Chapter-1
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Women’s Health and Hygiene in Colonial India

The colonial period marked a departure from primitive to modernity and transformed the pre-existing institutions with modern values and ideas. The health and hygiene, however, have not initially been the priority of governance, but still the colonial regime introduced a new concept of health and hygiene based on modern sciences and technologies. The major concern of colonial government was initially for the soldiers of the British East Company. Public health was not the responsibility of the colonial state for a long period. The upsurge of national movement during the second half of the nineteenth century raised the issues of public health as a fundamental right. The international movements followed by the declaration of the United Nations Declaration of Human Rights gave new dimension to the issue of public health in general and equality of right to health for women in particular. The intellectual inputs of the national movement considerably shaped the policy of public health in the post-colonial period. ¹

During the colonial period the general condition of public health was pathetic. The main reason besides sheer neglect of public health by colonial state was inequality in the society. The women were the most affected lot due to the poverty and their subordinate position. Though the condition of the health of ‘mother’ remained a major issue of criticism by the colonial government, in spite of this the colonial government initially provided medical facilities in state sponsored hospitals i.e. ‘Lock’ hospitals to treat prostitutes for venereal diseases. The concern here was not for the diseased women, but stemmed from the imperialist design to prevent the spread of syphilis and gonorrhea among British soldiers. ²

The notion of public health during the colonial period started with the emergence of elites in Indian society. Besides the seal of modernization and acceptance of the modern concept of health and hygiene by the middle class, the issue

¹ Amrith S. Sunil, ‘Health and well being in colonial and postcolonial India’, lecture delivered at Center for Health and Wellbeing, Princeton University, US, on 27/03/2006. www.princeton.edu/uchw/events_archive/repository/03272006_amrith/03-27-07.pdf, p.4
of public health for them also emerged as an important matter of debate, due to the political, social and epistemological challenges posed by the colonial rule. Introduction of new technology in printing and their circulations among the middle class popularized the concern for health and illness. One of the central theme related to the issues of health that was regularly debated in the writings was 'responsible parenting'. The health of mother and healthy child rearing led to the emergence of the concept of the maternal and child welfare leading to the upsurge in the institutional initiative to educate mothers and improve their health.\(^3\) This was also debated that the hygiene and the women's control over their bodies by planning their families are important concerns for social degeneration and the reproduction of the 'wrong sorts'.\(^4\) The new idea condemned and raised objections to child marriage and caste endogamy. The writings on colonial period, time and again, deliberated that poverty was one of the fundamental reasons for the neglect of general health and hygiene, which of course resulted in the Indians' susceptibility to disease and premature death.

The establishment and expansion of British rule in the eighteenth century led to the expansion of military establishments, leading to the increase in the number of defence personnel. The Indian Medical Services (IMS) came into existence in mid-eighteenth century to provide medical services to the army. The doctors appointed through the IMS not only assisted army, but some of them also entered into civilian practices and provided modern medical assistance to rich and elites. In addition to these doctors of IMS the British also introduced hospital assistance and orderlies organized under the Military Subordinate Medical Department to increase the number of trained personals for medical assistance. These trainees were local Indians and were trained in both western medicine and indigenous traditions. The growing number of Indians trained in aspects of western medicine, provided a medium for foreign medical ideas to enter Indian culture.\(^5\)

During this period the women also received the benefits of western medicines, but on a limited scale. The patriarchal norms kept them inside the home and less exposed to the developments taking out in the world except few high caste and elite

\(^2\) Ibid, p. 5
women. The women were reluctantly allowed to visit hospitals and dispensaries and their world was confined to zanana i.e. an inner quarter of the house where the traditional system was respected and adhered to. The effort of Countess Dufferin to replace the midwives by medically trained women has though been a remarkable leap in the modernization of maternity health but with limited success.\(^6\)

The general condition of women’s health was ignored and neglected due to the social backwardness of the country. It was only during the early nineteenth century that the issues of social reforms focused on the women’s health and especially maternity health. Moreover the accusation of British that the basic political weakness of Indians underlay in the social weakness and degradation of women was well taken by the reformers of the nineteenth century which in turn led to thinking on the issues of the women’s health. The issues of child marriage, polygamy, purdah, sati etc. also covered the discussions related with the health of women.\(^7\)

The condition of women’s health in late nineteenth century can be gleaned out from the male-female ratio at different ages. The Census Report of 1901 records, comparative figure of male-female ratio at different ages in some of the states in colonial India during late nineteenth century. Table-1 records, sex ratio recorded in the Census of 1891 and 1901 respectively.

**Table 1: Number of Females to 1,000 Males at each Age period in India as a whole and in certain Provinces at the Last Two Censuses (All Religions) 1901-1891**

<table>
<thead>
<tr>
<th>Age</th>
<th>India 1901</th>
<th>1891</th>
<th>Bengal 1901</th>
<th>1891</th>
<th>United Provinces of Agra Oudh 1901</th>
<th>1891</th>
<th>Madras 1901</th>
<th>1891</th>
<th>Bombay 1901</th>
<th>1891</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5...</td>
<td>2</td>
<td>1,028</td>
<td>3</td>
<td>1,071</td>
<td>4</td>
<td>1,081</td>
<td>6</td>
<td>1,000</td>
<td>7</td>
<td>1,020</td>
</tr>
<tr>
<td>5-30...</td>
<td>960</td>
<td>957</td>
<td>1,001</td>
<td>913</td>
<td>1,027</td>
<td>937</td>
<td>1,028</td>
<td>937</td>
<td>1,023</td>
<td>937</td>
</tr>
<tr>
<td>Total...</td>
<td>963</td>
<td>958</td>
<td>1,000</td>
<td>937</td>
<td>1,023</td>
<td>937</td>
<td>1,023</td>
<td>937</td>
<td>1,031</td>
<td>937</td>
</tr>
</tbody>
</table>

The above table reflects that the number of females per 1,000 males is lowest in the category of the age group of 5-30. Lowest in Oudh may be due to the

\(^6\) Ibid
\(^7\) Forbes Geraldine, 'Women in Modern India', Cambridge University Press, 1998-2004, p. 12
\(^8\) Census of India 1901, p. 124
prevalence of female infanticide as recorded by the British official records. Madras records the highest rather healthy picture of the male-female ratio. Two main reasons behind female infanticide; one was epidemiology and unawareness about treatment for diseases, another was social circumstances.

The Census report also explains the reasons for the disparity in the sex ratio. According to the report the difference in the proportion of the sexes shown by the Census Statistics may be due to three causes, viz.:

1) a more complete enumeration of the male population,
2) a large number of male births or
3) a heavier mortality either because of their male relative regard them as of no importance in connection with an enquiry, such as the Census, instituted by the Government, or of girls who have reached the age of puberty while still unmarried, or because they connect the Census with some imaginary ulterior motive on the part of Government, such as the desire to provide wives for its sepoys (soldiers).

It is interesting to note here the conclusive remark of Mr. Banes the Census of 1891. He held that there was in most parts of India proper a tendency, in a greater or less degree, to omit from the census girls of from 9 to 15, and wives of from 15 to 20, or thereabouts, but that in every part of the country, except more numerous than boys of that age. After that period, apart from willful or ignorant omission, there is probably a real deficiency in the number of females, extending to about the twentieth year, more or less, and due to neglect, functional excitement, premature cohabitation and unskillful midwifery. At a later period, hard work, as well as the results of the above influences, and amongst some classes, excessive fecundity tell on the female constitution, producing greater relative mortality than prevails in the other sex, though towards the end of life, the latter succumb to old age sooner than the survivors from amongst their mates. It is also probable that, either from climatic "influences female life is on the whole, better in India on the coast and hills than on the hot and dry plains."9

Though, the official view emphasizes on the concealment of female figures due to various reasons besides high mortality rate. This is important to note here that contemporary record highlights the high mortality rate due to not only neglect of

9 Census of India 1901, Chapter III, p.110
women's health and early marriages, but also due to the social stigma related to the birth of females resulting into the high rate of female infanticide.

The Census Report further elaborates that the number of males at birth generally exceeds that of females to a relatively greater extent than it does in the case of the persons enumerated in the Census. The possible causes of higher female mortality in India are:

a) Female infanticide,

b) A comparatively greater neglect of females, especially at the earlier ages,

c) Premature cohabitation and childbearing coupled with unskillful midwifery,

d) Hard work in case of the lower classes, and e) general adverse conditions of climate, nutrition, house accommodation and the like.\(^{10}\)

In another table 2 we may see death and birth ratio of women in Provinces per 100 Males.

Table 2: Number of Females, per 100 Males, Births and Deaths\(^{11}\)

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Number of Females Born and Deaths per 100 Males in 1891-1900</th>
<th>Total 1891-1900</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Birth</td>
<td>Death</td>
</tr>
<tr>
<td>Assam ...</td>
<td>92</td>
<td>89</td>
</tr>
<tr>
<td>Bombay...</td>
<td>93</td>
<td>92</td>
</tr>
<tr>
<td>Bengal...</td>
<td>91</td>
<td>89</td>
</tr>
<tr>
<td>Bengal Proper...</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Bihar...</td>
<td>90</td>
<td>87</td>
</tr>
<tr>
<td>Orissa...</td>
<td>96</td>
<td>94</td>
</tr>
<tr>
<td>Chota Nagpur...</td>
<td>93</td>
<td>88</td>
</tr>
<tr>
<td>United Provinces...</td>
<td>91</td>
<td>87</td>
</tr>
<tr>
<td>Madras...</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Central Provinces...</td>
<td>94</td>
<td>87</td>
</tr>
<tr>
<td>Punjab...</td>
<td>88</td>
<td>87</td>
</tr>
<tr>
<td>Burma...</td>
<td>94</td>
<td>81</td>
</tr>
<tr>
<td>India...</td>
<td>92</td>
<td>89</td>
</tr>
</tbody>
</table>

\(^{10}\) ibid, p.115

\(^{11}\) Census of India 1901-2, p. 126
Table 3 represents the population by sex, deficit of women in absolute number (or the difference between the total male and female population) and percentage of total female deficit beginning from 1901 to 1941.

Table 3: Population by Sex, Deficit of Women in Absolute Numbers as Per cent of Total Population, and Sex Ratio of Population in India, 1901-41

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Total Population Persons</th>
<th>(in Male Millions)</th>
<th>(in Female Millions)</th>
<th>Deficit of women</th>
<th>Percentage of deficit of women</th>
<th>Sex ratio (males per 1000 females)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901a</td>
<td>238.2</td>
<td>120.8</td>
<td>117.4</td>
<td>3.4</td>
<td>1.4</td>
<td>1029</td>
</tr>
<tr>
<td>1911</td>
<td>252.1</td>
<td>128.4</td>
<td>123.7</td>
<td>4.7</td>
<td>1.9</td>
<td>1038</td>
</tr>
<tr>
<td>1921</td>
<td>151.4</td>
<td>128.6</td>
<td>122.8</td>
<td>5.8</td>
<td>2.3</td>
<td>1047</td>
</tr>
<tr>
<td>1931b</td>
<td>278.7</td>
<td>142.9</td>
<td>135.8</td>
<td>7.1</td>
<td>2.5</td>
<td>1052</td>
</tr>
<tr>
<td>1941b</td>
<td>318.4</td>
<td>163.7</td>
<td>154.7</td>
<td>9.0</td>
<td>2.8</td>
<td>1058</td>
</tr>
</tbody>
</table>

In the table clearly reflects that the availability of female per 1000 male has continuously declined from 1901 to 1941. The percentage of the deficit of female has increased from 1.4 in 1901 to 2.8 in 1941. Main causes of women deficit must have been primarily due to the lack of knowledge about health and hygiene, ignorance of health, maternal mortality and other social factors.

The major debate on the issue of child marriage and its impact on the health of women started in the late nineteenth century. Both the Indian reformers and British officials debated in length about the effects of child marriage on women's health and child mortality. However some conservatives tried to justify the child marriage on the basis of climatic conditions prevailing in India.

During nineteenth century social reformer however criticized the child marriage and deliberated in detail about the ill-effects of child marriage on women's health, still a proper health policy for women by government was not forthcoming. Pandit Ishwar Chandra Vidyasagar wrote an article in Sarvasubhakari Patrika in 1850 lamenting on evils of child marriage. He wrote that early marriages led to premature childbearing, often damaging the health of young parents who, as a consequence

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12 Census report for various census years

Notes: * Sex distribution of population of Chandannagar in West Bengal, Gonda in Uttar Pradesh, and Pondicherry was not available. The total population figure shown here is exclusive of the population in these territories.

b Sex distribution of the population of Pondicherry for 1931 and 1941 was not available. The total figures shown here are exclusive of Pondicherry's population.
rarely had strong and healthy children. Another article also denounced the evil of child marriage in *The Bamabodhini Patrika*, in November 1864, pointing out many abuses caused by it, such as early death, ill health, lack of education, poverty, etc. It is important to note here that the health of women was a concern but the main subject matter however was the ‘strong and healthy children’. On the issue of child marriage in April 1871, Keshab Chandra Sen (President of the Indian Reform Association), addressed a circular letter to eminent medical practitioners of the country and sought their opinion. The opinions of medical officers were unanimous in increasing the marriageable age above twelve.

First legal protection against child marriage came into existence through the passage of the Special Marriage Bill, and three days later it was passed into law as Act III of 1872. The Act abolished early marriage and made polygamy penal, sanctioned widow remarriage and inter-caste marriage. The Special Marriage Act (1872) however gave more rights to women than those permitted in the traditional form of marriage. Hence the issue of marriageable age came as a relief to young girls who were relieved to some extent from the hazards of early marriage. In 1890 the death of Phulmoni Das at the age of ten as a result of injuries sustained during sexual intercourse with her 35 year old husband, Hari Mohan Maity cleared the deck for the passage of a law restricting child marriage. This incident led to amendment of both the Indian Penal Code and the Criminal Procedure Code in March 1891 to rise the age of consent for girls to 12 for marriage and unmarried girls. The sexual intercourse with girls below that age was a punishable offence with up to ten years of imprisonment or transportation for life.

From as early as 1922, following the enhanced powers of the reformed legislatures, various bills were introduced to raise the age of consent within and outside marriage, but these were obstructed frequently by the government itself. Like, H.S. Gour’s 1924 bill to amend Section 375 of the Indian Penal Code rising the age of

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14 Ibid, p. 40
15 Ibid, p. 41
16 Ibid, pp. 43-45.
consent for girls to 14 in both marital and extra marital cases was not passed due to the intransigence of Government members. Another Legislative Assembly led by Har Bilas Sarda also supported 14 years age of girls for marriage in 1927. Several women members of Joshi Committee\textsuperscript{19}, such as Lady Ramabai Nilkanth from Gujrat, testified before the committee, strongly urging that the minimum age of marriage of girls be fixed at 16 years primarily on the grounds of protecting maternal health. In Madras, some women even suggested that the age of consent be fixed at 18 in 1928. Thus the Madras Legislative Council unanimously passed a resolution recommending 16 as the age of marriage during the course of time.\textsuperscript{20} The increase of marital age from 12 years 16 years to some extent ensured women a better reproductive and mental health.

The widows constituted the most depressed category among women during colonial period. They were the basic amenities of the life. The sub-human condition of women deprived them not only nutritional food but also basic facility of health and hygiene. In the following table-4 number of widows per 1000 female is recorded in the census data from 1881 to 1911.

<table>
<thead>
<tr>
<th>Number of widows per 1,000 Females</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>187</td>
<td>1881</td>
</tr>
<tr>
<td>176</td>
<td>1891</td>
</tr>
<tr>
<td>180</td>
<td>1901</td>
</tr>
<tr>
<td>173</td>
<td>1911</td>
</tr>
</tbody>
</table>

The figure shows that the number of widows per thousand females which was 187 in 1881 fell to 176 in 1891; it rose to 180 in 1901 and fell to 173 in 1911, the lowest on record. The decrease since 1901 is shared by all the religious communities. It is greatest in the case of the Animists, who have now only 114 widows per thousand compared with 139 at the previous census. Amongst the Muhammadans the proportion of widows has declined steadily since 1881, and is now only 148 per thousand compared with 170 in that year. It would seem that the prejudices against widow-remarriage were gradually dissolving. The proportion of Hindu females who were widowed in 1911, thought larger by two per mile than in 1891, was less by nine

\textsuperscript{19} The Joshi Committee appointed to consider Gour's Bill, expanded its mandate to consider the Sarda Bill and presented its detailed report to the Assembly in 1929.

\textsuperscript{20} Ibid, pp. 79-80
per cent than it was in 1881. The proportion of widowed at all ages below 30 in the
total population is larger now than it was twenty years ago, but there is a slight
improvement between the age of 20 and 30.\textsuperscript{21} Another table 5 records the comparison
of total number of widows in the census of 1921 and 1931.

\begin{table}
\centering
\caption{Number of Widows}
\begin{tabular}{|c|c|c|}
\hline
Age & Number of widows in 1921 & Number of widows in 1931 \\
\hline
0-1 & 759 & 1,515 \\
1-2 & 612 & 1,785 \\
2-3 & 1,600 & 3,485 \\
3-4 & 3,475 & 9,076 \\
4-5 & 8,693 & 15,019 \\
5-10 & 1,02,293 & 1,05,482 \\
10-15 & 2,79,124 & 1,85,339 \\
\hline
\end{tabular}
\end{table}

The above figures show that in spite of various legal enactments the number of
widows continuously increased. In 1921, there were 759 widows less than 1, and in
1931, the number was 1,515. Under the 10-15 age group, there were 2,79,124 widows
in 1921 and, in 1931, the corresponding number was 1,85,339. The successive census
figures showed only a microscopic improvement.\textsuperscript{22}

In the entire India, no fewer than eleven per cent of the females aged fifteen to
forty per cent were widowed. Among the Hindus, the proportion was twelve per cent;
while in Bengal it exceeded sixteen per cent. The colonial period witnessed high
infant mortality rate which of course was also directly linked with the social
backwardness, poverty and negligence to women's health. The colonial records
attributed the high infant mortality rates to the lack of stamina in mothers, their poor
nourishment causing their inability to bear healthy offspring, and the hard work that
they did during pregnancy. Women also suffered some more with diseases during
pregnancy and childbirth, while Indian practices of midwifery were dismissed as
ignorant, unclean and superstitious in colonial discussions by male doctors.\textsuperscript{23}

From the late nineteenth century onwards, the high rate of infant mortality in
India drew the attention of the press in Britain. Journalist Marry Frances Billington

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{21} Census of India, 1911, Vol. I, chapter VI, p. 275
\item\textsuperscript{22} Census of India, 1931, part I, vol. I, chap. VI, p. 224.
\item\textsuperscript{23} Shah K. Kirit (ed.), \textit{History and Gender: Some Exploration}; Ramanna Mridula, \textquote{Women's Health in Colonial Bombay, 1850-1920}', Rawat Publications, 2005, p. 163.
\end{itemize}
\end{footnotesize}
wrote in the 1890s that infant mortality was very high in India mainly due to the ignorance of the dais. The infant death rate in England around 1870 was 162. It came down to 96 in 1917, and in 1920 it was as low as 80 per 1,000. In contrast, during the first two decades of the twentieth century in Bengal, one in five babies died before the first birthday. The report of Dagmer Curjet recorded in 1920 found 49 per cent survival rate among infants in Bengal. In 1920-21, female mortality was over 5 per cent as against the male mortality rate of 3.3 per cent. It was also noted that ‘there is a phenomenal excess of female mortality in Bengal during the first part of a woman’s reproductive age period’.  

British administrators, who emphasized poor hygiene and ‘curious’ practices, however admitted that poverty was the main reason among the laboring classes. Women who were malnourished and overworked could not give birth to or bring up healthy and strong children. Anaemia during childbirth and chronic calcium deficiency resulting from strenuous pregnancies were major problems. Diseases such as lung infections, bronchitis, diarrhea and measles—which caused most of the deaths of children between one month and one year, were closely related to poverty, especially to inadequate housing, clothing and sanitation. In some official reports, the causes of maternal and juvenile deaths and poor health were traced to social customs, unhygienic environment, malnutrition, dirty midwifery and untrained midwives.

The period witnessed the expansion in the arena of health education. Deepak Kumar argues that this led to the greater governmental control over patient’s body or family from the outside. Health education certainly contributed to the management of social and individual bodies. Traditionally, health education has been considered as an asset within health care, because it provides information and suggests alternatives to individuals, families or groups, to prevent disease and promote health. From this perspective, health education seems to be a healthy practice and a weapon for the empowerment of patients. Although impact of health education positively made changes in the society, but see in the (Appendix 1, table 1) it may be observed that death rates of infant were decreasing as compared to maternal deaths. The maternal death rate in Bengal showed an upward trend between 1929 and 1938, rising from

around 7 per cent to nearly 11 per cent. Between 1939 and 1944 it fluctuated between nearly 9 per cent and more than 10 per cent. The infant death rate also presented a dismal picture, fluctuating between nearly 150 per cent and more than 200 per cent during the same period.  

Of late some maternity and health centers came into existence through the initiative individual women organizations. The Bombay Mother and Child Welfare Society (1919) ran three maternity and four child welfare centres in Bombay city, and twenty in the mofussil areas. Two free family planning clinics, eight prophylactic clinics for venereal diseases, and separate training centers for midwives and dais were also maintained. A scheme was started to train village dais by bringing them into towns for short-term courses. Elsewhere, the Seva Sadan at Poona, with branches at Sholapur and Ahmednagar, trained nurses. These measures only touched the periphery of the issue, but they were an important beginning.  

On the occasion of the meeting of the Association for the Provision of Health and Maternal Supervision, 1919, in Delhi, Lady Harnam Singh had noted that owing to ‘the domestic prejudice of our country women’, the sums spent by Government benefited men more than women. But with the increase of women doctors, not only could cause of women’s diseases be investigated but also of the ‘terrible infant mortality’.  

Some men also contributed their best efforts for women. For instance Rukminibai Dispensary at Kalyan and the Lingoobai Dispensary for Tuberculosis Patients, Bombay were also established with the efforts of men. Bai Motlibai Wadia and Sarker Petit made subscriptions to the Medical Women for India fund in their individual capacities as early as 1885, and Jerbai Wadia founded many institutions. In fact, the latter corresponded with the Bombay government about the management of a dispensary she had endowed at Khandala. These few efforts could be taken as indicative of the growing awareness among women.

Such initiatives broadened the avenues of health assistance for women as the Bombay Gazette observed, Indian women had no confidence in European doctors,

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26 Ibid, pp. 208-211.
28 Ibid, p. 163
who did not understand their language and approached them 'with a grave and unsympathetic countenance'. Nonetheless, the presence of Indian women doctors contributed to increased numbers in admissions at hospitals and dispensaries in Bombay Presidency had doubled from the figures for 1913.  

Throughout the colonial period there was reluctance on the part of women towards modern health facilities and women desirous of their health preferred to go to Vedhas or Hakims instead of going to hospitals or dispensaries directly. Though, they were not getting proper and satisfactory treatment in the hospitals, they chose to do so.

The Dufferin Fund, begun in 1885, became the first program with official support to focus on medical care for Indian women. The Fund’s mission was to provide scholarships, train doctors, nurses and midwives, and sponsor hospitals and dispensaries for women. At the same time district boards collected funds to build women’s hospitals that would be run in collaboration with the Duff Fund and staffed by Duff doctors.

In the late nineteenth century, the colonial government decided to promote Western medical care for Indian women from high-ranking and respectable families. This was however, seen as their effort to penetrate the zanana viewed as a dangerous and unhealthy place where disloyalty flourished and women suffered without medical aid. Their goal was to penetrate the zanana, not with force but with the forceps of the lady doctors. To do so, they created a new and inferior class of lady doctors, trained in western medicine through the vernacular, and supported their employment in women-only hospitals in the district of Bengal. At the same time, they worked to discredit traditional medicine and medical practitioners.(see appendix 1, table 3)

Throughout the colonial rule one of the major concerns of women’s health for the government was the maternity health. In these efforts missionaries also played an

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29 Ibid, p. 167
31 Ibid, p. 140
important role. In fact, by promoting a western innovation in the form of western medical science, European medical missionaries undertook efforts to change the health standards and behavioural attitudes of the Indians with whom they came into contact. However by the last year of the nineteenth century, medical missionaries in India realized the implications of their ‘care and cure’ policy vis-à-vis the complex process of Christianization.

One of the major themes of the study of reproductive health during the colonial rule from 1850-1950 centered on the problems of the ‘wicked practices of barbarous midwives’ and on the ‘deleterious effects’ of child marriage and the seclusion of women. At the close of these hundred years, reproduction in India was yet? to promote national efficiency and hygienic progress.

Previously and during the British period, traditional Indian birth attendants (dais) were traditionally authorized to deliver baby in every Indian families and society. The method they used during delivery was very unhygienic and risky for the mother and child health. European missionaries first drew attention to the high maternal and infant mortality in Bengal in the early nineteenth century and pointed a finger of blame squarely at ‘traditional customs of childbirth’. In 1934, the All-India Women’s Conference [AIWC] passed a resolution at its annual meeting calling for legislation requiring the “compulsory registration” of all dais and midwives. The AIWC, inaugurated in 1927 was fast emerging as India’s premier women’s organization, with branches all over the country and a membership in the thousands. By this act, reformist middle-class Indian women made it clear that they agreed with Western missionaries, medical personnel, and British authorities that traditional Indian birth attendants had to be replaced by midwives trained in Western medicine and hygiene.

34 Ibid, p. 181
It is important to note here that the census data clearly reflected that the most urgent issue for the colonial government was to realize the urgency for the health problems of mothers and children. Nearly one-half of the total deaths at all ages in British India takes place among children less than 10 years. Of these nearly a half is among infants under one year. A conservative estimate of the annual number of deaths among women in the reproductive ages from causes associated with pregnancy childbearing is 2,00,000 while the number of women who have to undergo, each year, varying degrees of disability and suffering from the same causes is likely to be about four millions if the ratio of maternal morbidity to mortality considered reasonable elsewhere can be applied to India.\(^{38}\) The mortality rate of women in this country as compared with that of England and Wales may be obtained from the table given below:

| Table 6: The Women Mortality Rate Compared with the England and Wales |
|-------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                         | Period          | Sex        | 0-1         | 1-4         | 5-9         | 10-14       | 15-19       | 20-24       | 25-29       | 30-34       | 35-39       | 40-44       | 45-49       |
| British India           | 1930-32         | M          | 184.4       | 37.6        | 10          | 6.3         | 8.9         | 9.5         | -           | 12.6        | 18.7        | -           |            |
|                         |                 | F          | 167.1       | 34.6        | 9.9         | 6.3         | 10.6        | 11.9        | -           | 13.3        | 16.3        | -           |            |
| England and Wales       | 1930-32         | M          | 72.2        | 7.5         | 2.3         | 1.5         | 2.5         | 3.3         | 3.3         | 3.6         | 4.8         | 6.4         | 9.3         |
|                         |                 | F          | 54.9        | 6.8         | 20          | 1.4         | 2.3         | 2.8         | 3.1         | 3.3         | 3.9         | 4.9         | 6.7         |

This is due to the added risk of death which childbearing brings to women during those years. On the other hand in India, this risk is presumably greater than in England and Wales because female death rates during 15-40 are distinctly higher than the corresponding rates for men although, at the earlier and later age periods, these rates are, as in the case of England, lower than those for males.\(^{39}\)

The Government of India formally established the Women’s Medical Service (WMS) in 1914. It was small and politically weak in respect to the long-established Indian Medical Service (IMS) or other medical organization. Its numbers were far smaller than IMS, and responsibilities were largely confined to the treatment of

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\(^{39}\) Ibid, p. 62
women and children, and the staffing and administration of women's hospitals. Moreover, forming only about a tenth of all qualified medical women practicing in India in the 1930s, the WMS had to compete or coexist with the Dufferin Fund and with various women's missionary organizations in the quest for funds, buildings, trained medical staff and ultimately, for professional and political authority.  

Among other initiatives, for maternal and child welfare in fact rested not with the WMS as a state service but with the voluntary sector. Hence, it was under the auspices of the Indian Red Cross Society that a Maternity and Child Welfare Bureau was established in 1930, the first all-India body created for this purpose. The bureau attempted to carry out in the voluntary field the work which is performed in England by the Maternity and Child Welfare Department of the Ministry of Health.

There was little convergence between official attitudes and policies relating to population, reproductive health and birth control can be further illustrated by developments in Calcutta in the 1930s. In December 1932, after several years of planning, the All-India Institute of Hygiene and Public Health (AIIPH) formally opened in Calcutta. To some this marked the "opportunity for which those most intimately concerned with maternity and child welfare had long been looking." However, even before institute opened, the world depression forced the Government of India to renege on its original promise to the Rockefeller Foundation to fund salaries and other costs in return for the foundation providing the building and bearing the expense of equipping the new institute. It was decided that two of the intended six sections could no longer be funded—which was the one of maternity and child welfare section. Recognizing its importance, the Duffrine Fund and Red Cross Association of India (RCAI) stepped in to pay for the section to be partially opened and for Dr. Jean Orkney of the WMS to take charge of its work.

At that time there were several general and maternity hospitals in which, within a year the maternity and child welfare programme was said to be reaching more than half the pregnant women in the ward and providing effective antenatal and postnatal services. By 1938 attendance at the clinic had reached 8,456 in a year. In

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41 Ibid, p. 39
42 Ibid, p. 40
addition, there were 7,500 home visits by the two health visitors and 202 antenatal visits by the midwives.\textsuperscript{43}

Beside these issues of women’s health, the colonial government had a long history of disease and their prevention and expansion of infrastructure for this purpose. It reveals the development of surveillance systems and the response to epidemics by the imperial government. It depicts how the establishment of health systems under the colonial power shaped disease control in British India to improve the health of its citizens. The history of western medicine in India dates back to 1,600, when the first medical officers arrived in India along with the British East India Company’s first fleet as ship’s surgeons. In 1757, the East India Company established its rule in India, which led to the development of civil and military services. A medical department was established in Bengal as far back as 1764, for rendering medical services to the troops and servants of the Company.\textsuperscript{44}

In 1785, medical departments were set up in Bengal, Madras, and Bombay presidencies with 234 surgeons. The medical departments involved both military and civil medical services. In 1796, hospital boards were renamed as medical boards to look after the affairs of the civil part of the medical departments. In 1857, the Indian Rebellion led to the transfer of administration of India to the Crown and different departments of civil services were developed. It wasn’t until 1868 that a separate civil medical department was formed in Bengal. In 1869, a Public Health Commissioner and a Statistical Officer were appointed to the Government of India. In 1896, with the abolition of the presidential system, all three presidential medical departments were amalgamated to form the Indian Medical Services (IMS). After the development of IMS, medical duties for the Royal Indian Army were performed by the Army Medical Department, later called the Royal Army Medical Corps (RAMC).\textsuperscript{45}

Under the Military Cantonments Act of 1864, a sanitary police force was formed under the charge of military medical officers to improve military hygiene. To improve civil sanitary conditions, sanitary boards were formed in each province in

\textsuperscript{43} Ibid, p. 42  
\textsuperscript{44} Harrison Mark, ‘Public Health in British India: Anglo-Indian Preventive Medicine’, 1859-1914 (Cambridge: Cambridge University Press, 1994), pp. 7 
http://www.amazon.com/Public-Health-British-India-Anglo-Indian/dp/0521466881#reader_0521466881  
\textsuperscript{45} Ibid, p. 8
1864. Sanitary Inspector General’s later named as Sanitary Commissioners replaced these boards and took over the charge of sanitation. In 1870, the sanitary department was merged with the vaccination department to form a central sanitary department. From 1870 to 1879, sanitary departments were set up in each province. In 1827, four European superintendents of vaccination with one Indian vaccinator were appointed to the Bombay Presidency. In 1880, an act was passed for the compulsory vaccination of children in municipalities and cantonments.

When the British Empire came into power in India, they faced the challenge of a new set of diseases that were endemic in that region. India was a vast country with environments ranging from the world’s highest mountains to plain green fields, and from tropical forests to barren deserts. Such a diverse region had its own peculiar diseases, which were difficult to prevent with the limited resources of the IMS. An enormous amount of work was done for the prevention of epidemics to save the lives of people in India in general, and the Imperial troops and officers, in particular. Epidemic diseases that had devastating effects during that period were smallpox, plague, leprosy, cholera, and malaria. The British government took great efforts to prevent diseases but due to insufficient medical officers and funds, the major target was to improve suffering and render curative services as it was solely a state responsibility during that period with virtually no volunteer or private-sector organizations. Prevention and environmental hygiene had long been neglected. It wasn’t until the late 19th century that the government realized that many deaths could be prevented and public health services were strengthened.

When British Government was taking initiative to elaborate modern medical system in India, at that time Indian population was completely following indigenous and traditional method of the health and medicine. *Hakims* and *vedhyas* were to treat people. Their treatment was completely based on herbs and plants which called Unani

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763662/
(Islamic/Graeco-Arabic) and Ayurveda (Hindu) medical system and traditional source of treatment. Western medicine was often the preferred option, but in other cases, especially medication for common diseases, it generally was not. Nor did all Indians have easy access to Western medicine. Rural areas continued to be poorly served by dispensaries and Western-trained practitioners' right through to Independence in 1947. Women were also much less exposed to Western medicine than men, because the latter often forbade them from attending dispensaries and hospitals. Consequently, while the numbers attending such institutions increased under colonial rule, the proportion of women remained consistently low for most of the colonial period. Efforts designed to penetrate the veil of the zenana, such as the Countess of Dufferin's Fund to supply medical women for India, were generally limited in scope and tended to concentrate on women of high caste.49

The earliest attempt in this direction was made by Miss Hewlett of the Church of England Zanana Mission in 1866. National Association for Supplying Medical Aid by Women to the women of India was founded by the Countess of Dufferin in 1885, the object being to open women's hospitals; to train women doctors, nurses and midwives in India; and to bring these out when necessary from Europe. In addition Branch having its own funds and each having a number of Local Committees and Zenana Hospitals affiliated to it. This Fund, assisted by a small grant from the government of India, opened the Lady "Reading Health School in Delhi in 1918 for the training of health" visitors. This was followed by the founding in 1919 of the Lady Chelmsford All-India League for maternity and Child Welfare Bureau was established for the purpose of promoting maternity and child welfare work throughout the country.50

Being a private organization, Dufferin Fund was unofficially connected with government, which made health system extremely influential. These efforts to extend Western medical care facilities and personal to Indian women were very popular among Indians who considered themselves modernizers. The enlightened among the elite served on medical boards, donated money to hospitals, and refuted those who argued that Indian women were not ready to take advantage of these new facilities. In

the meantime, the central committee of the association strengthened the semi-official nature of their mission by securing government inspection of their hospitals. Practically, this meant that women's hospitals, and the medical women running them, were under the authority of the Civil Surgeon.\textsuperscript{51}

It was not easy to replace primitive health care system by modern health care system. Margaret Balfour and Ruth Young, both British doctors, commented on the work of women medical workers and health care in India in the 1920s, they wrote that the “insoluble problem” was the “indigenous midwife, or dhāi who has been presiding over childbirth for ages.” Modern method of health care was implemented in India by the efforts of new middle class, wanted Western medical knowledge and techniques. At this very difficult period in history, middle-class Indians had become partner in the “civilizing mission”.\textsuperscript{52} The modern health system had a serious handicap of manpower. The number of nurses employed in public medical institutions in the different provinces is given below:\textsuperscript{53} (also see appendix 1, table 2)

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Nurses employed in Medical Institutions</th>
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<td></td>
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<td>Rural</td>
<td>Urban</td>
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<td>European</td>
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<tr>
<td>Bengal</td>
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<td>13</td>
<td>29</td>
<td>42</td>
<td>392</td>
<td>536</td>
<td>928</td>
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<tr>
<td>Bihar</td>
<td></td>
<td>17</td>
<td>26</td>
<td>43</td>
<td>97</td>
<td>196</td>
<td>293</td>
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<tr>
<td>Bombay</td>
<td></td>
<td>2</td>
<td>42</td>
<td>44</td>
<td>211</td>
<td>957</td>
<td>1168</td>
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<tr>
<td>Central Provinces and</td>
<td></td>
<td>4</td>
<td>25</td>
<td>29</td>
<td>31</td>
<td>177</td>
<td>208</td>
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<td>655</td>
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<td>Madras</td>
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<td>North West Frontier</td>
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<td>1</td>
<td>12</td>
<td>13</td>
<td>5</td>
<td>94</td>
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<td>Provinces</td>
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<tr>
<td>Orissa</td>
<td></td>
<td>3</td>
<td>14</td>
<td>7</td>
<td>11</td>
<td>27</td>
<td>38</td>
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</tr>
</tbody>
</table>

\textsuperscript{51} Forbes Geraldine, op. cit., p. 88.
\textsuperscript{52} Ibid, p. 91
\textsuperscript{53} Report of the Health survey and Development committee, Chapter III, Published by the Manager Publications, Delhi, Printed by the Manager, Government of India Press, Calcutta, 1946, p. 40
Sind | 103  
---|---
United Provinces | 257  
Assam | 48 | 48 | 14 | - | 14  
Delhi | - | - | - | 104 | 200 | 304

The figures of hospitals and dispensaries also reflect the paucity of health care units in different provinces of British Indian 1941. In Bengal there were 37 Hospitals with 821 beds, in Bihar 21 hospitals and 352 maternity beds, 118 hospitals in Bombay, in Central Provinces 83 hospitals and 323 beds facility, Delhi 34 hospitals, Orissa 39 hospitals with 97 beds, Punjab maintained 106 hospitals for maternal health and 345 beds and in Sind only 5 hospitals for women and children health care.  
As regards health personnel the number of doctors, nurses and midwives that will be required is shown below:

<table>
<thead>
<tr>
<th></th>
<th>Number required</th>
<th>Number now available for the complete programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>233,650</td>
<td>47,500</td>
</tr>
<tr>
<td>Nurses (including public health nurses) (including existing health visitors)</td>
<td>680,000</td>
<td>7,750</td>
</tr>
<tr>
<td>Midwives</td>
<td>112,500</td>
<td>5,000</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>84,375</td>
<td>7555</td>
</tr>
</tbody>
</table>

In the three provinces Madras, Bombay and Bengal the administrative officer in charge of the medical department is known as a Surgeon General, while in other provinces the corresponding officer is the Inspector General of Civil Hospitals. The officer responsible for medical administration in a district is the civil surgeon. He administers the sub-divisional hospitals and looks after dispensaries in his own area. The hospitals and dispensaries in a sub division are usually under the control of Government or of local bodies.

In 1935 nearly half the districts and three quarters of the municipalities in British India had no qualified health officers. During the same period the number of sanitary or health inspectors employed in the country as a whole increased by 656,

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54 Ibid, p. 40  
* 186 is the total average of the Sanitary Inspector in Behar.  
55 Ibid, p. 35
making a total of 2,976. We understand that the special committee consisting of certain Directors of Public Health, the Director of General of Research Institute, Shillong, and some others, which discussed the problem of smallpox vaccination at New Delhi on 22nd November 1944, recommended that one qualified sanitary inspector should be appointed for every group of 25,000 people. Therefore, on the assumption that the population of British India is 300 millions, the number required is 12,000 as against the existing number of about 3,000. The increase in the number of vaccinators during the same period was 925. A striking feature is that, as regards women vaccinators, the total increase in British India was exceedingly small. In 1935, only 45 women vaccinators were employed in the rural areas of the country and 37 in the urban areas. The number of these women workers rose to 75 in the rural areas and 44 in urban centers, a total increase of 37 in the country. In many parts of India it is only a women vaccinator who can obtain access to the homes of the people and mix freely with the women. Therefore, the extreme inadequacy of the existing numbers of the women vaccinators available in the rural and urban areas of the country and of the rate at which their strength is augmented becomes emphasized.  

India under British rule witnessed the origin and growth of modern medicines and health system. In the beginning the colonial state was concerned only with the British soldiers and population, later, however, they tried to extend the health facilities to natives as well. The general condition of health was still under developed, but the prejudice of colonial state and modern reformers made the issue of women’s health, particularly maternity and child health, one of the important arenas of health reforms during colonial rule. The British besides philanthropy had also their colonizing agenda. The Indian reformers were though struggling hard to attain better health facility, still the women’s health was neither seen as a matter of individual right for women nor as a means to mitigate the gender inequality during the colonial rule. Moreover the contemporary health facilities suffered from severe handicap of the shortage of medical and nursing staff.

56 Ibid, p. 47
European settlements in India (1498 - 1739)

LEGENDS
- European settlement (with date of establishment / takeover)
- Portuguese settlements
- Dutch settlements
- Danish settlements

Settlement of British Empire in India