provided the opportunity to explain written literature supplied to mothers. Home visiting also provided learning opportunities for the professionals, enabling them to gather data and information relevant to infant mortality, such as levels of breast feeding, poverty and working mothers.

The statistical evidence offered by Robertson regarding St Stephen`s and St George`s in 1912, would appear to suggest that the work of the health visitor contributed to a reduced IMR. However, some years later the MOH report, in considering neo-natal mortality, suggested that deaths at this stage were not being seriously reduced even by intensive visiting, and that the factors which may be considered to have contributed to a reduction in infant mortality after the first month

²⁸⁶ Birmingham MOH Annual Report (1911) p.17

appeared to have little impact in the initial phase of life²⁸⁷. The report concluded that infant visiting could do little to reduce these early deaths as the primary visit was paid approximately two weeks after the birth, and a study of 565 infant deaths showed that only 94 of these would, in fact, have been visited²⁸⁸. Thus, by introducing the health visiting model, other issues which needed to be addressed could be identified, and further models of intervention, such as welfare clinics and ante natal clinics developed.

²⁸⁷ Neo-natal mortality refers to those infant deaths which occurred within one month of birth

²⁸⁸ Birmingham MOH Annual Report (1927) p.82

CHAPTER 7: MUNICIPAL MATERNAL AND CHILD WELFARE CENTRES

“The middle-class mother is the worst off at present. There are no maternity centres for her though she is often quite as ignorant of mother craft as the industrial woman”.

Miss Halford.. Secretary.

Association of Infant Welfare and Maternity Centres. 1916²⁸⁹

The Infant Consultations in the St Stephen`s and St George`s wards of Birmingham, established in 1909 as part of the experimental work by Dr Jessie Duncan, followed a similar format as the model instigated by Budin in Paris, although initially Duncan had no ante natal contact with the mothers. All mothers were invited to the twice weekly consultations held in local rented accommodation, being encouraged to attend regularly with their infants, and were provided with a weight chart for their infant, a duplicate of which was retained by the doctor. Many mothers who thought breast feeding insufficient for their infant`s needs were encouraged by weighing to refrain from supplementing with bottle feeding in the very early stages of an infant`s life, thereby reducing the risk of infection. Duncan considered that attendance at consultations encouraged mothers to improve the cleanliness of both the children themselves and their clothes, and that mothers concentrated more on instructions they were given in this setting rather than at home when distracted by domestic duties. Duncan noted in her report that ‘many drunken women and mothers of illegitimate children’ had been persuaded to attend, and by the end of the first year

²⁸⁹ *The Times*, issue 41228 (25 July 1916) p.9

there had been 2,600 attendances, with plans being developed to establish classes for expectant mothers to advise on health and habits during pregnancy.

The object of consultations and the welfare centres was to make advice on all matters relating to the care of babies `continuously and systematically` available to all mothers and expectant mothers²⁹⁰. It was recognised that centres, with a staff of a lady doctor and trained nurses, open on one or more afternoons per week, needed to be readily accessible, and therefore the Public Health and Housing Committee recommended to the council that there should be a number of small centres in different parts of the city. Despite experiencing extreme difficulties in obtaining suitable premises, with the assistance of grants made by the government to both the city council and voluntary organisations, the number of welfare centres continued to grow and by 1920 they were to be found in most wards of the city. The locations of the centres identified from the MOH reports have been mapped to illustrate the spread of the centres across the city²⁹¹. In 1913 the management of the eight centres in the city had been divided equally between the local authority and the voluntary sector, but by 1920, of the twenty-one centres then established, only five were voluntary, and one of these, the Aston clinic, moved to municipal management in 1921. Eighty per cent of the approved expenditure of the voluntary centres was being met by the city council with 50 per cent of this funding coming from the Local Government Board. It can therefore be seen that in just over ten years from the experimental work in two wards the city, and national Government, gave a major commitment to the welfare of infants and children in Birmingham.

²⁹⁰ Birmingham Notification of Births Act Committee Minutes (14 January 1916)

²⁹¹ Appendix 5

Much statistical information is available regarding child welfare centres but variations in the figures collated from year to year, and lack of sufficient detail, can prevent extended use being made of the information. Tables of data for both municipal and voluntary welfare centres were presented in the MOH annual report for 1917. These show that, of the 17,706 live births in the city in that year, 10,078, or 57 per cent, were reported to municipal welfare centres, of which 99 per cent were visited by the health visitors. In the same year 81 per cent of those visited, a total of 8,050 'fresh' children, attended the same centres, although it is unlikely that all attendances were by children under the age of one year. As those included in the data given could have been older children who had not previously attended, statistical calculations regarding total attendance at welfare centres cannot be considered necessarily to relate directly to a decline in IMR. However, an impression of the number of infants attending welfare centres may be gained by figures presented in annual reports from 1931 to 1937, which show that between 74 and 81 per cent of attendances were children under one year. If an average of this is taken, it would seem reasonable to assume that of the 8,050 new attendances at municipal centres in 1917, 6,198, or approximately half of the 12,333 live births reported, attended the centres. Of the 48,413 child attendances at the municipal welfare centres in 1917, some may have been for weighing only, and others for consultation with medical practitioners; again this was not specified in the data, showing the limitation of this statistical evidence. However, for every primary visit made by health visitors, 4.9 visits were made by mothers with their children to the municipal welfare centres, a figure which was exceeded by the 8.9 attendances at voluntary welfare centres.

	Berkley Rd	Bloomsbury St	Farm St	Hope St	Landsdowne St	Latimer St	Lichfield St	St Vincent St	Shortheath Rd	Smith St	Stratford Rd	Washwood Heath Rd	Wright St	Total
Births reported	484	1009	1028	1143	619	394	1092	996	193	1032	957	865	266	10078
Primary visits to children	471	1013	1006	1023	620	377	1104	1075	195	1019	897	808	332	9940
Revisits to children	1697	6426	3529	8178	3413	4846	3884	9443	1702	9146	7734	3755	1375	65128
Total child visits	2168	7439	4535	9201	4033	5223	4988	10518	1897	10165	8631	4563	1707	75068
Primary antenatal visits	9	144	42	230	24	56	64	139	11	127	124	106	8	1084
Antenatal revisits	10	164	53	156	11	182	46	138	32	71	64	164	6	1097
Total antenatal	19	308	95	386	35	238	110	277	43	198	188	270	14	2181
Fresh children at centre	346	746	484	888	744	216	1103	852	325	793	886	452	215	8050
Total attendances	2201	4579	3122	5587	2604	1875	7672	4606	1489	4226	6294	3517	641	48413
Fresh mothers at consultations	23	131	128	177	13	47	122	206	17	177	67	55	5	1168
Total mothers attendances	31	224	189	307	42	107	347	407	65	351	175	108	11	2364
No.at Sewing classes	-	387	-	421	20	271	442	324	199	288	124	248	-	2724
No.at Cookery classes	-	-	-	40	-	-	-	12	-	187	-	198	-	437
No.at Health classes	-	125	-	1449	424	-	98	60	24	1468	721	842	46	5257

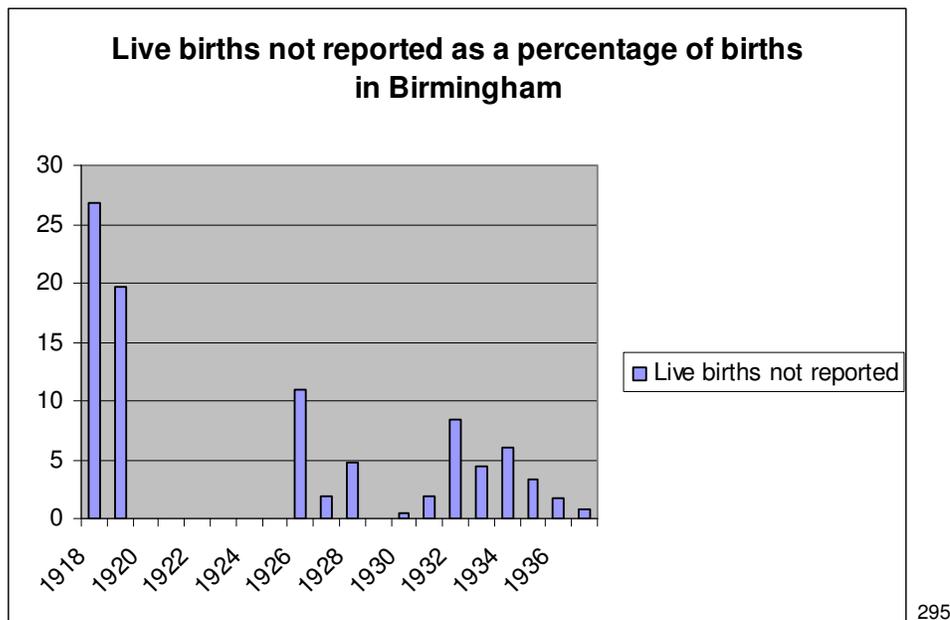
Table 9. **Work undertaken by municipal welfare centres** Birmingham MOH Annual Report 1918

Despite the limitations of the statistical evidence it may be seen that, even in the early years of welfare centres, mothers were availing themselves, and their infants, of the services provided, and that mothers were more likely to make their first visit to a welfare centre in the first year of the life of their child.

Figures have been collated from the MOH Annual reports for the period which show that, in the early days of the health visiting service, at a time prior to the instigation of welfare centres, the total of primary visits made to children were far in excess of the numbers of live births in the city, indicating that much of the work undertaken was with children beyond the first year²⁹². This data was not presented again until 1918, by which time twenty-one centres were established, when the number of primary visits made by health visitors following births were approximately the same as the number of births reported. This shows that the health visitors were fulfilling this major aspect of their role, and also that the majority of children were being seen by professionals in the first year of life. However, the data for 1918, 1919 and 1926 shows the number of births reported to the welfare centres for their attention as lower than that of live births in the city by 27 per cent, 20 per cent and 11 per cent respectively. This may be explained by a footnote in the 1928 report regarding the numbers of expectant mothers attending the welfare clinics, which states that 'the percentage of mothers attending the ante-natal clinics is based on the total births in the area and *of a social class suitable for attendance at a Welfare Centre and for home visiting*', suggesting that some assessment of the births reported was being

²⁹² Appendix 6

made prior to notification being given to the centres²⁹³. It is interesting that this class distinction was made over ten years after Robertson had highlighted in his 1916 report the need to educate all social classes of mothers with regard to infant welfare, saying “Nature does not endow any mother with the necessary information as to how to shield her infant from the dangers which surround it in a civilised community, among the rich and the poor the need of instruction is evident”²⁹⁴.



Graph 11

The number of live births not reported to welfare centres declined over the remaining period of the study, suggesting that there was a growing acceptance of infant welfare services as universal rather than targeted solely at the poorer sections of the community. The 1928 MOH report provided a list of the twenty-five welfare centres, the number of births in each area in 1924 to 1926, together with the percentage of those births attending the centres, which ranged from 15 per cent at Floodgate

²⁹³ Birmingham MOH Annual Report (1928), p.103 The italics are mine

²⁹⁴ Birmingham MOH Annual Report (1916) p.1

²⁹⁵ Calculated from figures included in appendix 4

Street, Deritend, to 53 per cent at the Harborne centre. A comparative list for those born in 1927 to 1928 showed a large increase, with 72 per cent attending at Floodgate Street, and 85 per cent at Harborne. From 1931 to 1937 new child attendees under one year were recorded annually and showed an attendance of 69 to 79 per cent of reported births. By the end of the 1930s the number of live births in the city was approximately the same as those reported to the welfare centres, and also as the number of primary visits made by health visitors, suggesting a gradual change in the class divisions in welfare services. This would indicate that, together with an increasing acceptance of health visitors, attendance at the child welfare centres with infants under a year old also became more acceptable.

The early infant consultation sessions were held in rented rooms, although finding suitable premises appears to have been difficult at times. However, following a research paper into infant mortality, on 6 October 1917 the Carnegie UK Trust made an offer of funding to four major cities, including Birmingham, to develop a purpose built infant welfare centre. The conditions of this offer were that the site should be provided by the local authority, with the plans and estimates drawn up by the authority being approved by the Carnegie trustees. In addition the local authority were required to maintain the centre, which was to be part of a comprehensive welfare plan for the city, by means of government grants, local rates and contributions, and for a certain period annual reports were to be provided²⁹⁶.

Following their acceptance of this offer, in 1918 the city council purchased a site in Hunters Road for the sum of £1,604 and appointed Mr Joseph Ball of Paradise Street

²⁹⁶ Birmingham MOH Annual Report (1923) p.43

as the architect. Delays were encountered due to legislation preventing the demolition of dwelling houses on the site, but on 13 October 1923 the completed premises were handed over to the city council by Lord Elgin of the Carnegie UK Trust and opened by Neville Chamberlain.

This was not the only assistance the city council received towards the provision of welfare centres in Birmingham. In 1925 Cadbury Brothers gave a plot of land in Charlotte Road, Stirchley, for the erection of a Maternal and Child Welfare Clinic, together with £8,000 the building from Walter Barrow, as the Hon Secretary of a private trust, to replace the building used in Bournville Lane²⁹⁷. A further anonymous donation in 1927, in the form of premises in Delamere Road, Hall Green, was offered, but considered unsuitable for the purpose and declined²⁹⁸.

The 1923 MOH report stated that the aim of the Carnegie centre was to 'look after all the babies and children up to five years who live in the area surrounding the institution', and by the end of 1924 the director, Dr Ethel Cassie, was able to report 199 infant consultations had been held, with a total attendance of 10,628, an average of 53 per session. Health talks continued to form part of the welfare provision, with two being given at each infant consultation to a reported 5,777 mothers, and special lectures being given to both mothers and fathers once a month, although it is noted that the number of fathers attending was small. The four health visitors, together with the two pupils who were attached to the centre, had made 3,007 visits to the 780

²⁹⁷ Birmingham Maternal and Child Welfare Committee Minute Book 4. (9 October 1925)

²⁹⁸ *Ibid.*, (23 November 1927)

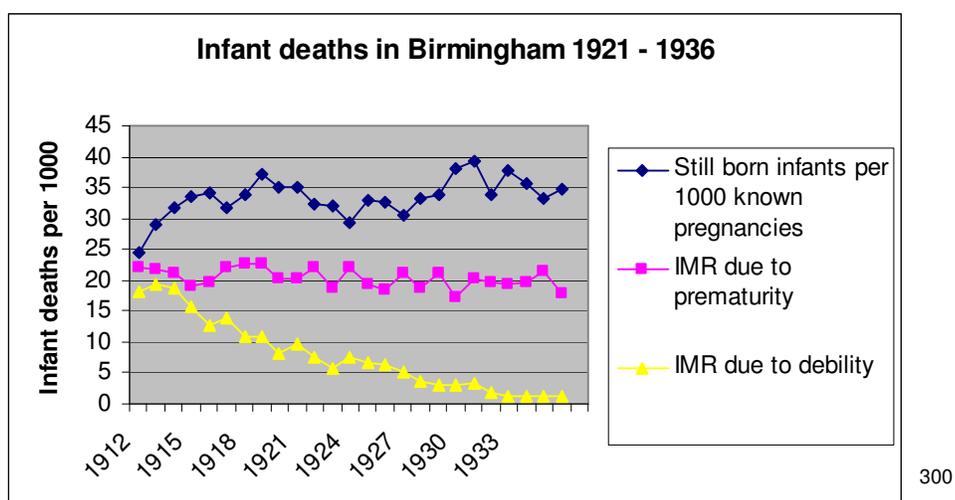
infants, an average of four per child, and 10,301 to the one to four year olds an average of three per child. Regular ante natal sessions, dental, radiology and breast feeding clinics were held at the centre as well as the supplementary activities such as sewing and cookery classes.

Although, of the twenty-five clinics in 1926, Hunters Road may be considered to have been the 'flag ship', some of the services provided there were replicated at other centres in the city²⁹⁹. However, while the greater proportion of the centres continued to provide sewing classes, this table includes only three mother craft classes and no health lectures. This educational element, originally identified as the method for reducing infant mortality, would appear to have been absorbed into a medical model of infant welfare, with health lectures being delivered as part of consultation sessions. Over the next decade, as the city expanded and new housing estates were developed, the number of child welfare clinics increased, with demand often causing them to be established in temporary accommodation in a local house or church hall before municipal centres could be built, until by the late 1930s there were thirty two such establishments across Birmingham.

In addition to services for infants and children, welfare centres gradually introduced ante natal consultations for mothers who needed advice in connection with their confinement. In 1921 the MOH reported that 824 sessions had been held and that 4,683 new cases had attended, approximately twenty per cent of those expectant mothers who delivered a live infant or had a still birth, and by 1926 this had increased

²⁹⁹ Birmingham MOH Annual Report (1926), Appendix

to 26 per cent. By 1938, 2889 ante natal sessions were held in the city providing a service for 11,968 new cases, or 68.5 per cent of total births. However, despite increasing attendance at ante natal sessions, the number of still births for 1912 to 1936, when considered per 1000 known pregnancies, continued to follow an upward trend. At the same time, some infant deaths which could be attributed to ante natal conditions remained roughly constant, as in the case of prematurity, while others followed a sharp decline, as in the case of debility. This would suggest that information and advice only made a partial contribution at the ante natal stage, and medical intervention and treatment may have had a greater impact.



Graph 12

Location of Welfare Centres

All the welfare centres established in Birmingham between 1907 and 1928 have been identified using the MOH annual reports, a total of forty-four, although the centre in Bloomsbury Road replaced that in Windsor St in 1916, and these will be

³⁰⁰ Statistical information collated from MOH reports 1921 - 1936

counted as one centre. It is possible that some other centres replaced earlier establishments which proved to be inadequate, but no information has been found to confirm this point. Fourteen of the forty-four centres were initially established by voluntary organisations, although over the period of this study all eventually became municipal centres. Using Allday's map of Greater Birmingham c1920 amended to incorporate the ward boundaries for 1911 – 1928 it has been possible to map the location of forty centres³⁰¹. Of these, thirteen were located in the central wards, five in the middle ring and twenty-two in the outer ring. The early focus, both municipal and voluntary, would appear to have been to develop centres in the areas presenting the highest IMR, and by the end of 1916 the health department had set up ten centres, only one, Washwood Heath Road in the middle ring, was outside the central wards. However three municipal centres were established the following year, two in the middle ring and one in Hey Mills, in the outer ring ward of Yardley. Of the sixteen centres developed by the health department between 1919 and 1928 three were located in the central area, two in the middle ring and the remaining eleven in the outer ring. Galley suggests that 'all efforts to reduce IMRs were targeted at the inner wards which were dominated by working-class families and the outer wards.... were virtually ignored'³⁰². Whilst this would seem to be the case up to 1910, the final date of Galley's study, it can be seen that within a short time as the city expanded considerable effort was put into addressing the needs and the IMR of the outer ring. It was population of the middle ring which could be considered to have received the least provision, although on reviewing the mapped location of the centres it would

³⁰¹ Appendix 7

³⁰² Galley, 'Social intervention'. p.35

appear that by 1928 the majority of mothers would have found themselves within a mile of the nearest welfare centre in their own, or a neighbouring ward.

There is no written documentation which presents, from the mothers` perspective, their views on the services provided for them, and to what extent the services of both health visitors and the welfare centres addressed the needs of mothers and their infants. The following table suggests that the innovation of a welfare centre within particular wards was greatly welcomed, with 54.4 per cent of mothers of infants born in the period July 1912 to the end of March 1913 attending infant consultations in St Martin`s and Deritend, although this figure was almost twice that which occurred in Duddeston and Nechells. While this figure may have reflected differences in the general state of health in particular wards, it could also have been attributable to the personalities of health visitors and medical practitioners encountered by mothers, the strength of cultural and family influences on them, or the location of an individual centre and the ease of access.

Attendance at first municipal welfare centres

	St Georges & St Stephens	Duddeston & Nechells from July 1912	StMartins & Deritend from July 1912	Ladywood & Market Hall from Aug 1913	Total
Total births	1485	1591	1264	570	4910
Mothers attending infant cons	564	372	687	178	1801
	38%	23.4%	54.4%	31.2%	36.7%
Total no. attendance	1939	1426	2994	550	6909
Average attendance per infant	2.6	4.3	1.8	3.2	2.7

Table 10. Birmingham MOH Annual Report 1913

However, in her report for 1912 in these areas Dr MacCallum had noted that although breast feeding was encouraged, in St Martin`s and Deritend a trial use of dried milk for artificially fed babies with gastric and intestinal disorders was being undertaken and sold to mothers attending infant consultations at cost. It would seem likely that this was the factor which resulted in the considerably higher level of attendance at infant consultations in this ward. This may be endorsed by oral evidence presented by Roberts, when a young mother stated that she attended the clinic for cheap food, but `I never got much advice because I got it from my mother`³⁰³.

Whatever the factors were which affected the level of attendance at welfare centres, the 1914 MOH Annual Report highlighted the need for health visitors and volunteer visitors to reach those parents `who stay away from classes of all kinds`. This would suggest that the services on offer did not appeal to all sections of the community.

The rate of decline in infant mortality from 1899 to 1908, the first decade in which health visitors worked with families in the city can be calculated as 25 per cent, and in the next decade, with an increasing number of both health visitors and welfare centres the rate increased to 28 per cent. This level continued up to 1928, with the final years of this study showing a decline of 22 per cent. These figures would suggest that a major impact was made by the health visitors, particularly in the second to the twelfth months of an infant life, nevertheless it appears likely that the work of the welfare clinics supported that undertaken by the health visitors, and the

³⁰³ E. Roberts, *A Woman`s Place* (Oxford, 1984) p.177

ante natal clinics they provided also made a contribution to the reduction of neonatal mortality.

Feeding of expectant and nursing mothers

An additional aspect of the work of welfare centres, first introduced in Birmingham by Dr Duncan in the St George's and St Stephen's wards, was the provision of dinners for mothers who, due to their own lack of nourishment, were unable to breast feed their infants successfully. This model of intervention, first undertaken by Henri Couillet in Paris in 1904 as part of a promotion of breast feeding, was later replicated in Chelsea in 1906. A small fund enabled Dr Duncan to incorporate this service for mothers into her work, allowing her to report on the improvement in the condition of the infants being nursed and to recommend it being undertaken on a larger scale. However, due to lack of funds at this time, the practice had to be abandoned.

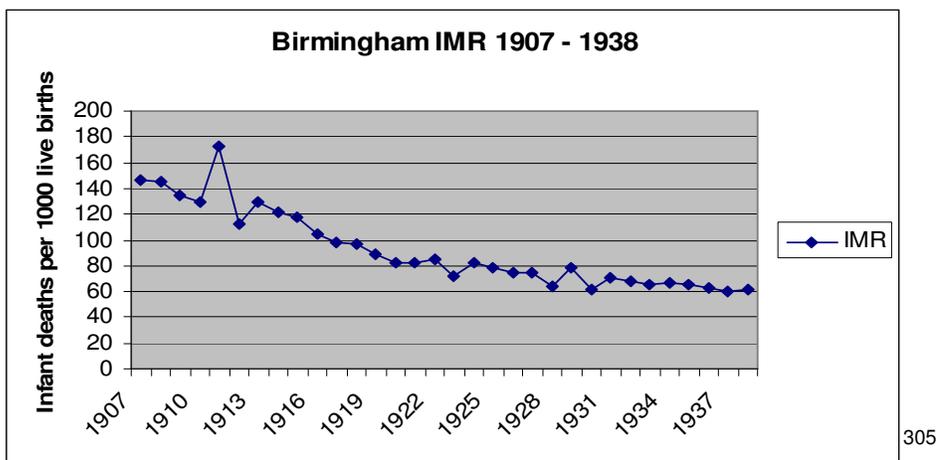
Robertson noted in 1914 that mothers were often not getting sufficient nourishment and, to address the issue, three small voluntary societies had undertaken to provide substantial dinners for expectant and nursing mothers, the duration of the feeding ranging from a few days to six months³⁰⁴. The recipients were classified as being of one of two types, those with sick husbands who were endeavouring to avoid Parish Relief, and those with idle, drunken or work shy husbands. By 1918 maternity feeding centres had been incorporated into four municipal, and one voluntary, welfare centres, providing over 11,000 meals and with each mother contributing two pence per dinner. Meals at the Smith Street centre were cooked on the premises

³⁰⁴ Birmingham MOH Annual Report (1914) p.20

and drew an average weekly attendance of 115, with those at Bloomsbury Street, Hope Street, River Street and St Vincent Street being cooked at a communal kitchen and catering for 41 to 77 mothers per week.

Although not included as part of the work or statistical returns of the centres, a total of 39,057 dinners, each consisting of two courses, were provided in 1922, a figure which had reduced to 25,616 by 1928, suggesting that the provision of meals was reactive and possibly seasonal. In 1930 a reported 27,807 dinners were served 21,316 to mothers and 6,493 to toddlers, and in the following year, probably in response to the national economic climate, the total had again increased to over 37,000. Unfortunately no work appears to have been done in order to follow up the individual mothers and infants who were the recipients of this model to make an accurate assessment of this model of service provision.

The impact on infant mortality



Graph 13

³⁰⁵ Data collated from Birmingham MOH Reports see Appendix 2

In the decade prior to the opening of the first welfare centre the IMR had shown a definite downward trend and, apart from a peak in 1911, this decline continued throughout the remaining years of this study. It was only in 1916, when the number of centres had risen to fifteen, that the service could be considered to be city wide, by which time the decline in infant mortality was already well established. Following the development of infant welfare centres, on the whole it is difficult to differentiate between the changes brought about by health visitors and those made by the welfare centres on the IMR of Birmingham. The two models of service were closely interrelated, and a proportion the work undertaken by a health visitor, or infant visitor, would have been carried out within a centre amongst mothers previously visited in their own homes, and it therefore becomes difficult to attribute changes to a particular model of intervention. However, health visiting per se appears to have had little impact on the deaths of infants in the neonatal period, but the study reported in 1927 showed that only eleven per cent of mothers whose children died in the first month had attended ante natal clinics compared with an average of twenty eight per cent of all mothers³⁰⁶. This study concluded that mothers whose children died in the first month had had far less ante natal assistance, thereby indicating that the work of the welfare centres contributed to the decline in IMR, particularly in the neo-natal period. This would also suggest that, although the Notification of Births Act could be considered to have impacted on the levels of infant mortality by enabling health visitors to visit infants in the first few days of life, a decline in IMR also depended to some extent upon welfare centres, the availability of both free medical consultations and ante natal clinics, together with the willingness of mothers to attend.

³⁰⁶ Birmingham MOH Annual Report (1927), p.82

Welfare centres can be considered to have been effective in that, by choice, the number of mothers and infants attending increased, indicating that mothers valued some aspects of the information and support they received. However, the work of the centres was limited to providing a free advisory service and any medical intervention required usually depended upon both the willingness of mothers to visit a medical practitioner, and their ability to pay for this service. Although not nationally innovative, the model of welfare centres established in Birmingham must be considered of value in the attempt to reduce the IMR of the city in that it provided an accessible service and established the practice of mothers seeking free professional advice regarding the well being of their infants.

CHAPTER 8: CONCLUSION.

The study of the MOH Annual Reports for the period 1873 to 1938, together with other supporting documentation, and relevant literature, provides a valuable insight into the social interventions focussed on the reduction of IMR established in Birmingham. It shows that, while the council could have been proactive at an earlier date, the decision taken to place the task in the hands of a voluntary agency cannot be seen to have been the responsibility of the MOH as suggested by Galley.

Although the management of welfare centres was taken over by the local authority, the evidence suggests that the voluntary sector made a significant contribution to the early development of interventions in Birmingham. The municipal interventions which were implemented have been shown to have been based on models developed elsewhere or by voluntary agencies, demonstrating a wish to have evidence of success before committing to financial outlay. When faced with straitened national financial circumstances following the First War, the city retained the services already in place, indicating that considerable value was placed upon these services. Despite views that the welfare services were often seen as intrusive, the evidence shows that in Birmingham there was an increasing willingness on behalf of mothers to take up the services offered to them by the welfare centres.

While it is possible with hindsight to judge critically the actions of the past, the approach of Birmingham council regarding infant mortality in the late nineteenth century cannot be considered in the best possible light. Some council members had

shown considerable reluctance to establish the post of MOH following the Public Health Act of 1872, when Alfred Hill, previously holder of the position of Borough Analyst was appointed to this position. However, he provided the council with detailed information regarding the health of the city for the succeeding thirty years, in the form of both quarterly and annual reports, and it cannot have gone unnoticed by members that Birmingham experienced a relatively high rate of infant mortality over this period³⁰⁷. Nevertheless, by regularly including the IMR of other major English towns, Hill may have down played the situation, leading councillors to believe that the situation in Birmingham was no greater problem than that experienced elsewhere³⁰⁸. At the same time, improvements being carried out regarding the sanitation of the city had been expected to reduce the general death rate, and there was no evidence to indicate that this would not affect the whole population, including infants. The belief that infant deaths provided a form of natural selection, leading to the survival of the fittest, together with the view that many of the poorer classes brought about the death of their infants in order to collect insurance payments, may have encouraged council members to believe that the IMR was not an issue which required municipal action.

The views of the council may be summed up by a statement made by Hill in his 1877 report when he commented that `the evil of excessive and preventable infant mortality is one which cannot be dealt with by a sanitary authority`. Hill went on to say the issue should be seen as `more social than public`. In his report of 1877, Hill recommended the instigation of a home visiting organisation in order to inform and advise mothers of the poorer classes. This model of intervention had already been

³⁰⁷ Appendix 2

³⁰⁸ Chapter 3, p.48

developed in Manchester, and it would seem possible that Birmingham, with its strong philanthropic leanings, could have established a similar service. During the same period other organisations of women were carrying out other charitable work in the city amongst some of the most deprived sections of the population, which would suggest that visiting the poor in their own homes would not have been totally unacceptable by the more committed of the middle and upper classes, without cost to the city³⁰⁹. As there is no documentary evidence to demonstrate the views of council members regarding Hill's recommendation, it can only be assumed that the fact that the sister of the mayor was at that time president of the LAUW, an organisation already delivering health lectures in Birmingham, lent considerable weight to the decision to pursue the model of delivering health lectures to those of the population who wished to attend. Under different circumstances it is possible that a more targeted method of providing health information could have been established many years before health visitors were appointed in the city.

The delivery of health lectures, the first model of intervention which was implemented in the city, had already been established as part of an educational opportunity for women and girls. While some additional sessions were implemented in 1877, when health lectures were proposed as a method of addressing IMR, and later some attempts were made to target the more deprived sections of the community, there is no evidence to suggest that the content of the lectures changed in order to address the specific issues relevant to IMR, but maintained the format previously presented.

³⁰⁹ The Ladies Association for the Care of Friendless Girls, established their work with prostitutes in the city in 1878. Annual Report 1897

Over the following twenty years no evaluation of the impact of the health lectures would seem to have been undertaken. The statistics which Hill continued to present did not reflect any significant improvement in the IMR, and by the 1890s the situation had deteriorated further³¹⁰. Although concerns continued to be raised regarding the great loss of infant life, the council does not appear to have considered any further intervention³¹¹.

Although the health lectures provided by the voluntary sector made no apparent statistical impact on the decline of infant mortality in Birmingham, without this input it is possible that the reported IMR over the 1880s and 1890s could have been higher, and therefore the work of the LAUW cannot be dismissed out of hand. The experience gained by the LAUW showed that while many would access information, both as lectures and written material, services needed to be targeted on the most deprived members of the community, both by talking to small groups and by explaining written information. It could also be suggested that the training and knowledge gained may have provided some of the deliverers of services in later years, although no evidence has been found to substantiate this possibility.

Galley suggested that Hill lacked the will to take any direct action to reduce the IMR of Birmingham. Although in 1877 he suggested the strategy of home visiting, Hill does not appear to have pursued this recommendation following the approach by the council to the LAUW. It is possible that due to the reluctance of some councillors to support the creation of the post of MOH, and following his experiences whilst

³¹⁰ Appendix 2

³¹¹ Rimmer. p.19

Borough Analyst when his position was only confirmed on an annual basis, Hill did not feel completely secure in his employment, and was therefore not prepared to contravene the views of the council. However, by 1877 he had been in post for over four years, and despite there having been some initial unwillingness on behalf of the council to conform, the position of MOH was required by law, and there appears to have been no question as to Hill`s suitability for the role. Hill may have considered that having made a suggestion as to the method of addressing the issue, any decisions were in fact the responsibility of the council, and was appreciative of the fact that the preferred approach did not impinge upon his workload or that of the health department. Alternatively Hill may indeed have felt that the health lectures, alongside continued sanitary improvements would in time bring about the desired changes.

Whatever the motivation, Hill chose to accept the proposed method of intervention, and it would seem he took no further action regarding the proposed home visiting until the late 1890s, when the LAUW themselves raised the issue of the appointment of health visitors. Given this evidence, Galley`s view was correct, that Hill indeed `distanced himself from any responsibility` and subsequently he may be considered to have failed the infants of Birmingham. Equally, it must be concluded that steps could have been taken sooner by Birmingham council and this failure to do so contributed to the high loss of infant life in the city.

However, from the turn of the century, Birmingham adopted the health visiting model, which had been established initially by the voluntary sector, and later taken over by the local authority in Manchester, a decade earlier. Other towns and counties had adopted the model during the 1890s, and it was on the basis of their experience that Birmingham decided to follow suit. The initial role of the health visitors had a broad health and hygiene remit and it was only with the introduction of the Notification of Births Act of 1907, initiated by Huddersfield, that a more focussed role of early visits to new born infants was introduced. However, Birmingham was amongst the first authorities to adopt the act when it was introduced countrywide on an optional basis the following year.

Having taken the majority of Hill`s time as MOH to instigate any formal process to educate mothers in the matter of hygiene and child care, once started the health visiting service in the city quickly expanded, with the number of posts increasing to eight in the first year and to twelve by the end of the third year. Although initially the role of the health visitors focussed on the health and welfare of families per see, in 1902 their role was expanded to include the promotion of breast feeding, and hygiene when caring for babies, and the service would seem to have been well established before Hill`s retirement in September 1903.

Galley suggested that the impact of health visitor intervention was minimal. As in other aspects of this study, no evaluation of the work appears to have been undertaken, and therefore there is a lack of formal evidence to support or negate

Galley's view. It cannot be claimed that the introduction of health visitors to the city was the only factor for change, as occurring simultaneously were improvements in water and milk supplies, followed later by an increasing standard of housing, and further research in this area may demonstrate the impact of such major changes and their contribution to the decline in IMR in Birmingham. It must be acknowledged that in the first years of the twentieth century the small number of health visitors employed would have initially made a limited impact. However, the evidence presented in this study suggests that the effect of the Notification of Births Act, together with gradually increasing numbers of workers helped to improve this, and contribute to the decline in IMR in Birmingham³¹². Apart from 1911, which had a particularly hot summer, the IMR showed a continuous decline from the early 1900s until 1930, by which point almost all new infants were visited by a health visitor. From this point on, the change in IMR levelled out, suggesting impact of health visiting had reached its full potential, and other issues such as prematurity required alternative intervention for these figures to be addressed.

It could be suggested that Galley's study, with its cut off point in 1910, did not continue for a sufficient length of time to fully assess the value of the health visitor model of intervention, and that, in the long term, his view of the minimal impact of health visitors cannot be supported. This study has demonstrated that the number of health visitors active in Birmingham was approximately seventeen by the conclusion of the period considered by Galley, less than twenty per cent of those in post by

³¹² Appendices 2 and 6

1930, demonstrating that a sufficient number of health visitors were required to have the desired impact on IMR.³¹³

The working location of the health visitors across Birmingham is not clarified in the MOH reports. The note that the city was divided into twelve would suggest that there was some sort of service in most areas, although for much of the period of this study it has been shown that those of a higher social standing were deemed not to require this type of intervention. By mapping the centres, it can be seen that these were developed alongside the considerable expansion of the city which occurred in the inter-war years³¹⁴. As health visitors formed part of the staff of each centre, it may be assumed that their work load was distributed city wide, making both them and the centres available to all who were judged, according to their social standing to require such services. Whereas Galley, in his assessment of social intervention in Birmingham from 1870 to 1910, considered that all efforts to reduce IMRs were targeted at the inner wards, and therefore at the poorest level of society, it has been shown that from 1910 onwards this quickly altered, and that with the migration of population to the new estates in the outer ring, the services responded to the expansion of the city. It has also been shown that while the take up of clinic attendance was at approximately fifty per cent by 1930, the number of mothers not visited by a health visitor at this time was minimal, suggesting both a change in policy and in the acceptance of child welfare as a universal service³¹⁵. This demonstrates that the development of the health visitor service in Birmingham took approximately thirty years to become both city-wide and universal.

³¹³ Appendix 6

³¹⁴ Appendix 7

³¹⁵ Chapter 3, p. 67

The welfare centre model had been developed in Europe, notably in France and Belgium, and adopted by voluntary organisations elsewhere in England prior to the establishing of the first centre in Birmingham. When, as a result of the Notification of Births (Extension) Act 1915, the provisions of the 1907 act were made compulsory, it was stated that authorities `may make such arrangements as they think fit and as may be sanctioned by the Local Government Board for attending to the health of expectant mothers and nursing mothers and of children under five years of age who are not being educated in public elementary schools`³¹⁶. At this point, four voluntary and four municipal child welfare centres had already been established in Birmingham, with a further six in the process of development. Although Birmingham cannot be described as adopting an innovative approach to infant mortality, from the late 1890s the city assessed the methods introduced elsewhere, and demonstrated a willingness to implement the interventions which were considered successful.

Following the introduction of the first municipal Maternal and Infant Welfare Centre as part of the work undertaken by Duncan, there was a positive move to expand this more intensive level of intervention. However, the increasing number of centres developed from 1915 onwards must also be attributed to governmental financial support. In the first decade of welfare centres almost half were initiated and run by the voluntary sector, although, as has been shown, these were gradually taken over by the local authority. However, the work of the voluntary centres appears to have been valued, with no questions being raised as to the viability of the service they offered, and no suggestion would appear to have been made that a centre with

³¹⁶ 5&6 Geo. 5 c64

financial difficulties should be closed down. The twenty-five welfare centres established by 1917, the year in which the IMR of Birmingham fell below 100 for the first time, over forty per cent were voluntary, had made 2,519 primary visits to children and had provided 534 children`s consultation sessions that year. One feels bound to echo Drake by saying `Surely they made a difference`³¹⁷. It must be concluded that although financially they proved to be unsustainable as voluntary organisations, their work made a valuable contribution to the interventions provided at the time.

Whilst it has generally been accepted that infant mortality was multi-causal, it could therefore be presumed that the reasons for the decline of IMR was equally varied, and social intervention, in the form of health visiting and welfare centres can be seen to have been sufficiently flexible to address a range of issues, by educating mothers as to hygiene, nutrition, and child care, in addition to providing a medical advisory service for both expectant mothers and their infants. By analysing the causes of death, the statistical evidence presented in this study shows that two major causes of infant mortality in Birmingham, debility and infantile diarrhoea, declined significantly from the beginning of the 1900s. This, coinciding with the commencement of the health visiting service, together with the large numbers who attended infant consultations at welfare centres, suggests these interventions filled a need in health provision and made a major contribution to the decline of infant mortality.

³¹⁷ Drake. `Surely they made a difference`, p.63

It has been shown that in the first twenty-five years covered by this study it could be claimed that there was a want of care shown by the local authority for the infant population of Birmingham. Not constrained by the opinions of the council, the voluntary sector, which Miss Matheson later considered to be innovative, could also be considered to have failed to address the issue of infant mortality in a more effective manner.

However, once the role was accepted as a municipal responsibility, and prior to any statutory requirements being imposed, the city showed considerable commitment to driving down the level of infant mortality. At the same time the voluntary sector made constructive efforts, in the form by establishing welfare centres to address the care of the infants of the city. It may therefore be concluded that while there was a want of care shown in the later years of the nineteenth century by all sectors, the new century introduced a change of approach, an increased level of care and a steady reduction in the level of infant mortality experienced within the city of Birmingham.

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Appendices

Appendix 1.

Birmingham Wards by Area 1912 - 1934

Central wards	Middle Ring	Outer Ring
Duddeston and Nechells	All Saints	Acocks Green
Ladywood	Aston	Erdington North
Market Hall	Balsall Heath	Erdington South
St Paul`s	Edgbaston	Handsworth
St Bartholomew`s	Lozells	Harborne
St Martin`s and Deritend	Rotten Park	Kings Norton
St Mary`s	Saltley	Moseley and Kings Heath
	Small Heath	Northfield
	Sparkbrook	Sandwell
	Washwood Heath	Selly Oak
		Soho
		Sparkhill
		Yardley

Appendix 2

Birmingham annual IMR by causes 1873 - 1938

Data collated from Birmingham MOH Annual Reports

Causes	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882
Smallpox	19	77	21	0	1	1	0	0	0	1
Measles	32	23	33	19	69	7	37	16	32	33
Whooping Cough	60	93	70	70	147	180	124	86	86	122
Diphtheria	12	8	7	5	5	8	4	9	9	4
Scarletina	30	48	25	18	22	50	15	6	6	3
Diarrohoea	476	434	579	378	331	468	153	540	540	361
Enteritis	19	21	20	17	15	20	14	17		
Tuberculous Diseases	78	120	113	138	126	132	133	155	152	176
Premature Birth	216	181	227	188	163	222	202	141	182	215
Debility/ Marasmus	605	568	573	471	516	471	455	534	314	484
Convulsions	173	199	210	206	212	219	214	151	151	164
Bronchitis/Pneumonia/Pleurisy	372	426	443	485	495	428	496	626	410	409
Suffocation	157	106	150	120	123	125	134	112		
Syphilis	72	74	49	48	46	67	54	56	40	43
Influenza										
Injury at birth										
Congenital malformation										
Births	14221	14888	14862	15816	16001	15964	15846	15111	14869	14866
Total deaths	2577	2688	2958	2538	2629	2768	2385	2601	2212	2452
Still births										
IMR	181	178	196	160	164	170	150	172	150	165

Appendix 2

Causes	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892
Smallpox	14	8	2	0	1	0	0	0	3	0
Measles	30	64	28	80	47	39	34	76	27	83
Whooping Cough	75	99	92	29	140	88	116	68	115	114
Diphtheria	3	0	2	3	1	1	5	3	2	6
Scarletina	21	6	1	5	2	2	5	8	6	5
Diarrohoea	288	490	264	525	424	208	347	332	245	324
Enteritis										
Tuberculous Diseases	68	96	75	76	62	93	82	130	95	126
Premature Birth	173	168	205	225	214	195	227	269	268	344
Debility/ Marasmus	515	515	515	515	515	515	515	515	515	515
Convulsions	174	170	156	161	136	138	137	136	127	130
Bronchitis/Pneumonia/Pleurisy	405	457	450	366	369	414	423	501	537	451
Suffocation	134	114	121	117	124	104	104	102	107	83
Syphilis	34	59	36	31	35	35	46	24	28	29
Influenza										4
Injury at birth										
Congenital malformation	24	23	38	30	24	17	22	27	26	30
Actelectosis	22	24	41	39	37	38	40	33	31	26
Want of breast milk/starvation		28	35	20	18	13	25	15	22	5
Births	14701	14991	14383	14282	13893	13673	14001	14076	14623	16026
Total deaths	2338	2611	2253	2515	2468	2105	2396	2593	2504	2664
Still births										
IMR	159	174	157	176	178	154	171	184	171	166

Appendix 2

Causes	1893	1894	1895	1896	1897	1898	1899	1900	1901
Smallpox	7	32	1	0	0	0	0	0	0
Measles	8	62	22	71	102	42	53	35	62
Whooping Cough	150	89	64	168	91	104	74	129	81
Diphtheria	0	2	8	14	13	2	6	3	13
Scarletina	6	4	5	4	6	1	1	8	10
Diarrohoea	630	194	439	475	731	534	670	475	342
Enteritis	17	93	203	232	37	424	41	331	154
Tuberculous Diseases	113	79	103	106	117	94	91	114	129
Premature Birth	359	345	375	384	424	371	366	353	348
Debility/ Marasmus	677	547	584	622	565	589	574	670	648
Convulsions	159	158	198	207	181	178	194	178	107
Bronchitis/Pneumonia/Pleurisy	422	525	371	466	456	425	423	532	399
Suffocation	54	70	74	54	87	94	92	92	92
Syphilis (From 1898 VD)	27	24	31	28	26	23	21	19	41
Influenza	2	2	6	7	8	8	2	5	3
Injury at birth									
Congenital malformation	25	16	30	34	35	27	28	33	
Acteectosis	20	21	20	21	25	32	13	12	
Want of breast milk/starvation	13	4	12	7	19				
Births	15881	15505	16014	16582	16771	17289	17609	16941	16735
Total deaths	3146	2539	2910	3265	3594	3287	3398	3366	3150
Still births									
IMR	198	164	182	197	214	190	193	199	188

Appendix 2

Causes	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
Measles	37	50	47	40	46	81	13	109	7	63
Whooping Cough	122	37	210	72	105	63	121	54	95	39
Diarrohoea	327	462	764	364	667	188	364	183	149	538
Enteritis	78	84	92	126	151	116	128	99	125	196
Tuberculous Diseases	98	111	93	75	54	70	58	40	56	51
Premature Birth	361	365	377	304	321	318	338	318	331	362
Debility/ Marasmus	562	531	569	536	453	458	457	391	335	399
Convulsions	172	119	144	128	98	120	104	79	99	87
Bronchitis/Pneumonia/Pleurisy	409	413	505	380	356	441	335	314	324	285
Suffocation	70	95	96	75	85	78	87	61	87	70
Syphilis										
Influenza										
Injury at birth										
Congenital malformation										
Births	17103	16866	16902	15795	16016	15619	16141	14985	14898	14704
Total deaths	2681	2666	3302	2397	2685	2300	2393	2030	1936	2408
Still births										
IMR	157	158	195	155	168	147	145	135	130	184

Appendix 2

Causes	1912	1913	1914	1915	1916	1917	1918	1919	1920
Smallpox									
Measles	92	76	50	100	16	66	11	31	30
Whooping Cough	155	71	141	48	162	41	95	19	77
Diphtheria	2	8	11	6	6	2	2	7	12
Scarletina	5	8	1	3	2	2	0	1	7
Diarrohoea	198	685	429	479	289	220	252	155	206
Tuberculous Diseases	53	85	73	70	40	42	30	18	28
Premature Birth	491	499	492	401	404	389	379	437	507
Debility/ Marasmus	401	439	435	335	263	248	182	208	207
Convulsions	130	151	137	117	133	107	79	78	93
Bronchitis/Pneumonia/Pleurisy	426	287	450	446	423	312	296	339	487
Suffocation	89	91	87	79	27	38	28	33	26
Syphilis	38	37	33	24	44	23	28	39	42
Influenza							44	36	21
Congenital Malformation	78	100	91	82	78	77	54	74	96
Injury at birth	22	21	28	12	1	10	5	16	25
Births	22168	22812	23207	21187	20618	17706	16840	19335	25069
Total deaths	2470	3070	2839	2490	2142	1796	1674	1630	2072
IMR	111	129	122	118	104	98	99	84	83
Still births	667	679	762	732	729	580	590	744	911

Appendix 2

Causes	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Smallpox										
Measles	36	22	41	18	24	21	27	13	38	11
Whooping Cough	50	147	17	78	94	61	31	75	46	60
Diphtheria	2	3	6	4	6	4	2	2	3	4
Scarletina	2	1	0	0	0	0	0	0	0	0
Diarrohoea /enteritis	308	146	181	150	171	162	178	139	203	125
Tuberculous Diseases	57	23	32	25	20	19	20	19	26	30
Premature Birth	447	439	356	405	345	326	364	327	361	297
Debility/ Marasmus	214	151	111	140	120	113	88	64	51	53
Convulsions	70	44	49	51	47	36	31	23	30	12
Bronchitis/Pneumonia/Pleurisy	346	411	293	366	276	294	272	177	263	164
Suffocation	19	15	23	19	26	24	25	20	12	9
Syphilis	37	20	8	7	3	7	6	7	8	11
Influenza	7	8	7	8	8	4	13	4	19	4
Congenital Malformation	82	90	77	82	76	79	72	87	97	100
Injury at birth	31	24	25	24	32	25	25	25	46	53
Births	22134	19850	19069	18390	17836	17756	17333	17375	17064	17180
Total deaths	1838	1705	1370	1518	1389	1301	1299	1117	1324	1046
IMR	83	86	72	83	78	73	75	65	79	60
Still births	804	660	629	554	609	585	521	595	590	688

Appendix 2

Causes	1931	1932	1933	1934	1935	1936	1937	1938
Smallpox								
Measles	45	9	18	4	11	8	17	5
Whooping Cough	37	60	14	52	26	66	15	52
Diphtheria	4	2	2	4	4	4	4	4
Scarletina	0	1	0	2	1	0	0	0
Diarrohoea	135	122	106	127	115	82	81	212
Tuberculous Diseases	23	8	8	7	12	12	12	9
Premature Birth	353	323	295	310	330	292	334	266
Debility/ Marasmus	56	30	20	20	18	20	15	8
Convulsions	7	17	10	4	4	3	2	7
Bronchitis/Pneumonia/Pleurisy	269	214	221	160	145	163	167	177
Suffocation	12	4	3	0	4	3	1	4
Syphilis	12	5	5	4	3	2	5	3
Influenza	16	11	8	6	5	3	14	5
Congenital Malformation	98	96	113	97	114	110	108	102
Injury at birth	45	48	36	61	56	61	66	66
Births	17357	16470	15181	15865	15384	16285	16850	17442
Total deaths	1217	1120	998	1061	1024	1021	1016	1068
Still births	697	603	591	580	548	590		
IMR	71	67	66	68	64	62	60	61

Appendix 3 Birmingham Infant Mortality Rates by Ward 1912 - 1935

Data collated from Birmingham MOH Annual Reports

	Central Wards							
	Duddeston & Nechells	Ladywood	Market Hall	St Pauls	St Batholemews	St Martins & Deritend	St Marys	
1912	180	123	138	134	134	136	194	
1913	179	159	155	162	205	180	229	
1914	173	166	166	153	167	148	195	
1915	158	126	123	170	180	157	187	
1916	164	121	139	160	139	150	159	
1917	136	112	89	115	132	112	168	
1918	104	104	152	156	137	120	148	
1919	105	100	120	109	102	95	103	
1920	93	105	85	112	111	102	121	
1921	104	96	117	106	113	85	116	
1922	102	102	113	105	115	107	117	
1923	99	79	80	104	81	93	103	
1924	103	86	81	87	119	110	123	
1925	101	73	119	120	106	107	100	
1926	79	81	106	106	98	86	122	
1927	104	78	85	115	81	89	115	
1928	73	69	100	71	89	84	101	
1929	125	108	73	120	98	108	111	
1930	67	74	88	89	74	91	75	
1931	87	105	103	85	86	99	107	
1932	98	69	76	92	77	87	105	
1933	72	79	79	82	100	85	73	
1934	87	84	106	66	101	81	85	
1935	66	84	80	94	74	100	98	

Appendix 3

	Middle Ring										
	All Saints	Aston	Balsall Heath	Edgbaston	Lozells	Rotten Park	Saltley	Small Heath	Sparkbrook	Washwood Heath	
1912	98	105	81	87	102	112	109	85	90		97
1913	124	136	99	109	100	137	94	113	98		114
1914	135	138	80	72	115	134	109	89	102		87
1915	108	128	91	82	102	118	86	86	87		123
1916	96	114	62	98	82	96	79	69	70		93
1917	122	105	83	73	93	93	97	94	110		96
1918	88	113	86	80	111	101	100	69	99		70
1919	88	93	64	61	79	97	64	67	60		90
1920	78	78	98	64	80	79	72	80	80		83
1921	104	82	62	75	87	78	75	57	60		91
1922	90	84	81	75	58	101	82	68	92		69
1923	79	85	54	51	60	67	59	62	59		68
1924	80	87	83	67	68	85	95	85	64		62
1925	92	104	64	70	87	53	65	58	77		69
1926	65	77	52	59	52	63	43	48	70		66
1927	82	80	87	66	78	89	64	34	73		73
1928	46	57	62	46	63	75	71	59	56		62
1929	72	86	51	84	80	82	69	50	45		92
1930	67	61	69	77	53	63	54	42	55		37
1931	80	87	70	83	86	100	59	48	61		76
1932	74	97	46	63	52	62	61	73	87		48
1933	74	59	44	72	56	69	54	99	65		70
1934	83	70	68	72	77	60	42	48	112		56
1935	69	59	50	62	72	64	30	80	51		58

Appendix 3

Outer Ring														
	Acocks Green	Erdington North	Erdington South	Handsworth	Harborne	Kings Norton	Moseley & Kings Heath	Northfield	Sandwell	Selly Oak	Soho	Sparkhill	Yardley	
1912	79	62	97	78	87	80	74	60	87	57	76	61	109	
1913	102	68	82	69	54	78	60	63	79	82	104	60	67	
1914	95	104	74	94	53	78	54	90	64	70	89	75	83	
1915	73	82	82	94	81	87	64	123	106	94	92	55	56	
1916	76	80	80	91	69	61	76	59	68	83	94	55	83	
1917	75	74	80	71	44	77	41	50	37	66	74	90	95	
1918	82	57	57	72	89	60	66	70	64	58	83	66	67	
1919	47	39	79	63	79	69	44	43	71	76	97	36	83	
1920	64	61	47	51	50	43	53	28	75	64	55	73	54	
1921	62	44	68	69	42	60	69	97	72	47	57	67	43	
1922	79	54	69	51	58	41	81	58	68	69	66	56	55	
1923	49	48	58	45	46	76	49	21	57	53	54	34	73	
1924	50	70	52	49	57	59	69	54	67	74	63	58	62	
1925	53	64	32	64	42	66	39	39	39	51	66	55	45	
1926	48	46	52	53	90	68	69	68	98	69	76	70	56	
1927	36	59	49	47	78	44	42	45	44	61	81	71	66	
1928	49	62	40	34	65	54	41	46	68	82	74	47	43	
1929	68	56	49	43	58	54	38	60	46	76	92	74	65	
1930	41	54	51	47	53	36	49	38	38	49	65	51	55	
1931	63	55	59	60	37	60	49	44	33	66	83	45	55	
1932	59	56	56	63	43	76	45	43	37	47	95	53	58	
1933	64	58	45	49	68	38	65	76	75	37	60	60	66	
1934	62	87	52	63	50	49	66	67	55	44	68	64	34	
1935	81	49	49	45	56	63	69	56	38	38	85	47	67	

Appendix 3

	Central	Middle Ring	Outer Ring	City IMR
1912	148	97	77	111
1913	181	112	74	129
1914	167	106	79	122
1915	157	101	84	118
1916	147	86	75	104
1917	123	97	67	98
1918	132	92	69	99
1919	105	76	64	84
1920	104	79	55	83
1921	105	77	61	83
1922	109	80	62	86
1923	91	64	51	72
1924	101	77	60	83
1925	104	74	50	78
1926	97	59	65	73
1927	95	73	56	75
1928	84	60	50	65
1929	106	71	56	79
1930	80	58	49	60
1931	96	75	55	71
1932	86	66	57	67
1933	81	66	59	66
1934	87	69	58	68
1935	85	59	58	64

Appendix 4

Summary of the Health Lectures given by the LAUW 1873 - 1903

Data collated from LAUW Annual Reports and Birmingham Daily Post

Date	Lecturer	Location	Sessions	Attendees
1873	Miss Kenrick	St Barnabas Church school room		120 - about 20 gave written answers
1873	Miss Kenrick	Immanuel Church		
1873	Miss Kenrick	St George`s		
1873	Miss Kenrick	Church of the Messiah, Broad St		
1873	Mrs CJ Bracey	St Luke`s, Bristol Road		
1875	Mrs CJ Bracey	St John the Baptist School, Harborne		}
1875	Miss Kenrick	Board School, Allcock Street, Deritend		}
1875	Mrs RW Dale	Hurst St Chapel rooms		} 80 -300 working classes
1876	Mrs CJ Bracey	New Jerusalem Church Schools, Summer Lane		}
1876	Mrs RW Dale	Carrs Lane Chapel School		}
1876	Miss Hill (Wilton House)	Wesleyan Misson Schools, Holiday Street		}
1876	Miss Kenrick	Messrs Chance`s Schools, Spon Lane, Smethwick		}
1876	Miss Teagle	St Silas` Schools, Handsworth		}
1877	[above plus	Spring Hill Chapel		}
1877	Miss Suckling	St John`s schoolroom, Ladywood		} 60 - 280 mainly of artisan class
1877	Miss Hadley	Wretham Road Church, Soho Hill	8	}
1877	Mrs W Lance assisted]	Lombard St Chapel schoolroom, Alcester St. Digbeth		}
1877		Lawrence St Chapel		}
1877	Mrs Russell Grant	Midland Institute	3	Full lecture theatre
1877		Poorer suburbs		80 -145 working class - cookery
1878		Harborne		Not large - all mothers
1878		Presbyterian Chapel, Six Ways	5	60 - 90
1878	Mrs CJ Bracey	New Hall Hill schoolroom	7	200 - 300
1878	Mrs RW Dale	Lodge Hill, Selly Oak		
1878		Nechells		} In response to Health
1878		Balsall Heath		} Committee request
1878		Severn St		} Nov 1877
1878		Upper Hospital St		}
1878		Five Ways		}
1878		Priory Rooms		}

Appendix 4

Date	Lecturer	Location	Sessions	Attendees
1878		YWCA rooms		}
1878		Factory of Messrs Chance		} Artisan lectures
1878		Factory of Joseph Gillott & Sons		} Cookery
1878	Mrs CJ Bracey	Board School, Hospital St		
1879	Mrs CJ Bracey	Wolverhampton		
1879	Mrs Edmonds	Coventry		
1879		Factory of Messrs Cadbury		250 (1/2 hr work time unpaid !/2 own time)
1879		Factory of Green & Richards		
1880	Mrs Bassett	Fazeley St	6	Very poor women
1880	Mrs CJ Bracey	Broad St, Church of the Messiah	7	
1880	Mrs Dale	Priory Rooms	6	Largest audiences ever had -from a distance
1880		New Hall St		
1880		Hurst St		
1880	Mrs Bracey	St James School room, Ashsted	1	At mothers meeting
1880	Miss Hadley	Bordesley St Chapel, Digbeth		Artisan class many of higher class
1880		Small Hath		Very poor women
1880		Gem St		Many well to do
1881	Mrs Bassett	Floodgate St		200 approx poorer classes
1881	Miss Kenrick	St Martin St, Five Ways		large audience
1881	Mrs A Osler	St Asaphs parish, Ladywood		wives of working men
1881	Miss Teagle	Old Church schoolroom, Handsworth		very poor area, crowded audience each week
1881	Mrs RW Dale			
1881	Mrs Wm Kenrick			
1881	Mrs Bracey	St Marks Schoolroom		
1881	Mrs Dale	Girls Schoolroom, Logbridge Road		
1881	Mrs Bassett	Steelhouse Lane		
1881	Miss Kenrick			
1882	Mrs CJ Bracey	Hagley		working people
1882	Mrs Wm Kenrick	Park St		low attendance - about 40 poor class
1882	Miss Suckling	New Hall, Cooksey St, Small Heath		
1883		Wynn St		well to do audience

Appendix 4

Date	Lecturer	Location	Sessions	Attendees
1883	Mrs A Osler	Lime Grove, Moseley Rd, Balsall Heath		High class audience - over 100
1884	Mrs Bassett	Sherbourne St		GFS group factory girls
1884		Tennant St		
1884	Mrs Bassett	Aston		Cottage lectures - av attendance 40
1884	Mrs Sargent	St Agnes Lane, Highgate St		Given fortnightly
1884	Mrs CJ Bracey	Hagley Road		
1884	Mrs RW Dale	Perryan Hall		
1884	Mrs Osler	Priory Rooms		
1884	Mrs Robinson	Fazeley St misson rooms		Mothers meetings
1885				`Monthly Nursing` lectures
1885		Bishopgate Street		Cottage lectures
1885	Mrs G Godfrey	Watery Lane		Reads sanitary tracts / encourages questions
1885	Mrs A Southall	Severn St	4	16 -34 attendees, very poor class
1885	Mrs CJ Bracey			
1885	Mrs Wm Kenrick			
1885	Mrs RW Dale			
1885	Mrs A Osler			
1885	Mrs Robinson			
1886				Cottage lectures at Mothers Meetings
1886	Mrs CJ Bracey	Town Hall, West Bromwich	8	1150 - 1300 per night
1886	Mrs CJ Bracey	Town Hall, West Bromwich	1	Lecture on child bearing 4500 tracts sold
1886		Severn St		
1886		Selly Oak		
1886		Lawrence Street		
1887	Mrs RW Dale	Upper Thomas Street, Aston		350 - 400.
1888	Mrs WH Ryland	Severn St	4	
1888				Weekly night school for women
1888	Miss Youngerman			
1888	Miss MC Albright	Workmen`s Hall, Selly		
1888	Miss GE Southall	Upper Highgate St Mission hall		Approximately 200 per session
1888	Miss GE Southall	Clark Street Board School		
1888	Miss Youngerman	Lower Tower Street Mission room		Room crowded

Appendix 4

Date	Lecturer	Location	Sessions	Attendees
1889	Miss GE Southall	Ikneild Street		1/2 hr lectures to factory girls
1889	Miss MC Albright	St James` School room, Summer Road		Average of 80 attendees
1889	Miss GE Southall			1/2 hr lectures to factory girls in dinner break
1889	Miss Youngerman	Gt Russell Street		Mainly to Girls Friendly Society members
1889	Mrs A Osler	Church of the Messiah, Broad St		
1890	Miss GE Southall	Kings Heath		Not many hearers
1891	Miss GE Southall	Barnt Green		
1892	Mrs RW Dale			
1893	Dr WH Line		10	on Physiology & Hygiene to 30 ladies
1893	Dr Savage		3	`The care of womens health`
1893	Dr Carter		3	`The care of children` - well attended
1893		Hamstead Road, Handsworth		
1893		Norton St Board School		
1893		Ward Street		
1893		St Nicholas		
1893		Harborne		
1893		Ickneild Port Road		
1893		Anderton Street		
1893		Balsall Heath		
1894				AGM press report states 83 lectures delivered
1895	Dr Mary Sturge		10	on `Hygiene` -leading to exams for teachers
1895				Lectures at 19 different centres
1896	Dr Mary Sturge		10	on `Hygiene` -leading to exams for teachers
1900				audiences in most cases small
1902				sanitary lectures in courts
1903				one short course - not successful

Appendix 5

Welfare Centres by location in order of development

Data collated from Birmingham MOH Annual Reports and Council committee minutes

Date	Organisation	Location	Area*	Comment
1907	Birmingham Infant Health Society	Medical Mission, Floodgate St, Deritend	C	£25 pa from BCC
1909	Settlement Guild of Mothers	Staniforth Hall, Staniforth St	C	£25 pa from BCC
1909	Health Dept	St Edwards Misson Hall, New John St West	C	Twice weekly. Unsuitable Jan 1916
1912	Health Dept	William White Memorial Hall, Windsor St	C	Weekly consultation session - July 1912
1912	Health Dept	Mission Room, Darwin St	C	Twice weekly, commenced July 1912
1913	Health Dept	44a, Broad Street	C	Weekly consultation session - Aug 1913
1913	Stirchley & Cotteridge School for Mothers	78 Windsor Road, Stirchley	O	
1913	Selly Oak & Dist.School for Mothers	72 / 74 Exeter Road, Selly Oak	O	
1915	Health Dept	108 Hope St, Balsall Heath	C	
1915	Health Dept	131 St Vincent St	C	Moved to Monument Rd 1934
1915	Stirchley School for Mothers	Lea House Road, Stirchley	O	Best premises Jan 1916
1915	S Edgbaston Guild for Mothers	38 Latimer St		BCC provides Lady Dr 1 pm per wk
1915	Selly Oak School for Mothers	Village Bells,Harborne Lane, Selly Oak	O	Best premises Jan 1916
1915	Maternity Hospital Infant Consultations	Loveday St	C	
1916	Health Dept	74 Washwood Heath Road	M	
1916	Health Dept	17 Bloomsbury St, Vauxhall	C	Replaced Windsor St
1916	Health Dept	Adult School, Farm St	C	
1916	Health Dept	41 Lichfield St		
1916	Voluntary	Friends Institute, Warwick Road, Greet	O	
1916	Voluntary	6,Holyhead Road, Handsworth	O	
1917	Health Dept	91 Landsdowne St, Winson Green	M	
1917	Health Dept	76 Stratford Road, Sparkbrook	M	
1917	Health Dept	Institute, Berkley Rd, Hay Mills	O	
1917	Voluntary	42, Wentworth Road, Harborne	O	
1917	Voluntary	697 Bristol Road South, Northfield	O	
1919	Health Dept	10, Short Heath Road, Erdington	O	

**Appendix
5**

Date	Organisation	Location	Area*	Comment
1920	Voluntary	10a Aston Street	C	1935 Replaced by Lancaster St
1920	Health Dept	113 Smith St	C	Taken over by Monument Rd 1934
1923	Health Department	Trinity Road, Witton	M	
1923	Voluntary	Bartley Green	O	Vol. Comm. Nurse provided by BCC
1923	Health Dept	Hunters Road, Hockley	M	Major funding from Carnegie Trust UK
1924	Health Dept	186 Irving St, Edgbaston	C	To replace Ridley St
1926	Health Dept	College Road, Perry Common	O	
1926	Health Dept	58 Poplar Road, Kings Heath	O	Set up as voluntary, taken over by BCC
1926	Health Dept	Pype Hayes	O	
1927	Health Dept	Wheelwright Road Tyburn	O	Short term, replaced by Tyburn Rd
1928	Voluntary	Hall Green	O	Weighing centre
1929	Health Dept	Shirley Road, Acocks Green	O	
1929	Health Dept	Weslyan Church Hall, Trittiford Rd, Billesley	O	
1928	Health Dept	181 Weoley Castle Road, Weoley Castle	O	New estate built 1931 -34
1934	Health Dept	Monument Road	C	Took over Smith St & St Vincent St.
1935	Health Dept	6, Plowden Road, Stechford	O	New estate
1935	Health Dept	Glebe Farm	O	
1935	Health Dept	Walsall Road	O	

* Centre located in central wards, middle or outer ring

Appendix 6

Statistical information regarding welfare centres, their staffing, visits made and attendance at clinics

Data collected from Birmingham MOH Reports

Year	No. HVs**	Clinics	Births Reported	Child 1st visits	Child Total visits	Mothers 1st visits	Mothers Total visits	No.Child Cons.	New child attendances	New ch . att. under 1 yr	Total Attend.	Seen by doctor	Mothers Cons.	New AN	New PN
1899	4														
1900	8			17832											
1901				23504											
1902	12			31977											
1903	13														
1904															
1905				23304											
1906				31975											
1907	17														
1908															
1909		2							2600						
1910															
1911				10290											
1912															
1913		8	4910								6909				
1914	31														
1915															
1916	78	15													
1917		20													
1918		21	12333	12044	111070	1553	5301		10306		67080			1603	
1919		21	15518	15154	128691	2845	8331	2409	11390			44760			
1920				21006	135357	3939	8812		14392						
1921	83*	21		21869				2610	14988				842		
1922															

Year	Number		Births Reported	Child Primary visits	Child Total visits	Mothers Primary visits	Mothers Total visits	No.Child Consultations	New child attendances	New ch . att. under 1 yr	Total Attend.		
	HVs	Clinics											
1926	74	25	15418	15626	249267	2722	6043	2831	13647		133409	64379	1117
1927		25	16316	16217	255775	2280	4595	2969	14035		143413	66000	1188
1928		26	16561	16188	272212	2796	6689	3102	15035		155605	71103	1304
1929		28											1522
1930		28	17333	17828	308722	2731	14036	3325	15705		158724	74728	2071
1931	95	28	16723	16937	307659	2516	14014	3305	15239	11560	159134	73053	2090
1932	99	28	15763	16190	320236	2427	14968	3289	15434	11574	169308	76626	1892
1933	103	31	14395	14975	313909	2507	16708	3316	14367	10891	167852	76827	1883
1934	101	33	14739	15161	304188	2044	17543	3305	13918	10917	164813	73771	1953
1935	94	30	15374	15400	289283	1970	18276	3476	14131	11089	178868	79586	2157
1936	98	31	16106	15806	279374	2021	18749	3687	14978	11987	200823	86161	2318
1937	100	32	16755	16259	308691	1649	19533	3680	16486	13326	212623	85999	2510
1938	105		17528	16880	308220	5426	20086	3986	17098		234037	92686	2889

**** Health Visitors**

* In this year the number of health visitors employed is divided into part time workers and infant visitors

19p/t +64IV

AN –ante

natal

PN-post

natal

IV - Infant visitors