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THE WORK OF MEDICAL WOMEN IN INDIA

By

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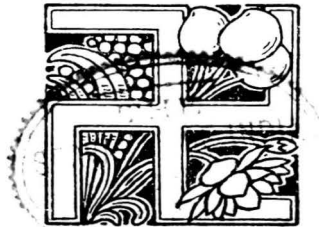
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WITH A FOREWORD BY

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DEDICATED
TO THE MEMORY OF THE
PIONEER MEDICAL WOMEN OF INDIA,
SOME WITH US STILL, SOME GONE BEFORE,
TO WHOSE DEVOTION, STEADFASTNESS AND
COURAGE, INDIA OWES THE RELIEF BEING GIVEN
TO-DAY TO COUNTLESS THOUSANDS OF HER CHILDREN

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FOREWORD

I have been honoured with a request from Drs. Balfour and Young that I should write a Foreword to their book. These are ladies exceptionally well qualified for their task, for they themselves are doctors who have worked long and enthusiastically in the endeavour to bring medical aid to the women of India.

Among the many flimsy, incomplete and one-sided books with which the market is burdened it is really delightful to find one the authors of which have honoured the public by writing seriously and sincerely, and who have taken the trouble of collecting and sifting their material, selecting from it what is interesting and necessary while rejecting the commonplace and non-essential.

The book opens with a sketch of the field of work, which is the land of India and her women. The authors bring before us the principal races inhabiting the country, the many different languages, the varieties of climates and of physical characteristics. They deal sympathetically with the social customs, conventions, and religions which exist throughout that vast peninsula. Very interesting remarks are made on all these matters, and they find that the conditions of life and the customs of the people which are common to-day in Kashmir and Baluchistan are practically identical with those which I found to obtain in the Presidency and town of Madras some sixty years ago. They find too that the Open Sesame to be applied to closed doors is now, as then, the gift of sympathy. Without this it is impossible that barriers should fall, that blinded eyes should see, and that frozen hearts should melt as melts the ice in Indian sunshine.

The difficulty in writing a Foreword to a book of this sort does not consist in poverty of material but in the impossibility of conveying any adequate idea of its value in

the space at one's command. The authors have much to tell us of such unfamiliar things as the purdah system and caste, of child-marriage, and of the ill-assorted unions of old men and young girls. All these and other kindred customs are closely connected with the problem of how medical women may best help their Indian sisters, but their interest and value are not limited to those who would fain serve the women of India as doctors and nurses, or as missionaries and educationists. On the contrary, they concern all whose work lies in India whether they be men or women, Hindus, Mahomedans, or Christians. Indeed I should like to see a copy of this book in the hands of all such workers. It is full of information useful to them all alike, while the common sense, sympathy, and reasonableness of the authors are evident on every page.

For instance, we are told why certain customs have sprung up among the Hindus. In the matter of early marriage we find that 'the principle on which it is founded is that young people of both sexes are likely to lead chaste lives and to form lasting affections for each other if brought together early in life'; while the important fact is added that, although the marriage ceremony may be performed at any age, the bride does not leave her father's home until after puberty is established. Thus, with a few wise words, an injurious imputation of selfish and ungovernable passion is dismissed.

Again, in mentioning some of the criticisms on the splendid movement known as Lady Dufferin's Scheme, the old arguments are cited that it was contrary to public welfare because it favoured caste. This is clearly shown by the authors to be unfounded.

When Lady Dufferin went out to India as the wife of the Viceroy she was specially charged by Queen Victoria to do all that might be possible to help these, her daughters, in their hour of need. So well did Lady Dufferin understand the wishes of her Sovereign, and so great was

the enthusiasm that she brought to the task, that in three years she collected in India seven lakhs of rupees, of which five and a half were invested in buildings, grants-in-aid and scholarships. The undertaking was so well organized that during the same period of time the United Kingdom branch collected three lakhs of rupees.

It was but natural that after Lady Dufferin left India some of the enthusiasm died down, but it has revived from time to time under the fostering care of successive Vicereines whose names are connected, sometimes with the Dufferin Fund itself, sometimes in special educational effort, in the provision of well-equipped medical colleges and hospitals, or in the training of the nurses and native midwives, whose services are essentially necessary to the success of any endeavour to secure adequate medical assistance for the women of India.

Among the most interesting chapters of the book is the one on the pioneers, the medical women who went out to India during the last twenty years of the nineteenth century. In reading this record one realizes that the difficulties and the labours of these women were great and insistent, their problems were stiff and frequently not immediately soluble. But they worked on; they never despaired but hoped to the end, and remembered that although God may bury His workers He continues His work.

As we read it becomes more and more clear that the foundation on which the pioneer work was built was by no means strong and firm. A generation ago, even in England and America, would-be medical women were still fighting hard to obtain education, especially in the form of clinical training both as undergraduates and as junior practitioners. No one welcomed us, no one wanted us. Professional brethren saw in us probably incompetent, and certainly inconvenient, competitors, and the public at large looked on us in much the same manner as that in which suffragettes were greeted thirty years later.

Still, after all, when once an individual or a cause has attained maturity, it is fair to expect that it will bear fruit, and what might be called the Medical Mission of Women to India was the early and excellent fruit of Mrs. Garrett Anderson's gallant endeavour to secure medical education, training and success for women in England.

From this point of view there is another truth to be considered. Movements, peoples, and individuals, are apt to attain their best development under apparently unpropitious circumstances, such as the maximum of work and worry, and the minimum of outside help and financial resource. At any rate, as Sir James Berry wittily said of women's medical work,—'their jaws were stronger and their bite was better when they were not spoon-fed.'

Another excellent chapter is devoted by the authors to what is technically known as 'medical mission' work by women. The endeavour to save the bodies of Indian women has been most wonderfully prosperous in the hands of those, their sisters, whose primary and declared object in exile and in renunciation of this world's golden store was the welfare of souls.

Medical mission work indeed constitutes not only the most attractive exposition of the work and aims of the Good Physician, but it is also the foundation of the truly educative and statesmanlike endeavours which are made to draw into one state ancient, spiritually minded India, and the modern, materialistic West. Indeed, it is in the humble mission compound, with its narrow means and its want of earthly prestige, that we find the nearest approximation to the spiritual wealth and gladness of the early Christian Church, of those days when all things were held in common, and when the poverty of the state was the clearest title deed to the wealth of Heaven.

The appreciation of the work of women medical missionaries in the book before us is true and generous. The authors appraise both the quantity and the quality of

the women missionaries' work, pointing out that, both from the professional and the administrative view, medical missions have one great asset which seldom exists in other spheres of medical work in India. In each medical mission there are one or more nursing sisters, trained in England, who are both competent and enthusiastic in training Indian women to be nurses and midwives, agents without whom medical mission work is liable to be superficial and short-lived.

Two important chapters deal with the subject of preventive medicine, the first with the tremendous work that has been inaugurated and still progresses in the care of women before, during, and after childbirth, and the other with the child welfare movement. It is possible that to many readers the chapter dealing with the pathetic and important questions connected with maternal health and maternal safety will be looked upon as one of the most important of the whole book. On such a view was founded the action taken by the Government of Madras when, in 1875, they permitted me and three other women to share in the studies of the male medical students at the Medical College, Madras. They comically put on their minutes that they did not expect, nor did they want, Listons and Brodies, but what they desired to secure were useful practitioners to look after women in childbirth and to attend them in everyday ailments. Similarly, some years ago, Sir Charles Pardey Lukis, in his inaugural address at the London (Royal Free Hospital) School of Medicine for Women, expressed it as his considered opinion that the chief objects of women's medical work in India should be—

- (1) The safety of India's women in childbirth;
- (2) The recognition and treatment of antenatal disease;
- (3) The training of nurses and midwives;
- (4) Infant welfare;
- (5) Household hygiene; and
- (6) Research work, for which last there is a great

and urgent, but unrecognized need. . .

With all these subjects the authors deal carefully and wisely, and distinguish between the spheres in Preventive Medicine which belong to men and women doctors respectively. They point out that general sanitation and the scientific control of epidemic and endemic disease in general falls to the men, while mother and child welfare, together with the training and education of doctors, nurses, *dais*, and health visitors, is chiefly in the hands of the women.

It is to be noted that the difficulties and comparative neglect of these latter subjects do not arise so much from lack of money as from lack of sympathetic understanding by state and public alike. As our authors point out, even the doctors are almost obsessed by their great mission to

Take up the White Man's burden,

The savage wars of peace—

Fill full the mouth of Famine,

And bid the sickness cease.

They feel, therefore, they have scarcely time, thought, or strength for such less insistently clamant ills as anaemic mothers and starved infants, while the public are often unaware of the tragedies enacted at their own gates. Here, we are told, is one of the stricken fields the fortunes of which may be retrieved by the skill and sympathy of women doctors.

A chapter on administrative work and one of valuable general conclusions close the main body of the book. There remain for notice several appendixes showing to some extent why the authors, together with their able assistants, spent so much of their hard-worked time and scanty leisure in what is truly a *magnum opus*. They instinctively felt that 'the day is short, and the work is great, the reward also is great, and the Master presseth. It is not incumbent on us to finish our work, but we must not therefore cease from it.'

MARY SCHARLIEB

LONDON, January 1939

PREFACE

In presenting this account of the work of medical women in India, we feel we ought to say a few words to explain the reasons which led to the conception of the book, as well as to thank the many people who have helped us with information and advice.

It is now nearly sixty years since the first medical woman landed in India. Slowly, but in growing numbers, others followed. Many difficulties were encountered and were overcome, by a devotion and steadfastness beyond praise. These pioneer women are passing from among us, and with them the recollection of conditions and events which will soon be forgotten, but which deserve a lasting place in the annals of the women of India, as well as of medical women generally.

A new generation of medical women is growing up in India which is ignorant of the very names of those who originated their work, and of the struggles and trials by means of which the conditions they now enjoy were secured. It is right that they should realize the efforts and achievements of their predecessors, which may well stimulate them to carry on worthily and to far greater purpose than was possible in the old days.

It was suggested we should devote a special chapter to Indian medical women. We feel, however, that this is unnecessary, for what is said in these pages, with few exceptions, applies equally to British, Indian and American medical women. All took part in the same movement as pioneers; all met and overcame the same difficulties. The problems we have discussed affect all, and our interests are identical.

Besides recording the past, we have endeavoured to give a picture of the present conditions of medical relief by

women in India, and to offer a forecast of what we feel to be the greatest needs in the immediate future.

We cannot help wishing that this very important task had been carried out by more worthy writers ; but our excuses must be: love for the people of India, experience gained by many years' work, and travels in many different parts of the country. We have endeavoured to give as much information as possible, but have been obliged to leave out a great deal, in order to economize space. Lastly, we would ask our readers to remember that the book has been written in the intervals of our work, during week-ends and on journeys, and was finally completed during our not very lengthy furlough.

We wish to express our warmest acknowledgments, especially to the Dowager Marchioness of Dufferin for old papers and records kindly supplied; to Dame Mary Scharlieb for permission to take material from her *Reminiscences*, and for associating her name with ours by writing a Foreword; to the Council of the Countess of Dufferin's Fund for permission to reproduce from its *Annual Report* the map showing hospitals staffed by women; to Dr. Agnes Scott for advice, photographs and permission to look up old records; to Dr. Margaret MacKellar and the Council of the Association of Medical Women in India; to Dr. Annette Benson, Dr. Emma Slater, Dr. Kathleen Vaughan, and many others, who have contributed papers, recollections and advice, without which this history would have been impossible.

M. I. B.

R. Y.

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CHAPTER ONE

THE FIELD OF WORK

Before we can enter on an account of what has been done by medical women in India it is necessary to give some description of the country, of the people and especially of the habits and conditions of life of the women, among whom the work has been done. When one realizes the vast area of India—the varieties, one might almost say the extremes, of climate, of religion, of scenery and of people—it seems impossible to compress into one short chapter anything which can give a true idea of these conditions. But there are certain factors which particularly concern women's medical work and it is these only with which we propose to deal.

Leaving out for the moment provincial landmarks and taking the country as a whole, the first important fact which strikes us is, that India is peopled by communities—the Hindu, the Mahomedan, the Parsi and the Christian. In addition to these main communities there are Jews, Sikhs and animistic tribes. Each community has its subdivisions—the Hindus into a number of castes—the Mahomedans into Shias, Sunnis, Bohras, etc.—the Christians into Catholics, Protestants, Syrians, etc. These subdivisions may correspond with similar subdivisions in England, but there is nothing in England to compare with the strange spectacle of four great communities living side by side in the Indian cities and villages, children of the same country, descended in many cases from common ancestors, speaking to some extent a common language, but separated in the strictest and most definite manner as regards religion, habits and social customs.

When the great Aryan invasion of India took place

perhaps about 2000 B. C., a struggle commenced between the invaders and the aboriginal population, which lasted many years. The aboriginals gradually scattered and now only exist as 'animistic' tribes in a few parts of the country.

The earliest literature extant relating to the Aryan invaders is the Rig Veda, a series of hymns, the outcome of the daily life of the people. In this there is no evidence of caste, idolatry, enforced widowhood, suttee or child marriage. Women appear to have held a good position, and to have taken part with their husbands in religious ordinances; indeed, some of the finest hymns are attributed to women. It was not until later, as the Hindu religion developed among the Aryans, that women began to lose their original position of freedom. Manu, one of the early law-givers, is reported as saying, 'he who does not pay his debt is born again as a slave, a servant, a quadruped or a *woman*,' and again, that a female must depend on her father, husband, sons, kinsmen or sovereign, but must never govern herself as she likes.

Purdah became established after the first Mahomedan invasion of India in the 11th century, partly as one of the recognized principles of the Mahomedan religion, partly to protect the women of the country against the invaders, for which reason it was adopted by many Hindus also.

The Purdah System: Purdah is the one of all India's customs which most powerfully and prejudicially affects women. Under its laws, a woman may not be seen by any men other than her nearest relatives. This leads in most cases to close confinement of the woman in some part of the house where men will never penetrate. It leads to special precautions regarding housing conditions—either no windows at all in the women's apartments, or windows so high that no one can see in or out. The house may be a palace, a well-to-do residence in a town, or a mud hovel where all the functions of life are carried on in a space

sometimes only ten feet by eight, with its one door darkened by a grass screen. In the better class houses doors usually open on a courtyard which is also 'purdah', that is, men may not enter without notice being given.

Children are not kept in purdah, so they are more or less independent of their mothers' control, and run about the streets with or without servants according to the social status of the family. Purdah mothers cannot have any conception of life outside the 'zenana'¹ and although their sons may, and do, love them, the mothers have no practical influence on their lives outside the home. In so far as they have influence on matters affecting general social conditions, politics, or other problems which concern India, their attitude is against progress. Their education is very backward, partly, no doubt, owing to the great practical difficulty of getting girls to school, keeping them there and teaching them, without allowing them to be seen by men, and this in a country where women workers are very scanty and difficult to get. So the purdah woman, sitting all day in her dark little rooms, has no resources other than the very simple housework which, if she is a well-to-do woman, will be done by servants. Even if she wished to do so she has no means of carrying on any physical or mental activity.

During illhealth, unless women doctors are available, she cannot get any adequate advice. Messages are frequently sent describing her symptoms to male doctors through her husband or servants. The husband may even bring a male doctor to sit behind a screen and feel her pulse, and one surgeon was allowed to remove cataract through a hole cut in a sheet. But it is in childbirth that the full horror of the purdah system is seen, when women are allowed to die undelivered sooner than show themselves to a man. It is occasionally the husband and more often the mother-in-law, who forbids the relief brought by

¹ Women's apartments.

male hands, but sometimes, as in the Madras case described by Mrs. Scharlieb in her *Reminiscences*¹, it is the poor woman herself who bars the door, choosing death in great agony rather than what she considers disgrace. Probably all medical women who have practised long in India, or in certain parts of India, have heard of similar cases.

The troubles during pregnancy and labour are not only due to lack of medical aid, but to the habits of life. The almost entire lack of physical exercise discourages metabolism and to this is often added an almost entire lack of sunlight and fresh air. This especially leads to the development of toxæmic conditions during pregnancy. Anæmia and osteomalacia frequently occur and are allowed to proceed to extreme conditions. It must be remembered that the habits, which render it difficult to send Mahomedan girls to school, render it difficult to send them to hospitals and dispensaries, unless the hospitals are officered by women and strict purdah is kept.

There is no doubt that purdah is decreasing among the wealthy and well-to-do, as education increases. Even in the middle classes it is less rigid than formerly, and in many families women, whose mothers would have been forbidden, are now permitted to see male doctors. This change is more apparent in large centres, and has probably not spread very deeply among the masses.

Purdah, of course, is only observed among a small section of the people. It is especially common among Mahomedans in all parts of the country. It is less common among Hindus, and in certain parts of the country, such as Madras and Bombay, it is not observed by Hindus at all. It is never observed by Parsis, Christians or Jews and rarely by Sikhs.

Caste: The best known of Hindu social customs is that of caste. Members of the lower castes may not

¹ *Reminiscences* by Dr. Mary Scharlieb, C. B. E., J. P., 1924, (Williams and Norgate), pp. 29-30.

touch or come into contact in any way at all with those of the higher. If even the shadow of a low caste person falls on the orthodox Brahmin, he is contaminated and must bathe in order to purify himself. This system of caste leads to profound social consequences with which we are not concerned here. It affects our present subject in the influence it has on the treatment of women in childbirth in India. This is looked on as an unclean process, and the woman is practically outcasted from the birth of the child for a varying period, usually forty days. She is kept apart in the worst room of the house; no member of the household can attend to her without becoming unclean; she is unbathed, and her clothes are unchanged. A complete breakdown in health may follow this severe treatment, especially in young girls.

Another way in which caste affects women is in the rules for marriage, which may not take place outside the caste. Most castes are divided into groups descended from a common ancestor and marriage may not take place inside the group. This is a good arrangement, as it prevents consanguineous marriages. Unfortunately, the wife is considered to become a member of her husband's group and thus it is possible for her children to intermarry with her family. In some parts of the country, especially in the south, marriages between first cousins and even uncle and niece are not uncommon.

Early Marriage: Early marriage is one of the most freely criticized of Hindu customs. The principle on which it is founded is, that young people of both sexes are likely to lead chaste lives and form lasting affections for each other if brought together early. As a matter of fact, although the marriage ceremony may be performed at any age, cohabitation does not commence until after puberty or only exceptionally so. Even then, pregnancy does not usually occur for a year or two, and instances of the first child being born at thirteen or fourteen are rare. The

progress of education, as well as legislation, is tending more and more to discredit early marriages.

Hindu Widows: A Hindu custom, which presses most cruelly on the young girl, is that of unequal marriages, when a young girl of fifteen may be married to a man of sixty, almost inevitably to become a widow in a few years time, subject to the harsh and degrading treatment given to Hindu widows. According to the Hindu religion she is not allowed to remarry, the belief being that marriage once celebrated is eternal. This does not apply to the man, as he is allowed more than one wife. Education is relieving the hard position of Hindu widows, partly by allowing the orthodox to train for professions, such as medicine, teaching or nursing, and partly by a change in public opinion which is leading more frequently to widow remarriage.

Childless Wives: This same custom of polygamy which is allowed by both Hindu and Mahomedan law, is one that bears very hardly on the women. True, polygamy is not common, at least among the poor and moderately wealthy, but in all classes the right is practised when a woman fails to have a child, and especially a son. Medical women very soon come to understand the tragic position of the patient, who comes stating her case, in the common phrase, 'without hope'. If it is a poor family, she will be turned out to make her way to her father's house, perhaps unwelcome, or to earn her bread as best she can. If it is a rich family she will remain on, to see another woman reign in the place that was hers, at least, if the other woman is fortunate enough to have a child. India is only very slowly beginning to realize that sterility may not always be the woman's fault. It may be that her sterility is due to a disease transmitted by the husband, or it may be that she herself is fertile and the husband for congenital or acquired causes is sterile.

It is the custom with some castes for the father

to give a marriage dowry with his daughter. This and the other expenses of the marriage are often a strain on the family finances, and, if there are many daughters, lead to financial ruin. Details of seventy-five actual cases of the marriages of daughters were collected for publication in the *Census Report of 1921 (Bombay)*, the expenditure in which varied from a minimum of Rs. 150 to a maximum of Rs. 17,625. In the latter case the girl's dowry was Rs. 10,000, her ornaments Rs. 3,500, her clothes Rs. 1,500, the feasting Rs. 2,400 and the ceremony only Rs. 125. Among the poorest classes the expenditure is stated to be from Rs. 50 to Rs. 200, which is a more serious drain to the very poor than a sum of Rs. 20,000 would be to the wealthy. It is for such reasons as this that girl babies are so often unwelcome and in former days female infanticide was common. Instances are related of villages where no daughters' marriages had taken place for many years. Infanticide probably still persists to some extent in parts of the country, and even where it is not actively carried on it is a well-known fact to medical workers that an ailing baby is more likely to recover if a boy than a girl.

In other castes, such as the Bhatia, the dowry comes from the husband's side, that is he pays a sum of money for his bride. The position of women is much better in such castes. The wife is a more precious possession and in childbirth and other diseases it is worth the husband's while paying for medical relief, if only to save the expense of another dowry. In castes where the bride brings the dowry the attitude of the husband sometimes is, 'let her die, then I can get another wife.' This remark was actually made to a medical man when he was pressing a rich Hindu to contribute to a maternity scheme.

Among Christians and Parsis education is more advanced than among Hindus and Mahomedans. They have more knowledge of hygiene, take more physical exercise and seek treatment earlier when ill. They are not

hampered by any of the disabilities of purdah or caste. Hence their physique is better and they are less subject to disease in pregnancy.

Education: The greatest handicap to the advancement of Indian women in any direction is the lack of education. At the time of the last census in 1921, only 21 women per 1,000, over the age of 5 were 'literate', that is, able to write a letter and read the reply. There were great differences in different parts of the country. For instance, in the cities of Calcutta, Madras and Bombay, the number of women literate was respectively, 270, 190 and 160 per 1,000; Central India and Gwalior 3 per 1,000, Bihar and Orissa 5 per 1,000. Even where ability to read and write is looked on as a religious or professional need for men of the better classes, the education of women is considered unnecessary, unorthodox and dangerous. The obligations of purdah and early marriage make any reasonably prolonged schooling difficult.

Medical women see most of the dark side of Indian life. They are brought oftenest in contact with the purdah woman, the woman in childbirth, the unfortunate child wife, the unwanted girl baby, the childless woman making her last frantic effort after offspring; they see less of the numberless homes where the wife and mother is happy in her husband and children, interested in her house, enjoying the many feasts and holidays, and having no wish for any life different from that which she leads. The Indian woman is not, as many Europeans think, groaning for release from purdah or pining for the blessings of education. But for exceptional circumstances she is happy as she is, and the reason for pressing reform and education is not so much the happiness of individuals, but the improvement of the whole standard of Indian life by enabling women's influence to permeate society.

Those who live only in the large towns, or in the capitals of Imperial India, may think the picture of the

customs of Indian women overdrawn. It is true that during the last thirty or forty years a new type of Indian woman has come into being. There are graceful and cosmopolitan society women, keen politicians, social workers, doctors, teachers and girl students. But there are few indeed of the new order compared with the millions of the old order, and they are scarcely to be found outside the large cities. Yet we hope that they point to the inauguration of a new era and that this little band of educated women, as it expands, will scatter through the country, fighting the old hampering customs and forming a new public opinion. So that, perhaps sooner than we expect, Indian women will come to be free from all restrictions and disabilities, and able to take their place with men in all movements for the uplift of the country.

The description of the field of work would not be complete without some account of the varying conditions under which medical work is done in different parts of the country.

In the more distant and primitive regions, such as Kashmir or Baluchistan, education is backward, hygiene almost unknown, medical assistance difficult to get. Money is scarce, and it is a question for the medical woman of making the best of the material she has at hand, and doing much herself that would have surprised her in old student days. But there is compensation in the free life, the independence and lack of criticism. She organizes her own work. She is dealing with primitive or virile peoples and she feels that she is indispensable for the most urgent needs of the women around her, sometimes even of those in distant tribes across the frontier. Many of these wild and more or less hostile tribes-people get their first lesson in empire co-operation in the wards of the zenana hospital.

In the great cities of the Punjab, United Provinces and central parts of the country, India is found at her most typical. Here and there new India begins to make herself

felt in the heart of old India. We see the big cities with the crowded bazaars, interspersed with narrow lanes into which the sun never penetrates; the open drains, choked and over-flowing, in which the flies are battenning and the little naked children playing; the tall houses, where behind shuttered windows the women sit in purdah, forbidden all interest save that of family and religion; boys and men crowding the streets and sitting about the doors, their pallor and languid aspect speaking of the prevalence of dysentery and malaria; and, not five hundred yards away, the great university from whose gates hundreds of young men pass annually, primed with modern knowledge and taking up in their turn teaching and doctoring and social work. Near at hand is the women's college with its class-rooms and play-grounds. New India forms yet a small part of these great cities, but year by year she is making her way, gaining strength and confidence and winning an entrance to the hearts of many in the crowded streets and *mohallas*.

Women's medical work is perhaps at its most ideal in these cities. The medical woman still feels that she is indispensable. Round about, in the big houses, the tenements, the mud hovels and the huts, anæmia, osteomalacia, dysentery and malaria are sapping the lives of the mothers, while ignorance and prematurity carry off the babies. Cruel cases of obstructed and neglected labour are brought to the doctor almost daily and, as confidence waxes, the unhappy victims of former neglect come hoping for surgical intervention. In many cases the women's hospital is the only place where these sufferers can come for relief, although they have tried, no doubt, with ineffective charms and potions and consultations with *dais*¹, or through their husbands, with learned *hakims*.

The large towns in the south, east and west show medical practice under somewhat different conditions.

¹ Midwives.

Here there are plenty of private practitioners, both men and women, well trained in western science. Most well-to-do households have their own family doctor. Specialists are practising in most departments of medicine.

The large hospitals are officered by honorary physicians and surgeons. The conditions of practice, in fact, approximate more to those in European cities. *Purdah* chiefly exists among Mahomedan women and even then, is less strict than in the north. The women's hospital still takes an important place, both for the treatment of Mahomedan women and of those others who prefer to be treated by their own sex, but it is not so indispensable as in the northern and central regions.

The young British or American medical woman, coming to start work in India, may well feel that she is entering a new world. She is surrounded by people wearing a different dress, speaking a strange language, eating unfamiliar food, following all kinds of customs and beliefs of which she has no knowledge. There is no common ground of religion or education. Is there any common meeting place? and if not, how can the relationship between doctor and patient be established, so as to produce mutual confidence and reliance?

This is the problem which every British and American medical woman coming to India has to solve, and according to her success in solving it lies the secret of her professional success, whether in private practice, hospital or administrative work.

The one quality in the beginning, which can bridge the gulf between East and West is *sympathy*, and this is seldom lacking, but it must be sympathy strong enough to inspire the medical woman to learn the language, to study the environment of her patients, and to distinguish the different habits and customs of communities living side by side, but often under very different conditions.

The newcomer very soon loses her feeling of bewilder-

ment and becomes accustomed to her surroundings. Year by year she grows more familiar with the language, learns to recognize her patients by name and forms friendships, often very deep, with those who at first seemed so strange. She takes part in the most intimate of their domestic events, sees her 'own' babies growing up and extraordinarily soon getting married! She becomes a grandmother vicariously, and even a great-grandmother in her time. Happy she, if she can remain so long in her first station, but the exigencies of the public service, whether civil or missionary, too often lead to transfers. She is fortunate if she remains in the same part of India.

The young Indian medical woman has the advantage of familiarity with the language, habits and customs of the people, but she has her own peculiar difficulties. Her medical studies and her professional reading are carried on in a language usually acquired after childhood. She sometimes has trouble with family or social objections and, in some cases, she has to conquer her own caste prejudices in her hospital and even in her private work. She has to overcome her natural diffidence and accustom herself to appear publicly and take an active and leading part, not only in the consulting and operating rooms, but in committees, social gatherings and lecture rooms. She does not always escape the feeling of strangeness and the need for learning a new language when she works far from her home. While the supply of qualified medical women is as small as at present, she has often to go from places like Madras or Calcutta to the more remote parts of India, and to work among people whose habits, customs and beliefs are as strange and unknown as those of another continent. But, like her British and American confrères, she also generally wins through and comes to hold a position of respect and affection in her new environment.

CHAPTER TWO

THE PIONEERS

Although women patients from the beginning were admitted to Government and Municipal hospitals, the absence of any female staff made their attendance almost nil. It was not until after the middle of the nineteenth century that we hear of special effort being made to bring them relief. It may appear strange that the movement was so long delayed, but it must be remembered that Indian men are unwilling to speak to strangers about their domestic matters; also, that there was a widespread chain of indigenuous relief in the hereditary *dai* class, which, seventy years ago, was probably fully trusted by the people. Hence it was only rarely that Indian men realized the need for anything more, and only rarely that the domestic tragedies which so frequently took place were brought to the notice of Government officials.

The earliest efforts made were mainly classes for training *dais*, undertaken here and there by male assistant surgeons. The classes were all abandoned in the course of a year or two as no good results followed. The young men teachers had probably no practical experience in midwifery, and their praiseworthy efforts to teach the *dais* their business was no doubt looked on by the pupils as both shocking and presumptuous! All the more credit to the teachers that the classes sometimes lasted so long.

In the year 1866, a Civil Surgeon, Dr. Aitchison, opened a class for *dais* at Amritsar, which struggled on through many vicissitudes and changes of teachers, and became in the eighties the well-known Amritsar Dais' School, under Miss Hewlett of the Church of England Zenana Missionary Society, one of the first of the women pioneers who initiated medical relief for Indian women.

To those of us who have followed in the footsteps of these pioneers, and have reaped the fruits of their self-sacrificing labours, it is difficult to speak in measured terms of their lives and work. Most of them came to India as zenana missionaries, and scattered in different parts of the country, came to the same horrifying realization of the fatal and almost unspeakable tragedies, which were common events in the zenanas they visited. They saw their zenana pupils dying in childbirth without any advice other than that of the dirty and ignorant old *dai*. They saw the precious babies snatched away by pneumonia or dysentery, untreated, because their mothers could not take them to a male doctor. They saw the women sinking into chronic illhealth and fatal disease unrelieved, but when advised to go to the hospital, holding up their hands with horror at the idea of consulting a man. The missionaries soon realized the futility of trying to act as go-betweens, describing symptoms, and conveying bottles of medicine to and fro. Better to do what they could, as so many European officers did in those days, with their medicine chests, commonsense, and the wisdom which experience soon began to give. Medical books were begged from friends and the first furlough was often the opportunity of haunting hospitals or friendly consulting rooms, in the endeavour to pick up all that might be used for the women of India. Unfortunately, there were not many facilities in those days of the sixties and seventies for giving medical knowledge to women. One well-known missionary disguised herself as a nurse, and so was enabled to be present at her brother's clinics in a famous hospital. Institutions began to spring up where a short training in medicine and midwifery was given to missionaries. Many took advantage of this. In any case the return after furlough usually showed more definite medical work. The zenanas were still visited, but a room was taken where women were encouraged to come and bring their babies for advice and

simple remedies. Some bold spirits acquired pocket-cases and performed minor operations, and as time passed, major operations too. The need for a few beds for patients from a distance was soon apparent, and it was found that Government officials were very ready to give what support and help they could. The bible women were trained as rough and ready assistants with girls from Christian schools and orphanages to help them. And in many cases the work, begun as a side issue and in response to the dictates of humanity, became a great success, the main purpose of the mission station, and requiring the employment of a large staff.

The first qualified medical woman came from the United States in 1869. Others followed her, and after the opening of the London School of Medicine and Royal Free Hospital in 1877, British medical women began to appear. After this date some of the British pioneers went home and qualified. Probably all would have liked to do so, but many did not feel justified in leaving their work, already organized, for such a long time as would have been necessary.

In the years which followed unqualified medical missionaries, sooner or later, became associated with, or were succeeded by, qualified medical women.

It is getting more and more difficult for us as time passes to realize the conditions under which these pioneers worked in the seventies and eighties.

Now, the medical woman comes to take charge of an organized hospital with full beds, trained staff, competent assistants and usually excellent operating rooms, instruments and medicines.

Then, she was alone, usually without an assistant, or if she had one, she must be handled delicately as she could not be replaced. There were no Indian nurses, and the medical woman had first to raise the salary of an English nurse, and then to try and find one who was willing to

come and devote herself to the training of Indian girls. If she failed to find one, she had to do the work herself. On occasion, she was her own anæsthetist and her own compounder. There was no hospital. She had to make the best of some Indian house and perhaps live there herself, while devoting all her spare time and energy to raise money for building. Worst of all, there were few patients, for women doctors were an innovation, and ignorance, superstition and prejudice were rife among the people. Patients had to be coaxed and persuaded to come to hospital in those days, and the slightest setback would be enough to make them run. A death emptied the wards and an unsuccessful operation would lose all the ground that years had gained. We often feel our work is anxious and difficult now. What would our predecessors have given for our facilities!

These were women of strong personality, sympathy and determination, or they could not have coped with the position. They all came to their reward, the happiness of seeing success crown their work, of leaving confidence and trust where they found fear and suspicion, and of handing over to their successors a legacy of mutual reliance between doctor, patient and staff which made further success certain.

Space will not allow us to give as full an account as we should like of these pioneer medical women, but some must be mentioned.

The honour of sending out the first qualified medical woman to India belongs to the United States of America. Miss Clara Swain, M. D., (Penn.) started from New York on November 8th 1869, and arrived at Bareilly in the United Provinces on January 2nd 1870. Dr. Swain was attached to the Women's Foreign Missionary Society of the Methodist Episcopal Church. One of her fellow passengers on board ship was Miss Isabella Thoburn, after whom the fine Women's College in Lucknow is named.

Mrs. D. W. Thomas, who, with her husband, had been in charge of the girls' orphanage attached to the mission at Bareilly, had for long felt the need of efficient medical treatment for Indian women, and had started training the elder orphans in physiology and hygiene. Here, then, Dr. Swain found work waiting her, and she at once began to give this class of fourteen girls a simple training in medicine, nursing and compounding. In 1873 they were examined by a board of three doctors and pronounced competent.

Dr. Swain's patients very soon became numerous. The need for a regular hospital and dispensary was felt and both were made possible by the gift of a site from the Nawab of Rampur. The dispensary was opened in 1873 and the hospital in 1874. The cost of the two buildings, including a house for the doctor, was about thirty-five thousand rupees.

Dr. Swain remained in charge until 1885, when she was asked by the Rajah of Khetri to take up the post of physician to his Rani and her ladies. This she did, on the understanding that she was allowed to carry on Christian work. A dispensary was opened and a girls' school was started under the charge of a European lady, Miss Pannell. Miss Swain and Miss Pannell were the only two Europeans in the State and led very lonely lives, for which they were compensated, not only by the interest of the medical and teaching work, but by the opportunity of bringing the lessons of the New Testament home to the Rani and others. In 1895 Dr. Swain left India as she thought for good, but she returned in 1906 for the jubilee of the Methodist Mission. She spent her last years in Castile, N. Y., and died in 1910 at the ripe age of seventy-six.

Miss Sara C. Seward, M. D., was sent out by the American Presbyterian Foreign Missionary Society to Allahabad in 1871. In March 1872, she opened a small dispensary and later built a larger one. Dr. Seward died in 1891 of

cholera, and shortly after the Sara Seward Hospital was built as a memorial.

Miss Sarah Norris, M. D., arrived in India in 1873, sent by the Women's Board of Missions of the American Congregational Church.

Miss Fanny Butler, M. D., was the first qualified medical woman from England to work in India. She was sent out by the Church of England Zenana Missionary Society in 1880, and was stationed first at Jubbulpore and later in Bhagalpur. In 1887 she was sent to Kashmir where she opened pioneer medical work among the women. Her work was very successful, and shortly after the Mission became permanently established in Srinagar having received ground for a hospital, dispensary and house. Dr. Butler died in 1889.

There had already, before this time, been the beginnings of medical work by unqualified British women. Foremost among these was Miss Hewlett, already mentioned, who came out under the Church of England Zenana Missionary Society in 1877, took charge of the Amritsar Dais' School and, as described in a later chapter, originated the training of indigenous *dais* under a new method. Miss Hewlett also trained Indian girls as assistants in mission hospitals, and carried on much general medical and surgical work in Amritsar. The well-known St. Catherine's Hospital in Amritsar was built at this time. She was a woman of great personality and influence, and at the time of the foundation of the Dufferin Fund, Lady Dufferin freely availed herself of Miss Hewlett's experience and advice. Miss Hewlett retired in 1912, and died some years later at Mussoorie.

Miss Rose Greenfield came out to India (Ludhiana) in 1875 under the Society for Female Education in the East. Her work at first consisted in visiting the zenanas, teaching the women and organizing schools for the children. Almost immediately she was brought into contact with cases of

illness and began to treat them by prescribing cleanliness and simple remedies. Women soon began coming regularly for advice, and in 1881 a room was taken and a regular dispensary opened. The old mission church was adapted for a hospital in 1889 (the Charlotte Hospital) and put in charge of a qualified medical woman in 1891. Miss Greenfield continued to do medical work in the city and district. In 1893 and the following years, she was largely instrumental in organizing and opening the Women's Medical School at Ludhiana, in which she was associated with Dr. Edith Brown, the first principal. Miss Greenfield raised funds for a new hospital to be attached to the Medical School, which was named the 'Memorial' Hospital after her sister, Miss Elizabeth Greenfield. She continued to work in Ludhiana and other Punjab stations until 1924 when she retired after forty-nine years in India. She received the Kaiser-i-Hind medal of the first class in 1926.

Miss Elizabeth Bielby sailed for India on the 2nd December 1875, and arrived in Lucknow on the 26th of January. She had already some medical training and had come with the purpose of relieving the suffering of Indian women; therefore it was discouraging to be met on arrival by the gloomy forebodings of a fellow worker, that Indian women did not want such help and that their prejudices were too strong to be overcome. Dr. Bielby, in telling of her experiences, says: 'It is very difficult to describe the real state of things that I found in Lucknow—and how hopeless everything seemed to be.....I am writing of more than fifty years ago—the people were far more ignorant, superstitious and prejudiced than they are now. Female education was then nil, except for what the zenana missionaries gave. It ought never to be forgotten that it was these ladies who first brought education to the purdah women of India.' Miss Bielby opened a dispensary and later a small hospital. Her sister, who was a trained nurse, came to join her, but died in a few months from enteric. The same

year Miss Hewlett joined her for six months, in order to learn the language before commencing work in Amritsar. Miss Bielby left Lucknow in 1881, to go to England for a full medical training. 'She had found in Lucknow that the great difficulties in India were--the ignorance and prejudice of the women, the lack of proper instruments, the want of efficient help, and lastly, the lack of sufficient knowledge on her own part, which led her to qualify.

When Miss Bielby left India she was entrusted with a message to Queen Victoria, regarding which the following account is kindly supplied by the Zenana Bible and Medical Missionary Society.

'In the year 1881 it became known to the Maharajah of Punna that Miss Bielby was carrying on her work as a Zenana Medical Missionary in the city of Lucknow. He asked her to visit his wife and she at once undertook the journey. Happily her medical knowledge, skilfully applied, effected a complete recovery. Miss Bielby, having resolved to return to England to take a degree in a regular college, went on the morning of her departure to say farewell to the Maharani. 'You are going to England;' said the royal lady, 'I want you to tell the Queen and the Prince and Princess of Wales, the men and women of England, what the women of India suffer when they are sick.' She then gave charge that Miss Bielby herself was to convey the message to the Queen. She asked her to write it down. 'Write it small, Doctor Miss Sahib,' she said, 'for I want you to put it into a locket, and you are to wear this locket round your neck till you see our Great Queen and give it to her yourself. You are not to send it through another.' Miss Bielby duly reached England when the Queen, hearing of the message, sent for her and graciously admitted her to a personal interview. To what Miss Bielby said of the condition of suffering Indian women Her Majesty listened with much interest, asking many questions, and showing the deepest sympathy. The locket

with its writing was given to the Queen, and Her Majesty entrusted Miss Bielby with a kind and suitable reply, adding, 'We had no idea it was as bad as this. Something must be done for the poor creatures. We wish it generally known that we sympathize with every effort made to relieve the suffering of the women of India.'

In 1885, having obtained the license of the Kings and Queens Colleges of Physicians, Ireland, and the M. D. of Berne, Dr. Bielby came to Lahore, the capital of the Punjab, to take charge of a hospital for women to be opened by the Lahore Municipal Committee.

A few days after her arrival, she was asked to go with the Inspector-General of Civil Hospitals to meet a deputation of the Municipal Committee, and inspect a building which they thought would be suitable for the new women's hospital and dispensary. This proved to be some stables and cowsheds then occupied by cattle! But the Inspector-General, seeing Dr. Bielby's dismay, informed the deputation that the site would do, but only if the buildings on it were pulled down and new ones erected. Finally, a little dark house off the Anarkali Bazaar with mud floors was chosen, and here the work was begun, lamplight being necessary even during the day. After six months' work a larger and better house adjoining was obtained, in addition to the first.

Funds at first were very scanty. Dr. Bielby was told she must make eight annas go as far as a rupee. But sympathy and support were found for the new hospital. Money was collected, and on the 15th of November 1888 the Lady Aitchison Hospital was formally opened by the Countess of Dufferin.

The difficulties met with hereafter were those which have already been spoken of—lack of a woman consultant, lack of qualified assistants, lack of nurses, lack of a competent matron, difficulty in getting suitable medicines and instruments. On one occasion, when a pair of midwifery

forceps was indented for, a set of tooth instruments was received!

The prejudice against sending at time of labour for a doctor or even a trained *dai* was very great. For years, whenever Dr. Bielby was sent for, she found the woman had been ill for three or four days—that one ignorant *dai* after another had tried to deliver the child and had often in their efforts pulled off a limb and left the woman in a deplorable state. But after about three years a slight lessening of the prejudice began to appear.

Dr. Bielby resigned the charge of the Aitchison Hospital after about fifteen years' work and carried on private practice in Lahore. She retired in 1927 after fifty-two years' work in India. She describes the great changes which have taken place through the spread of education, infant welfare and other organizations, but gives some amusing instances showing that ignorance has not yet disappeared. She successfully treated a woman for sterility in 1911, and in 1921 the woman was found to have cancer of the uterus. The husband took the trouble to seek out Dr. Bielby and blame her for not having detected this in 1911. In another case treated successfully for sterility, the woman died during her delivery (not having called a doctor until too late), and the friends blamed the treatment given before pregnancy began.

Another pioneer medical woman in the north of India was Dr. Maria White, who came to work in Sialkot under the American Methodist Mission in 1875. Dr. White worked up a good-sized hospital and made a great reputation for herself in the Sialkot district. She handed over the charge of the Sialkot Hospital in 1913, and after some years returned to India to take charge of a smaller hospital she had started at Pasrur in the Sialkot district.

Miss Ida Faye, M. D. (Penn.), came to Nellore in 1881 under the American Baptist Missionary Union. At first a

dispensary was opened, but in 1897 a hospital with twenty beds was built.

Mrs. Anandibai Joshi was the first Indian lady to study medicine. She herself was married when nine years old and became a mother when thirteen. Her child died and she determined to devote her life to the medical aid of her countrywomen. In 1883 she went to America to study. She graduated in 1886, from the Women's Medical College, Pennsylvania, and returned to India having been appointed to the charge of the women's wards of the Albert Edward Hospital in Kolhapur. Unhappily, it was found that she had contracted tubercular disease in America, and this most promising career was cut short by death in February, 1887.

Miss Annie Jaganadhan, another Indian woman pioneer, began her studies in Madras in the year 1883. In 1888 she went to Edinburgh and joined the Edinburgh School of Medicine for Women, recently opened. She obtained the triple qualification of the Scottish Colleges in 1892, and went out to India to take up the post of house surgeon to the Cama Hospital. She also, sad to say, developed pulmonary tuberculosis and passed away early in 1894.

Rukhmabai, another Indian woman pioneer, went to England in 1889 and began her study at the London School of Medicine for Women. She took the qualification of the Scottish Colleges and returned to India in 1895, where she undertook the charge of the Women's Hospital at Surat. In 1918 she was selected for the Women's Medical Service, but at the same time received the offer of the appointment of Medical Officer in Charge of the Zenana State Hospital, Rajkot, which she decided to accept, and where she is still working.

Dr. Jessie Carleton, of the American Presbyterian Mission, came out to Ambala City in 1887 and took up her residence in a fine old thatched bungalow in the mission

compound, the same house in which she had been born. Two rooms were taken in the city and a dispensary was opened where the young doctor worked singlehanded, with an intelligent *ayah* as interpreter.

Popularity came, however: a small hospital was opened and soon Dr. Carleton was also doing pioneer work in the training of indigenous *dais*. In 1901 the 'Philadelphia Hospital for Women' was opened. The number of the in-patients treated in 1902 was 203 and in 1926 was 1028. Dr. Carleton, after forty-one years, is still working in her old station, with her colleague, Dr. Lewis, and a good staff of helpers.

Dr. Alice Ernest came to Jhansi from the United States in 1887. She opened pioneer work among the women and built a hospital, of which she is still in charge.

Dr. Elizabeth Beatty commenced work under the Canadian Presbyterian Mission in 1884.

The history of the development of medical aid for women in the Bombay Presidency is of interest, because it illustrates some of the early difficulties medical women and those who were acting for them had to meet.

In the year 1882¹ there were no medical women in the Bombay Presidency. An article appeared in the *Contemporary Review* in August of that year by Dr. Frances Hoggan which stated:—

'What is needed is a new medical department as a part of the public service of India—managed by women and responsible only to some high officer of state, working in harmony with the existing civil medical service but co-ordinate, and not subordinate to it.'

This attracted the attention of Mr. George T. Kittredge, an American business man resident in Bombay. In considering the matter he did not agree with the course

¹ This account is taken from the *History of the Medical Women of India Fund of Bombay*, by G. T. Kittredge.

taken in Madras, namely, of throwing open an inferior medical qualification to women.¹ In a little account of the subject written by him in 1889 he says, 'I am convinced that for success in India, women must be recognized as the equals of men in the medical care of their own sex.' He felt sure the Government of Bombay would not take the matter up. He thought the best plan would be to try and raise a fund, bring out two or three competent medical women from England, pay them fair salaries for a short term of years, in the hope that they would then be able to support themselves by private practice, or would, by their usefulness, have induced Government to give them posts in Government hospitals. He thus, assisted ably by Mr. Sorabjee Shapurjee Bengalee and other Indian gentlemen, organized a fund called the 'Medical Women for India Fund, Bombay'. This was largely contributed to, and in two months' time amounted to Rs. 40,000.

In the meantime Mr. Pestonjee Hormusjee Cama had come forward with an offer to give a sum of one lakh of rupees (afterwards increased to one lakh, sixty-five thousand) to build a hospital to be staffed by medical women. This offer was passed on to the Bombay Government, Mr. Cama's conditions being that the Government should provide a site, that it should maintain the hospital, which should be handed over to the charge of women doctors. This offer was accepted, but the Government objected to the stipulation that the hospital should be entirely under the charge of women doctors. It was stated in the reply, 'they will willingly agree to utilize the services of competent medical women *acting under the instruction and guidance of the male superior staff* when such services are available.' Mr. Kittredge, writing in 1889, remarks that the opinion of Government reads strangely in view of what Dr. Pechey and her assistants

¹This was before Mrs. Scharlieb had settled in Madras.

have done at the Cama Hospital since its opening in 1886 without 'the instruction and guidance' of any male doctor. How much more strangely it reads in 1929, when one considers the fine record of first class medical and surgical work, second to none in India, carried out at the Cama Hospital by the three successive medical women superintendents—Dr. Edith Pechey, Dr. Annette Benson and Dr. Eliza Turner Watts! Government finally agreed that the hospital should be turned over to the charge of medical women as soon as a competent staff was available.

Mr. Kittredge went on leave to England in the spring of 1883, authorized to secure the services of two suitable medical women to be paid at first from the Medical Women's Fund. Mr. Sorabjee was left to secure a suitable site for the hospital.

The next difficulty was the desire on the part of the officers of the Jamsetjee Jeejibhoy Hospital to secure Mr. Cama's money for their own institution, where accommodation for women was very scanty and lacking in many ways. To this was added the natural disbelief of most of the staff in women doctors, and so they made every effort to get the new buildings put up in close proximity to the Jamsetjee Jeejibhoy Hospital, where it would be under the control of the male staff. Mr. Sorabjee had an uphill battle to fight as the official medical staff of the Presidency was against him, but he stuck to his guns and carried the matter through. The site selected was on the Esplanade.

Mr. Kittredge, in England, found it difficult to secure experienced medical women. But after some time Dr. Edith Pechey's name was suggested, and after a personal interview with Mr. Kittredge she agreed to accept the post of Senior Medical Officer to the Medical Women of India Fund, Bombay, on a salary of Rs. 500 per month, quarters and first class passage out and home.

Dr. Edith Pechey was one of the pioneer women who

began her medical studies with Sophia Jex Blake in Edinburgh, and when driven away from that inhospitable home of learning, completed her course and took her degree at Berne, afterwards obtaining the license of the Kings and Queens College of Physicians, Ireland, the first licensing board in the British Islands to open its doors to women. The Medical Women of India Fund was fortunate in its choice, for Dr. Pechey was not only fitted by talent, education and experience to take a foremost place among the members of the medical profession in Bombay, but she was able to take part in the social life of the city, and so secured a greater recognition of the valuable work done in the Cama Hospital. She was also a great public speaker and soon became widely known and appreciated by all classes.

Dr. Pechey arrived in Bombay on the 12th December 1883. Dr. Charlotte Ellaby joined her as Junior Medical Officer in November 1884. Dr. Ellaby was succeeded by Dr. Littlewood some years later. The hospital was opened in a temporary building and the patients were moved to the new Cama Hospital in August 1886. The services of the two medical women were then taken over by the Government, increased rates of pay were given and the appointments, like other Government posts, were made pensionable.

A question difficult to settle arose between Dr. Pechey and her committee at an early date. From the time of her arrival at Bombay she charged the same fee for professional visits as other physicians of the best standing. Some of the committee wished her to visit the patients of the middle classes for a smaller fee. Dr. Pechey objected, on the ground that she would be assuming a position of inferiority to the best medical officers of the city. She agreed, however, to attend free all patients who obtained letters from any member of the committee. The committee gave way, but unfortunately Mr. Sorabjee

who had done so much for the fund, withdrew on this account from further participation in its work. This same question not infrequently arises still in connexion with hospital committees in India. The members are anxious that even the middle classes should be able to avail themselves of the medical woman's services at home; the medical woman not only shares Dr. Pechey's feeling about status, but feels that her hospital work will suffer if she consents to take very small fees and is in consequence frequently called out.

The Medical Women for India Fund, Bombay, did another important piece of pioneer work—it applied to the Bombay University for the admission of women to medical classes and degrees. This permission was given in August 1883, and at the request of the committee a certificate course was opened for non-matriculated students. As explained in a later chapter this was a necessity in consequence of the backwardness of female education, but in Bombay the number of matriculated students soon exceeded the non-matriculated.

The Medical Women for India Fund, Bombay, was dissolved on the 18th June 1889. Its history is a remarkable instance of what can be done by private citizens, with no official backing, and with no help from princes and governors, to introduce a great measure, and to establish it on sound and permanent lines. Having done their work, they retired from the field. The Cama Hospital was for many years the finest women's hospital in India, both as regards building and work, and was the source of strength and inspiration to the many medical women who visited it when passing through Bombay. That there now exist other hospitals as good, and other work as successful, is due, to some extent at least, to the firm attitude and strong championship of Mr. George Kittredge and his able seconders in 1883.

Dr. Pechey married Mr. H. M. Phipson in 1889. She



Dame Mary Scharlieb, D.B.E., M.D.
Qualified, 1882

resigned her hospital appointment in 1894, but continued to practise in Bombay. She died in 1908.

The initiation of women's medical work in Madras is closely bound up with the history of Mrs. Scharlieb, a young Englishwoman, who went out to India in 1866 with her husband, a barrister in Madras. Mrs. Scharlieb heard much from her husband's clients and clerks and from her own servants, of the unnecessary suffering of Indian women owing to lack of medical attendance, and she herself determined to take a midwife's training in order to help them. The Madras Maternity Hospital was in full working order and she had the strong support of the then Surgeon-General, Dr. Balfour. By the time she had completed her year's instruction, however, she realized that helpers with only a knowledge of midwifery would not meet the full needs of Indian women. She then proposed a scheme for the provision of medical women in Madras for caste and *goshā* ladies, and she obtained the sympathy of the Governor, Lord Hobart, and Surgeon-General Balfour. There were difficulties and delays, but finally permission was given to admit women to the Medical College and Mrs. Scharlieb and three other women entered in the winter session, 1875. They shared in the lectures of the male students and did clinical work in the women's hospital under Surgeon Branfoot, who received them the first morning with remarks on the folly and inadvisability of educating women as doctors. Seeing that Government had sent them, he said, he could not prevent them walking round the wards, but was firmly determined not to teach them! However, his bark was worse than his bite, and the women made good progress and all passed the final examination at the end of three years.

In 1878 Mrs. Scharlieb returned to England and entered the London School of Medicine for Women. In the autumn of 1882, she passed the final examination for the degrees of M. B., B. S., with honours, and gained the

gold medal and scholarship in obstetric medicine. After some post-graduate work in Vienna she returned to Madras in 1883. Before doing so, she had an interview with Queen Victoria, to whom she gave a plain account of the sufferings of Indian women during illness, and the barbarities inflicted on them by the native midwives. The Queen, who, as already related, had heard something already from Dr. Bielby, turned to Lady Biddulph and said, 'How can they tell me there is not need for medical women in India?' She also sent a kind message to the women of India, and gave Mrs. Scharlieb her photograph, that she might take it to the houses of the people to show them how much the Queen felt for them. Mrs. Scharlieb was also sent for by the Prince and Princess of Wales (afterwards King Edward VII and Queen Alexandra), who listened with the greatest interest and sympathy to her account of the suffering of caste and *goshā* women.

Mrs. Scharlieb now started private practice in Madras, and soon had more patients than she could manage. She felt, however, almost at once, that her work could never be wholly successful until she had a hospital. This was necessary for women of all classes, owing to the lack of intelligent co-operation of friends and of nursing facilities. She engaged the sympathy of the Governor's wife, Lady Grant Duff, and of the Surgeon-General, and a meeting of the chief members of the Indian community was called. Funds were collected and it was decided to institute a caste and *goshā* hospital, to be in charge of Mrs. Scharlieb. A beginning was made in a hired house.

The hospital was a success from the beginning and the work was very strenuous. The Committee agreed to the appointment of a second medical woman, Miss Pallthorpe, as assistant to Mrs. Scharlieb.

Mrs. Scharlieb was also appointed as lecturer on midwifery and diseases of women and children to the women students, and examiner in obstetrics and

gynaecology to the University of Madras.

In 1887 Mrs. Scharlieb's health gave way, and she was obliged under medical advice to leave India for good.

The Caste and Gosha Hospital, named after Queen Victoria, moved into new quarters in Triplicane, and after Mrs. Scharlieb's departure, continued its busy existence. It was more unfortunate than the Cama Hospital in that it had frequent changes of superintendents, and the finances of the committee were not always sufficient to keep it well supplied with staff and appliances. In the year 1914 the Women's Medical Service took over the salary of the superintendent, and in 1920 the hospital maintenance was taken over by the Local Government, the Lady Willingdon School for Women Sub-assistant Surgeons being placed under its control.

Meanwhile medical mission work had not been neglected in the Presidency. In 1883, the same year in which Mrs. Scharlieb had returned to Madras, Dr. Anna Kugler, of the United Lutheran Church of America, arrived in Guntur where her Mission had been established since 1847, and opened work among the women. A dispensary was begun in 1885 and a new dispensary was built in 1893. A fine women's hospital was opened in 1899. Other workers came from America, and a nurses' training school was opened for Anglo-Indian as well as Indian women. The work rapidly increased and was extended by centres in other parts of the Guntur district—at Chirala, Tenali and other places. Additions were made from time to time to the buildings of the parent hospital—a Children's Ward in 1911, a Nurses' Home in 1912, a Maternity and Surgical Block in 1915. In 1905, Dr. Kugler received the silver Kaiser-i-Hind medal for public service in India and in 1917 a bar was added to it. Dr. Kugler is still working at Guntur.

Dr. Matilda Macphail began work at Madras under the Free Church of Scotland Mission in 1887. A dispensary,

which had been opened by male medical missionaries, was handed over to her, and in 1891 a bungalow was acquired in Royapuram, Madras, and a women's hospital of twelve beds was opened. Later, the accommodation was increased by the building of sheds in the compound, and it was possible to take in fifty patients. Meanwhile money was being collected and the Christina Rainy Hospital was built and opened in 1914. This fine hospital is supported entirely by the fees made in private practice, or paid by hospital patients, only one worker's salary and half of another worker's salary being received from the Home Committee. Dr. Macphail is still carrying on the work here, together with other medical women of the United Free Church of Scotland.

CHAPTER THREE

THE COUNTESS OF DUFFERIN'S FUND

The beginning which had been made in the provision of medical aid to women hitherto, was only a drop in the ocean; and the formation of the Countess of Dufferin's Fund in 1885 gave a tremendous impetus to public opinion and carried it forward on a wave of enthusiasm, which was sometimes a little astonishing even to the promoters of the scheme. The likelihood is that the need for some measure of relief for their women had been perplexing the hearts of many Indian men, but they had seen no possibility of initiating it. Lady Dufferin's proposal to start a fund, form an organization, bring women doctors to open women's hospitals and wards, and train Indian women to follow in their footsteps, was met with a burst of applause and hardly a dissentient voice. Subscriptions and donations poured in from Indians and Europeans alike, not only to the Central Fund presided over by Lady Dufferin, but to the Provincial Funds opened in each province by the wives of the Governors and Lieutenant-Governors.

It is pleasant to think that the Countess of Dufferin's Fund owed its origin to Queen Victoria who will long be remembered in India as 'the Great White Queen and Mother of her People'. It has already been described how two medical women, Dr. Elizabeth Bielby, and Dr. Mary Scharlieb, had told Queen Victoria during personal interviews of the sufferings of Indian women during sickness. When Lady Dufferin went to India in 1883 the Queen-Empress asked her to see what could be done to remedy matters. Lady Dufferin, from that time, took great pains to acquaint herself with all matters relating to the medical relief of women in India. In 1885 she wrote to the wives of the various Governors and Lieutenant-

Governors and being assured of their cordial support, a prospectus was drawn up and published in various languages all over India. The warmest possible response was given. The press was almost unanimous in its approval and during the Viceroy's autumn tour frequent favourable allusions were made in municipal addresses.

Certain objectors there were, even then. Some declared that Indian women did not want medical relief: therefore it should not be provided for them. Others, that it was a mistake to say they would not see men professionally, for they did. This last objection has been repeated from time to time in one form or another, and it may be well to explain what the position really was, and still is.

In those days it may be said there were three classes of Indian women—the strictly *pardah nishin* who under no circumstances, or almost no circumstances, would see a man; respectable women of all classes who would never consult a man for childbirth or diseases peculiar to women, but who were not debarred from doing so for other diseases; and very low class or disreputable women who did not mind whom they consulted. Even the second and largest class was almost debarred from consulting men doctors owing to the principle so prevalent in India, that women should not mix with men at least unless their husbands accompany them. Hence the Government hospitals were almost unattended by women. The 'female patients' mentioned in the 'annual returns' were often treated secondhand through the husbands. In those days few Government hospitals had women nurses.

Miss Rose Greenfield, a Punjab medical missionary, wrote in a little book published in 1885: 'European and native practitioners, Government hospitals and dispensaries, are alike unused by the vast majority of women in India. Prejudices of women and jealousy of husbands forbid telling sufferings to men.'

Dr. Rukhmabai writing of the year 1883, when the Grant Medical College was first thrown open to women, declared that 'the strictly *pardah nishin* women patients were then absolutely unapproachable to the man doctor, but even the average Indian woman did not dream of showing herself to a man doctor for diseases peculiar to women'.

There is another charge sometimes made against the Dufferin Fund which may be mentioned here—namely, that by arranging for the medical treatment of *pardah* women, it encouraged the continuance of *pardah*, which is a pernicious custom and would otherwise have been earlier abandoned.

The Dufferin Fund, however, was not a political or social, but a purely humanitarian organization. It was not concerned with the customs, habits or religion of the patients it treated. It did not support *pardah*—its relief was for all women who preferred the attendance of their own sex. It only directed its employees to respect all religious and social prejudices of the patients, in order that the full value of its work might be attained.

The organization of the Countess of Dufferin's Fund was in accordance with the principles of civilized humanity, which requires relief to be given to all sufferers irrespective of habit, creed or desert. Its example since then has been followed by many civilized governments, who have provided medical relief on a large scale for the victims of venereal disease, that social curse even greater than *pardah*. It is not worth while to consider whether this relief is given more for the sake of the actual sufferers or for the sake of the innocent victims of the disease, for the conditions in India were parallel. It was the children, potential men and women of the future, who grew up suffering from troubles connected with birth and other disabilities, due to the lack of medical aid for their mothers.

Nor is there any likelihood that *pardah* would have

been abandoned if women's hospitals had not been organized. It had already existed hundreds of years during which time it had shown no sign of diminishing, although Indian *hakims* and western men doctors were available for the treatment of women.

The Countess of Dufferin's Fund or the National Association for Supplying Female Medical Aid to the Women of India was organized in 1885. The Queen-Empress was the Patron, the Viceroy was the Patron in India, the Viceroy's wife was the President, the Governors and Lieutenant-Governors of provinces were the Vice-Presidents. There were in addition, Life Councillors, Life Members and Ordinary Members, according to the size of the donations given. The Association was managed by a Central Committee meeting at Calcutta and Simla, of which the Viceroy's wife was President. Each province had its own branch similarly organized, which undertook to carry out the objects of the Association and which collected and was responsible for its own funds. The objects of the Association may be briefly epitomized as medical relief to women by women, medical tuition of women and the doing of all things conducive to these objects.

The function of the Central Committee was to act as a link between the different branches, to collect information, to give advice and to assist by grants-in-aid. It was also in direct communication with those parts of the country where there were no branches, and with Indian States.

The National Association received no assistance from the Government of India except in two particulars—it received the services of a clerk, and it had permission for the medical officers of Government to supervise the work of the employees of the Association.

At the end of three years, when Lady Dufferin left India, the Central Committee had collected about seven lakhs of rupees of which five and a half lakhs were invested and the remainder used in furthering the objects of the

Association. Some large building grants were given to the more important Dufferin Hospitals at Agra and Lahore. Grants-in-aid to the salaries of medical women and nurses, and scholarships to women students and probationer nurses, were given annually.

A branch had been formed in the United Kingdom and by means of subscriptions raised there, passage and outfit money for several medical women and nurses had been provided.

By this time eleven medical women were working in connexion with the Association in India, five having been brought out from the United Kingdom, and six being residents of India. They were employed at Madras, Agra, Calcutta, Delhi, Ulwar, Lahore, Darbhanga and Bhagalpur. This was in addition to the two medical women who were already employed by the Bombay Government at the Cama Hospital, and of course it was in addition to medical women working as missionaries. Many other hospitals were projected at this time both by Indian princes, and by municipalities and some were actually waiting for the services of a qualified doctor.

The different branches had collected about three lakhs of rupees and were utilizing it in much the same way as the Central Committee. The Bombay branch concentrated its efforts on a nurses' training school in connexion with the Cama Hospital.

There were, in addition, local branches under the Provincial branches which raised their own funds. In some cases these branches built and supported hospitals. In other cases their efforts were confined to paying the salary of a woman hospital assistant or midwife.

When one reads over the old reports and papers dealing with this period, it is evident that Lady Dufferin and the members of that first Central Committee were possessed of great knowledge and had real insight into the needs of the women of India. Their enthusiasm was

keen. Meetings were held every week and many hours were spent discussing and initiating plans, both inside and outside committee meetings. Schemes were considered and reluctantly laid aside, not for want of energy or organizing power but for want of funds, perhaps to be taken up many years later. Thus we find a chapter written by Lady Dufferin on the training of *dais*, urging it as one of the most important and urgent duties of the Dufferin Fund. She says, 'in a few years time it will, I trust, be possible to insist upon the compulsory registration of *dais* and the granting of licenses to them without which it should be illegal for anyone of them to practice.' Again it is recorded that the Central Committee hoped to start a model training school for Indian women in medicine, to be entirely under female supervision. This materialized thirty years later, as the Lady Hardinge Medical College for Women in Delhi.

At this time Lady Dufferin and the Central Committee believed they had only made a beginning, and that every year would add to their funds and render greater activity possible. But, as a matter of fact, there was very little addition to the funds after Lady Dufferin left India in 1888, and the Committee was left to carry out a gigantic task with the very inadequate capital of six lakhs; bringing in an income of say, Rs. 30,000, or about £2,000, a year. This was partly at least owing to the decision of the Central Committee not to appeal to the public for funds, as encroaching on the resources of the Provincial committees. The Provincial committees, however, themselves soon ceased to collect.

The activities of the Central Committee thus ceased to expand after 1888. This is not to say the work of the Dufferin Fund did not expand, for local committees occasionally increased their work, and newly formed hospitals became 'affiliated' to the Central or Provincial committees. The term 'affiliation' was a loose one. It is

not quite clear what it implied. It meant, at all events, the inclusion of the hospital report in the Dufferin Fund's *Annual Report*, and it gave the medical woman the right to ask assistance or advice from the Central Committee, if necessary. In any case this affiliation was appreciated by medical women who were sometimes working under difficult conditions in Indian states and elsewhere, and who, on occasion, received generous and sympathetic help from the Central Committee.

The effect which the Countess of Dufferin's Fund continued to exert on the medical relief of women was great, partly on account of the influence and social prestige of the promoters, partly on account of the genuine propaganda renewed each year at the time of the annual meeting and the publication of the *Report*, and partly on account of the numerous local efforts which, although sometimes humble and unnoticed, were carrying relief into many homes and gradually instilling confidence and appreciation among the people.

It would not be right in a book of this kind which is not a brief for the Dufferin Fund, to withhold mention of the criticisms directed as time passed on against the National Association, and which eventually led to its reorganization and considerable expansion.

It was said that the Association was itself inactive, and therefore took credit for work done by others not connected with itself. It was said that the hospitals were inefficient compared with the women's mission hospitals, owing to poor staff and appliances. It was said one of the great objects of the Association, the treatment of purdah women, was hindered by the rule requiring Civil Surgeons to inspect the Dufferin hospitals, and that the position and status of the medical women employed suffered also.

Criticism in India was not outspoken owing to the official standing of the members of the Dufferin Committee,

but in the early years of the present century such charges were widely known and privately referred to by many.

It may be said they included some truth and some falsehood. The Association's *Annual Report* stated clearly that it included returns of work not done by its own employees in order that it might keep the public informed of the progress of medical aid by women. It was true that the Dufferin hospitals were sometimes inadequately staffed. The Central Committee did not itself carry on any hospitals, it only aided those carried on by its local branches or other bodies. It had no system of inspection of these hospitals, so that its annual grants were given blindly. The members of the local committees, with the exception of the Civil Surgeon, usually had little knowledge of hospital administration, and the medical woman was not a member of the committee. The endowment funds were generally small and it was necessary to get additional funds from local grants and private subscriptions. It was difficult, very often, to get these, and the fact that the Civil Hospital itself was often poorly staffed and badly equipped made the committee less ready to accede to the medical woman's demands even if funds were there. Moreover, the troubles were partly due to the lack of educated women available in the country. For many years after the formation of the National Association, women assistants passed out from the medical schools in small numbers only. They were difficult to get, and difficult to replace. In 1885 there were no Indian and only a few Anglo-Indian nurses. Mission hospitals obtained their Sister Superintendents in England as missionaries, and at once set to work to train Indian girl probationers got from the mission schools and orphanages. They did not feel inclined to give these trained girls to work in Dufferin hospitals, as they thought their moral and religious training might be neglected. Hence it was only slowly as these mission nurses became older and more independent,

and as Hindu girls and their parents gained confidence in the Dufferin hospitals, that the problem of nursing in these hospitals became less acute.

It is difficult to deny the charge of inactivity brought against the National Association during the twenty-five years following Lady Dufferin's departure. The meetings of the Central Committee became reduced to three a year, mostly for formal approval of things already done. The real decisions were made by the Lady President and the Honorary and Joint Secretaries, with the Director-General, Indian Medical Service, as a consultant. The other members of the Committee ceased to feel a practical interest and were content to go on giving the same small annual doles to work of which they knew nothing, publishing the *Annual Report* and holding the Annual Meeting. There were no women members of the Central Committee until the appointment of Dr. Kathleen Vaughan in 1909. There were no social workers among the members or any medical practitioners except the Director-General, Indian Medical Service, and the Honorary Secretary, and only one or two Indians, who rarely attended the meetings. The Honorary Secretary, as Surgeon to the Viceroy, changed every five years and his time was pretty fully taken up with his own duties. The Joint Secretary was a young man without medical knowledge and with no opportunity of gaining information about the medical needs of Indian women. In fact, there was no one connected with the Association in a position to enlighten the Central Committee as to the changes taking place outside India, and the manner in which these might affect the work of the National Association.

In England, during the last years of the nineteenth century, attention was being drawn, by means of the falling birthrate, to the high rate of infant mortality. 1902 saw the introduction of the Midwives' Act; 1907, of the Education Act (medical inspection of school children);

1911, of the Insurance Act; 1917, of the Venereal Diseases Acts; 1907, 1915 and 1918, of the Notification of Births Acts and the Maternity and Child Welfare Act. Every one of these ordinances was opening large new fields of usefulness for women doctors, fields in which the need was infinitely greater in India than in England. Time was increasing the numbers of medical women and had already brought some to positions of power and influence in England. A Medical Women's Association had been formed in England and the principle of equal pay for equal work had been adopted by medical men and women alike. Yet the National Association, which had taken the position of central authority for all matters connected with women's medical relief in India, and was looked on as such by the Indian Government, was unaffected by any of these changes and never considered whether work similar to that springing up so widely in England could be organized in India, nor whether any reconsideration of the conditions of service of its employees was required.

The first maternity and child welfare work on a large scale to be organized in India was started by Lady Willingdon in Bombay in 1912. Lady Willingdon was the President of the Bombay Presidency branch of the Dufferin Fund, but so far had it receded from the position it held in 1885 that it apparently occurred to no one that the opening of maternity homes officered by women doctors, was an activity for which it should be responsible.

These criticisms, then, were widely made. Probably few of the critics realized how small were the funds of the Central Committee, and perhaps even fewer had any clear idea what could be done to improve matters. It is easy to be wise after the event, and modern opinion will no doubt hold that the obvious secretary for an organization like the Dufferin Fund was a woman, and if possible a medical woman. Her task would have been to keep in touch with the medical employees, and with the local hospitals, to

make herself acquainted with the needs of Indian women, and to search out and render practicable new spheres of usefulness. The attention of the Lady President would have been drawn to the need for including in the Central Committee members with actual knowledge of the conditions of the people. Had this been done it is probable that the activity of the Central Committee would have continued and that it would never have taken the fatal step of ceasing to ask for subscriptions. A woman secretary was appointed after many years had passed, but not until the public had, to a considerable extent, lost confidence in the Dufferin Fund, and the near approach of decentralization and provincial autonomy made the active revival of a central organization difficult or impossible.

One charge against the Countess of Dufferin's Fund remains—that which concerned the relations of the medical women employed, with the Civil Surgeon.

When the Central Committee obtained permission from Government for its hospitals to be inspected by Government medical officers, it thought it was making an excellent arrangement in the interests of the women, who, coming as strangers to a strange land, would find someone definitely responsible for their reception and for their initiation into the difficulties of Indian medical practice; also, that the connexion with Government would give them a certain status.

All this was true, and probably the medical women would have welcomed the arrangement and would have been content to begin their service under the Civil Surgeon had any limit of time been fixed, or had there been any prospect of future independence. But, as matters were, the young medical woman of twenty-five, who began working under a Civil Surgeon perhaps ten years her senior, found herself twenty years later in the same position, but the Civil Surgeon was now perhaps ten years her junior, with possibly but little experience of the management of

women workers, or of gynecology, while she had become something of an expert in both directions.

Friction most commonly occurred with regard to the purdah question and with regard to the treatment of patients. The medical woman felt herself responsible for seeing that purdah was observed in the hospital, in order that purdah women might freely attend. A formal inspection by the Civil Surgeon did not so much matter, as notice could be given and purdah women could be hidden out of sight; but she objected strongly to surprise visits either for inspection purposes, or to see patients. On the other hand, some Civil Surgeons were accustomed to Indian husbands allowing them to see and examine their purdah wives, and did not realize that other Indian husbands would not permit it. They thought the medical women were imagining or exaggerating the strength of the purdah system—hence they would walk into the wards without notice and the medical woman, who had perhaps persuaded some purdah lady to enter the hospital on the solemn promise that purdah would be observed, felt the matter keenly; to use the familiar Indian phrase, 'her face was blackened.'

One case is recorded—and this is a true story—where purdah was very strictly observed in the Dufferin Hospital and inspection by the Civil Surgeon was not permitted. Nevertheless, one day the Civil Surgeon arrived to inspect, accompanied by a superior Government officer. The medical woman in charge refused to admit them, and she was supported by some of the Indian members of her committee hastily summoned. There was an unpleasant altercation, but the Government officers had to retire, and severely reported the matter to the Central Committee. There was much discussion and correspondence but no harm resulted to the medical woman, unless the reputation of being strongminded is considered harmful!

Such cases were rare, and probably few men would

have persisted in entering the wards if they had fully understood the situation. But all the medical women had not the power of presenting the cases tactfully and forcefully, and, especially in the smaller hospitals where women subordinates were employed, the attendance of purdah women was hindered.

The question of operating was another source of bitterness. The Civil Surgeon was accustomed, in those days, to do all the more important operations in his own hospital and sometimes considered the same rule should apply to the Dufferin hospital. Perhaps at first the inexperienced medical woman was ready to acquiesce in this, but, as she became more experienced, she wished to do her own operations. Even if she was not personally keen on surgery, she saw that her hospital would never be a success unless the people believed her capable of meeting all emergencies. The Civil Surgeon's argument was, that the interests of the patient should come first and the most experienced surgeon should operate, and this view was apt to influence the Hospital Committee. Old-fashioned people thought that surgery was not suitable for women, and the view that women would not make good operators died hard. The medical woman pointed out that there were cases where the Civil Surgeon would never be allowed to operate and unless she could gain experience by taking all cases available in her own line, she would not be equal to these serious operations on purdah women.

It must not be thought that these unfortunate controversies were usual, or even very frequent. The relations between the Civil Surgeon and the medical woman were often of the pleasantest. But the fact that such instances did occur, were liable to occur, and sometimes ended in capable and skilful medical women being driven to leave India, caused great indignation, even among medical women who were not themselves affected. And the fact that the Central Committee took no strong line in the matter,

caused it to become more unpopular as time passed on among medical women both in India and England.

By the year 1907 an Association of Medical Women had been many years established in England, and during this year an association on the same lines was established in India, called the 'Association of Medical Women in India'. The chief credit for founding this Association belongs to Dr. Annette Benson, then first Physician of the Cama Hospital, Bombay, who became the first President, and who was ably seconded by Dr. Catherine Wickham (the first Secretary), Dr. Alice Sorabji, Dr. Kathleen Vaughan and others. One of the main objects of the Association was the forwarding of the interests of medical women in India. It opened a quarterly journal and the discontent felt by many as to the position of medical women under the Dufferin Fund began to find expression. The Council of the newly formed Association determined to take the matter up and wrote to the Central Committee in Simla, voicing the dissatisfaction generally felt. The result was that the Association was asked to send a deputation to Simla to discuss the situation with the Central Committee. The deputation, consisting of Dr. Annette Benson, Dr. Mildred Staley and Dr. Kathleen Vaughan, arrived in Simla in the summer of 1909, and were met by representatives of the Central Committee including the Countess of Minto, then President of the Fund, and Lieut.-Col. Lukis, one of the members.

The deputation brought forward the points already referred to, and stated their opinion :

1. That the Secretary of the Countess of Dufferin's Fund should be a qualified medical woman.
2. That at least one qualified medical woman should have a seat on the Central Committee.
3. That an efficient service of medical women for India should be organized and carried on by the Government of India.

The members of the Central Committee, while not definitely agreeing with the proposals, promised to consider them, and the deputation were, on the whole, pleased with their reception. As an immediate result Dr. Vaughan was asked to join the Central Committee, and it was arranged that she should make a tour of inspection of Dufferin hospitals in company with an Indian Medical Service officer, Major Bird.

Meanwhile a United Kingdom branch of the Association of Medical Women in India had been formed, whose Honorary Secretary was Mrs. Emma Slater, (Miss Littlewood), L. R. C. P., one of the earliest medical women employed by the Government of Bombay. After some years' work in India Mrs. Slater had retired and from 1910 onwards took an active part in rousing public opinion in England on the need for proper organization of women's medical work in India. For this her experience and knowledge of the country well fitted her. In 1910 Dr. Annette Benson went to England on furlough and attended a meeting of the United Kingdom branch, at which the position in India was discussed. It was agreed that the Secretary of State for India should be asked to receive some members of the Association that they might explain to him the need for an organized service of medical women in India. The request was made and granted. In October 1910, Mrs. Mary Scharlieb, M. D., Miss May Thorne, M. D., Miss Annette Benson, M. D., and Mrs. Emma Slater, L. R. C. P., were received by Lord Morley. They represented to him the great needs of the women of India, the fact that the organization of the Dufferin Fund was incapable of meeting it, and that a properly constituted women's medical service under the Government of India was required. A draft scheme for such a service was laid before him.

This draft scheme was forwarded by Lord Morley to the Government of India in December 1910, with the

remark that for many reasons the scheme seemed to be outside the range of practicable expedients, but asking the opinion of the Government of India, especially on the underlying suggestion that the present provision for female medical relief in India was inadequate and unsatisfactory.

About this time the matter began to attract the attention of the English press, and during the next few years references were frequently made, both in the correspondence columns and in the leading articles of such papers as *The Times*, *The Daily Chronicle*, etc., to the suffering of Indian women in sickness, the lack of adequate medical aid, and the failure of the Government of India to provide relief.

As no definite steps had been taken with reference to the draft scheme, a further deputation of fifty-four persons, interested or sympathetic, waited on Lord Crewe (who had now succeeded Lord Morley as Secretary of State for India), in July 1912 to bring the matter to his attention.

The deputation was introduced by Mr. H. W. Forster, M. P., and the views of the deputation were expressed, by Mrs. Scharlieb from a professional point of view, and by Sir Frederick Lely, an experienced Indian administrator, from an administrative point of view, while Mrs. Emma Slater was deputed to reply to questions which might be asked. Mrs. Scharlieb described the present difficulties of women doctors in India, and the sufferings of Indian women through lack of efficient treatment. Sir Frederick Lely spoke of 119 millions of women in British India, of whom roughly two thirds objected to treatment by men doctors. He spoke of the need for Government action, for organization, and for opportunities for Indian women to study medicine under their own sex.

Lord Crewe, in his reply, said he knew the keen interest taken in this matter by many people and that its importance was recognized by the Government of India, and also by Lady Hardinge. The proposals made by the deputation in

1910 were still under the consideration of the Government of India. He thought he might say, however, that there was no fundamental difference of opinion with the deputation as to the need for some action, although there might be some difference as to method. He promised the most sympathetic attention to the matter when the views of the Government of India were known.

Mrs. Slater pointed out that a service on the same scale as the Indian Medical Service was not contemplated. What was desired was, that there should be a central body to control a few women's hospitals in different parts of the country, staffed by very efficient medical women, where the locally trained women doctors would get special experience in obstetrics and gynecology after qualifying, and so would be competent to undertake really serious cases in smaller towns and villages.

Meanwhile the Government of India had referred the draft scheme to the Central Committee of the Countess of Dufferin's Fund, with the question as to how far it felt its present organization was equal to the medical needs of the women of India. This was discussed at a meeting of the Central Committee held in January 1911, and a Sub-Committee was appointed to consider it in detail. The Sub-Committee consisted of Lady Hardinge, the Hon'ble Mr. S. H. Butler, Surgeon-General Lukis and Col. O'Kenealy. The Sub-Committee reported there was no doubt the present provision of female medical aid was utterly inadequate and unsatisfactory and that it was necessary to improve the pay and prospects of medical women working under the Association. A draft scheme prepared by General Lukis and modified by the Sub-Committee required an expenditure of three lakhs a year. The Central Committee replied to the Government of India in November 1911 and forwarded this report and scheme. They fully acknowledged the need for reform and said they felt General Lukis' scheme was necessary, but that this could only be carried out if the

Government of India and the Secretary of State could see their way to adequate financial contributions.

The conclusion which the Government of India came to finally was, that some action was necessary to provide more adequate medical relief for that large section of the women of the country who from social or religious prejudices would not attend ordinary hospitals. It had a strong sense of the good work done for so many years by the Countess of Dufferin's Fund and was unwilling to form any new organization or detract from the influence or prestige of the Fund. Accordingly in the year 1913 the announcement was made that a Government subsidy of one and a half lakhs of rupees (about £10,000) would be paid annually to the Countess of Dufferin's Fund, and it was asked to draw up a scheme and submit it for the approval of Government. Therefore, during the year 1913, the draft rules of the Women's Medical Service, India, were drawn up by a Sub-Committee appointed for the purpose by the Central Committee. These were approved by Government and the new Service came into being on 1st January 1914.

The announcement of the new Service was not received with great enthusiasm in England. There was disappointment that its administration was in the hands of the Dufferin Fund rather than in the hands of Government. The salaries were thought inadequate, the qualifications of those appointed were not always of the highest, and the attitude taken by many medical women in England was, better no reform than a half reform. They overlooked the fact that the half reform was a lever which made it possible to bring in greater reforms, a fact which, at the end of fourteen years' working, has resulted in conditions at least reasonably good. They have been sufficient to attract the best type of medical women, British, Indian and Anglo-Indian, giving them the opportunity to initiate and carry on, in an adequate manner, work of the greatest importance in the different departments of medical relief and prevention.

The salaries were at first too small: Rs. 350 p.m., rising after ten years service to Rs. 550 p.m. Even so, in many cases, it was more than the medical women admitted to the service had been getting. The Central Committee realized the pay was too small, but could not give more, as it had decided to employ twenty-five medical women and had only one and a half lakhs of rupees to disburse annually.

The qualifications were not always of the highest because the Central Committee had decided to employ, as far as possible, medical women already working in India. Many of these were without university degrees, not probably because they were less highly endowed by nature than the younger women coming out, but because facilities for getting university degrees were not common in their young days, and in the case of Indians especially, economy had compelled them to take the qualification most quickly obtainable.

But quite apart from this, the Central Committee could not have taken any other action. The women appointed to the Service were in charge of hospitals which were not under the control of the Central Committee, but were under provincial or local committees. Where a medical woman had been working in connexion with such a hospital for years and the local authorities desired to retain her services, it would have been impossible for the Central Committee to insist on replacing her by a more highly qualified medical woman perhaps new to India, and with all her experience to get. Had the Central Committee endeavoured to take this line it could only have ended in disaster. All the women chosen, however, had European qualifications, and, as the older members passed out, care was taken to select well qualified successors.

The most important changes for the better which the new Service brought were :—

1. Permanence of service.
2. Definite increments of salary.
3. A provident fund.
4. Furlough every three or four years.
5. Study leave.
6. Right to attend all meetings of the Hospital Committee.
7. Full professional control of the hospital.
8. Employment by a Central, instead of as formerly by a local committee. The right to appeal to the Central Committee, which alone could terminate employment and the possibility of transfer when advisable.

The increased responsibilities which the Service brought to the Central Committee made it clear some reorganization of its office was needed. It was generally agreed that the Central Committee must visit and inspect the work of the members of the Service, both in order to keep in touch with the personnel and in order to be in a position to determine from time to time the lines on which the Women's Medical Service should develop. It was felt that a medical secretary was needed, who should herself be a member of the Women's Medical Service. There was some delay in this matter, owing to the sad death in 1915 of Lady Hardinge, the then President of the Central Committee. The senior member of the Central Committee, Sir Harcourt Butler, held office temporarily. He was succeeded by Lady Chelmsford early in 1916, and the same year Dr. Margaret I. Balfour was appointed as Joint Secretary of the Countess of Dufferin's Fund, in place of Mr. E. J. Buck, resigned. The title of Chief Medical Officer, Women's Medical Service, was later added to that of Joint Secretary.

No account of the initiation of the Women's Medical Service would be complete without a reference to one who was at once its warmest friend and its most active and

competent adviser—the late Sir C. Pardey Lukis, Director-General of the Indian Medical Service from 1910 to 1917. Sir Pardey Lukis was a man of wide sympathies and far-seeing policy. He was in touch with the movement for the advancement of women, was aware of the progress made in other countries in this direction and of the new avenues which were opening for their employment. His influence with Government was high and his opinion was looked upon as carrying the utmost weight. It was uniformly given in favour of the new Service and in favour of making the rules as generous and liberal as possible. It was owing to a letter written by him to Lady Chelmsford that the question of the appointment of a medical woman secretary to the Countess of Dufferin's Fund was finally taken up and carried through in 1916, and during the last year of his life he gave the most cordial and valued support to the work initiated. His death, in the autumn of 1917, was a great blow to the Service, as well as to the Lady Hardinge Medical College, then newly opened, to which he had been an equally warm friend.

CHAPTER FOUR

THE WOMEN'S MEDICAL SERVICE FOR INDIA

The duties of Secretary to the Central Committee included the administration of the Women's Medical Service, that is, the inspection of the personnel, the selection of applicants in India, the arrangements for appointments, transfers, etc. It included also the Secretaryship of the Funds of which the Viceroy's wife was President, that is, the Countess of Dufferin's Fund, of which the income was chiefly spent in grants to hospitals and scholarships, and the Victoria Memorial Scholarship Fund, used for assisting the training of indigenous *daïs*. Later, the Secretaryship of the Lady Chelmsford All-India League for Maternity and Child Welfare was added to the other duties. It was understood that new lines of activity suited to Indian conditions were to be thought out and organized, and much of the work described in Chapters VIII and IX was initiated during the next few years in the Dufferin Office. The Funds were charitable ones, raised at different times by Lady Dufferin, Lady Curzon and Lady Chelmsford, and had no connexion with Government, although, as related later, Government grants were sometimes given for special objects.

The selection of candidates from the United Kingdom for the Women's Medical Service was placed in the hands of the United Kingdom Committee of the Countess of Dufferin's Fund. Of this Lady Dufferin was President, and the Committee in 1919 was fortunate enough to secure as Honorary Secretary Miss L. Brooks, Warden of the London School of Medicine for Women.

The Women's Medical Service was also fortunate in having Lady Chelmsford as its President during its early

years. She had the modern viewpoint and realized that if first class medical women were to be secured for India, first class conditions must be offered. She supported in every possible way the position of the new secretary and, on occasion where differences of opinion arose among the Committee, she invariably stood for the most generous treatment and widest liberty of action possible for the members of the Service. She was a good business woman, spent much time going into details regarding the rules and working of the Funds and the special cases which frequently arose. During her tours with the Viceroy, she was careful to visit all work connected with the Funds and gathered much information as to women's medical needs and child welfare work. Certain reforms which she initiated regarding the Committees were of great value.

Lieut.-Col. Ansten Smith, who, as Surgeon to the Viceroy, became Honorary Secretary of the Dufferin Fund, had always been friendly and sympathetic towards medical women, and throughout his term of office he devoted himself to forwarding their interests and helping the new Service to fulfil itself. He was a most valued colleague and it was with great regret that the staff of the Dufferin Office said goodbye to him when he left before Lord Chelmsford's departure to take up the duties of Inspector-General of Civil Hospitals, Bihar and Orissa.

In 1917, after the appointment of the new Secretary, a small Executive Committee was formed to carry on the routine work of the Funds and to initiate and propose necessary changes to be brought before the Central Committee. The Viceroy's wife was the President, the Director-General, Indian Medical Service, and the Honorary Secretary, were members, and from time to time others from the Central Committee were co-opted to give special advice. Each member of this Executive Committee was actuated by the single-hearted desire to improve the conditions and raise

the standard of the Women's Medical Service, and so dissipate the prejudice which still existed against it in the United Kingdom. The first step was to render the salaries more adequate. For this, an increase of the Government subsidy was necessary and the continuance of the war caused some delay. But in 1921 the necessary increase was sanctioned and the following improvements were made in the conditions :—

1. The salaries were increased from an initial salary of Rs. 350 p. m. rising to Rs. 550 p. m., to an initial salary of Rs. 550 p. m. rising to Rs. 1,000 p. m. (including overseas allowances); additional allowances were given for special posts.
2. The Provident Fund was doubled (that is, the contributions of the Central Committee and of the members of the Service).
3. Study leave was increased from nine to twelve months in the total service and the allowances held during it were raised.
4. The rate of travelling allowance was increased to equal that given to first class Government officers.
5. Full professional control of the hospitals had been given in 1914, but it was now required that the amount of administrative control should equal that held by a Civil Surgeon in charge of a District hospital.
6. The cadre of the service was increased to forty members.

It was a source of great satisfaction that the last of these changes was complete before Lady Chelmsford left India in 1921, when the members of the Women's Medical Service expressed their sense of indebtedness by presenting her with an illuminated address.

It may be said here that the Secretary had wished to introduce a system of pensions instead of Provident Fund.

It appeared from calculations made by the Honorary Treasurer on the basis of the Officers' Daughters Indian Pension Fund, that the cost would not be much greater. Some of the Central Committee were opposed to this measure and one high Government official stated that most of the men in his department would prefer to change their pension for a generous Provident Fund. The Secretary was asked to take the vote of the members of the Service as to which they would prefer, and rather to her surprise, the vote was almost unanimously in favour of Provident Fund. The explanation no doubt is that medical women not infrequently marry, or they may decide to give up hospital work in favour of private practice, when the Provident Fund provides a convenient reserve. It is only fair to say that the pensions contemplated at this time were not of a very generous nature.

Difficulties which arose in administering the Women's Medical Service, and the Funds generally, were not in connexion with the Central Committee but rather in connexion with the provincial and local committees. In the more distant parts of India it was not fully realized how the position of women workers had improved. The claims of medical women to be recognized as first class officers were sometimes received with genuine astonishment. Still, most of these committees were fairminded enough to see that if they accepted the salaries paid by the Central Committee, they must also accept the conditions under which the salaries were given. Hence matters usually ran smoothly, and it was only occasionally that difficulties arose.

One case in point was in connexion with the Agra Medical School. When the Dufferin Fund was first started in 1885 one or two women students had already been admitted to the male School for Sub-assistant Surgeons at Agra. The Central Committee took the matter up, gave large building grants, and paid grants-in-aid to the salaries

of the medical women. By the year 1914 the women students had their separate hostel, and separate hospitals, but attended classes with the male students. The Central Committee admitted both the medical women employed to the Women's Medical Service. The senior medical woman was lecturer on obstetrics and gynecology, but she was not permitted to do the gynecological operations, which were in the hands of the Superintendent of the School, an Indian Medical Service man. Nor was she in complete charge of the hostel. It was the old story of the Dufferin Fund—there was no prospect of her ever attaining a more independent position. It was evident that the situation was not in accordance with the standard which the Women's Medical Service had set up for its women employees. As the Agra Medical School was a provincial institution under the United Provinces Government and most of the expenditure was paid by that Government, it was a difficult matter to negotiate. It was fortunate for the Women's Medical Service that Sir James Meston, the then Lieutenant-Governor of the United Provinces, was a man of extremely just and reasonable mind, who took much personal trouble to look into the details and acquaint himself with the views on both sides of the question; also that Lady Chelmsford understood clearly the importance of the matter for the status of the Women's Medical Service. In 1918 the Women's Medical School, Agra, was, except for theoretical lectures, separated from the male Medical School and Dr. Mary O'Brien, W. M. S., was appointed Principal with full administrative and professional control over the hospitals and hostel. In 1923, on the strong representation of the then Principal, Dr. Muriel Webb, W. M. S., the process was completed by the appointment of additional staff and the rearrangement of the buildings. The Women's Medical School, Agra, has since then been a self-contained women's school, a matter for many reasons of more importance in India than in England.

A matter on which some difference of opinion arose among the Central Committee was in connexion with the question of venereal disease in India. A lady had visited Simla with the purpose of rousing public opinion against the Cantonment Act, and the whole question had been ventilated at public and private meetings. It was felt by some, that although the Dufferin Fund could not take any action or definite attitude regarding the Cantonment Act, it should, as a medical organization, take some action as regards Venereal Disease in India. The Secretary was aware that it was a very common cause of disease in Indian women, that the people were tragically ignorant of the consequences, and that there were seldom facilities for segregating infectious cases or carrying out efficient treatment in the Dufferin and Women's Medical Service hospitals. This was brought before the Central Committee, but the idea of any action met with opposition in some quarters. One of the oldest members said that the Dufferin Fund, since its inception, had never had anything to do with such questions and in his opinion it never should. The reply might have been made that although the members of the Committee had been so fortunately situated, their employees had been fighting it unsuccessfully for many years, on account of the lack of weapons. However, a compromise was reached. The Central Committee agreed to a member of the Women's Medical Service being appointed to make an investigation into the prevalence of venereal disease in India, and Dr. Dagmar Curjel, W. M. S., was appointed to make it. Her report was published in 1918. A large amount of information had been collected from medical men and women in all parts of India and all were unanimous in declaring, the great number of cases which required treatment; the lack of facilities for treatment; the lack of knowledge on the part of most of the medical women of the newer methods of treatment; and their inability to use them, even when known, because of the high

cost of the medicines and the lack of facilities for pathological examination.

After this the Central Committee agreed to send up an application to Government asking for a sum of money to enable postgraduate courses for medical women in the newer methods of treatment of venereal disease to be organized, asking that the necessary drugs for undertaking the treatment might be supplied at cost price to women's hospitals, and that the necessary pathological examinations might be done free of charge in Government laboratories.

The application was acceded to. The first postgraduate course was held at Deolali in 1921 under Lieut.-Col. Frost, Dermatological Specialist with the Army. Others were held at Poona in 1922, 1923, and 1924. The courses were not confined to the members of the Women's Medical Service but were open to all medical women in India.

From the year 1918 onwards something was done to initiate maternity and child welfare work in India in the Dufferin Office. This will be referred to later—here it may be said that an association was formed for the provision of health visitors and maternity supervisors, a Health Training School was opened in Delhi in 1918, and a large Maternity and Child Welfare Exhibition was organized at Delhi in 1920. At this meeting Lady Chelmsford, who had recently been collecting money for child welfare announced her intention of forming a new association to be called the 'Lady Chelmsford All-India League for Maternity and Child Welfare'.

The formation of the new Association has sometimes been criticized, and it has been said that the essential objects of the Lady Chelmsford League were already provided for in the constitution of the Dufferin Fund.

The reasons for forming a separate fund were twofold. The Dufferin Fund, at least in some of the provinces, had so far lost its vital interest that it could scarcely have

secured large donations. Had an appeal for the Dufferin Fund been made directly by the Vicereine it would have given provincial offence—had it been made through the provincial committee, it would have failed.

Moreover in India, when large donations are made to a charitable fund, the donor usually hopes for some recompense in the shape of an honour or decoration. He believes he is more likely to get this if the fund is a new one, in this case the child of the acting Vicereine. He believes she would not think it worth while to acknowledge in any adequate way a donation to her predecessor's fund. In this he is no doubt wrong; and yet there is a certain awkwardness in the position of a Vicereine to her predecessor's fund. She may disapprove of certain developments and see ways in which the work of the fund might be improved—but such changes might give offence to the lady to whose initiative the fund was due, and after whom it was named. If the decision had been taken in 1885 to call the original fund after the Queen-Empress these difficulties might never have arisen. The organization might have been esteemed the true child of successive Vicerines, for which they were responsible to her Majesty, and a single fund might well have been maintained for the medical and preventive relief of the women of India.

In the year 1921 Lady Chelmsford was succeeded as President of the Funds by Lady Reading, while Lieut.-Col. Carey Evans became Honorary Secretary. Major-General Edwards had already succeeded Sir Pardey Lukis as Director-General, Indian Medical Service, and he in his turn was succeeded by Major-General MacWatt in 1923.

Lady Reading was handicapped throughout her term of office by delicate health, but in spite of that she took the keenest interest in the working of the different Funds. She had not been many weeks in Simla before she put her finger on a plague spot which had vexed the hearts of many medical women, namely, the Dufferin Block of the

Ripon Hospital, and said, 'I shall make it my business to provide Simla with a new women's hospital'—a promise which was splendidly carried out.

The Dufferin Block of the Ripon Hospital had been opened in the early days of the Dufferin Fund and was at first presided over by a woman assistant surgeon. The question of building a new women's hospital in Simla had been considered more than once, but had ended in nothing. In 1914, a member of the Women's Medical Service was put in charge. By this time the ward had grown into a block and various alterations were carried out shortly after to provide more suitable operating rooms and doctors' quarters. But the Dufferin Block still remained an inadequate building, providing only twenty beds, poorly equipped and staffed, nominally at least under the control of the Civil Surgeon, closely connected with the Ripon Hospital buildings and overlooked by the bazaar, which made any degree of privacy impossible.

Lady Reading had not been long in India before she opened her 'Women of India Fund', the object of which was to provide for the Simla Hospital, to forward the interests of Indian nurses, and to provide an adequate building for the Health Training School, Delhi.

After much discussion and searching for sites, the house 'Bairdville' was chosen as the nucleus of the new hospital. Large donations to the building fund were given by Indian Princes and others. The foundation stone was laid in September 1923, and the Lady Reading Hospital was opened for work in 1924.

The Hospital has sixty beds and is one of the best staffed and best equipped women's hospitals in India. It is certainly one of the most beautifully situated hospitals in the world. While freely accessible to the people of Simla the situation is so retired that it allows complete privacy. All classes of women are provided for, except Europeans,—and it seems one of the great blots on Simla



New Maternity and Surgical Block, Lady Reading Hospital, Simla

administration that while European women are debarred from admission to the Lady Reading Hospital, they are debarred from being attended by women doctors at the European Hospital, where the only doctors allowed to attend patients are the two Civil Surgeons and the Staff Surgeon.

Dr. Charlotte Houlton, W. M. S., was appointed as the first Superintendent of the Lady Reading Hospital and in a very short time she had dissipated the fear, so freely expressed in some quarters, that the scheme would prove a fiasco and the wards would be empty as there was no need or desire in Simla for a first class women's hospital. From the beginning the hospital has been, in the fullest sense of the word, successful. It attracts women from the remote hills, who have no other chance of hospital treatment; it attracts women from the crowded Simla bazaars, where, during the season of the Government of India's residence, women of all classes abound; and many women come from the plains, attracted by the growing fame of this, the first hospital for Indian women to be opened in an Indian sanatorium.

In the year 1922 the Women's Medical Service passed through a period of acute danger, when it narrowly escaped the devastating effect of the 'Inchcape axe'. It is a fixed belief of women workers in India, too often justified, that when economy is needed a beginning is made with the women's work. In this case it was quite openly stated by the junior officials in the Finance Department, that the Women's Medical Service subsidy would be the first load to be thrown to the wolves. To these officials the Women's Medical Service was only a name. They knew nothing of the nature of the work which it was doing. They knew that, since the subsidy for it was given in 1914, the system of Government had been changed. Medicine was now a 'transferred subject' for which the Provincial Governments were wholly re-

sponsible.¹ It was, in their view, an anachronism that the Central Government should continue to pay a sum of three or four lakhs annually for medical relief to be used in the provinces. They were eager to rid themselves of this anachronism and they did not understand or realize the reasons which urged as exceptional the case of the Women's Medical Service.

Perhaps there is no country in the world where men and women live under such different conditions as in India. The man has education—medical aid—the power to earn his living—the right to move about freely and voice his grievances. And what is it that bars the women from doing the same? Not the decree of the foreign Government—but the inexorable tyranny of domestic custom and habit. While this is so, how can we expect that the Provincial Departments, without the opinion of the people to back them, can all at once take up the viewpoint of western nations regarding women's affairs? In the special case we are considering, it was admitted to be most unlikely that the Provincial Governments would take up the burden of the Women's Medical Service, if the Central Government laid it down. Here and there something would be done—elsewhere the hospitals would be reduced and put under women subordinates. The efforts made to attract first class European women—to encourage Indian women to take the highest qualifications—to initiate work in different parts of the country requiring skilled organization—would be nullified.

Lady Reading had learned much since coming to India of the terrible conditions of Indian women during childbirth, of the high infant mortality, of the sufferings from untreated disease. She had not only heard, but had visited the hospitals and had spoken to the women. She not only saw, but realized, what was being done in the Women's Medical Service hospitals to relieve suffering and to initiate schemes for the education of mothers and the

¹See below, p. 123 note.

well-being of children. She personally interested herself in the matter, and was able to bring home to Lord Inchcape and the members of his Committee a sense of the tragic importance to the women of India of these few lakhs of rupees. In time to come, the Provincial Governments would no doubt take up the burden and do even more for the Women's Medical Service than the Central Government had done; but they must have time given them, either to develop in the minds of the Indian electors the need for first class medical treatment of their women, or to enable Indian women to unite and demand the best of treatment for themselves and their children.

The women of India owe a debt of gratitude to Lady Reading for the part she took in clearing the issues on this important question.

Lieut.-Col. Carey Evans—now Sir Thomas Carey Evans—left India in 1924. Again the Dufferin Office staff had to bid farewell to one who had come to mean a great deal to them. Colonel Carey Evans had a personality seething with energy and with the determination to carry through successfully whatever he undertook. Coming from a busy surgical post to the comparative calm of Viceregal Lodge, he sought fresh outlets for his energies, and found them in the organizing of the Lady Reading Women of India Fund and the Lady Reading Hospital. Under his skilful fostering hand the Fund rapidly exceeded all previous Vicereines' Funds, while he still found time to lend ready aid in all departments of the work.

In the year 1922 Mr. Montagu Butler, afterwards Sir Montagu Butler, Governor of the Central Provinces, became a member of the Central Committee. He soon shewed himself keen and interested, and took a leading part in organizing the amalgamation of the different Funds under the Vicereine. Of these Funds the Dufferin, Victoria Memorial Scholarships, and Women's Medical Service, had recently been worked by one Committee. But the Lady

Chelmsford League had another Committee and the Lady Reading Fund had a third Committee. This increased the secretarial work, took up the time of members unnecessarily, and inevitably caused some overlapping of interests, and confusion in the minds of the public. The possibility was considered of amalgamating all into a common fund, with a single constitution and a single committee; but after the matter had been carefully considered it was found legal measures would be necessary for such an end, and that the purpose would be as easily attained by altering the constitutions of the different Funds to make them identical, and by appointing identical individuals to sit on the different committees. As Lady Reading announced her intention of closing her Fund when she left India it was only necessary to take these steps with regard to the Dufferin Fund and the Lady Chelmsford League. This arrangement was completed in 1924 and the Funds have been successfully worked since with a single Committee.

Lady Reading laid down the reins of office in 1926. There were many sad hearts among the women workers whom she had befriended; and in time to come they will perhaps remember her, not so much for the solid benefits she secured, as for the invariable kindness with which she sought them out and the thoughtfulness and consideration she showed in all her dealings with them.

Lady Irwin succeeded her in the Presidency of the Funds and since her arrival in India has shewn the same interest and desire to help forward the work as her predecessors.

The most recent changes in the Women's Medical Service have been the granting of a certain number of free passages to members of the service when proceeding on or returning from furlough; more liberal leave rules; and the formation of a Training Reserve to which women medical graduates of Indian universities are admitted. Members of this Reserve are, from time to time, sent to

Europe for further study. Selections from the Training Reserve may also be made for appointment to the Women's Medical Service, the great advantage being that the Chief Medical Officer has the opportunity of watching the candidates and noting their capabilities while in the Training Reserve.

To sum up, the Women's Medical Service has been in existence now for fourteen years, and it is by no mere coincidence that India has, during these years, made great progress in the medical and preventive relief of women.

The opening of the new Service improved the financial position of its members, made provision for regular leave, furlough and study leave, removed from the hospital committee the burden of the medical woman's salary and so rendered it possible to organize a suitable nursing staff. The appointment of a medical secretary to the Central Committee and her annual visits made the members of the service realize that interest was taken, at headquarters, in their work—and that notice was evoked not as formerly, by an ably written report, or by the spick and span appearance of the hospital at the time of a viceregal visit, but by the real standard of work done through the year, by the organizing power shewn and by the evidence of popularity of the hospital.

The increase in efficiency and the growth of public confidence in the Women's Medical Service hospitals is clearly shewn by a comparison of the reports of these hospitals in 1921 and 1927.

Returns for eighteen of the hospitals only, were published in 1921¹. Compared with the same eighteen hospitals in 1927 we find the number of in-patients had increased from 20384 to 28432 (or, the average for each hospital had risen from 1132 to 1557), the number of abdominal operations had risen from 498 to 1049, the number of abnormal labour cases relieved had risen from

¹ *Annual Reports of the Countess of Dufferin's Fund, 1921, 1927.*

940 to 1230, the number of nurses under training had risen from 178 to 208. To those who understand what hospital work means, and especially how difficult it is to overcome the natural fears of Indian patients about operations, these figures mean a great deal.

The organization of a regular Service made it possible for the Committee to depute members from time to time on important public duties—such as the deputation of Dr. Dagmar Curjel for the enquiry on the prevalence of venereal disease among Indian women in 1918, the deputation of Dr. Curjel and Dr. Florence Barnes for the enquiry on the maternal conditions of women industrial workers in 1923, the deputation of Dr. Agnes Murphy to assist in an enquiry on the diseases of pregnancy in 1925, 1926, and 1927.

The Committee organized postgraduate courses for medical women in the newest methods of treatment for venereal disease 1920-1924; it organized courses of general postgraduate work for Sub-assistant Surgeons in Calcutta, Madras and Simla 1917-1924. It gave grants for the organization of general postgraduate courses for medical women 1926-27.

During this time several large movements were organized in India. An Association for providing Health Visitors with its first Health School in Delhi was organized in 1918; the first Maternity and Child Welfare Exhibition in India was held at Delhi in 1920; the first All-India Baby Week was organized in 1924; an All-India Conference on Maternity and Child Welfare was held at Delhi in 1927; the organizing secretaries of all these movements were members of the Women's Medical Service. The effects of these movements are widespread throughout India to-day.

The scheme for the Lady Hardinge Medical College was initiated before the Women's Medical Service, but by the time the College was opened the Service was in working order and has since provided the whole of the superior medical staff. It supplies part of the superior medical staff

for the Agra Medical School. Nearly one third of the women trained in India pass through these two institutions.

The students of the Lady Hardinge Medical College have done well in their examinations. They get plenty of practical training in midwifery, and after they graduate every effort is made to provide them with house posts in the chain of Women's Medical Service hospitals, where they learn how to organize medical work efficiently on a small scale and have the opportunity of actually performing obstetrical and gynecological operations. They then pass on, some to go to England for further study, some to enter the Women's Medical Service, some to take up posts in general hospitals or small women's hospitals, some—and as time passes the number of these will increase—to take up private practice. Each carries with her the ideals which have been impressed on her as student and graduate—to keep her head under difficulties, to be efficient, and to bring to success whatever she undertakes; and the standard of Indian women's medical work will rise in consequence.

But, the great central institutions where training is done, and the Women's Medical Service hospitals where the graduates gain experience, must keep up their standard, and more, must improve it, as the years pass and opportunities of gaining knowledge come more and more within reach. They must especially develop that almost neglected avenue of progress in India, research on conditions of pregnancy and infancy in India and must instil into the rising generation of medical women an enthusiasm for this branch of medicine, on which so much of our future success depends.

The Countess of Dufferin's Fund receives from the Government of India an annual sum of Rs. 3,70,000, (£28,500), to carry on the Women's Medical Service. A year ago¹ the Committee of the Countess of Dufferin's Fund, having been informed by its Honorary Treasurer that the

¹*Annual Report of the Countess of Dufferin's Fund, 1927.*

present Funds could not continue to carry on a service of forty-four medical women, applied to the Government of India for an increase to its subsidy of Rs. 1,30,000, (£10,000), to enable it to continue its present cadre and to provide for the employment of eight additional medical women. This request was refused by the Government of India. An application was then made to the Provincial Governments (in whose provinces the medical women were working), but we understand it has met with little success. The refusal is all the more unfortunate when we consider the important relation which childbirth and feebleness at birth bear to the vitality and efficiency of the Indian people. Patient, steady and constant research is needed, before we can discover and prevent the causes of feebleness at birth. Centres of first class treatment are needed, if we are to utilize the knowledge gained. Medical women of organizing ability are needed, to plan out enterprises in these two directions and to lead lay enthusiasm into the channels where it will be most useful. Money spent in these ways would be a thousand times repaid.

India is not now the only field for medical women overseas and a comparison between the conditions of employment in the Women's Medical Service, India, and under colonial Governments is interesting.

Women are admitted to the Malayan Medical Service on the same terms as men, on salaries rising from £700 to £1120 per annum after twelve years' service.

Women are not appointed definitely as members of the West and East African Medical Services, but are given special duties in connexion with maternity hospitals and infant welfare. They receive salary at the same scale as in these Services and if placed on the permanent establishment become eligible for pensions under the same conditions as men.

The salaries in East Africa commence at £600 per annum and rise after ten years' service to £920 per annum.

In West Africa they commence at £660 per annum and rise after eight years' service to £960 per annum. There are, of course, higher scales of salary in all these Services, but promotion to the higher ranks is made by selection and it is uncertain if women would be selected for these grades, which include administrative work.

Free quarters are given in all the Services. Private practice is allowed in East and West Africa, if it does not interfere with official duties. In the Malayan Service only consulting practice is allowed.

The salaries in the Women's Medical Service, India, commence at £493 per annum, rising after twenty-four years' service to £900 per annum, furnished quarters are given, and private practice is allowed if it does not interfere with official duties. There is no pension, but there is a Provident Fund to which the members of the Service and the Council administering the Service each contribute ten per cent of the salary.

The pensions in the colonial Services are calculated on the basis of $\frac{1}{80}$ th of the final pension emoluments for each month of pensionable service. After twenty-five years, this would probably amount to £500 or £600 per annum. The Women's Medical Service Provident Fund savings at the end of twenty-five years would, we believe, purchase an annuity of about £380 a year.

It is not easy to draw a comparison between the value of different salaries owing to the difference in the cost of living in different countries. In Malay, for instance, the cost of living is higher than in most parts of India. But there is no doubt the provision for old age is less in the Indian than in the colonial Services.

There are two aspects of the Indian Service which should go far to compensate for this with the best type of medical women. One is, that all the administrative and special posts of the service are filled from the cadre of the service, and medical women who make their mark thus

have the prospect of rising to positions of great responsibility and incidentally draw salaries larger than any given at present to medical women in the colonial Services— (£1440 p. a., £1260 p. a.). Another is, that in the Indian Service, medical women have complete professional control of their hospitals and are encouraged to do as much surgical work as possible. In West and East Africa the duties of the medical women are confined to maternity work and Infant Welfare posts. In Malay, where there are many Indian residents, medical women are appointed to the charge of the women's wards in large general hospitals. They are assisted by male assistant surgeons, hence they have to do a great deal of routine gynecological work themselves. There is frequently a surgeon specialist who does all operations.

It is impossible to generalize about climate—but most parts of India possess a cool bracing winter and have easy access to hill stations where accommodation is plentiful. This is not always the case in Africa and Malaya.

We have not yet compared the conditions of the Indian Women's Medical Service with the Indian (Men's) Medical Service. In this last, salaries commence at £584 per annum and rise after twenty-five years' service to £2480 per annum with a pension of £700 on retirement. If the officer elects to retire after six years' service he gets a gratuity of £1000. If he retires after twelve years' service he gets a gratuity of £2500, and if he retires after seventeen years' service he gets a pension of £400 per annum. Quarters are not provided, hence the initial salary represents about the same value as the women's initial salary, but it soon soars beyond it. The same medical qualifications and the same standard of work are expected from both Services.

Reasons are given why the salaries of Indian Medical Service officers should be higher than those of the Women's Medical Service. It is said that the Indian Medical Service is a military service and men may be called at any time,

on a day's notice, to proceed on active service with all its dangers and risks; that those in civil employment must attend all civilians over a certain grade free of charge, and, although private practice is not forbidden, they are frequently stationed in places where private practice is not forthcoming; they have important public duties apart from their hospital work, such as the charge of jails, the duties of a Police Surgeon and sometimes of a Medical Officer of Health; they constitute a reserve, from which men are taken for the important tasks of teaching and research.

All this is true, but we do not think it is enough to explain the great difference between the salaries, and especially in the provision for old age, in the two Services.

The Civil or Military Surgeon, with all his onerous duties, is never faced with a more terrible emergency than the medical woman who attends a case of obstructed labour in a coolie's hut. But the struggle which she engages in there, is only a reflection of the struggle she is daily carrying on, in her attempts to train illiterate midwives and *dais*, to treat women so ignorant that they are ready to fly from hospital at a neighbour's idle word, and to raise the standard of public thought and to organize public support; all in the endeavour that India may become enlightened as to the need for first class preventive measures to secure healthy mothers and children, and first class treatment for those unfortunates who have suffered from lack of it in the past. No branch of public service is of greater importance than this, which depends greatly for its fulfilment on the energy, initiative and determination of the medical women of India, and those whom they train to assist them. Women who have spent a lifetime in such work deserve a better recompense than a penurious old age. Those who organize women's services do not always realize that many women workers have parents or young relatives to support, and the existence of such relatives may make it impossible for them to sink their savings in an annuity on retirement.

The clearly written and carefully compiled *Reports* of the Countess of Dufferin's Fund give from year to year much interesting information about the Women's Medical Service and shew that it is constantly becoming a more useful and valuable asset to the women of India. It must be the earnest hope of all who realize the physical suffering and disabilities of eastern women that it may receive generous treatment from the Central and Provincial Governments, that it may continue to expand, and to organize fresh centres for women's medical relief in parts of India now untouched.

CHAPTER FIVE

THE WORK OF WOMEN MEDICAL MISSIONARIES

The account given of the beginnings of women's medical work in India shows what a debt the women of India owe to medical missions. The subsequent history of that work displays in almost as striking a degree the part which mission doctors have played in every fresh development. We see it in medical education, in work for *dais*, in child welfare work, and notably in the co-operation between medical women serving under different bodies which found expression in the 'Association of Medical Women in India'. It is difficult to imagine India without this chain of mission hospitals, stretching from the north-west frontier to the very south of India, and across from Burma to the Sind desert. Medical missions, however, are remarkable not merely for their extent, but for the *quality* of the work performed. The hospitals are staffed by women with the highest British, American or other western qualifications, and many of them have the greatest reputation for brilliant and successful surgery. The mission hospitals too set a splendid example in management. They have almost always a staff of one or more western trained nursing sisters. This makes for efficiency in details of internal management and it also gives the opportunity to the hospital to train Indian girls in nursing. The latter is one of the most notable features of medical missionary work, and in after years will be regarded as second to none in importance. Indian women belonging to other communities are only very slowly taking up the work of nursing; the bulk of Indian nurses belong to the Indian Christian community and have been trained in mission

hospitals.¹ Most of the mission hospitals also train compounders or dispensers, and midwives.

It has been seen that the earliest efforts at medical missionary work owed their origin to the facts related by 'zenana' missionaries of the suffering endured by women who, on account of social customs, lived in seclusion. This, combined with the fact that women had begun to study medicine in England, induced missionary societies to send out medical women to India. Quite a large proportion of the first women medical students in Edinburgh and London took up the course with a view to becoming medical missionaries. Though the motive was thus one of desire to relieve human suffering, it must be kept in mind that the mission hospital was at that time regarded rather as an adjunct to mission work than an object in itself. Similar work among men, and among wilder peoples,² had proved that the mission hospital was a most powerful weapon in breaking down prejudice and animosity. People soon became convinced that the hospital could do much for their physical ills, and the spirit of friendliness and trust thus created introduced an atmosphere in which the missionary could attend to the moral and spiritual needs of his patients in addition. This was true of women's work as well as of men's. Evangelization was the aim, and the mission hospital was a means of opening doors which would otherwise have remained shut. In those days there was much less opportunity of getting to know women in the ordinary course of events. Seclusion was more rigid, few girls went to school, and intercourse between Europeans and Indians was not so common.

The contacts which the mission hospitals brought about

¹ Attempts are being made to attract better educated girls belonging to good families to the profession, e. g., at the Lady Reading Hospital, Simla, and the Christina Rainy Hospital, Madras. This move appears to have promise of success.

² Cf., e. g., Central Africa, and the Pacific Islands.

were therefore all the more welcome, and whether or no the hospitals were a means of bringing many converts to the Christian Church, they did give an example of service and care to rich and poor, caste and outcaste alike, which impressed the patients.

It is impossible here to give any detailed account of the mission hospitals now working in India; the most we can attempt is to give a brief survey and a general view of the methods adopted.

For the most part the missionary societies have adopted a policy of co-operation, have mapped out the areas in which they are to work and do not encroach on each other's territory. The same holds good with medical work. A group of hospitals belonging to one mission is usually found in the same area. Of course where a mission has more than one 'field' in India itself there may be several hospitals.¹ For this reason we find some missions or churches in one province and others in another one.

The north of India, with its larger proportion of purdah women, was, as we have seen, the first part of the land to claim from women the services of doctors of their own sex. The answer to that call was given almost before the study of medicine was taken up seriously by women in the west. Attempts were made by zenana missionaries, who were untrained in medicine, to meet the sore need of women in the zenanas. This happened for example in Delhi (Society for the Propagation of the Gospel and the Cambridge Mission to Delhi) where a report written in 1867 mentions that work had been already carried on for three years so that, 'when we found what a great demand there was for it, we secured the services of a lady who had been thoroughly well trained

¹ The United Free Church of Scotland, for example, has work in several provinces in India, so that there is a women's hospital in Madras, one in Nagpur (Central Provinces), and a group in Rajputana, corresponding to the other activities of the Mission.

for the purpose.' The training was presumably that of a nurse. The venture proved the truth of the scriptural advice 'despise not the day of small things', for this medical work, which we would now-a-days dub as *kachcha*,¹ was the precursor of the now famous St. Stephen's Hospital of Delhi. It was for a long time the only hospital for women in that city, and though others now exist, it maintains its reputation for good work and is full to overflowing. Similar attempts were made by other zenana missionaries with the result that to-day the women's mission hospitals of the Punjab form a network covering the province. They have done an incalculable amount of good. Not only has the medical and surgical work been of great extent and of the highest quality, but the doctors in charge of these hospitals have helped in all sorts of other ways. Notably in the training of *dais* the Punjab owes a very large debt to mission hospitals, which have in many cases undertaken their training and with considerable success. Perhaps the biggest testimony to the efficiency of medical mission work for women in the Punjab lies in the fact that, save in two places, Lahore and Simla, mission hospitals are the only medical institutions in the province which are staffed by women with European qualifications.² The largest number of hospitals belong to the Church Missionary Society, and to the Church of England Zenana Missionary Society, whose work extends outside the Punjab to Kashmir, Baluchistan (Quetta) and the North-West Frontier Province. Some of the hospitals are large for India—Amritsar, a living memorial to Miss Hewlett, has 100 beds and Multan 80, and there are several other smaller ones. The American missions in the Punjab, one of which dates from

¹ Lit., unripe or raw.

² This statement does not take into account the Indian States, in some of which women with European qualifications have been and are employed.

before the Sikh Wars, likewise took up the pressing need. The medical work of the American Presbyterian Mission was begun in 1887 by Dr. Carleton. She writes amusingly of the early days—'Old women would come in and sit down and say to one another, "She looks but sixteen years of age, how can I tell her of my symptoms?"'—an experience still often met with by the young Indian or English doctor. The same Mission has an excellent hospital at Ferozepore. The American United Presbyterian Mission has hospitals at Taxilla, Sialkot, Sargodha, Jhelum and Pasrur. The women of Canada as well as of America have come to the aid of their Indian sisters, and the missionary society of the Church of England in Canada has medical work in what has hitherto been an isolated district, the Kangra Valley.¹ The Church of Scotland has old established hospitals at Gujrat and at Sialkot, while further south the Baptist Mission holds the fort at Bhiwani, and at Palwal, south of Delhi. The same Society also works a hospital built by the State at Dholpur, an Indian State near Agra. The very fine medical work at Ludhiana is noticed below.²

Before leaving the north we must not forget the Zenana Hospital at Mardan, (North-West Frontier Province), which carries on a very fine work for frontier women. It has 75 beds and is supported by the Danish Presbyterian Mission.

In the United Provinces, the chief societies undertaking medical work are those of the American Methodist Episcopal Church, the Women's Union Missionary Society, also American, and the Zenana Bible and Medical Mission (English). The first named carries on work at Bareilly, an account of the founding of which has already been given,³ and at Brindaban, where medical work began as early as

¹ It is now being opened up by a railway line and a big hydro-electric scheme.

² See below, Chapter VII, Medical Education.

³ See above Chapter II.

1889. The other American Society has hospitals at Jhansi and Fatehpur. One of the best known mission hospitals in the United Provinces is at Lucknow, where work was begun many years ago under the Zenana Bible and Medical Mission by Dr. (then Miss) Bielby.¹ The present hospital was opened in 1891. There is a smaller hospital at Jaunpur. In addition to these, work is carried on by the Society for the Propagation of the Gospel at Cawnpore, and by the Methodist Mission of South, Australia at Azamgarh. A sanatorium, which is financed by several missionary societies, is carried on at Almora in the Himalayas.

In Rajputana the United Free Church of Scotland has done very fine work in the hospitals at Ajmere, Nasirabad and Jaipur, and the doctors from these hospitals are sought after by the Indian princes of the many Rajputana States for the palace ladies. Further south, the Canadian Mission works at Indore, Neemuch, and Dhar, Banswara and Hat Piplia. The medical work at Indore was one of the earliest in India, as the first woman doctor began work there in 1884. Another mission sanatorium is at Tilaunia near Kishangarh in Rajputana, where very fine work is being carried on by the American Methodist Episcopal Church.

The Central Provinces are not rich in hospitals for women only, but in the Disciples of Christ Mission the hospitals cater for both men and women. This is also true of the hospital of the Friends' Foreign Missionary Society at Itarsi. The province has few towns and the women are for the most part unsecluded. There are aboriginal tribes in many districts and work peculiarly women's is not so necessary. The Nagpur Hospital, however, under the United Free Church of Scotland is one of the best mission hospitals for women in India. The work was begun by Dr. Agnes Henderson, a remarkable personality and a woman of great ability, whose services to India met with

¹ See above, Chapter II.

their best reward in the boundless love and devotion of the people among whom she worked.¹ There is a small hospital for women at Chanda in the southern part of the province under the Scottish Episcopal Church Mission. A sanatorium for patients of both sexes is run by the Disciples of Christ Mission at Pendra Road.

The eastern part of India, Bihar and Orissa, Bengal and Assam, is also not rich in women's medical work either on the part of missions or Government. This is perhaps partly due to the fact that purdah is not so powerful a factor in the life of women, and women are often willing to be attended by men. The hospital of the Zenana Bible and Medical Mission at Patna is old established and very well known. It has an important rôle as the only hospital for women in the capital of the province of Bihar and Orissa. Hazaribagh, on the uplands, is the site of a 60 bed hospital belonging to the Dublin University Mission; while the Church of England Zenana Missionary Society carries on work at Krishnagar, Ratnapur and Mankar. In Assam the American Baptist Foreign Missionary Society has a hospital at Gauhati. In other places in this province several of the mission hospitals are for both sexes.

The work of medical missions is very widespread in the Madras Presidency, and some of the earliest hospitals were founded there. Many of the mission hospitals cater for both men and women, and many women have no objection to treatment by a man doctor. The purely women's hospitals however are by no means few, and some are large for India. The United Lutheran Church Mission has the honour of having at once the oldest mission hospital for women and the largest but one in the Presidency. Dr. Kugler, whose name was recorded in an earlier chapter, is still at her post (1929),² having begun

¹ See also below, chapter VIII, for Dr. Henderson's work among the *dais*.

² See above, chapter II.

her work in 1883. The mission sent out Dr. Kugler as an ordinary worker, but two years later they appointed her as a *medical* missionary, and in 1886 she rented a house in the city for use as a hospital. A few years after this a site of $17\frac{1}{2}$ acres was secured, and the present fine buildings were gradually erected. The record of the steady increase of the work is fascinating reading, and it is good to know that many gifts were received in India as well as from America for the plant. The same Mission has a hospital of 70 beds at Rajmundry, and a smaller at one at Chirala.

Other American missions have excellent medical work for women. The American Arcot Mission was responsible for the hospital at Vellore which is now used for the Union Medical School,¹ and has 120 beds and over 2000 in-patients yearly. The other hospital of the Mission is at Madanapalle and has 45 beds. Both these hospitals have branch dispensaries and do itinerant work in addition. The hospital at Madanapalle started the tuberculosis sanatorium near the hospital and helped to make it popular. It was later moved to another site on a higher altitude where there now exists a splendid Union Sanatorium for both men and women. A small hospital and dispensary exist at Tindivanam.

The American Madura Mission was begun in a way which frequently happened in the early days, that is, by a partially trained missionary. This lady, Mrs. Capron, was a lay missionary who, when her husband died, went to Madras and did some hospital work. She began medical work in 1877. A man doctor came over to see patients twice a week and the work made such progress that the Mission asked for a woman doctor. Dr. Pauline Root came out in 1885. The hospital has now 110 beds and three doctors with western qualifications. It is a great centre for medical and surgical work in one of the historic cities of the south.

¹See below, chapter VII.



Christina Rainy Hospital, United Free Church of Scotland Mission, Madras. Opened, 1914

Yet another American Society is the American Baptist Foreign Missionary Society. It has a large hospital at Nellore, and smaller ones at Udayagiri and Sooriaket. English and Canadian Baptists are also at work in this Presidency, the former at Berhampore in the north or Ganjam District, and the Canadians at Akidu, Vuyyuru, Pithapuram, Sompat and Chiccacole. Other English missionary societies besides the Baptists are working in the province. The London Missionary Society has a hospital at Erode. The Wesleyan Methodist Missionary Society has two fields. In the south there are hospitals at Woriur, Madagadde and Mysore. The last named has 100 beds in this large city, the capital of the State of the same name. The other field is in the Nizam's Dominions with two 50 bed hospitals at Medak and Karimnagar, a smaller one at Nizamabad, and a maternity hospital at Ramyanpett. The Leper Asylum at Dichpalli, as far as its medical side is concerned, is in charge of a woman doctor. The Church of England Zenana Missionary Society is responsible for a hospital of 80 beds at Bangalore and smaller ones at Channapatna and Khammamet. Two small hospitals are carried on by the Australian Presbyterian Mission at Sholinghur, North Arcot, and the Basel Mission at Udipi, South Kanara.

The Presidency capital is the site of one of the finest hospitals in the province—the Rainy Hospital of the United Free Church of Scotland. Dr. Macphail, still at work in 1928, came out in 1888, and started a dispensary with a 12 bed hospital in her own bungalow in 1890. The Hospital was constantly added to until the present fine building was opened by Lord Pentland in 1914. It has 75 beds, three English (or rather Scots!) doctors, and carries on, besides its ordinary dispensary work, an antenatal and child welfare clinic, and a good deal of V. D. and leprosy work. It is almost entirely supported by local funds, mostly the fees of private patients.

When we turn to the Bombay Presidency, we find that the women's mission hospitals on this side of India are fewer. One of the oldest is that at Poona, for which the Church of Scotland is responsible. St. Margaret's Hospital there was opened in 1892, but medical work had been carried on previously for some years in a rented house. The American Presbyterian Mission carries on a hospital at Kolhapur further south, and the American Board of Commissioners for Foreign Missions has a considerable work at Ahmednagar. Pandharpur, a pilgrim centre, is the site of a hospital of the Poona and Indian Village Mission. The Zenana Bible and Medical Mission has an old established hospital at Nasik, another sacred city of the Hindus, north of Bombay, while the Church of the Brethren has a women's hospital at Dahanu. Further to the east, the Irish Presbyterian Mission works at Borsad and Broach. The work at Borsad was started in 1889 and the present hospital of 50 beds is named after the first worker, Dr. Roberts. The work at Broach dates from 1902. Still further to the east and north, the Church of England Zenana Missionary Society has two hospitals on the edge of the desert at Sukkur and Larkana. In Baroda State the Methodist Episcopal Church has a small hospital.

Even this very brief survey of the work for women undertaken by missionary bodies shows how much is being done. We have already alluded to the quality of the work. The method of carrying it on does not differ greatly from that of institutions run by lay bodies. The doctors have their 'dispensary' (out-patient) work, their ward rounds, and operation cases as routine. It is noticeable that many mission hospitals which started as dispensaries or small hospitals of a few beds, moved outside the cities when the time for expansion arrived. This enabled the doctor and nurse or nurses to live nearer the other missionaries, and was healthier and pleasanter both for staff and patients. Little trouble is experienced in inducing women

to remain as in-patients though the hospital may be a mile or more from the centre of the town. In very many cases the hospital has a dispensary in the city opening a few days in the week, for the convenience of city dwellers who wish to attend as out-patients. As a general rule the mission hospitals are well built and well equipped, though the pressure of financial stringency is sometimes apparent. In most strict economy is required and maintained, and the mission doctors and nurses are past masters in the art of making one pound of cotton wool do for two, in keeping down the drug bill, and doing with the minimum in the way of menial staff. This need for economy is sometimes trying to those who have to practise it, and many would be thankful to be saved from the worry entailed. The finances of mission hospitals, however, are by no means drawn solely from the supporters of missions. Government aid is usually given willingly in the form of grants from municipalities and district boards. Many hospitals derive a considerable income from the fees of paying patients or from the rent of private rooms. Where a mission has been long established and a reputation for surgery built up, there is no difficulty whatever in letting out rooms for a small rent, as this enables the patients to be accompanied by the number of relatives considered necessary on these occasions, though not welcomed in the general wards. Fees are also paid for operations and in some cases payment is made for medicines. When the doctors are called out to cases in the patients' own homes a fee is usually paid except in the poorest cases. The position with regard to fees is a very difficult one for mission hospitals. It is only just and right that those who can afford to pay for the services of doctors should do so, and it is not just towards other members of the profession that some should give their services free while others have to charge. Yet no doctor likes to appear to demand money for services rendered, and this applies particularly to doctors working under Christian

missions. The full discussion of this problem would be out of place here, but it is mentioned to indicate a minor difficulty in the work of missions.

The activities of mission hospitals do not end with the ordinary ones of hospital and dispensary work. There are others which have been taken up and carried on in a very efficient manner. The training of nurses, mentioned above, when carried on by a number of hospitals, led to the evolution of a system of examinations and a standardization of training which has been very helpful to the nursing profession as a whole in India. Some textbooks have been published, and co-operation in various ways, and the establishment of Boards of Nursing, have improved standards and have done the spade work which is necessary before registration can be thought of.

Another matter in which mission hospitals have been pioneers is in the medical inspection of school children. It frequently happens that in old established missions boarding schools for girls and boys exist in the same place as the mission hospital. The children in such schools are for the most part those of subordinate mission workers or other Christian families. Experience proved that their health was often poor, and that girls, especially, frequently developed tuberculosis. The great majority of mission boarding schools now have their children regularly examined by a medical officer. The consequent improvement in health has been marked. The doctor is also able to advise on the subject of school diets, and sanitation, and in some cases he helps in the important work of the pupils' health education. In a few cases this inspection work is also performed in mission day schools for non-Christian pupils.

Tuberculosis, as is well known, is one of the great scourges of India, and medical missions have been foremost in attacking it, or rather in providing for its victims. Of the sanatoria staffed by women only, one is at Almora, a lofty hill station near Naini Tal, the summer capital of

the United Provinces. It is now a 'Union' institution, that is, one for which several missions are responsible. The other is at Tilannia, in Rajputana, which, though in the plains, has a dry atmosphere, suited to the disease. The nucleus of the patients were children of famine refugees from girls' schools in Rajputana, among whom tuberculosis was spreading at an alarming rate. An interesting feature of the sanatorium is the fact that it carries on a Middle school for patients of school age, of which the teachers are patients or ex-patients.

A third sanatorium, which will be staffed by medical women, is shortly to be opened in the Punjab.

Medical missionaries have bound themselves together by the formation of an association now called the Christian Medical Association of India. This body is composed of both men and women, but the women certainly pull their weight in the deliberations and councils of the society, and the present secretary is a woman, Dr. McMillan, of Ajmere. The Association publishes a two-monthly journal, and is at present making a survey of all mission hospitals with a view to increasing their efficiency. It also holds yearly conferences.

As we are dealing here with the future of women's medical work as well as with its past and present, a few words may be allowed on the question of the future of medical missionary work.

Provincial Governments and local bodies are taking up the needs of women throughout the greater part of India. The number of places of any size without a women's hospital, dispensary, or ward, is decreasing every year, and the opportunities for pioneer work, the breaking of entirely new ground, have gone from the missionary societies. There is a certain element of rivalry in many places where a mission hospital has been long established. It and its workers are mostly beloved by the inhabitants, but there is a section who would prefer to have their women treated

in a hospital where they would not hear another religion preached, and so attempts are made to set up Government or private institutions in places where a mission hospital exists. Such a policy has a good and an evil side, but in whatever way it is viewed, it is a fact and has to be reckoned with. It may mean the closing down of some smaller hospitals and dispensaries; and though missionary bodies might regret this in individual cases, yet they recognize the principle that it is the duty of the state to provide medical relief. As years go on, the discrepancy between the efficiency of mission and that of Government hospitals will disappear. More money will be set aside for women's work and more efficiently trained staffs will become available for Government institutions. On the other hand, the mission hospitals are not likely to increase their incomes; in fact, the difficulty in some cases is to maintain them, as many societies are facing times of financial stringency.

Yet another factor is the entry of the Indian Christian Church into the field of medical missions. This has not so far taken place to any great extent, but will undoubtedly take place in the future. The organization is at present almost entirely with the 'foreign' missionary, but as the Church grows in size and power, it will take over an increasing share of the responsibility for, and administration of the work. One cannot tell what changes in policy and methods this may involve, but that it will take place is inevitable.

These facts may mean that in the course of another fifty years the position of medical missions will have greatly altered. It may be that they are a challenge to undertake other activities, and it is certain that the scope of medical missions is now regarded as much wider than was the case fifty years ago. Then the hospital was, by the majority, regarded as a means to an end. At the present time the work of medical missions is looked on as a service to be performed for its own sake. 'In the missionary

enterprise the medical work should be regarded as, in itself, an expression of the spirit of the Master, and should not be thought of only as a pioneer of evangelism, or as merely a philanthropic agency.¹ This change of attitude makes it easier for medical missions to strike out into new fields which do not, perhaps, offer the same opportunities for direct evangelization. Its results are seen in preventive work; and representative medical missionaries appear to have recognized this, *per se*, as a legitimate work for medical missionaries. 'In view of the waste of life, especially infant life, due to preventable diseases, there is urgent need of devoting far more attention to preventive medicine and welfare work. Hitherto medical missions have been almost wholly engaged in curative work.'²

The future of medical missionary work in a country like India is, therefore, uncertain. But we can be certain that whatever form may be adopted to express it, the spirit which has animated the workers will remain the same and that it will be worthy of a great past.

¹ *The World Mission of Christianity. Messages and Recommendations of the Meeting of the International Missionary Council, Jerusalem, (April 1928).*

² *Ibid.*

CHAPTER SIX

MEDICAL PRACTICE IN INDIA

A general practitioner in a western country must have some claims to omniscience. He never knows what circumstances may demand his skill or what emergency may call on his knowledge. Although, even in remote districts, he can get the services of a specialist in a few hours, he has to decide when to call for the help and what particular kind of help is necessary.

The general practitioner of the west, however, faces a task which is child's play compared to that of his fellow worker in the east. In a small town or village, colleagues may be entirely absent, and the doctor may have to be practitioner, consultant and surgeon in one, also keeping an eye on the anaesthetist and on the aseptic methods of the instrument clerk. In many women's hospitals, the doctor is alone in her profession, or she may have an assistant of the Sub-assistant Surgeon class. Sometimes a member of the latter class is in sole charge of a small hospital with all the responsibility involved. Even where the services of male colleagues are available, their help cannot always be taken owing to the prejudices of the patients. The variety and amount of the work that come to the worker under these conditions are very great. The following experience related by Dr. Stuart (Quetta) illustrates what one has to be prepared for. 'At one time I was left in charge soon after my arrival. A small child in the compound developed a bad throat and seemed to be working up to need a tracheotomy. In the early morning came a call to a baby case in a distant village. Should I go, and risk the delay in doing the tracheotomy, or should I stay and risk the almost certain death of mother and babe? I went; the case came off

successfully, and I got back to hospital at night. I then did a tracheotomy and sat up with the child. Next day was full of work and the second night I sat up again, but had a little sleep between times.'

The first difference which strikes one between medical practice in the east as compared with that of the west is that the worker is constantly coming into contact with tropical diseases. It is not only that she is called on to treat cases of malaria, dysentery or plague, but that these diseases keep intermingling themselves with the ordinary troubles of temperate climates. A simple diarrhoea in a child may turn quickly to dysentery, a simple operation case may develop fever which the operator fervently hopes is malaria, and persistent anæmia may prove to be due to helminths. It begins to dawn on the newcomer that it is not enough to have remedies at one's finger ends, but that one must also have the means of diagnosis. Fortunately it is becoming more and more common for both men and women who mean to practise in the tropics to take a course at one of the Schools of Tropical Medicine before coming out, or to take the excellent course now available at Calcutta.

The second difference which strikes a medical woman in India is, that she is regarded, from the beginning, more or less as a specialist in obstetrics and gynecology. True, she sees something of ordinary ailments, respiratory or digestive, in the out-patient department, but she is not usually called to see such cases at home. The visits she pays in the homes of the people are usually for obstetrical or gynecological trouble, very often in consultation with other doctors.

Perhaps the most important branch of her work is obstetrics. In most parts of the country she has an unduly large proportion of abnormal cases. There is much disease associated with pregnancy, and too often advice is not sought until the case is desperate. Thus a woman will enter hospital with commencing pains and almost prostrate

from anæmia—or unconscious from eclampsia—or with a pelvis so distorted and contracted by osteomalacia that the examining finger can scarcely enter. Or there may be some other form of obstruction to the pelvis, or a malpresentation, and often the case is complicated by the fact that the woman has been kept for many valuable hours—even days—in the vain hope that natural delivery would occur. Often the case is a simple one, but the too zealous *dai* has exercised all her ingenuity to secure an earlier delivery, and sepsis results. Labour among Indian women, if left to itself, and if no abnormality is present, is simple and rapid. The maternal pelvis is smaller than in European countries but the size of the foetal head is also less.

Naturally, bad midwifery makes plenty of gynecology. One of the commonest and most unfortunate results of delay in the second stage is vesico-vaginal fistula. All degrees are met with, from the small and comparatively simple opening, to the terrible cases where the whole of the anterior vaginal wall seems to have sloughed away; there are few conditions more difficult to cure.

Ruptured perineum is common and is often the precursor of prolapse, which is sometimes allowed to become extreme before the patient comes for treatment. Displacements too are frequent.

Pelvic cellulitis fills many beds. Salpingitis is often met with.

Many operations are done for fibroid tumours of the uterus and cystic tumours of the ovary. As a rule women come forward readily for operation, especially in a place where previous surgical successes are known to have occurred.

Cancer of the uterus is not infrequent and is a most depressing class of case, owing to the fact that women usually come too late to allow of much help from surgery.

Sterility is a frequent complaint, not so much because it is common among Indian women, but because the family

consequences to her are so serious. The medical woman who is interested and resourceful in this direction will win golden opinions from her patients.

The ordinary medical woman does not get much general surgery. She is called on for occasional amputations, setting of fractures, bone or gland operations. She also gets a fair amount of eye work, especially cataracts and entropions. If she is skilful with eyes she will soon increase her numbers.

Medical complaints include a good deal of dyspepsia, especially among the richer classes, diarrhoea especially at certain seasons, respiratory troubles in the cold season, and as has been said, all may be complicated by the occurrence of tropical diseases, such as sprue, kala-azar, typhoid, etc.

The medical woman is frequently consulted for children's diseases, in fact she is looked on as a children's expert. Nearly all children in India are breast-fed, hence there are fewer early troubles of digestion. The troubles arise later owing to the parents' carelessness or lack of knowledge of the food suitable for a young child. Diarrhoea and other intestinal complaints are serious causes of trouble and in some parts of the country pneumonia and bronchial troubles are frequent. Children suffer very much from malaria, which is a common cause of anxiety. Infantile tetanus is sometimes met with after birth, but there is no certain knowledge as to its frequency. Premature birth and stillbirth are probably more common than in temperate climates, but as regards this also we have no general information. A large proportion of the infant mortality takes place during the first month of life, probably owing to the frequency of maternal antenatal disease.

Perhaps the interests and difficulties of medical work in India will be best illustrated by an account of a day in the life of an imaginary medical woman, whom we shall call Dr. Mary Jones, with apologies to any possible owner of the name.

'*Chah taiyar hai,*' (Tea is ready), are the first words that greet her, and while she drinks her tea and listens to the swishing of water in the bathroom adjoining, she gathers her energies for a renewed tussle with the problems of the day.

Before breakfast, she hopes to read up a puzzling private case—persistent fever, the patient going down hill, no organic lesion found, blood negative to typhoid and malaria; is it possibly kala-azar, not usual in Daulatpur, but just near enough the kala-azar zone to make the idea not unreasonable? But just as she finishes dressing, there comes a little note from the hospital. Dr. Rao, the Sub-assistant Surgeon is out at a midder case and Sister is uneasy about yesterday's abdominal. Will doctor come over?

Dr. Mary goes across. The case had been a large ovarian cyst, very adherent, and the operation necessarily lengthy. Last evening she was doing well, considering, but this morning her abdomen is distended and her pulse more rapid. Dr. Mary stays some time trying various remedies and finally returns to breakfast, leaving the patient easier.

Back again to hospital—it is now 9-30. Dr. Rao is back from her case, has had time for a hasty round of the wards and wishes to ask doctor to look specially at that Afghan woman with dysentery, at a new case of tumour and at a baby suffering from convulsions of unknown origin, admitted yesterday. She goes off to have some breakfast before taking the out-patients. Dr. Mary sees Sister, gets the night nurse's report, hears that two nurses are down with fever. Mrs. Dales, the housekeeper, comes to complain of the sweeper, who 'never does anything he is told, has to be watched every minute, and will doctor please note this, so that Mrs. Dales may not be blamed for the epidemic of cholera or typhoid which is sure to come'. On the suggestion that the sweeper should be changed she looks shocked. 'Does doctor think a better man can be

got? At least he has a good wife who does the ward work pretty well, and after all, what is the poor man to do if the municipal men won't come at the proper time?' It is finally decided that Mrs. Dales had better deal with the culprit herself.

The compounder is hanging about and wants leave, for her child is ill. The *mali* has a similar petition, only in his case it is for his mother's funeral. The husband of the last labour case wants to take his wife home. But time is passing, so these hovering figures are told they must make their petitions to Dr. Rao, who will enquire into them.

Now we are in the wards, engaged in the solemn process of 'taking rounds'. Nearly everyone belonging to the staff is supposed to take part in this function. One carries a basin of water, another soap and a towel, another a bowl of antiseptic lotion. One has pen and ink, one is responsible for case sheets, one for dressings, etc., etc. Dr. Rao is now firmly enveloped in out-patients and Sister is Dr. Mary's sheet anchor.

'Well, Parbati, how are you?'

All is well. Parbati is cured and has not a single bad symptom, not a care in the world. It does not need Sister's murmur, 'she wants to go home, her people are waiting outside with a *doolie*,' to prepare Dr. Mary for the next sentence, with clasped hands and ardent eyes, 'give leave!' Two or three women friends near join in the chorus. Well, Parbati can go. The rule in the Daulatpur women's hospital is 'speed the parting guest' whenever possible. The gratitude that follows, the salaams, the hopes that Dr. Mary's health may be good, that her life may be long, that her children (hypothetical) may live, that God may shower blessings on her, are not evidences of gratitude for the disease cured, but only outpourings of surprise and relief that Parbati is to be allowed to go without a struggle. Real gratitude is there, and will shew itself presently by a *dali* (present) of fruit, by many grateful

words, and by a vague but distinct wish to help the Doctor Miss Sahib somehow, if only they knew how.

Next comes Rahmat, one of your strictly purdah women and a frequent hospital inmate, who suffers from all the ills which befall purdah women. 'Well, Rahmat, how are you?' Rahmat raises her eyes to heaven and then casts them down to earth. She waves her hands and emits a profound sigh, then manages to articulate, 'Great trouble!'

'What did you eat last night?', suggests the doctor.

'Only three grains of rice, and they have been galloping like horses in my stomach all night.'

Dr. Mary looks round the circle of grave faces. Not a muscle moves, not the shadow of a smile. (Sister has left the room with Parbati.) The immobility of the faces round about helps her control her voice and dictates a suitable mixture to meet the surprising symptoms described.

'How are you, Gulabkor?'

Gulabkor is really better, but very anxious to utilize this opportunity to give her audience, headed by the big Doctor Miss Sahib, a full and complete account of her history, symptoms and general condition, not only since yesterday, or even since the beginning of her illness, but back into some more or less remote past and including the treatment at various times by *dais* and *hakims*. But time passes—only three patients seen and fifty still waiting, so the essential facts being gleaned, the round continues, trying to give at least a word to each patient. Some are inarticulate, unable to express what they are feeling, some have too great a power of expression, and so we go on trying to concentrate on the things that matter and at the same time to cultivate the calm and gentle demeanour which secures the confidence of the Indian public. The husband of a grateful patient once described the work at a successful Dufferin hospital as carried on 'with the peace of the Pacific and the speed of an express train!'

The round over, every one relaxes. The nurses get

ready the patients selected for a further examination. Doctor and Sister disappear into a little sanctum where, over a cup of tea, Doctor gains much private information throwing valuable sidelights on her not always easy path. The sanctum is invaded by Nurse Premi, who comes to say that a patient has complained that the compounder, Mrs. Amar Nath, has extracted a rupee from her by saying she will not otherwise give her the proper mixture. Mrs. Amar Nath says, 'What can the Doctor Miss Sahib do? She only writes the prescription, it is I who make it up.' Roused to righteous wrath, Dr. Mary sends for Mrs. Amar Nath, who indignantly denies the charge. Led by Dr. Mary, the party adjourns to the bedside of the patient in question, and Dr. Mary asks, perhaps a trifle sternly, 'Did you give a rupee to this person?' Only to be met with a look of blank surprise and the reply 'No, Doctor Sahib'. Nurse Premi, her whole face and manner one big exclamation mark, calls out, 'Did you not tell me five minutes ago that she refused to make up your mixture unless you gave her a rupee?' 'No, Bibiji, you must be thinking of someone else.'

Dr. Mary, for once, is at a loss. Sister, for the moment, has no suggestion. The immediate necessity is to remove the controversy from the bedside, where eyes are beginning to flash and the patient is looking alarmed. But no amount of enquiry gets us any further. Premi insists the complaint was made to her unsolicited, and she is known to be a truthful girl. Mrs. Amar Nath resolutely denies the offence and charges Premi with personal enmity. The patient, quietly and privately interrogated, sticks to her position and has no information to give. And so the matter ends with very severe warnings to everyone concerned. Perhaps it will be cleared up a few months later, when Sister goes to see that patient in her home, and in the friendly shelter of the zenana says, 'Now tell me, what really happened in that matter of Mrs. Amar Nath and the rupee?'

But this small eruption has greatly delayed us, and the six in-patients selected for further examination have to be hurried over, in order that Dr. Mary may get half an hour at out-patients before it closes. Quite a dozen people are waiting there to see her.

There is still a small operation to do before the morning's work is ended. Kissenkor was one of those tragic Hindu wives who have failed to produce a son, and she and her husband had taxed every one of their small resources in 'cures'. At long last she tried the zenana hospital and the treatment carried out there (without a fee) resulted in a son! Kaka is now three months old, the apple of his father's eye and the darling of his mother's heart. Many a time has she asseverated he is Dr. Mary's son, and that everything she recommends in the smallest particular will be carried out. But it is a very severe test when Dr. Mary tells her the child must be circumcised both for his present and future good. An anaesthetic—a cutting operation—! But Kissenkor has come all the same, and now she is sitting in the verandah of the operating room living through some of the worst moments of her life. She thinks of the warnings of her neighbours, the doubts of her husband, the tales that are told on all sides of the dangers of 'operayshuns'. And then she is called in, little Kaka is placed in her arms and she is told all is well. Her voice still trembles as she tries to thank the Doctor and repeats the old formula 'He is your child'.

Two to four o'clock is looked on as a time of ease in Indian hospitals. This is the Babu's opportunity, and he duly appears at the bungalow with his files and letters and accounts. At certain times of the year when the 'Annual Returns', 'Annual Report' and 'Budget Estimate' are going up he very persistently demands attention. If the Babu is non-existent, all the worse for the doctor.

This is also the time for looking at the newspaper, working up one's cases, writing home letters, and, if one

has been up at night, trying to get a little sleep.

Or, if there has not been time in the morning, one goes over to hospital and finishes the operations. If the doctor, as is sometimes the case, takes full charge of the out-patients herself, this is usually necessary.

After tea, Dr. Mary goes to visit her patients in the city. She hopes to get to the club in time for some tennis, so she changes into tennis kit and drives off soon after four.

Darkness does not always see the end of her work. Mrs. Walker, the Judge's wife, sits down beside her and wants to know the uses and advantages of the latest vitamin extract. The Assistant Commissioner's wife asks her, as a favour, to come over and look at Joan, who has been cross all day. Many people in India believe, if you can get hold of a doctor after work hours, it is permissible to extract information or advice which would have to be paid for at other times, and in a small place like Daulatpur, where everyone is on friendly terms (outwardly), it is a difficult attitude to combat, without getting a reputation for meanness and inhumanity.

After dinner, Dr. Mary pays a last visit to hospital; but 'evening round' is a rapid and simple affair, though sometimes productive of anxiety. Then to bed, the last waking thought being an earnest hope that the night may pass without furtive footsteps in the verandah and the sound of a murmured '*Huzur*, one woman in the city—'

For at any time, interrupting the routine like the clanging of a fire alarm, suddenly comes the call to a case of complicated labour. It may have been brought into the hospital, or it may be in the city or in a distant village. Preparations are hastily made and the doctor sets out, accompanied by a pupil nurse or compounder. She has to be prepared to meet any emergency and returns happy if she has been able to deliver the mother safely of a living child. The task of collecting a fee is often difficult, even

in houses where there is plenty of money. 'Here is ten rupees—if it had been a boy I would have given thirty!', was the remark once made to a medical woman after hours of waiting and work.

Private practice in India, especially for a European woman, can only be successful in the large towns. Here the better classes are beginning to realize that scientific training and good work must be paid for, and are of value. Many families in the large towns have their own family doctor, and medical women are still chiefly called in consultation for gynecological and children's diseases. Some have obstetric work, but even that is largely consultant, as the women like to employ nurses or *dais* in ordinary cases. The prospects of Indian women doctors in private practice should improve as education and enlightenment spread, and there appears to be a great field for them in the organizing of private nursing and maternity homes. It cannot be too strongly emphasized that European women should not think of private practice in India unless they have familiarized themselves with the vernacular, and are acquainted with the habits and customs of the people. They should have sufficient capital to live in comfort for at least three years, and should always have in reserve a sufficient sum to pay their passage to Europe in case of illness. They will have far more chance of success if they have specialized in some subject, or some method of treatment, which is new to the local practitioners. Indians, naturally, like to be treated by their own country women, so a stranger has more chances of success if she can shew that she has special facilities for treatment.

The question is sometimes asked, 'Are Indian women satisfactory patients?'

This is a matter on which it is impossible to generalize. In the first place, there is the attitude, now fortunately becoming less common, of lack of faith in the doctor. The medical woman meets with it tragically, when she is con-

sulted too late in a case of obstructed labour or inoperable cancer. Sometimes the attitude has its humorous side when it is found that the patient is taking medicine from several doctors at once and perhaps from *hakims* also. Consultations are popular and one husband said, 'Six doctors sat on a board on my wife!'

But very often the people shew unlimited trust and confidence. If a medical woman is a successful operator women will come from all parts of the country and will submit fearlessly to the most serious operations. This faith in the doctor is a valuable quality because it materially assists the will to recover, whereas the attitude 'it was written for me' is the strongest incentive to accept death as inevitable. The importance of psycho-analysis has scarcely been realized in India, and it seems as if there were a great field for this form of therapy among the women.

Strangely enough in India there is little sex prejudice as regards work. Women's entry into medicine was accepted as a natural and suitable event. When a medical woman is successful in the treatment of women she is often asked to undertake the treatment of men. This is not usually done either in Dufferin or in mission hospitals, but one of the writers well remembers a women's hospital in an Indian State, where the verandahs were crowded with men's beds. The medical woman (an Indian) had a reputation for cataract, and she said, 'Why should the men not benefit? and anyway I could not keep them out!' It was quite irregular of course, but no one raised any objection.

CHAPTER SEVEN

MEDICAL EDUCATION OF WOMEN

The social conditions and position of women peculiar to India forced the need of medical education for women on the attention of thoughtful people at a time when such education was as yet only in its initial stages in England. This led to beginnings being made long before the general education of Indian women was in a state to justify their embarking on special departments. We cannot afford to judge these early efforts harshly, though in the light of experience we may realize that they were in many ways mistaken.

To understand what happened we must bear in mind that the number of medical women in India at that time (the '70's and '80's of last century) was exceedingly small. It was therefore out of the question that Indian women should be instructed by members of their own sex. Future generations must acknowledge generously the efforts made by men to provide the medical education for women which circumstances made absolutely necessary. Two courses were open to those who wished to see women receive medical training. One was to allow women to enter the existing medical schools; the second was to found separate schools for them. Both courses presented obstacles hard to overcome. As regards the first alternative, there was objection both on the part of the staff and the would-be students. Some of the men who taught in colleges were opposed to the entry of women students, on much the same grounds, presumably, as men in England opposed it. On the other hand, it was exceedingly difficult for Indian women to face the ordeal of sharing classes with men and in general of going out into the world in a way that such education made necessary. A combination of circumstances,

however, led to the overcoming of both these difficulties in the year 1874 in Madras.

As early as 1872 the Surgeon-General of Madras, Dr. Balfour, advocated the medical education of women to meet the needs of the women of India, which he anticipated could not be met by men for the next hundred years, owing to social customs. His first suggestion was to give nurses a training at the Women's and Children's Hospital at Vepery for twenty or twenty-four months, or else to form a class at the Medical College. The Director of Public Instruction regarded this move as 'entirely premature', and recommended that women be not admitted to the Medical College. The proposal was thus vetoed for the time being. In 1874, however, Dr. Balfour again returned to the charge, and this time found a strong supporter in Dr. Furnell, then the Principal of the Medical College. In 1875 four students were admitted, all of whom were of European or Anglo-Indian descent. For such the difficulties involved in mixing with men students were naturally not so great as in the case of Indian women.

All four students entered what was then called the 'certificate' class. This was a shortened course of three years (since increased to four) which was available to students who had not matriculated. It was naturally taken advantage of by students who had not had the opportunity of attending high, or other schools, preparing for the university and who yet had a good general education.

These four students were the first real women medical students in India, apart from some who were given a private course of instruction, whom we shall notice later. The remarks of their teachers are of great interest. The Principal wrote: 'They have been remarkable for their assiduity, regularity, keen interest and strongly marked desire to attain proficiency in every branch of the work they have so nobly undertaken.' They all passed the final examination 'with great credit'.

One of these students was no less a person than Mrs. Scharlieb, now so notable a figure in the women's medical world. She subsequently went to England and qualified in London. On her return to India she was appointed lecturer in midwifery to the 'female' class and superintendent of the Caste and Gosha Hospital, the recently opened women's hospital of Madras. This must have been the first teaching appointment held by a woman.

After that no students came forward for some years but, in 1881-2, six were admitted, among them a matriculate, who took the L. M. & S. degree. Another student is said to be studying for the M. B., C. M. degree a year or two later. The students included Europeans, Anglo-Indians, and Indians.

Madras was thus a pioneer in the medical education of women. Curiously enough, a Surgeon-Major Branfoot, in a note on the training of midwives in the lying-in hospital of Madras, remarks in 1886: 'Of late the leading papers at home have been giving utterance to much unwisdom on the subject of women doctors for India, in apparent ignorance of the fact that for the past twenty-five years at least the Madras Government has been at the cost of training women in the practical duties of a branch of the profession which is especially suited to the capacities of the female sex!' This referred to the training of women (Europeans, Anglo-Indians and Indians) as midwives at the Madras Maternity Hospital.

Medical education for women has gone on at Madras ever since those days and women continue to be trained for the University degree in mixed classes, though the women's Sub-assistant Surgeon class was separated from that of the men in 1923 and is now taught by medical women.¹

¹For the benefit of readers not acquainted with the details of medical education in India it is as well to explain the form it takes there. There are three classes of practitioners, namely (a) those who take the university degrees of M. B., B. S., which are obtainable

Before noting further the development of medical education for women in men's colleges, we must return to the second alternative which faced the promoters in these days, namely that of separate schools for women.

This alternative was beset with even greater difficulties than the first. At the outset was the question of expense. The foundation of entirely separate schools was simply out of the question on this ground alone. Even if individual members of Government had advocated such a revolutionary proposal, the majority would have opposed them, and even if there had been willingness all round, it is very doubtful at Madras, Bombay, Calcutta, Lahore and Lucknow, and which aim at standards similar to British degrees. It is a qualification usually registrable in the United Kingdom; (b) those who take the L.M.S., still obtainable in Madras, but formerly given by the other centres as well. This diploma is now awarded to candidates taking the degree course, but obtaining a lesser percentage in examinations. Formerly it was given to matriculates who studied for five years, but were not required to take the 'First Science' or 'Intermediate Science' of a university (corresponding to the British 'first professional' or 'first M. B.'). This also applied to the now obsolete 'certificate class' diploma; (c) those who take the Sub-assistant Surgeon's course (formerly called the Hospital Assistant's). These, according to present regulations, take a course of four years, formerly three. They are now required to be matriculates before entering, but formerly were not required to be further educated than the Anglo-vernacular middle examination, taken at schools two years before matriculation.

The existence of these classes of practitioners may appear very anomalous to English readers, but they were necessitated by the poor level of education in the country, the cost of professional training, and the urgent need to provide medical aid in such a vast country. The existence of a class of practitioners with such a low standard of education as the S.-A.-S. class has been justifiably criticized. It is admittedly far from ideal, but it is hard to see what other course could have been adopted. The class of Sub-assistant Surgeons has done, and continues to do, excellent work, and without its existence the provision of medical aid for masses of the people would have been impossible.

whether finance would have been available. In the second place there was the difficulty of securing students who would come to a school where teaching was done by men.

The plan adopted finally was that special provision was made for women in existing schools whereby the women need not mix with the men students, while they had the advantage of the same teaching. This method was followed in Agra and Lahore. It was naturally in north India, where the seclusion of women was an almost universal custom, that circumstances led to the evolution of this scheme. In north India, too, the need for Indian women doctors was most acutely felt owing to the fact that very few women cared to attend the general hospitals, even for ordinary complaints.

A class was formed at the Agra Medical School in 1883, but prior to that there had existed one or two private efforts which deserve mention.

As noticed in a previous chapter,¹ the missionary bodies were among the first to be struck with the great need of the women of India for medical help from members of their own sex. Missionaries who visited in the zenanas were continually meeting with cases which urgently required medical treatment, but this, owing to social customs, it was impossible for sufferers to obtain. Some of these workers tried, as already mentioned, to qualify themselves to meet the need; others urged that women doctors should be sent out to India to cope with it; and yet others felt that the only feasible scheme was to give training to Indian women themselves. Among the latter were some American missionaries, members of the Methodist Episcopal Church. A Dr. Humphrey, a member of this Mission, actually started a class for training women at Naini Tal in 1869. It was a brave effort, but one person, single handed, could hardly give an adequate medical education to even a few students. The teaching was

¹ See above, chapter V.

perfunctory and the class was closed in 1872. The same Mission, however, wrote to America asking for the services of a medical woman to 'instruct a class of native Christian girls, also to practice in the city as opportunity presented'. The one who responded to this call was Dr. Clara Swain who has been already mentioned¹ as one of the pioneer women in India. She came to India in 1870 and after a very short time she started a class of three married women and fourteen girls from the orphanage of the Mission. 'Thirteen members of this class passed their final examination in the presence of two Civil Surgeons and Dr. Johnson of our Mission, who granted them certificates of practice in all ordinary diseases.' When it is recorded that at that time Dr. Swain had no hospital buildings and no teaching facilities, it can be imagined under what difficulties and disadvantages such a class laboured. It is not surprising to know that the effort ceased with the first class.

A third effort was made in Bareilly, also by an Indian doctor, Babu Ganga Pershad. Its promoters were keen, but here again the education was incomplete and unsatisfactory, and the class was closed in 1875.

These efforts, brave as they were, proved that it was practically impossible to carry on classes privately in this manner.

In 1883, Brigade-Surgeon Hilson proposed to Government to start a class for Hospital Assistants at Agra. His idea was to carry on the class along with that of the men, but with provision for privacy and protection of the women students. He estimated the modest sum of Rs. 1000 for the first year and Rs. 2000 for five subsequent years. The Lieutenant-Governor at the time was Sir Alfred Lyall, a man of fine character and intellect, who sanctioned the scheme at once, and the class was formed. A new class was formed in 1884 through the vigorous efforts of Dr. Hilson; a

¹ See above, chapter II.

boarding house was opened, and an omnibus provided for conveying the pupils to the school. In 1885 twenty-one candidates were secured one of whom was a Brahmin girl of 13 or 14!

It was found, as might have been expected, that the Hindu and the Mahomedan girls could not 'with any propriety' (*sic*) enter the ordinary wards or out-patient department, so that the Principal was forced to devise an outdoor department for the treatment of women and children. This was incidentally no doubt a great boon to the women patients as well as an advantage to the students.

At the examinations it was found that the women students were quite up to the average in book knowledge, but 'they lie under a great disadvantage in not having a separate female hospital and dispensary with a medical and surgical ward for the poorer class of patients and a range of small separate wards or cottages for the use of better class patients, some of which might also, on occasion, be used for practical instruction in midwifery'. The writer of the report, Dr. Walker, expressed his conviction that 'nothing would aid so much in the success of female medical education at Agra as the presence there of a thoroughly educated European lady doctor attached to the school as lecturer on midwifery and diseases of women and children to the female class, superintending, (under the Principal), the female hospital and dispensary and engaging in private practice amongst the zenana ladies in and around Agra: in which the female pupils could give her valuable aid and receive still more valuable instruction'. The proposal thus adumbrated was carried out later when the Lady Lyall Hospital was founded and the Medical School for Women begun on a more adequate basis. It was not, however, until about the year 1923 that, as the result of a long struggle, the women's school was entirely separated from that of the men in all its departments.¹

¹ See below, p. 120.

In the year 1883, the medical faculty of the Punjab University discussed the question of educating 'native women in medicine and surgery', and suggested that the best means would be to form a class in the Medical School similar to that for Civil Hospital Assistants (men). It was also suggested that a certain number should be admitted into Government service under the same conditions of pay, promotion and pension as the existing grade of Civil Hospital Assistants. The latter point is of interest as the first mention of the possibility of a Government Service for women similar to that of men, a Service which even now, more than forty years later, barely exists. Surgeon-General Townsend addressed the Punjab Government on the subject and received a favourable reply. Six scholarships of Rs. 10 p.m. and Rs. 40 p.m. for the services of a 'matron' were granted. In 1885 there were ten students, seven of whom were in their second year of study. These students, it is to be noted, were required to know Urdu, Hindi, or English and were examined in the languages they professed. Scholarships were also given by districts¹ in the Punjab, on the understanding that the students returned to work in the same district. At the same time two students had been admitted into the Assistant-Surgeon Class (studying for the University degree) having passed the entrance examination of the Punjab University. They were both Anglo-Indians.

In 1886 the Lahore Municipality proposed to secure the services of a properly trained doctor from England for the benefit of the women of the city. The lady selected was Miss Bielby who, as we have already seen, had had experience of zenana medical work in Lucknow. Later on, the Lady Aitchison Hospital was started in Lahore and the women students were educated in the same way as at Agra till the year 1916, when the Government closed the school.

¹A 'district' in India is an administrative area in a province under a Deputy Commissioner, or Collector. There is an average of between twenty-five and thirty districts in one province.

or rather transferred its grants to the mission school at Ludhiana.¹ It is now probable that the school will be reopened at Lahore as a purely Government institution staffed by medical women.

It is a curious irony that Bengal, which has always prided itself on its advancement and intellectuality, should have been backward in receiving women as medical students. The question of admitting women to the Medical College was raised as early as 1876, and again in 1879, when it is said to have been 'favourably received'. This pious remark, however, apparently ended matters, for nothing resulted. In 1882 there was a fresh proposal, but it was again turned down. In the case of Bengal it was the Council of the Medical College which appears to have been the recalcitrant body, as the Secretary to the Government, and finally the Lieutenant-Governor himself, took the initiative to gain admission for the women. Mr. Rivers Thompson, the then Lieutenant-Governor, overruled the decision of the College Council and 'considered it a matter for great regret that Bengali ladies fully qualified by education had to go to Madras for training'. This was what was actually happening in Calcutta up to that date. The Lieutenant-Governor further affirmed that the action of the Calcutta Medical College was a reproach to the Presidency and was 'illiberal and retrograde'. Women were finally admitted in 1885. Two factors helped to secure this, one being that the Maharani of Casimbazaar gave a donation of Rs. 1,50,000 for the construction of a hostel for the 'female' students of Calcutta, and the other, that a gentleman named Sir Walter de Souza promised a sum of Rs. 200 p. m. for the benefit of women students. The students were admitted, as in Madras, to the University in the 'Certificate' class. There was a suggestion that lectures should be duplicated and that the women students should be screened from the men, but this was rejected, the

¹ See below, pp. 112 f.

women themselves not desiring any such arrangement.

In the Bombay Presidency there is no history of struggle to gain admission as far as can be traced,¹ and in 1887 it is noted that seventeen women are studying at the Grant Medical College, of whom two are matriculates, working for the L. M. & S. degree, while the others will be awarded diplomas as 'certified practitioners'. They were Europeans, Anglo-Indians, Portuguese, Parsees and Hindus. Separate classes, as in Bengal, were not considered necessary.

Thus, by the year 1890, there were women medical students in Madras, Calcutta, Bombay, Agra and Lahore. The great bulk of the teaching was carried on by men doctors. The conditions for the women students, at least in Agra and Lahore, were far from ideal. Generally speaking, the students in these centres were of a poorer type in education and character than in the other places. Though provision was made for their residence in hostels, their working hours were spent with men, who were unaccustomed to freedom among women and whose social customs did not breed respect for those who emerged from seclusion. Further, the women students were not influenced to any extent in their period of study by medical women as teachers, and the supervision in the hostels was not always adequate. The result was that many students were turned out poorly equipped, not merely in professional education, but lacking in personality and frequently even immoral in character. It is clear to us now that girls of this type should not have been subjected to such tests, but it is easy to be wise after the event, and had beginnings not been made then the progress of medical education for women might have been much retarded. The present generation has certainly profited by the mistakes of the past, and one is bound to admit that the pioneers did their best in attacking a problem whose solution was immediately demanded.

¹ See above, chapter III.

As the number of medical women increased in India the need for helpers began to be urgent. Women doctors could not perform operations without assistants or anaesthetists, and yet there were few places which were staffed by more than one European trained medical woman. There was not only an absolute lack of assistants, but, for the reasons indicated above, the quality of the available helpers was sadly lacking. Missionary doctors, in particular, desired to have helpers who would not only be efficient as regards professional work, but who would commend Christianity to the patients by the example of their lives and by helping the missionaries in teaching and preaching.

Things were at this stage when a young doctor came out to India as a medical missionary to the Baptist Mission station at Palwal, some thirty-five miles south of Delhi. Equally keen as a missionary and a doctor, she quickly grasped the fact that medical missionary work for women in India could not make great progress unless and until there was a larger supply of well-trained assistants of the right type. Those trained at Agra had proved disappointing in many ways; moreover they were receiving their training in an atmosphere which was quite neutral as regards religion, as is necessary in a Government institution. The dangers and temptations to a girl in a 'mixed' school were well-known, through sad experience, to women medical missionaries in north India. The obvious remedy, namely to establish a medical school where girls would be trained as doctors by members of their own sex, and at the same time be under Christian influence, was visualized by Dr. Edith Brown, the young doctor mentioned above. She invited a number of medical missionaries to a conference in order to discuss the subject. There was unanimity as to the desirability of the project, but finance seemed to offer insuperable difficulties. With magnificent faith and courage Dr. Brown determined to make the attempt to start the school, and she was appointed its first principal.

The start at Ludhiana was made possible, also, by the help of two ladies who, though not actually qualified, had been doing medical work in India for many years. These were Miss Greenfield of Ludhiana and Miss Hewlitt of Amritsar. Miss Hewlitt had actually undertaken the training of Christian girls at Amritsar, and she only gave up this work in order to support the Ludhiana scheme. The support of these two senior women was invaluable. The committee which was then formed was inter-denominational, and the plan was to induce the various missionary societies each to give a yearly grant towards the expenses of the school. A practising and teaching hospital was of course necessary and this was offered by Miss Greenfield, who, although not herself qualified, had for a good many years, been conducting a medical mission among the women of Ludhiana. Some buildings were also lent by the American Presbyterian Mission of Ludhiana. So with a start of scarcely £200 in actual money the School was begun.

At first the School granted its own diploma, but later the students from the School were admitted to the examinations held for the Sub-assistant class in Lahore, which proves that the teaching was of sufficiently high standard to attract Government attention. Progress was continually made and buildings were added, notably in 1912, when a big block of hostels was added, thus freeing much needed accommodation for teaching purposes. The crowning mark of confidence was the fact that, in 1916, the Punjab Government decided to close the classes in Lahore to women and concentrate on Ludhiana as the Provincial Medical School. Since that date a larger, though still small, number of non-Christian medical students have been admitted to the School where special arrangements were made for them. The Punjab Government contributed largely to the buildings of the School and about half the running expenses are provided by it. At the present time the buildings for teaching purposes are fairly complete and include a special block for

the teaching of anatomy, a physiology and chemistry block and a pathology department. The residential accomodation is excellent. The teaching staff includes eight graduates of English, Canadian and American universities as well as a number of Indian graduates who are assistants. There is a Physical Directress who superintends drill and games for the students.

The school at Ludhiana could not, however, have attained the position it has, had it not been for the great development of the clinical side of the work. Some years after the inception of the School, an extension of the hospital was built in the 'civil lines', as the city site was unsuitable and the buildings cramped and impossible to extend. This building has been added to several times, the latest addition being a maternity block to which the Punjab Government contributed a considerable proportion of the cost. The average daily number of patients in 1926 was 112 while the number of new cases in the out-patient department was over 46,000. This wealth of clinical material is available for teaching purposes and is naturally a great asset to the students. Dr. Brown's fame as a surgeon has spread far and wide, beyond the confines of the Province, and has given the hospital a reputation second to none in the north of India. There were eighty-two students under training in the year 1926.

In passing it may be noted that, besides the work of education among medical students, training for nurses, compounders and *dais* goes on at Ludhiana, and these are, as may be readily understood, very necessary adjuncts to medical work.

The former students of Ludhiana are working in every part of India, many in the mission hospitals for which they were primarily trained, but others in Government and municipal posts.

For many years the School at Ludhiana was the only one in India where girls were taught entirely by members

of their own sex. It was therefore sought after by those who did not care to expose their daughters or wards to the risks of a mixed school. In addition, on account of its missionary basis, many girls went there who were destined to serve as assistants in medical missionary work. Some of these girls came from as far away as the Madras Presidency, and went back to work in mission hospitals in that part of India. The journey from Madras to Ludhiana occupied about five days and some of the students had even longer journeys to perform—from Travancore and other parts south of Madras. To such it was an arduous task to journey to Ludhiana in search of medical education. At most they could return home once a year, sometimes not even so often as that. Their journey was made by third class to avoid expense and so was extremely fatiguing, and, though parties were usually arranged for companionship and avoidance of risks, there were times when girls had to travel alone. It was almost as if girls had to go from London to New York, a journey which even English girls of 17 or 18 do not usually undertake alone. In addition, the dry heat of the Punjab was extremely trying to girls accustomed to the moister climate of Madras. As the numbers of medical students from south India seeking admission to Ludhiana became larger, the missionary bodies there began to feel that a medical school on the lines of the school at Ludhiana was a vital necessity for the south. The project was again an inter-denominational one, with representation on the governing council in proportion to contributions made. (At present eleven societies are contributing to the School.) The actual opening of the new School was delayed owing to the war, but finally came about in the year 1918. The choice of site for the School was a matter of some debate, but finally the town of Vellore was chosen, mainly owing to the fact that a very fine medical and surgical work was in existence there under the leadership of Dr. Ida Scudder, a member of the Dutch

Reformed Church of America. This again provided the necessary basis for clinical teaching. The new School started on a much more secure financial basis than the Ludhiana one, and the preliminary equipment was more perfect.

The students at Vellore appear for the L. M. P. certificate of Madras, which is equivalent to the Sub-assistant Surgeon course. In spite of the fact that there is now a Government Medical School in Madras which is staffed by women, the number of students is high, being 77 in 1926.

Although the School is only ten years old, extension is already necessary, and it is proposed to move the School buildings and the residential accommodation for students to a new site three miles from the town. The hospital buildings, which include medical, surgical, maternity and children's blocks, out-patient department, private wards, X-ray department and clinical laboratory, remain in the town. They have recently been completed and the institution is thoroughly modern, up to date and efficient.

The history of the Ludhiana and Vellore Medical Schools showed how much could be accomplished by private effort. Such institutions have done, and are doing, splendid work. They have supplied many capable medical women to India who have done an incalculable amount of good. Their immediate success proved the need there was, and is, for facilities for medical training of women, by women. But the Medical School at Ludhiana had two drawbacks in the eyes of the general public. (The Vellore school was not yet started at the time of which we now write.) These were: first, that the foundation of the School was a missionary one, and that its staff were missionaries; and second, that its students were prepared for the Sub-assistant Surgeon's and certificate class diploma only, and not for university degrees. The first operated in keeping non-Christian girls from the School (prior at any rate to

1916), and the second meant that students from the School were not eligible for the more important posts, charge of hospitals, etc. It was realized that a greater number of Indian medical women with the highest qualifications, must be prepared to take charge ultimately of such hospitals, as India could not hope to depend on English doctors permanently nor was it desirable that she should. On the other hand, to expect Indian girls to go overseas in search of medical training by their own sex was absurd.

These things were 'in the air' at the beginning of the second decade of this century, and they found expression in the proposal to found a medical college as a memorial to the visit of H. M. Queen Mary to India for the coronation ceremonies of 1911. The proposal came from H. H. the Maharao of Kotah. As soon as it was made known other ruling princes were anxious to join in the scheme and gave generous donations towards it. Lady Hardinge, wife of the then Viceroy, to whom the monies were sent, was an enthusiastic promoter of the scheme, and Sir Pardey Lukis, the Director-General of the Indian Medical Service, also supported it warmly. The objections to mixed classes were by then thoroughly appreciated and it was realized that the best class of women, particularly from Hindu and Mahomedan families would not, especially in north India, come forward for training unless in a women's college. Moreover, it was clear by this time that a properly qualified staff of medical women could be got together for teaching purposes and for the staffing of a hospital large enough to secure the necessary clinical material.

Delhi, after some discussion, was chosen as the location of the College. Delhi had recently become once more the capital of India, so that there were strong sentimental reasons for its selection; moreover, Delhi occupied a central position; there was no existing college in the place, and the largeness of the city gave a guarantee of an ample number of patients. The Government of India was asked to give a

site for the buildings, and one was selected between the old city and the new so that both could have access to the new hospital. The foundation stone of the College was laid in 1913, and the buildings were opened by Lord Hardinge in the spring of 1916, just before he left India at the end of his viceroyalty. The Hospital was formally opened a year later though patients had been treated and admitted for some months previously.

It has been mentioned that Lady Hardinge was a keen promoter of the scheme. Her untimely death in 1915 was mourned by all, and by none more than by those watching over, sometimes anxiously, the birth of the College. The original intention had been to name the College after the Queen-Empress, but Her Majesty felt that the College was a fitting memorial to one who had done so much to bring it into existence, and so the College was finally named the 'Lady Hardinge Medical College for Women'. As may be surmised, the war increased the cost and the difficulties of the erection of the Hospital enormously, but all was carried out according to plan, though with considerable unavoidable delay.

Life at the Lady Hardinge Medical College is strongly reminiscent in many ways of life in an English women's college. The buildings are situated in their own grounds which consist of 54 acres. The administrative and teaching block contains a central hall, museum, library, and all the necessary laboratories; they are all thoroughly modern and admirably equipped. Behind this is the residential accommodation, which consists of a number of different hostels, but so grouped as to secure continuity of line architecturally. Such a plan is necessary in order that different castes and religions may be accommodated happily, as different messing arrangements have to be made for each. The students' common room, however, which is placed in the centre of the quadrangle, is more than a mere symbol of their unity as a student body.



Bird's Eye View of the Lady Hardinge Medical College, Delhi

Behind this again lies the Hospital with all its departments. The average daily number of in-patients is 229 (1927) and 10,960 patients attended the out-door department. All the equipment necessary to a modern hospital is found here, indeed, many a hospital in the west might envy the beautiful operating rooms where the surgeons work daily. The plan of the Hospital resembles that of St. Thomas's, with a central administration block. The latter forms part of a quadrangle which is completed by the nurses' hostel which accommodates the nursing sisters and pupil nurses.

The students have fine recreation grounds, which include a hockey field, tennis and badminton courts and a basket ball pitch. There is a good deal of keenness on games, and inter-class tournaments, besides matches between the staff and students, are followed with eagerness. The students largely manage their own affairs by a system of self-government and do it quite efficiently. The absence of friction among a hundred or so girls drawn from all parts of India, speaking many different languages and with most diverse social habits, is astonishing. Many racial types can be seen in this one institution, fair skinned Sikh girls from the Punjab, Mahomedan girls with full trousers, darker complexioned students from south India with their beautiful gaily coloured *saris*, an occasional Burmese, and so on. In addition there is a fair sprinkling of students of pure European and Anglo-Indian birth. The Hindu community sends the largest number of students, the Indian Christian, the next. There are, however, (in 1926) thirteen Mahomedan students, girls who in all probability would not be training as doctors had it not been for the existence of such a college.

As regards the academic side, the students have to undergo a seven years' training. The two first years are spent on science, and five years given to medicine proper. The examinations taken are those of the Punjab University, and the M. B., B. S. degree of that University is awarded.

The teaching staff consists of four lecturers in the science department, and eight in the medical faculty who are members of the Women's Medical Service. In addition there are a number of assistants and house surgeons.

The students, after qualifying, become assistants at Dufferin or other hospitals, a few have independent charge from the outset. Several have entered the Training Reserve of the Women's Medical Service and one is already a full member of the Service. A very few do private work. The leakage through marriage, or other causes, is less than in most cases of professional women in India, the reason probably being that the long and arduous course efficiently weeds out those who are not in dead earnest before the end of seven years.

The budget estimate for the College and Hospital is close on four and a quarter lakhs (£31,875), and this does not include the grade pay and allowances of the members of the W. M. S. who serve on the staff.

No one interested in the progress and education of women in general and in the uplift and succour of the women of India in particular, can visit the Lady Hardinge College without a thrill of pride and emotion. It is a noble conception, worthily carried out, with immense possibilities for India's women.

As indicated above, the medical schools at Madras and Agra which, as has been mentioned, do not train for university degrees, have now been separated off from the men's schools and are staffed entirely by women. Both train girls for the Sub-assistant Surgeon's diploma.

The Agra School has some good buildings, particularly the maternity block, which is excellent. It has fine grounds and good hostel accomodation. With some further buildings and reconstruction of the older parts of the Hospital it would be a first-class institution. The work, medical, surgical and obstetrical, done in the Hospital is of a very high order, and the students have ample clinical

experience and excellent teaching.

The School at Madras is the youngest of all the purely women's schools. Its buildings are not adequate at present, but the hospital work is excellent, and in time the Madras Government, which is responsible financially for the School, will no doubt provide what is necessary.

The Punjab Government are now considering the possibility of founding an independent, purely Government, school for women in Lahore, and when this materializes, yet another medical school staffed by women will come into existence.

The present position with regard to the medical education of women is as follows: (the figures are for 1923)

WOMEN STUDENTS STUDYING IN MEDICAL COLLEGES
AND SCHOOLS IN INDIA

	University Course	Apothecary Certified Practitioner	Sub-asst. Surgeon
I. INSTITUTIONS STAFFED BY WOMEN FOR WOMEN ONLY			
(a) Colleges—			
Lady Hardinge Medical College, Delhi	121		
Total...	121		
(b) Schools—			
1. Women's Christian Medical College (Punjab Medical School for Women)			97
2. Women's Medical School, Vellore			86
3. Women's Medical School, Agra...			73
4. Lady Willingdon Medical School, Madras			95
Total...			351

	University Course	Apothecary Certified Practitioner	Sub-asst. Surgeon
II. INSTITUTIONS STAFFED BY MEN FOR MEN AND WOMEN			
<i>(a) Colleges—</i>			
1. Medical College, Madras ...	63	3	
2. Grant Medical College, Bombay ...	50		
3. Medical College, Calcutta ...	18		
4. King George's Medical College, Lucknow	1		
Total...	132	3	
<i>(b) Schools—</i>			
1. Hyderabad (Deccan)		5	7
2. Indore			3
3. Hyderabad (Sind)			1
4. Robertson Medical School, Nagpur			7
5. B. J. Medical School, Ahmedabad ...			5
6. B. J. Medical School, Poona ...			49
7. Campbell Medical School, Calcutta			13
8. Dacca			5
9. Cuttack			4
Total...		5	94

CHAPTER EIGHT

PREVENTIVE MEDICINE

Part I. The Problems of Childbirth

Everyone familiar with medical work in England is aware of the extent to which women doctors are taking part in preventive medical work. This chiefly takes the form, as far as women are concerned, of maternity and child welfare work, and the medical inspection of school children. Both these branches have opened up a big field of work which is obviously very well suited to women workers and which they have not been slow to enter. The other branches of the work, such as those connected with sanitation, and the control of infectious disease, are still largely undertaken by men.

In India there is a similar division of the work, with this difference, that the amount of child welfare and medical inspection work is exceedingly small and the number of women employed in it in proportion. It is necessary to explain why this is so and to make it clear why these important branches of work have up to now received little attention.

First a word with regard to the organization of the sanitary services. As medical matters are now 'transferred subjects'¹ the Provincial Governments control the expenditure under this head, and the provincial head of the department, the Director of Public Health, is under the

¹ 'Transferred' subjects are those which, under the Montague-Chelmsford Reforms, are placed under a minister who is responsible to the Provincial Legislative Council. 'Reserved' subjects (e. g. Police) are in the hands of the executive and not subject to such provincial control.

Indian minister in charge of the portfolio. The Public Health Commissioner, an official of the Government of India, forms a loose connexion between the Directors of Public Health of the different Provincial Governments, but he has little administrative control over them. The different provinces vary with regard to the system of administration, but what is now generally aimed at is to have a specially trained public health officer for each 'district' or administrative unit of a province. In some provinces this has been completely carried out; where it has not been completed the work is administered by the 'Civil Surgeon' of the district who also has charge of the curative side of the district medical work. Civil Surgeons are members of the Indian Medical Service, or Indian Medical Department, but district medical officers are members of a Provincial Sanitary Service. Such officers are directly under the Director of Public Health and responsible to him. Their duties are comparable to those of similar officers in England, but it must always be remembered that India is a land of villages and there is little urban life; that the standards of hygiene are very low; and that India is subject to tropical and other infectious diseases which are frequently epidemic and often endemic on a scale undreamt of in England.

The larger towns and cities, as opposed to the rural districts, have their own medical officers of health appointed by the municipality and answerable to it only. Their problems, though rather different from those of district medical officers, are of the same magnitude as regards epidemic disease and low standards of hygiene.

It is these latter factors which influence our subject, for the control of such epidemics is one of the major duties of district medical officers of health, and they also account for a great part of the expenditure on this branch of medical work. In face of this need of control of diseases such as malaria, plague, dysentery and kala-azar, it is small wonder

that the problems of infant mortality have escaped the attention they deserve in India.

The expenditure on control of epidemics and on water and sewage schemes is not merely a question of money. It absorbs the thought and energy of the officers concerned, and so, unless there is unusual keenness on child welfare work, and unusual vision as to what it can accomplish, it is naturally left undone.

There are one or two other factors which, in our opinion, help to account for the small progress made up to now in this branch of preventive medicine. One is the fact that voluntary effort, though it has originated almost all that is of value in child welfare work in India, is not yet either powerful or widespread, nor has it wealthy patrons except in a very few instances. In addition, the general mass of the public is as yet uninformed as to the true purpose of the work. This again is due to a variety of causes, amongst which illiteracy and lack of education rank high. Hence, though as in England the initiation of the work was due to voluntary enterprise, the impetus given and the progress made have not been sufficient to force the authorities generally to take up the work, and the public to acquiesce willingly in the expenditure of funds to this end. (There are of course honourable exceptions to which we shall refer later, but such is the general position.)

Another obstacle which has to be reckoned with in India is that which social and religious customs and superstition place in the way of advance. These customs are sometimes apparently trivial, but are often very deep rooted. 'As we so often find in other matters, what in the west is one problem tends in India to become a number of inextricably interwoven problems each having its root deep in traditional usage or religion.'¹ Although

¹ *Statement of the Material and Moral Progress of India, 1926-7*, by J. Coatman.

one is here treading on delicate ground, it is impossible, after years of residence in India, not to conclude that a fatalistic outlook influences conduct in regard to health as in other matters. When epidemics or others calamities are regarded as the working of 'fate', when individual deaths are accepted as inevitable, for 'it was written so', it is naturally hard to rouse a 'sanitary conscience', or to get the people to take the 'long view' in health matters.

We have mentioned that the initiation of maternity and child welfare work in India was due to voluntary efforts and it is time now to attempt a short account of the beginnings of the work.

In time, the work for mothers in India really preceded that for infants, and this was due to the realization, towards the end of last century, of what the conditions of childbirth in India really were. This realization was naturally helped forward by the spread of medical work for women through the Dufferin Fund and the efforts of missionary societies. Women doctors were working in increasing numbers and the women of the country were becoming more willing to seek hospital treatment and consult women doctors 'trained in western methods. All this was excellent, but the more medical women practised in India, the more did they find themselves faced, in maternity work, with a problem which appeared almost insoluble. That problem was (and still to a large extent is!) the indigenous midwife, or *dai*. For ages the *dai* had been the genius presiding over childbirth and her sway was undisputed. She was the only source of help and the people naturally placed their faith in her. She not only conducted the birth, but was a gynecological consultant before and afterwards, and though untrained, according to western ideas, she admitted no gaps in her knowledge. The profession of midwife in India is hereditary; it passes from mother to daughter, or in some cases to daughter-in-law. Those who practise the profession are not

a separate caste, but may be members of several castes, but they are always low in the social scale; for example, in Madras they belong to the 'barber' caste. In north India Mahomedan women also practise midwifery, but they too belong to the lower classes. Childbirth is 'regarded as a time of impurity, an idea by no means peculiar to India, and therefore only those whose caste is low can attend a woman in this condition. This need not surprise us when we reflect on the 'Sarah Gamps' of less than a century ago in England, but in India among Hindus the condition of the lying-in woman forbids other members of the family attending to the patient and so she is left entirely to the *dai*. Since bed and bedding are frequently burned after the event, the oldest of both are set aside for it, the worst room in the house is given; clay vessels are used which can afterwards be broken; the mother herself becomes an outcaste for the time being.

The cleverer among the *daïs* accumulate a certain amount of wisdom either from their predecessors or from their own experience. It is not, however, based on scientific knowledge. They have no idea of the mechanism of labour, nor of the forces by which the infant is expelled, nor of what is involved in the term 'sepsis'. In any difficulty the only remedy is force, with what disastrous consequences may be imagined. It would be easy to fill a chapter with horrifying and unsavoury details of experiences in childbirth, but little purpose would be served by this. It is easy, especially for medical women, to give a wrong impression, as they naturally see the abnormal case rather than the normal. The majority of births are 'usually and happily normal', and 'the *dai* is a cheerful soul, hard-working and respectful to her clients'.¹ One can imagine that if the *daïs*

¹ *Is the Indigenous Dai worth training?*—A paper by Miss K. M. Bose, read at the Maternity and Child Welfare Conference, Delhi, 1927.

could form a trade union and become vocal one would feel somewhat differently towards them. They certainly have to work very hard for an extremely meagre rate of pay, and are forced to do all sorts of menial tasks, such as washing of clothes, burying the placenta, and so forth, for an inclusive fee. One difficulty, in fact, in the employment of better trained midwives is, that even those patients who can afford to pay a proper fee, are unwilling to do so as they have become accustomed to the modest sums which the *dai* accepts, while in addition the trained woman refuses to do the menial work.¹

Such briefly was the state of affairs as medical women found it at the end of last century. Had antenatal work been in the same state in England then as it is now, things might have proceeded differently, but as it was, the whole attention was concentrated on the actual confinement and on the *dai* who performed it. Efforts had been made from time to time to train the indigenous *dai*, but they had never been very successful. Classes had been formed by those who were aware of the state of affairs in the hope of remedying it, but as these classes had been taught by men who could only give theoretical knowledge and were debarred from actual demonstration in cases of childbirth, and had themselves little experience in obstetrical work, it is not surprising that the teachers were disappointed with their own results and felt inclined to say that any attempt to train the *dais* must be hopeless, and should not be made. Such in general has been the view of men ever since, but women have not taken this attitude for

¹ 'A real incentive to effort for improvements on the part of the *dai* would be afforded if anything approaching a living wage could be ensured by the practice of her profession. A substantial percentage of *dais* in rural Bengal divide their time between this [i.e. midwifery] and other trades.'—Dr. P. C. Sen, Dacca, in an address on the *Dai* given at the Maternity and Child Welfare Conference, Delhi, 1927.

the most part.¹ This has been due to the success which met with some of the early efforts to train the *dais* on the part of women, and also to the fact that women were in a better position to realize that there was no real hope of ousting the *dai* from practice and replacing her by another class of midwife for a great many years to come.

One of the finest attempts to train the indigenous midwives of India and one which had far reaching consequence was that begun by Miss Hewlett of Amritsar in 1886. Miss Hewlett was a missionary of the Church of England Zenana Missionary Society; she was also a trained nurse and midwife and had considerable medical experience. Her work among the women of Amritsar led her to the conclusion that the *dais* must be trained, but she had the genius to realize what others had not done, that training alone was not sufficient, but that supervision was also necessary. Miss Hewlett persuaded the *dais* to attend her classes by the payment of a small fee for each attendance, and obtained the funds for this from the municipality of Amritsar. At the end of a certain length of training the *dais* were submitted to an examination and those who were successful in passing were given certificates. The hold on the *dais* was maintained by requiring them to report every case as soon as the confinement was over. Miss Hewlett or her assistant visited the case, and if they found all was well, the *dai* was given a reward of one rupee. The *dais* were naturally eager to get the coveted rupee, and though they had no enthusiasm for reporting cases, the money was the jam concealing the powder and the system worked well.

Similar attempts on this model were made in a few other places usually by medical missionaries, and usually with some success. All municipalities, however, were not as generous as that of Amritsar, and few missions could

¹ The two points of view are well exemplified in the *Report of the Victoria Memorial Scholarships Fund for 1918*; See below, pp. 132 f.

bear the cost of the scholarships or rewards for any length of time. There was lacking an impetus to keep up these schemes, which had proved themselves of value, and perhaps also the details were not generally known or appreciated. Whatever may have been the cause, the training of indigenous midwives was not undertaken to any extent until the establishment of the Victoria Memorial Scholarships Fund in 1903.

This Fund was established by Lady Curzon as a definite and special effort to do something to improve the conditions of childbirth which the Dufferin Fund and other organizations had revealed to be in such a bad state. As it was inaugurated shortly after Queen Victoria's death it was given her name. The express object of the Fund was to train indigenous midwives as opposed to midwives from other classes or castes, who were already being trained in Dufferin and mission hospitals. The amount of money collected by public appeal for this object was nearly seven lakhs and the income of the Fund is about Rs. 34,000 (£2550). This money is kept quite apart from the Dufferin Fund, though the two organizations are worked from the same office and have an identical committee. Committees were formed in each province, and in each centre where the work was started, a local committee was formed, and the money was divided among the states and provinces more or less in the proportion in which it had been subscribed. Efforts were made by local committees to get the *dais* to attend classes of instruction for which they were given scholarships or fees. There was however little or no supervision after the manner described in connexion with Miss Hewlett's work, and this was a very weak point even where classes had been successfully started. The starting of classes was no easy matter in many cases. Many of the *dais* were hostile and refused to attend the classes. They believed that there was some trap in the scheme and that they would be ousted

from their means of livelihood. No doubt also some of the doctors who undertook the instruction adopted the wrong attitude and instead of being tactful and willing to placate, were superior and somewhat overbearing. There was no possibility of compulsion in the case of *dais* who were recalcitrant, as there was no register off which their names could be struck and they were not supervised by anyone. Even the *hukm* (order) of a district officer was powerless to compel the attendance of the *dais*, who had their own views about the need for training (or rather the absence of need) and who possessed the confidence of their patients. This latter was indeed a determining factor in the situation. As long as the patients did not demand a higher standard of skill in their attendants at childbirth, there was no inducement for the *dais* to seek it. All were alike in the matter of training though some might be more skilful as a result of natural gifts or experience. Had the patients appreciated the need for another kind of midwife, and been willing to pay for her, the *dais* would have been forced to come for training through fear of losing their clients, even if they did not do so from pure love of knowledge.

Taking the country as a whole then, the response to the effort to train the *dais* was rather meagre. Some centres reported good and successful work, others had to admit failure and actually gave up the attempt, but in both cases the number of *dais* involved was a small proportion of the total. Some centres obtained the permission of the Committee to use the grants for training other than indigenous *dais*, and some did this without such permission, so that in many places the real objects of the Fund were not carried out. The experiment was tried chiefly in towns, large or small, where there were medical women willing to give it a trial and perform the teaching work. The villages were left practically untouched. This was natural because women doctors are not found in

villages, and *dais* could not travel to the nearest town for a lesson when that involved time and money, not to mention keenness on the part of the *dai*, which was non-existent. But it was a tragic irony, too, for the village women were the most without skilled help and therefore the most dependent on the *dai*.

As years went on and the reports sent in to headquarters became less rather than more encouraging, the Executive Committee felt that the time had come to review the work as a whole and consider whether the objects of the Fund were being carried out and how greater success could be attained. Special reports were therefore asked for in the year 1918 and prizes were offered to medical women and nurses for essays on the improvement of the conditions of childbirth. These essays and reports were published in 1918. They showed clearly that there was much dissatisfaction with the idea of attempting to train the *dais* in many quarters but that, if suitable measures were adopted, very considerable success could be gained. The encouraging reports were mostly from the Punjab; in the United Provinces, Bengal, and Bihar and Orissa, training had been tried but the opinion of the Inspectors-General and Surgeon-General (who administered the Funds) was that no good could come of the attempt to train the *dais*. In the Central Provinces and Baluchistan, classes had been successful in one centre in each province, i.e. Nagpur and Quetta. Madras and Bombay Presidencies were outside the operations of the Fund. As mentioned before, the cleavage of opinion lay roughly speaking between men and women. But even where women felt that it was necessary to proceed with the training of indigenous *dais* as the only means of meeting the needs of the country, they declared emphatically that training without subsequent supervision was useless. Some women put forward strong arguments for legal registration of midwives through which alone adequate supervision could be attained. Government

officials on the other hand felt, not without justification, that such a measure would be very premature and could not be efficiently carried out. Many suggestions were made as to possible methods of improvement. The majority were for the better education of the general public together with various suggestions as to the training and encouragement of *dais*. It is significant that the holding of antenatal clinics was not among the suggestions made.

As a result of this review the Committee decided to adhere to the attempt to train the indigenous class of midwife, as they were of opinion that 'until proof were given that the majority of women in a province, rich and poor alike, are employing a superior class of midwife for natural labour, the funds of the Victoria Memorial Scholarships Fund must be expended entirely for the improvement of the hereditary *dai* class'.

Since that time the work of the Fund has gone on as before. Further experience has proved up to the hilt the truth of the medical women's contention that training without supervision is useless. A certain amount of the Fund is still spent on training midwives of other classes on the plea that indigenous *dais* are not available. It is not possible to say that the work of the Fund is a wonderful success, but quite clearly much good work has been done, which may be regarded as a seed sown which takes long to germinate, but suddenly springs up and grows rapidly. The period of germination is still going on, but there are signs that the growth of the plant may soon begin. One important point is that the resistance of the *dais* is largely broken down. They have become accustomed to western methods to some extent and do not fear to call the trained medical woman. This leads to calling her earlier, the suggestion to do so coming from the *dai* as often as from the relatives. In a few places the training of the *dais* has been so successful that it is declared that registration and

control are a real possibility.¹ This will no doubt be soon realized. In addition, the *dais* are, in some places, awake to the possibility of competition. The number of midwives trained in western methods and not belonging to the *dai* classes increases yearly, and, what is very important, the appreciation by the public of their services increases also. As has already been mentioned, this is a very important factor in the situation and the most powerful lever acting for training. This is well illustrated by what has happened in the city of Madras.

Madras and Bombay Presidencies are not included in the operations of the Victoria Memorial Fund, and in Madras especially the object aimed at consistently has been to oust from practice the indigenous *dai*, (or barber *dai* as she is usually called there), by means of a superior class of midwife. This aim has been wonderfully successful and an act for registration of nurses and midwives, which eliminates the untrained *dai* altogether, has been passed in the Madras Legislative Council. It may naturally be asked: If Madras can advance so far as to be really within visible distance of doing without the *dai*, why cannot other parts of India advance as rapidly if the same determination is shown? This is a controversial point, but it is very doubtful whether there is one solution of the *dai* problem for the whole of India, and even if it were held that the policy which has been followed in south India is the correct one, it is easy to see why the conditions there are specially favourable for carrying it out. In the first place, the Madras Presidency is educationally the most advanced in India. The people are therefore more prepared for innovations. Secondly, the women are not secluded (except for the small number of Moslem women). They

¹ In Simla all the *dais*, save a very few who are too old to learn, are either trained or under training. A real hold is maintained on the *dais* through the work of the Health Department which includes three trained women of the Maternity and Child Welfare staff.

have always gone to hospitals in considerable numbers for confinement,¹ and therefore are accustomed to the idea of being attended by a different class of midwife, and one with western training. In the third place, both these circumstances helped to provide a much larger number of women for the work of nursing and midwifery than were available in the north. More girls were educated and more took up professions. This, together with the economic conditions of the province, involved a fourth factor, namely the smaller rate of pay for which a trained midwife was prepared to give her services in Madras. Living is cheaper there and salaries on the whole less than elsewhere in India; also the law of supply and demand holds good; women are highly paid for such services when their numbers are few.² It is seldom safe to generalize on such points, but in the present instance these differences between Madras and the rest of India are broadly true, and have helped to bring about, if they have not created, the position peculiar to that Presidency.

In Bombay Presidency, also outside the operations of the Victoria Memorial Scholarships Fund, the position is somewhat similar though the advance is not so great. There is no talk as yet of dispensing with the indigenous *dais*, but better class girls are beginning to take up nursing and midwifery. Much credit in this connexion is due to the Poona Seva Sadan, which has helped to prepare and educate these girls in increasing numbers. The standard of

¹ Compare the state of affairs as regards practical midwifery training for medical students (men) in north India and south. The students from Lahore and Lucknow have been going to Madras for their 'cases' because it was impossible to secure the required number in these other cities where the women will not attend hospitals staffed by men for confinement.

² For example, women Sub-assistant Surgeons still receive higher rates of pay than men because the supply is not yet equal to the demand. The same holds good with the teaching profession.

living in Bombay Presidency is, however, very high, and nurses and midwives receive very good rates of pay.

We have already touched on the fact that the villages of India were largely left untouched by the attempts to train the indigenous midwives. Efforts have been made to overcome this difficulty and some of the results are very promising. At Asrapur, a large village in the Amritsar district of the Punjab, medical work has been carried on by the Church of England Zenana Missionary Society for some time. Latterly the training of *dais* has been attempted; the *dais* from villages have been encouraged by small payments to come for classes and their cases have been visited by the workers. Miss Bose, who carries on the work, is of the opinion that the *dais* have advanced in the knowledge of surgical cleanliness and as a result, puerperal fever and tetanus have been controlled; haemorrhages are understood to be dangerous, not 'cleansing', and cases of malpresentation and uterine inertia are brought to the hospital. 'The fact is that these women have had extensive practice, and when they are taught the theory of normal and abnormal labour intelligently, they are able to relate practice and experience in a way the other trained midwives are unable to do without years of experience.'¹ Miss Bose holds, like all other workers in this field, that supervision is essential and that the greatest need is for the *dai* to be taught antenatal observation.

Another hopeful instance of work among village *dais* is that carried on by Miss Piggott in Hyderabad, and the surrounding parts of Sind. Under this scheme a worker tours in the country districts, settling down for a few weeks or months in a centre and teaching the *dais* in the place. Experience has shown that the *dais* are willing to be taught and that the people themselves understand and appreciate the object of the training. Such work is capable of infinite expansion were funds and workers available.

¹ Miss K. M. Bose, loc. cit.

Another scheme for training village *dais* has been started in the Bombay Presidency. It is the Lady Wilson Village Dai Scheme and under it *dais* are brought into towns for a short intensive training of two weeks in a hospital. It remains to be seen whether good results can be hoped from this effort.

From the foregoing it will be seen that the situation is not without its hopeful features. What, then, is there to hinder a big advance, and what is the outlook for the future?

There are, in our opinion, two main difficulties. One concerns the teaching of the *dais* and the other the supervision of their work, after training.

Looking back on the work of the last thirty years, the fact stands out clearly that wherever the teaching of *dais* has been really successful, it has been in the hands of educated women with strong personality and winning character. Such were Miss Hewlett of Amritsar, and Dr. Henderson of Nagpur,¹ and such are those still living who are carrying on the good work. It is not an easy thing to win the confidence of illiterate people who have been down-trodden menials for ages and who have never experienced unselfish devotion. It is not an easy thing to instruct people whose minds have never been trained to think, and whose horizon is bounded by the need to earn daily bread and by the customs of the herd; many of them, moreover, are middle-aged or old women. It requires an infinitude of patience and tact and a real gift for teaching. Anyone who has ever attempted the task knows how fatally easy it

¹Dr. Henderson was a medical missionary in the United Free Church of Scotland Mission. When precluded by health from carrying on active hospital work, she took a house in the city of Nagpur and carried on a wonderful work among the city *dais*. She also introduced the novel idea of training the children of the *dais* and had a Montessori school for them. Dr. Henderson's name is still one to conjure with in Nagpur and the surrounding districts.

is to secure the lip response which conveys the right answer to a question without the slightest real response on the part of the mind, so that a test may be passed because the candidate knows what is expected of her, without the teaching having influenced her practice at all. In north India at least, where women do not readily come to hospitals for normal labour, it is very difficult to secure material for teaching the examination of normally pregnant women which is the foundation of all good midwifery. In the same way, if the teacher cannot be frequently present at delivery, the principles of surgical cleanliness are limited to the performance of ceremonious washings in the class-room and are not carried out by the patient's bedside. The patients too, in the majority of cases, weight the dice heavily against the *dai*. What need of hot water and soap if past generations were confined without them? Why the extravagance of clean sheets which may have to be burned subsequently? And why pay an attendant if she is merely to lay her hands on the patient's abdomen and not prove her capacity by frequent internal examinations, or preferably the application of medicines to the vagina?

In face of these difficulties is it surprising to know that the teaching of such a class of people is generally a failure when left in the hands of a Sub-assistant Surgeon who has little background herself, little gift for teaching or real enthusiasm for the job, and no imaginative insight which would lead her to understand the *dai's* mentality? Or that it is successful in the hands of the missionary who is prepared to give sympathy and understanding besides time and patience to the task, and who is fired by genuine enthusiasm? It is for these reasons, we feel, that the teaching of the *daies*, unless carried on by people of the right mentality and character, will not be successful.

Another point which it is necessary here to touch on, is the need for antenatal work. As already explained

it is not easy to get pregnant women on whom to demonstrate for teaching purposes; but the possibilities of antenatal work have not been sufficiently explored. If medical women could have the chance to examine a greater number of women during pregnancy, a great deal of maternal mortality could be avoided through the discovery of abnormal conditions in time. If such cases could be taken on by medical women, the normal ones can be left in the hands of the *dai*, provided she is taught the principles of surgical cleanliness and diagnosis by external examination only.¹ If the *dais* could be thoroughly persuaded that such was the doctor's intention they might be more willing to bring the patients for at least one examination during pregnancy. Opposition on the part of the patient is not likely to be serious, though her mother or mother-in-law may at first regard the proceeding with holy horror.

The other difficulty, namely the supervision of the *dais'* work, is a question of workers, well enough trained and conscientious enough, to perform the task. It is a thing which must take years to compass in a country the size of India where there are some eight and a quarter million births annually. Supervision will require as a matter of course a permanent staff after all *dais* are trained and registered. If such supervision is necessary in England with its comparatively educated midwives, how much more necessary in a country like India! At present there is very little supervision, and what there is, is not always carefully thought out. If, however, teachers of the required gifts can be found, it is likely that the problem will solve itself, for the evolution of both teachers and supervisors would go on *pari passu*.

The provision of first class teachers, well developed

¹ 'Out of 500 cases attended by indigenous *dais*, in about 25-30 villages annually, we have not had to assist in more than 8-10 cases on the average'—Miss Bose, loc. cit.

antenatal clinics and efficient supervision seems to be the hopeful line on which to attack the problem of the indigenous *dai*, and if success attends these efforts we may hope for a reduction in the present very heavy maternal mortality rate in India.

One other factor would accelerate the attainment of these objects, and that is the education of the public in the necessity for clean midwifery. This will be slowly accomplished by means of the health work which is already going on in India and which is bound to increase in amount and quality. The development of this work will be considered in the next chapter.

CHAPTER NINE

PREVENTIVE MEDICINE

Part II. The Child Welfare Movement

Infant and child welfare work is an accepted fact in England, and no one nowadays is heard to criticize it. Its real success, and the amount of propoganda work which has gone on, account for this; but also there are the facts, that the birthrate is falling, knowledge about conception control is spreading, and it is necessary to save infant lives if the population is not to become stationary. There is also a real appreciation of the fact that health *pays*; for it is a sound economic proposition which even the man in the street has grasped. This appreciation is not the predominant attitude as yet in India. The ordinary member of a municipality, if he were completely honest, would probably confess to a doubt whether the work accomplished anything. The more thoughtful person says, 'India is over-populated as it is; why save more babies when the land cannot support them?' or, as a cynical member of the Indian Civil Service once put it, 'What India wants is not Child Welfare, but Marie Stopes.' Neither point of view could survive if people understood the real nature of the work. It may be that India is overpopulated, but one can hardly leave the process of regulation to nature when it involves the suffering denoted by an infant mortality rate of two hundred or thereabout.¹ It is a mistake, too, to think

¹The figures for 1926 (*Annual Report of the Public Health Commissioner with the Government of India, 1926*) are 189 per mille of which 89 occurred in the first month. This is for British India as a whole. The figures for the towns are terribly high, e. g. Bombay 255 [419?], Cawnpore 484, Ahmedabad 438 (all industrial

that child welfare work consists merely in saving the lives of infants whom the ordinary person in his heart of hearts considers better dead. It exists to give health, not merely life, to these infants, it seeks to prevent them growing up as they do, feeble and unhealthy, unfitted to take their places in the economic struggle that is the rule to-day. This is not the place in which to offer a complete apologia for child welfare work, but it is quite certain that if India is to compete with other nations on equal terms, a vast increase of physical efficiency and sound health is required, and the foundations of that can only be laid in infancy, and by such agencies as the Child Welfare Movement represents.

The Child Welfare Movement in India as in England owes its origin mainly to the efforts of enthusiastic voluntary workers. These were mostly English women who had seen and read of what was going on in the west, and knowing something of the horrible infant mortality of India, were anxious to try similar methods in that country. The majority of them were not medical women. Many were the wives of officials who were genuinely interested in the people round about them and who were stirred with pity at the needless suffering they saw. By means of the interest thus created, child welfare schemes were started in a few places in India during the first years of the war and in some cases just before it. The stern realities of the war brought home to English people the fact that the man power of the nation must be kept strong, and this realization doubtless had an influence, conscious or unconscious, in India too. Those countries which, by various methods, had reduced their infant mortality rate, were not slow to trumpet forth the towns); Dacca 234, Poona 733, Benares 314, Lahore 241. The causes of infant mortality are set out, but, as the returns are given in by illiterate people and no certificate of death signed by a medical practitioner is required, they are unreliable. We have yet to ascertain the real facts as to the causes of infant deaths in India.

fact, and a certain uneasiness began to grow in India in view of her continued abnormally high infant deathrate. The spirit of social service, too, was growing in India: there were many agencies at work in the large towns for the uplift of the people, and the loss of infant life and the wretched physique of surviving infants, were brought home to such workers in a painful way.

The first efforts were made in large towns such as Bombay, Karachi, Delhi, and others, and they varied in scope. Considerable attention was paid to problems of childbirth: e. g. in Bombay, small maternity homes were founded; there was in some places an attempt to distribute milk free, or below cost price, but there was at first little attempt at systematic home visiting of infants, or the establishment of regular clinics to which healthy infants might be brought for inspection. This was a pity, but it must be remembered that fifteen years ago child welfare work in England had not reached the state of advance in which we now find it; also that few medical women in India had first-hand experience of preventive work, and the great majority of them were too much overwhelmed by the curative side of medicine to be able to spare much time or thought for the preventive.

Such work as was started was generally undertaken by voluntary committees who employed a nurse or midwife to do the bulk of the work. It was presently realized, however, that if it were to advance and develop adequately, a special class of workers must be trained for it, similar to the Health Visitors who were by this time at work all over England. Application was made to the Dufferin Fund Office for such workers, who were non-existent, so that to create them was a necessity. Training in midwifery was essential, but it left the pupils without any knowledge whatever of preventive work as applied to infant life and all that this involved. The next question which naturally arose was, what body should undertake to

give the necessary training? The atmosphere of a hospital, which was one of disease, not health, was felt to be unsuitable, and so it was decided to start a 'Health School', that is an institution which would be solely concerned with the training of Health Visitors. The Association for the Provision of Health Visitors and Maternity Supervisors was started in 1918. Mr. (afterwards Sir Henry) Sharp, the Secretary of the Education Department of the Government of India, was the Chairman and Dr. M. I. Balfour, of the Women's Medical Service, was the Honorary Secretary. A grant of Rs. 6,000 was given from the Government of India to start the School. The venture was a bold one, for the amount of money at the disposal of the Committee was small, and the whole position somewhat uncertain; however, the faith that gave birth to the Association was justified by events. Students came forward for training and there was a demand for their services afterwards. Delhi was chosen as the site for the new Health School for several reasons, the principal of which was that in Delhi a maternity and child welfare scheme was being carried on by two English women who were trained workers, and who were able to give valuable assistance in the practical teaching. This Delhi scheme had been initiated by Sir Pardey Lukis from funds given by the Government of India. He felt that Delhi, as the capital of India, should take a leading part in the development of child welfare in India, and he was prepared to urge that money should be spent on a scheme for it. The two workers alluded to were appointed and paid directly at first, though afterwards the money was given to the municipality for the purpose. Training and supervision of *dais* were the first tasks undertaken but child welfare centres were soon initiated, and by 1918 two were thoroughly established and the ladies in charge were well known and trusted.

Just at this time two things occurred both of which

proved a great stimulus to the Child Welfare Movement. One was the attention paid by Lady Chelmsford, wife of the Viceroy, to the subject, and the other was the Maternity and Child Welfare Exhibition, held in Delhi in 1920.

As has been noticed elsewhere, Lady Chelmsford immediately on arrival in India, interested herself in affairs affecting the welfare of the women and children of the country. Her concern in the matter showed itself in a variety of ways, and especially on the Dufferin Fund Committee. But Lady Chelmsford soon saw that far more was needed than existing organizations could cope with if child welfare work was to flourish and be really effective. At the time of which we write it must be remembered, scattered small societies were carrying on their work without any help from a central organization and without any expert advice or control. Lady Chelmsford's first move was to address the provincial Governments on the subject, as she wished to finance the work from state revenues. The various Governments, however, while all professing sympathy with the proposals, declined to promise financial aid. It was regrettable, but not altogether surprising, for it was a difficult time for India as for the rest of the world, with the war not yet ended, prices soaring and political unrest everywhere. As a result of this rebuff, Lady Chelmsford decided that a general appeal must be made for a charitable fund to promote child welfare work. This appeal, which was launched in the autumn of 1919, met with a good response, and the Lady Chelmsford League for Maternity and Child Welfare was founded. Lady Chelmsford announced the founding of the League at the Delhi Exhibition in 1920.

The idea of this Exhibition originated with the Association of Medical Women in India, but it outgrew its parents' ideas rapidly, and finally ended by being held on a scale undreamt of by the first promoters. The organizing work of the Exhibition was done in the

Dufferin Fund Office and involved an immense amount of labour. Sir Henry Sharp, then Secretary of the Education Department, was the Chairman of the Exhibition Committee. He spent a great deal of time and thought over the Exhibition and secured a grant of Rs. 5,000 for it from the Government of India. A local committee was formed which worked enthusiastically to make the Exhibition a success; and the success was real and undoubted. Exhibits and visitors came from all parts of India, and all who came were astonished at the possibilities the Exhibition placed before them. We cannot attempt a description of the Exhibition, but it was doubtless not unlike those held all over the world, with this difference, that instead of being held in a stuffy hall, it took place in a beautiful garden under cloudless skies with no threat of rain to mar the prospect. Looking back, it is clear that the Exhibition was a remarkable effort and that it had an immense effect in stimulating people to take up child welfare work. One feature of the Exhibition which is worthy of notice, was the harmonious working together of Indians and British for a common purpose, and this in less than a year from the time when race feeling had been at its highest. The same has been true ever since and was most noticeable at the Delhi Child Welfare Conference of 1927. Differences of opinion are always to be found but they are not on grounds of race; when child welfare takes the field, politics turn tail.

The first Chairman of the Lady Chelmsford League was, again, Sir Henry Sharp. Child Welfare in India owes him a big debt of gratitude on account of his keenness, the time he gave to the organization of the work, and the help he secured from Government while Secretary to the Education Department.

The income from the Fund collected by Lady Chelmsford was about half a lakh of rupees (£3750). The first idea was to give grants-in-aid to places undertaking child

welfare work, these grants to decrease as local help became available through interest created by successful schemes. In this way money would be liberated for the newer efforts. In addition, literature was to be published, a quarterly journal was started, and the organizing secretary, a medical woman, toured India to create interest in the objects of the League. Things seldom work out in practice precisely as their promoters visualize, and though the main objects of the League have never been abandoned, the methods of working them out have become considerably modified. In the first place, the beautifully logical scheme of decreasing grants failed to operate according to programme. A committee, once given a grant, clung on to it with great tenacity, and it was soon apparent that there would not be enough to go round. An undue proportion of the income went on overhead charges. This was met by amalgamating the Office of the Lady Chelmsford League with that of the Dufferin Fund, while the Secretary of the latter became the Honorary Secretary of the Lady Chelmsford League. The circumstance, however, which altered the policy of the Lady Chelmsford League most radically, was the entry of the Indian Red Cross Society into the field of child welfare work.

The Indian Red Cross Society had collected considerable amounts of money during the war which yielded a good income to the Society. When peace came and the activities, for which the Red Cross primarily existed, were suspended, the Society began to cast about for an object on which to spend its surplus. Child welfare work suggested itself, and naturally had a big appeal and a big claim. This led, however, to there being two organizations working for the same end, and they occasionally clashed. Everyone felt this to be regrettable, so an arrangement was made by which the territory was divided and each society became responsible for certain areas. The Lady Chelmsford League continued to give grants to places outside Governor's

provinces (e. g. the North-West Frontier Province and Rajputana) and Indian States, while the Red Cross Society confined its operations to Governor's provinces. In addition the Lady Chelmsford League aids Health Schools in Governor's provinces.

Apart from these grants the main work of the Lady Chelmsford League may be summed up in the word propaganda. This includes the preparation of literature of all kinds, books, pamphlets, leaflets in several vernaculars, films, lantern slides, posters, maternity outfits, infant's bundles, and so forth. A journal is published quarterly. In 1924 Lady Reading, during Lord Reading's viceroyalty, started the 'Baby Week' Movement in India. The first Baby Week was organized by the Lady Chelmsford League and Indian Red Cross Society jointly, and at its conclusion a National Baby Week Council was formed with the Secretary of the League as secretary. Later the Council was merged with the League and Baby Week is now one of its activities. It is celebrated with great enthusiasm and has been a most valuable additional means of propaganda. It is carried on in much the same way as in England, the central office supplying literature, posters, etc., as well as advising the promoters as to the best methods suited to particular localities. In addition, the League possesses a travelling exhibition which can be sent on request to any part of India. This summary does not exhaust the work of the League. The office acts as a sort of central bureau for all matters connected with child welfare. It endeavours to collect information about the work all over India and record it, and its advice is sought for even outside the bounds of India proper, e. g., in the Malay States and East Africa. It is able to supply expert advice on the problems of child welfare work and is in touch with what is going on all over the world. It performs, in short, the work which in another country would be under the Ministry of Health.

When the League was founded the Association mentioned above for the provision of Health Visitors and Maternity Supervisors became merged in it, and this meant that the Health School at Delhi passed into the hands of the League. Lady Chelmsford was keenly interested in the Health School and realized how necessary it was to the continued progress of the work.

It is time now to notice in detail the formation of the other health schools and the further evolution of the Delhi one.

The Health School at Delhi admitted a small number of pupils (about twelve). This was partly because accommodation was limited, but also because it was held, and rightly, that practical teaching could only be adequately given to a few pupils. The idea of a school of this size supplying the needs of India was patently absurd, but there were other reasons why it was desirable to have schools established elsewhere. Students coming to Delhi from distant parts of India did not always know the local vernacular (Hindustani). This made it difficult for them to take full advantage of the practical work. The conditions of living and customs differed perhaps from those obtaining in their own province. And finally, as the majority of students accepted scholarships from the League and were under agreement to serve the League for three years, it was often necessary to place students far from their own homes and normal surroundings as long as the Health School attempted to meet the needs of the whole of India. The League was therefore prepared to give grants to schools which might be created in other places.

The first school outside Delhi was at Lahore. The Punjab Government, as has been noticed elsewhere, was the first to appoint a woman assistant to the Inspector-General of Civil Hospitals. The second person to hold this post, Dr. Agnes Scott, organized the Punjab Central Midwives Board, and then set about the development of

child welfare work. She felt that the needs of the province would be best served by the establishment of a school which would train girls especially for work in that province. She obtained the services of two English women, who threw themselves into the work with enthusiasm and have achieved great success. At first the School was financed by the Chelmsford League grant plus a grant from the Provincial Government. Since April 1927 the Government has taken over the School entirely and is responsible for all the expenses. This is an act of real statesmanship and should prove a landmark of progress for the future. It has been made possible by the present flourishing condition of the Punjab revenues and by the keenness and wisdom of the authorities concerned. The School trains Punjabi girls for work in their own province. This is a task that can be adequately tackled, and the workers are turned out very nearly as quickly as the districts in the province are ready for them. One of the staff tours the province in the interests of the work, inspecting the centres and encouraging and advising the workers who are her own pupils. A great degree of unity and control is thus achieved. The two ladies at the head of the School are now Government servants, and this gives them more authority in the eyes of the public. They work immediately under the Director of Public Health and are virtually responsible for the child welfare work of the province under him.

In Bengal a Health School exists at Calcutta of which the main expense is borne by the Red Cross Society. The teaching and accommodation are excellent, and the practical work is secured by attendance at the Red Cross clinics in the city. The need for child welfare work is great in Bengal, but unfortunately the profession of Health Visitor had not attracted many recruits there; hence the numbers trained in the School have so far been few.

The Madras Health School is organized by the Madras

Maternity and Child Welfare Association which bears part of the expense. Practical experience is gained at the Corporation Child Welfare centres. The number of pupils is kept small but recruiting is not difficult. Recently there have been rumours that the Provincial Government means to undertake the training of Health Visitors, but this has not yet materialized.

At Poona, in connexion with the Seva Sadan, the nurses who are under training at the Sassoon Hospital receive a certain amount of instruction in Public Health subjects.

At Nagpur, Central Provinces, a Health School has been started to supply workers for that province. Women's education is however, very backward in the Central Provinces, so that recruiting of better class' women is difficult.

The Delhi Health School has now quarters of its own which were built mainly by the gift of Lady Reading from the funds at her disposal, and the School is styled the 'Lady Reading Health School'. The buildings have ample teaching and residential accommodation, and there is a 'model' centre close by where most of the practical teaching is done. The course of study is based on the syllabus of English institutions.

Such in brief is the position with regard to the training of Health Visitors. The total number studying in the various Health Schools is less than fifty; and this for a number of births per annum which exceeds eight million!¹ The number of qualified Health Visitors now at work in India cannot exceed 250. The number of births in England and Wales was rather under 700,000 (in 1926) and the number of 'whole or part time officers engaged in health

¹The figure was 8,395,679 (for British India) for 1926, a birthrate of 34·77. (*Annual Report of the Public Health Commissioner with the Government of India, 1926.*)

visiting' was 3963.¹ The two sets of figures placed in juxtaposition would be laughable were they not really tragic.

In view of the fact that for proper child welfare work a supply of adequately trained workers is necessary, the reader may ask why further efforts are not made to train such workers and why they are not forthcoming?

The answer to this question is rather complicated, but it is necessary to try and understand the difficulties of the position.

In the first place the schools, with the exception of the Punjab, do not receive much support from the Central or Provincial Governments. Those at Delhi and Nagpur receive a small proportion of their funds from grants;² those at Calcutta and Madras are supported by voluntary contributions. There are reasons for this, but the fact remains that Governments do not leave their sanitary inspectors to be trained by voluntary societies; they bear the whole expense of training them as well as training medical officers of health. It is true that the cost of training for Health Visitors' work per student, is high, and that all sorts of other educational projects are waiting and clamouring for money. There are, however, technical departments, such as agriculture and engineering, in which the training is also expensive and which yet are supported by Government. And it is quite certain that training at the Health Schools will not be properly standardized until there is adequate support from Government which would carry the right of inspection.

Money, however, is far from being the sole difficulty

¹ *Annual Report of the Chief Medical Officer of the Ministry of Health, 1926.*

² See for Delhi p. 144 above. In the case of Nagpur, Government gives a block grant to the Red Cross Society which is responsible for the School.

in connexion with the supply of Health Visitors. One has to realize that in every profession which women take up in India there is lacking a supply of the *right kind* of candidate. And in no profession more than that of the Health Visitors. The number of girls who reach the High school stage in India is very small,¹ and of these all do not enter professions. From among those who do, the majority choose either medicine or teaching, which are considered more honourable occupations, and of which medicine, at least, carries the prospect of better financial rewards. The nursing profession in India attracts few girls of good education who might possibly take up Health Visiting afterwards, and their own profession is in any case anxious to keep them. The qualities required for the work, moreover, make the selection of the right candidates a matter of difficulty. Character and experience of life are essential, but examinations have also to be passed. Older women taking up the work may have the former, but find the book work hard: whereas the young girl who can pass examinations with ease may not commend herself to those amongst whom she works by reason of her youth and inexperience. Health Visitors have to live a life that is quite foreign to the ideas concerning women in India. They must walk alone in the streets, go to the houses of strangers, mix with all sorts and conditions of people and perform tasks which may be regarded as menial and degrading. Is it surprising that, in spite of the good rates of pay usually offered to Health Visitors, there is difficulty in filling the Health Schools with the right people?

A considerable amount of activity is still carried on by untrained workers, some of it quite satisfactory. But no one can claim that this is an ideal state of affairs. Health

¹ J. Coatman (*Statement of the Material and Moral Progress of India, 1927*) relates that 174,000 girls are studying in 'secondary institutions'.

Visiting is as much a special job as teaching or nursing, and women must have a definite training for it if they are to perform the work adequately. The principles of preventive medicine have to be understood and accepted by the workers, and that is no easy task in a country like India where one might almost say illness was the rule and health the exception, or at any rate the ordinary person thinks of disease as inevitable.

It may be asked, what is the place of medical women in child welfare work in India? It is certainly not what it is in England. Medical women are not being used as they should be by the movement. In a great many cases the Health Visitor is doing what would ordinarily (in England) be done by a doctor, that is, she holds the child welfare clinic or infant consultation. This is sometimes because no medical woman is available, sometimes because the local doctor has no time or is not interested in the work, sometimes because it does not occur to the promoters of a scheme that the aid of a doctor is necessary! Of late some of the larger municipalities have appointed medical women in charge of their child welfare schemes; the Madras Corporation, for example, has done so for years, with excellent results. But though at first sight one might welcome such a move, there are one or two drawbacks to it. In the first place the idea underlying it in the minds of committees is often one of so-called economy. They have not grasped the nature of the work and see no objection to the child welfare clinics undertaking curative work. So they think it cheaper to have a doctor who can do both prevention and cure. The results to the work are, as may be imagined, disastrous. In the second place, committees accept for purposes of this kind women who have had absolutely no training in, or experience of, the work, who have sometimes been in ordinary practice for years, or else who are freshly qualified. What is almost worse, those

appointed do not always take up the work with genuine enthusiasm for prevention. This is equally fatal. Committees are not altogether to blame in the matter, as trained or experienced candidates scarcely exist. It is very necessary to provide some training for such officers, and this is where Government might take the lead, if only to show that child welfare work is a speciality as much as any other branch of preventive medicine. The employment of medical women as part time officers would be hastened too if Governments would pay fees for their attendances at clinics as in England. The Red Cross Society in Calcutta has no medical woman in charge of its work as a whole, but it pays a fee to different doctors for sessions at the various clinics and this system works well. It could be applied in many places. Government aid would mean recognition of the principle involved which would be a great advance.

With the exception of the few places where whole or part time medical women are employed, the work is carried on by Health Visitors who may or may not have been trained. These work under committees which are usually those of a voluntary society, though officials are represented. The financial resources of such societies are voluntary contributions and grants-in-aid. The latter may be given by municipalities or district boards, or by the provincial Government or provincial branch of the Red Cross Society. Local Baby Weeks often raise money as well. The Health Visitor's work consists mainly of three things:—Visiting in the homes of the people, holding of child welfare clinics, and training of *daïs*. The Health Visitor has, in the latter connexion, to do a certain amount of maternity work. Home visiting is usually made on the basis of birth lists which can be supplied by the Medical Officer of Health, or, where he does not exist, the authority responsible. Registration of births is, however, very faulty and the lists are often late in reaching the

workers. Notification of births does not exist.¹ The work of home visiting is educational in character, and a successful Health Visitor has a good deal of influence among the women. At the clinics too, the education of the women in mothercraft is regarded as very important. How difficult this is among illiterate people can be imagined. Simple remedies are given at almost all clinics, and there is milk distribution in many. Warm baths or bathing facilities are a favourite attraction, and a helpful one for those whose houses and incomes do not make bathing at home easy. Some centres have classes for sewing or knitting or simple nursing and first aid. A few have started antenatal clinics. Different places naturally develop different activities. Record keeping is very poorly done on the whole, partly owing to the poor education of the workers, but also to the want of a directing authority to ensure a standard for each province. The nature of the work is thus not dissimilar from that in England, but there are one or two important differences. There is the absence of aid by medical women already alluded to. A striking fact is the absence of the voluntary worker, except perhaps in the Madras Presidency and in Calcutta where education is more advanced. The committees or associations organizing the work may be voluntary in character,² but they employ a paid worker. Even in

¹That is, the obligation to give information regarding a birth to the Medical Officer of Health of the town, urban district or rural area, within thirty-six hours.

²This voluntary character is often more a question of management than of bearing actual financial burdens. Many committees derive most of their income from municipalities, district boards, or other authorities, who do not wish to undertake the work themselves, but feel vaguely that 'something ought to be done', and are glad to hand over a sum of money to a committee in order to be relieved of the responsibility of undertaking the work themselves.

England the proportion of work carried on by voluntary societies is still considerable, and the Minister of Health considers this to be 'an indispensable and invaluable contribution'.¹ This help is not available throughout the greater part of India and it is a tremendous loss to the movement. Not only is there loss in the actual amount of work, but the spirit which volunteers bring is also lacking, the keenness and personal sympathy which prompt people to undertake such work. There are countless ways in which voluntary helpers could be of assistance in child welfare work in India and it is sad that women cannot help each other in this way where help is so much needed. It is not suggested that Indian women are lacking in sympathy with the work—very far from it—but lack of education, social customs and lack of leisure place serious obstacles in their way. The class of single women with moderate means is non-existent in India. Wives of officials, both Indian and English, are constantly transferred to other places, or go to the hill stations, so that their help is seldom continuous.

For the adequate further development of child welfare work the most urgent thing at the present time seems to be the creation of posts for whole time child welfare workers who would devote themselves to organizing the work in each province. Where this has been done in one form or other the results are apparent in the extent and quality of the work. Unless and until such officers, who should be medical women with special qualifications or experience, are appointed, child welfare work will continue to 'muddle along'. It is of no use to say of one province or another that the work is not sufficiently advanced to justify such an appointment. In a case like this, if the provinces wait till

¹ Quoted from an address by the Right Honourable Neville Chamberlain at the Maternity and Child Welfare Conference, London, July 1927.

there are enough child welfare organizations to inspect or supervise before making the appointment, the officer concerned will have to spend the first few years of her term of office in undoing mistakes. As it is we see in India, unfortunately, a great deal of wasted effort. Committees have very seldom expert knowledge, and no amount of enthusiasm and good will can replace knowledge. Workers are inefficient and lacking in initiative; they fall easily into grooves out of which there is no one to help them. Money is spent on wrong objects simply from ignorance and little or nothing is achieved. If expert advice were available, and regular visits of inspection paid, these things could be avoided. Why wait for further mistakes to be made? It certainly does not sound like 'preventive' medicine! Besides, such work would not consist merely of inspection and supervision. At first at any rate, it would be actively creative. The amount of work waiting to be done is boundless, but it needs fostering, nursing, careful and sympathetic handling and continuous watching. At present in most provinces there is no one to do such work adequately, with the result that many schemes are strangled at birth, and others drag on an aimless existence, because there is not courage to close them down. Those with experience of the work in India know well how much of money and effort is wasted by municipalities and voluntary societies whose policy no one overlooks, whose work no one guides and whose staff has no one to advise and control it.

It must be recognized, however, that control means expenditure. It is only the giving of grants-in-aid that secures this to the Ministry of Health in England. Provision will have to be made in the budget of the Directors of Public Health for such grants. In most cases not only grants but also inspection and advice would be welcomed. The sums expended will not be enormous at first, and the amount of benefit will be disproportionately

large. In addition to the gain to the health of mothers and children, such schemes will have the advantage of giving us a great deal of information which is at present lacking. If the work were more centralized, proper record keeping could be insisted on, and a more or less uniform system evolved for each province and even for the country as a whole.

The appointment of officers to the Public Health Departments of the provinces as described here would probably lead to a similar appointment under the Government of India. This is a difficult question owing to the fact that medical subjects, including Health, are 'transferred', and so provincialized. Health, however, is a matter in which all have something to gain from co-operation and centralization. Diseases such as plague and cholera recognize no provincial boundaries, and child welfare problems do not differ so greatly from province to province. There would be great advantages in having a central office which would act as a bureau of information and be able to give advice and help to the provincial child welfare officers. Such a bureau would also keep in touch with what is going on in other countries and could study the difficult subject of methods of propaganda for the benefit of India as a whole.

From what has been written above it will be seen that the Central and Provincial Governments in India are leaving the major portion of the organization of child welfare work to voluntary societies. In only one province (the United Provinces) is a medical woman, paid by a local Government, organizing child welfare work, and even she does not give her whole time to it. No province gives grants-in-aid on anything approaching the fifty per cent grant system in England, and no investigations are undertaken or paid for by Central or Provincial Governments

into the cause of Infant or Maternal Mortality.¹

Contrast this with the five medical women officers employed at the Ministry of Health in England for maternity and child welfare work, the fifty per cent grant-in-aid to all approved child welfare schemes, the regulations for Health Visitors' training, and the researches undertaken by the Ministry direct and the Medical Research Council.

It may seem as if difficulties and obstacles to progress have been dwelt on too exclusively in this chapter. This is natural when the work is so undeveloped and the various hindrances are so very real. But it would not be a fair picture of the situation to say that it has not hopeful aspects. As in the case of the work among the *dais*, wherever the work is being undertaken from the right standpoint of health and prevention, (and not, as is often seen, charitable doles and inefficient medical aid) and worked by women of the right character, it is successful in the best sense of the word, and need give rise to no feelings of depression, but to hope of a better future. We must be prepared to find progress very slow, but it is sure and it is better to progress slowly on the right path, than quickly on the wrong one.

¹ With the exception of the investigation now being carried on at the Haffkine Institute, Bombay, which was started by a voluntary worker, and is financed by the Indian Research Fund Association, Simla. It is temporary in its nature, and does not receive any assistance from the Local Government.

CHAPTER TEN

MISCELLANEOUS ACTIVITIES

Administrative Work.—The opening of the field of administrative work to medical women was initiated by the Punjab Government. In the year 1913, at the instance of the then Lieutenant-Governor, Sir Louis Dane, it had made an application to the Government of India for permission to appoint a medical woman as Assistant to the Inspector-General of Civil Hospitals, for the inspection of all hospitals and other medical institutions officered by women and aided by Government or local bodies. The Government of India delayed its consent on account of the imminent formation of the new Service; but the Central Committee took the matter up as soon as the Service was formed, and Dr. Margaret I. Balfour, one of the original members of the Service, was appointed and took up the duties of the post in September 1914.

Dr. Balfour was transferred to the office of the Central Committee in 1916, and Dr. Agnes Scott took up the post of Assistant to the Inspector-General of Civil Hospitals early in 1917 and held it until she succeeded Dr. Balfour in the office of the Central Committee in 1924. As the medical work in the Punjab is very typical of that over the greater part of India some account of it as seen by these two medical women may be of interest.

There are in the Punjab three types of women's hospitals—(1) Mission hospitals, with British or American women holding the higher posts of the medical and nursing staffs. Something has been said about mission hospitals earlier; here it need only be said that in the Punjab they are a very efficient body and exercise a great influence on the welfare of the people. (2) Non-mission hospitals of the

same standard. For these the Punjab is badly off, the chief representative being the Lady Aitchison Hospital at Lahore, one of the earliest of the Dufferin hospitals. (3) The women's departments of Civil hospitals, some of which are under the charge of women Assistant or Sub-assistant Surgeons working under the Civil Surgeons.

In India all Government hospitals and all aided hospitals are inspected at least once annually, the larger ones by the Inspector-General of Civil Hospitals and the smaller ones by the Civil Surgeon of the district. Medical women generally welcome these visits which give them the opportunity of bringing their needs to the notice of Government, but on the understanding that, owing to the need for respecting purdah, only those parts convenient will be inspected. But the Inspector-General and the Civil Surgeon, though experts in general hospital administration and perhaps first-rate surgeons, have not experience of the special needs of women's hospitals, which, in a country like India, where the relative positions of the sexes are so defined, differ greatly from those of men's hospitals.

A question of great importance for women's hospitals in any part of the country where purdah exists, is, how to take full precautions so that purdah women will freely attend and yet to arrange that the hospital is easily available for the large class of women who are not purdah, but want to be attended by their own sex.

Arrangements must be made so that the women can enter the hospital or dispensary privately, and that only women attendants should be allowed to enter the wards. Yet even purdah women wish to see their own male relatives and so careful organization is needed. Lack of this, in parts of the country where purdah is kept, means that the hospital is not much used by the class of people for whom it is most necessary.

All these and other questions are matters on which the

Inspector-General and Civil Surgeon have little experience, and yet they are matters which greatly affect the success and well-being of the women's hospital. It is in such matters that a medical woman inspector, going from place to place, learning the difficulties and seeking the solutions, becomes an expert adviser and of great help to the hospitals she visits. She is also able to bring to the notice of the Government really important needs which, if known, can be remedied and can prevent Government money from being wasted on merely spectacular enterprises. She is (or should be) well acquainted with the needs of the women, understands their domestic conditions and difficulties, and is able to initiate schemes for their more adequate treatment.

In the Punjab, as in most provinces of India, plans for model hospitals are kept by the Inspector-General of Civil Hospitals from which selection may be made when district or municipal hospitals are built. In drawing up these plans no thought had been taken for the special requirements of women's hospitals—labour ward, facilities for gynecological examination, nurses' or matrons' quarters, privacy. Hence the woman Sub-assistant Surgeon, handicapped already by imperfect education and perhaps by insufficient experience, had to organize her work in an inconvenient building and with no idea how to adapt it. This was a matter in which the woman inspector could often help her by suggesting some slight building addition or alteration of the existing rooms. After some time she drew special plans for women's hospitals which were incorporated with the model plans in the Inspector-General's Office. At a later date Dr. Balfour and Dr. Scott published a booklet on women's hospitals in India, with specially drawn plans, which is obtainable from the Office of the Countess of Dufferin's Fund.

The Punjab Government contributed largely to the Women's Medical School at Ludhiana which was originally a

purely missionary institution, but which from 1916 onwards was recognized as the Punjab Medical School for Women. The Assistant to the Inspector-General was one of a special committee for the annual inspection of this school.

The conditions of childbirth in the Punjab were as wretched as in other parts of India, women being attended by illiterate *dais* or by trained midwives, who were subject to no supervision and were often very careless in their methods. Many of the Civil hospitals in the Punjab had such midwives attached, whose duties were to attend cases of labour in the town when called, and to look after the women patients in the female wards. Usually they had no outfits and apparently went to their cases emptyhanded. It was almost worse in the one or two cases where an outfit was possessed. One such woman was found with a leather bag, old and cracked, without lining, containing a miscellaneous collection of articles, rubber enema syringe with vulcanite nozzle used for enemas and douches indiscriminately, rubber catheter lacking a stilette, bottles without labels, lumps of cotton wool which had once been white and aseptic, a bottle of vaseline with the top missing, mysterious bundles of country drugs, a loose hank of what was once surgical silk,—all loose, inextricably mixed and coated and surrounded with filth. The articles had no doubt been many times deposited and taken up from the dirty mud floor with unwashed hands, and the idea of sterilization had never entered the owner's head. These midwives were quite unsupervised. For one thing the male Assistant or Sub-assistant Surgeon who was their immediate superior, had little knowledge himself of midwifery and especially of practical midwifery. Also, he considered the midwife's work outside the hospital was her own private affair, for which the hospital was not responsible.

The Assistant to the Inspector-General got up 'refresher' classes for these midwives. Courses were

held in different parts of the Punjab, each attended by about eight midwives, who were given leave from their hospitals. A room in the dak bungalow was borrowed, and the work went on for five or six hours daily for ten days. The women were taught to wash their hands, prepare lotions, sterilize their instruments, put up packets containing what they needed for their cases. Imaginary women were delivered, beds were made, babies were bathed, cords were tied and cut, etc., etc. It was amusing to see how quickly the women responded, how enthusiastic they got and how critical of any lapse among their associates. Finally, model outfits, sterilizable, were prepared, packed in tin boxes, and bought by the hospital employing the *dai*, for her use. At first there was a tendency to save the outfits as being too good for use. On one occasion, when the Assistant was inspecting a hospital, the midwife brought her outfit for inspection and a dressing forceps was found to be missing. The woman was anxious to show she was not to blame and hastened to explain that the 'Babu' (Assistant Surgeon) had taken all the appliances from her after last inspection and locked them away in his cupboard, and had only brought them out that morning before the Assistant's arrival!

There was no uniformity in the training, and the certificated midwife might be very well or very poorly trained. In 1917 a Central Midwives' Board for the Punjab was formed which instituted rules for the training of midwives throughout the province, conducted examinations, maintained a register and drew up rules for their practice. The registration was optional, that is, midwives were not obliged by law to register.

As already mentioned, there were in the Punjab a number of women Sub-assistant Surgeons attached to the women's sides of Civil hospitals. These were often young Indian women and were sometimes the only women on the hospital staff. It was not always an easy position, for in

India the idea dies hard that a woman who works is necessarily a light woman and fair game for any adventurer. The Civil Surgeon would not of course sanction any such idea, but it was a difficult matter for the young women to appeal to him. Moreover, it might not be members of the staff she had to fear, but people outside the staff, perhaps members of the municipality, who had power to dismiss her if she dissatisfied them. The visits of the woman inspector were a real help to such women. After some years a scheme was drawn up for a Provincial Service of women Sub-assistant Surgeons on the same lines as those for men. As a result of this, women were to be no longer employed directly by local bodies, but by Government, which would lend their services to the local bodies and would have the right to transfer them when desirable. They were to be regularly visited by the woman inspector and were to be assured regular promotion and pension. Unfortunately, this scheme never materialized, as the Punjab Government, as related later, abolished the post of Assistant to the Inspector-General who would have administered the scheme, just when it was to be put in operation. Services, somewhat similar to that outlined above, exist in Madras and the United Provinces.

The moral question in Indian hospitals is no imaginary danger. Although in some parts of the country and among some classes, women are becoming emancipated, the old ideas prevail throughout the greater part of the country; and young women who take up independent work, or a woman who goes alone to a mixed hospital, is looked upon as of doubtful morality. A Civil or Assistant Surgeon who desires to keep order, and has his eyes open, can do so; but otherwise, there is apt to be trouble. The writer remembers one mixed hospital—not in the Punjab—where the woman Assistant told her she never went to the wards after a certain hour in the afternoon, because she never knew what she would find. It was a regular duty for the

peon (messenger) to select likely women patients for his superior officer's pleasure. This woman Assistant was herself respectable, but said she could do nothing, and that she could only remain in her post by shutting her eyes and ears to what went on. Another hospital—in the Punjab—with excellent women's wards had an extraordinary dearth of women patients. The Assistant Surgeon said this dated from an 'unfortunate incident' in his predecessor's time, which he described. The details were told more fully by the missionaries. A Christian woman needed hospital treatment and a missionary lady persuaded her to stop in hospital. A single ward was given her with others on each side. Each night the woman on her left was visited for immoral purposes and one night a visitor came to the Christian woman's room and began to force the window. She escaped through a window at the back and, as may be believed, the missionaries ceased to advise their protégées to undergo treatment in that hospital. It must not be thought that incidents like that are common in Indian hospitals—they are probably rare. But so long as they are liable to occur—and that liability will continue until education and the emancipation of women are much further advanced than now—is it not essential that every province should have a medical woman inspector with an official position, which enables her to speak out fearlessly, and whose very presence at headquarters will diminish the likelihood of such scandals? We hear the scheme for subordinate medical women workers is now about to be initiated by the Punjab Government. Up to the present time we have not heard that it is proposed to renew the appointment of a responsible medical woman to administer it, and inspect the women workers of this service. If such a step is not taken it will be a matter for grave regret.

The advantage of having a woman Assistant to the Inspector-General of Civil Hospitals was found when the

Child Welfare Movement spread into the Punjab. A branch of the All-India League was formed in 1921 and the Assistant became the honorary secretary.

The scheme, which was described in the last chapter, has proved a great success, largely due to the good fortune that at that critical time the province possessed a woman adviser thoroughly acquainted with women's medical and preventive needs.

In 1919 there were thirty-five appointments for medical women under local bodies in the Punjab—four for women with British qualifications, six for women Assistant Surgeons and twenty-five for women Sub-assistant Surgeons. There were twenty mission hospitals of which eighteen were under medical women with British or American qualifications, and two were under Sub-assistant Surgeons. 32,994 in-patients were treated during the year in these women's hospitals.

The year 1924, when Dr. Agnes Scott succeeded Dr. Balfour at the Central Office, was unfortunately a time of great financial stringency in the Punjab and the local Government, although regretting the necessity, found itself obliged to discontinue the appointment, at least for a time.

A similar appointment of Assistant to the Inspector-General of Civil Hospitals was made in the United Provinces in 1917. Dr. Catherine Wickham held this post for two years and was succeeded by Dr. Shirin Commissariat, who still holds the post. In the year 1920 the United Provinces had twenty-five hospitals and dispensaries staffed by women and affiliated to the provincial branch of the Countess of Dufferin's Fund. It had in addition thirty-four hospitals and dispensaries staffed by women under the management of district boards and other local bodies. Altogether seventy-six medical women were employed, six belonging to the Women's Medical Service, one other with British qualifications, seventeen Assistant Surgeons and

fifty-one Sub-assistant Surgeons. There were sixty women students at the Agra Women's Medical School, fifteen compounders were under training at different hospitals and fourteen pupil midwives. There were in addition a number of mission hospitals, some receiving grants from Government.

Dr. Commissariat, besides inspecting the above work, has organized a considerable amount of maternity and child welfare activity in the province. She has also organized many Baby Weeks, where she herself attends and delivers lectures.

Military Service:—Another avenue in which medical women found employment was that of military service during the war. At the outset, in 1914, Dr. Annette Benson, then President of the Association of Medical Women in India, had offered the services of its members to the Viceroy, and had received a decided but unqualified refusal. She was thanked for her offer, but was told that war work was not suited for 'feminine hands'. In 1916 the Scottish Women's Hospitals, knowing the terrible needs of our troops in Mesopotamia, offered to provide and staff a hospital boat on the Tigris, but this also was refused by the Government of India. Opinion, however, had changed in England, if not in India, as to the nature of the tasks fitted for 'feminine hands', and early in 1917 strict orders were received from the War Office that the services of medical women in India were to be employed in every possible way. The military authorities consulted the Joint Secretary of the Dufferin Fund as to how the services of medical women could be obtained. Just at this time Dr. Amy Lillingston of the Church Missionary Society, Bangalore, having heard that medical women might be called for, came up to Simla to press the point, that if medical women were employed they should be carefully selected and that the Association of Medical Women in India should organize the supply. A joint committee of the Association of Medical Women in India and of the Countess of Dufferin's Fund was formed,

consisting of Dr. Lillingston, Dr. Agnes Scott, Dr. Margaret Mackellar and Dr. Margaret Balfour. This committee arranged terms of service with the military authorities, sent out notices to medical women, received applications and made selections for service. The medical women were engaged as civilian practitioners, and during the remainder of the war two units were kept up to strength, one in Bombay, the other in Secunderabad. At the conclusion of the war the following letter was received :—

‘From The Director, Medical Services in India, Simla, to the Secretary, Association of Medical Women in India, 22nd April, 1919.

‘His Excellency the Commander-in-Chief desires me to convey to you, as Secretary of “The Association of Medical Women in India” his thanks for the assistance which you, and your Association, have rendered to the authorities in India during the war. I wish also to thank you on my own behalf for the Association’s ready and willing help in the time of stress we have recently passed through. You have placed at my disposal twenty-seven medical women for duty in “Women’s units attached R. A. M. C.” and for certain other duties. Will you please convey to these ladies my thanks and my deep appreciation of their valuable services.’

Research :—Research by medical women on matters connected with childbirth and infancy has not been altogether neglected, although it has not received the attention it should have done. This will not be surprising to anyone who has read the preceding chapters of this book. We have seen that in the early days medical women were obliged to devote themselves to the building of hospitals, to the raising of money, to a vain search for staff, and in the end to do most of the work with their own hands.

Then, when trained staff became available, there was still not money to employ it.

The opening of the Women’s Medical Service relieved

some local bodies of a part of their expenditure, and made it possible to employ improved staff and obtain a better standard of work ; but the immediate needs of the hospitals, of the different teaching institutions, of the training of midwives, and of the institution of the child welfare work, put properly organized research for a time into the background.

And yet there is no doubt India is a country which would form an ideal field for research on the whole question of the conditions of pregnancy and the causes of infant mortality in tropical countries.

In India we have a number of different communities living side by side, some of their conditions of life being similar, others, such as diet, religion and domestic habits, very different. There are a number of diseases, which, if not specially caused by pregnancy, are at least specially connected with it. Anaemia—osteomalacia—eclampsia—puerperal beri beri—sutika (a puerperal disease dreaded in Bengal)—are all frequently found, some confined to certain parts of the country, some confined, or almost confined, to certain communities. It is estimated that at least 100,000 mothers die annually of childbirth in India and the greater number from disease acquired during pregnancy. Infant mortality, throughout the country, is extraordinarily high. From one third to one half of the total infant mortality during the first year of life, occurs in the first month. This seems to indicate that it is due to antenatal causes, probably connected with the above-named diseases. Organized research as to the causation of these diseases would save an infinitude of life.

A résumé of the research carried on by medical women in India is as follows :—

‘ A Contribution to the Study of Osteomalacia in India ’ by Agnes C. Scott, M.B. (Lond.), W.M.S., was published in the *Indian Journal of Medical Research*, 1916-17. This gave a general survey of the geographical distribution of

osteomalacia in India, of its epidemiology, its clinical symptoms, and described eighty-three cases personally investigated. Special attention was drawn to the connexion with purdah, although strict purdah had not been observed by all the patients affected; to the fact that it was commonest among Hindu banias in north India and among Bohra Mahomedans in west and central India; and that it did not appear to occur at all in the south, with the exception of Mysore State. Waters from affected and non-affected areas were chemically examined, but no marked difference was found, either as regards the calcium content or contamination.

A 'Note' by the same author in the same *Journal* gives the result of the estimation of the calcium content of the urine in one hundred normal controls and in eighty-four persons suffering from osteomalacia. It was found that the osteomalacia patients who were pregnant or lactating had a slight deficiency of calcium but those who were neither pregnant nor lactating had a slight increase over the normal mean. The majority of the patients examined were in the chronic stage and possibly the normal equilibrium of calcium metabolism had been somewhat re-established. The calcium content of the blood was estimated in a hundred normal controls and in thirty-seven cases of osteomalacia. It was found the calcium content was raised in osteomalacia independently of the presence of pregnancy or lactation.

A paper on 'Late Rickets and Osteomalacia in India' by Grace Stapleton, M. D., B. S. (London), W. M. S., was published in *The Lancet*, May 30th, 1925. The writer described seventy-three cases followed up in Delhi. She drew attention to the close connexion between late rickets and osteomalacia, which she believed to be similar conditions, differing clinically owing to changes in the tissues due to difference in age. She described cases of late rickets commencing in healthy girls of eight or ten and shewing the characteristic changes in the bones; of osteomalacia,

commencing in early and also in later adult life; and of intermediate cases where both conditions were present in the same woman. The article included photographs and X-ray prints showing changes in the bones. She considers the determining cause in most to be lack of sunlight and exercise due to the purdah system in north India. She notes the same frequency of incidence among Hindu banias as described in Scott's paper.

An article 'Osteomalacia in Kashmir' by Kathleen O. Vaughan, M. B. (London), was published in the *British Medical Journal*, March 6th, 1926. This paper gives a general account of the disease as it affects Kashmiri women. The points chiefly emphasized are the entire absence of the disease among the women of the boatman class, who live in the open air, do plenty of work and eat raw tomatoes and cucumbers with their rice; and the commonness of the disease among the other women, who lead sedentary and shut-up lives, although purdah is not so strictly observed as in the plains of India. The disease is most frequent in winter and early spring. The offspring, when delivered by Caesarian section, are usually fine children, even when the mother is weak and anaemic. They do not tend afterwards to suffer from rickets.

A small book, *The Purdah Sytem and its Effect on Motherhood*, by the same author, has recently been published. This describes more fully than is done in the articles, the social habits of Kashmiri women, the symptoms of osteomalacia, and the theories advanced by other workers as to causation. It propounds the theory that Kashmir is more subject to osteomalacia than other places, owing to the fact that the Jhelum valley is surrounded by high hills and hence gets a smaller amount of light especially in winter; that the cold is extreme, and therefore the women confine themselves to their houses and close all doors and windows. Some facts as to treatment are given.

A paper on 'Osteomalacia in India' was read by

Dr. Agnes Scott, W. M. S., at the Obstetrical Section of the Conference of the Far Eastern Association of Tropical Medicine in December 1927. The clinical and epidemiological facts already given were summarized; reference was made to recent research on rickets in Europe and to the occurrence of hunger osteomalacia in Europe during the war. The need for more organized research on this subject in India was strongly emphasized.

A Report on Venereal Disease among Indian Women by Dagmar F. Curjel, M. D. (Glas.), W. M. S., was published by the Countess of Dufferin's Fund in 1918. The *Report* gives the impressions of a number of medical men and women from their individual experience of practice as to the prevalence of venereal disease and as to the facilities for treatment. It establishes the fact that they were frequently called on to treat the disease and that there was a great lack of facilities for treatment. The writer does not attempt to give statistical evidence as to the incidence even with regard to the work of the doctors quoted. The *Report* therefore, does not profess to be any index as to the general prevalence of venereal disease among the population, but only to shew the need for more energetic action to secure proper treatment for the many patients who desire it.

A paper on 'The Reproductive Life of Indian Women' by the same writer, was published in the *Indian Journal of Medical Research*, 1920-21. Figures are given showing the age at the onset of puberty, at the commencement of married life, and at the onset of the menopause, as collected by medical women in different parts of India. In 489 cases the average age at the commencement of puberty was 13.63 years, in 481 cases the average age at the commencement of married life was 13.83 years, and in 74 cases the average period of the reproductive life was 32.14 years.

A paper on 'The Weight at Birth of Infants in India' by the same author, appeared in the same number of the

Indian Journal of Medical Research. In 1849 Indian infants the average weight at birth was 6·48 lbs. In 201 European and Anglo-Indian infants born in India, the average weight at birth was 7·64 lbs. The writer considers the Indian birth weight compares favourably with the European birth weight, considering the heavier build of European mothers, and looks on this as evidence that Indian infants are not unfavourably affected by the earlier marriage age.

The same author's paper on 'The Result of Treatment at the Malarial Convalescent Depot, Dagshai' was published in the *Indian Journal of Medical Research*, Congress Number 1919.

Several papers have been published by the same author in collaboration with other research workers on matters of general tropical interest.

A paper by Charlotte L. Houlton, M. D. (London), W. M. S., on 'An Investigation of the Bacteria of the Vagina in Pregnancy', was published in the *Journal of Obstetrics and Gynecology of the British Empire*, xxxi, 1924. The vaginal secretion of ninety-eight pregnant women was examined. In sixty-seven cases the discharge was considered normal. In most of these only *b. vaginalis* was found and after delivery only 1·5 per cent suffered a febrile puerperium. In thirty-one cases the discharge was considered pathological and contained one or more of a variety of organisms—of these 13 per cent suffered from a febrile puerperium. The writer considers that if gram positive cocci are found in the vagina during pregnancy, an autogenous vaccine should be administered during the last weeks.

A report, *Women's Labour in Bengal Industries*, by Dr. Curjel, was published in 1923 as a special bulletin by the Government of India. The object of the enquiry was to determine the influence of industrial work on the health of the Indian woman worker and the well-

being of her child. The enquiry was carried on among the women employees of jute and cotton mills around Calcutta, in the tea districts, and on the Bengal coalfields. Information is given regarding social conditions, hours of employment, type of work, wages, cost of living, sanitation and common diseases. The social conditions of the women on the tea estates were better than in the jute mills, but the incidence of hookworm was high, owing partly to the absence of sanitary conveniences. The attendance in the coalfields was often irregular as many of the women lived in their villages and came to work irregularly for two or three days at a time.

A somewhat similar report on 'The Maternity Conditions of Women Industrial Workers in Bombay' by Florence Dissent Barnes, L. R. C. P. & S., W. M. S., was published in the *Bombay Labour Gazette*, 1923. The enquiry was confined to the conditions of the women workers in the cotton mills in and around Bombay. It dealt with questions similar to those mentioned above and described in detail the crowded and insanitary state of many of the workers' tenements. It described the unhygienic conditions under which the women workers were delivered in childbirth and recommended the organization of creches and maternity homes in connexion with cotton mills.

A further enquiry into the maternity conditions of women industrial workers in Bombay is being carried on at present by Margaret I. Balfour, M. B. (Edin.), W. M. S., (Ret.). In the reports quoted above exact information as to childbirth could not be obtained, partly because of the short period during which the enquiry lasted and partly owing to the fact that the women workers either went to their villages for delivery or were confined in their tenements by a *dai*. Hence definite information about childbirth was difficult to get. In Bombay, since that time, the Nowrusjee Wadia Maternity Home and Hospital have been opened and a fair number of women workers attend

for delivery. The conditions of their pregnancy and labour are being watched and compared with those of women of the same class living under the same conditions, but not working in the mills. The report of this enquiry will shortly be published.

A paper on 'Maternal Mortality in Childbirth in India' by the same author was published in the *Indian Medical Gazette*, November 1927. This gave the results of an enquiry carried on under the auspices of the Indian Research Fund Association during 1925-26. Particulars were given of 11343 cases of childbirth collected from hospitals in different parts of India. Among these 244 deaths occurred, of which 35.65 per cent were due to anaemia, 17.62 per cent to sepsis, 14.75 per cent to accidents etc., of labour, 10.24 per cent to eclampsia, 9.01 per cent to the consequences of osteomalacia, 11.8 per cent to haemorrhage, 0.82 per cent to pulmonary embolism. These figures were compared with similar figures from representative British maternity hospitals and it was found the incidence of pregnancy disease in Britain was considerably less, amounting only to 35 per cent of the deaths instead of 54 per cent as in India. The author draws particular attention to anaemia of pregnancy and osteomalacia which cause much maternal and infant mortality.

The average infant birth weight in 2836 infants reported from different parts of India was 5.80 lbs. In 1504 infants born in Bombay the average was 6.2 lbs. The average for 105 infants born to women millhands was 5.3 lbs. It is pointed out that the Bombay figures are more dependable, as the all-India cases were collected from different sources and it could not be certain that all premature cases were excluded.

Another paper on 'Anaemia of Pregnancy' by Dr. Balfour, in the *Indian Medical Gazette*, September 1927, described the clinical symptoms of the disease, its

epidemiology, the results of blood, urine and postmortem examination. Its occurrence in different communities was described and theories as to etiology were put forward. Malaria, hookworm and syphilis were mentioned as occasional causes of the disease, which might otherwise be due to the absorption of an intestinal toxin and possibly, to a toxæmia due to the pregnancy itself.

A paper by the same author entitled 'Some Diseases of Pregnancy in India' was read at the Conference of the Far Eastern Association of Tropical Medicine in Calcutta in December 1927.

A paper by Alexandra Emanuelov, M.D., and Manek M. Mehta, D. Sc. (Lond.), called 'A Preliminary Note on the Pathological Examination of some Discharges etc., from cases of Anaemia of Pregnancy, Normal Pregnancy, and Non-Pregnant Anaemia', was read on the same occasion.

A note on 'Pelvic Measurements in Indian Women', by Grace Stapleton, M.D. (Lond.), was published in the *Indian Medical Gazette*, December 1925. Measurements were taken from two hundred cases of labour (cases of pelvic contraction being excluded), and the average was found to be—intercristal, 9.69 in.; interspinal, 8.67 in.; external conjugate, 7.22 in. The promontory was felt in two thirds of the cases. Of twenty-five cases of pelvic contraction, twelve were due to osteomalacia. The average weight of the infants was 5.96 lbs.

These figures may be compared with those given by Balfour in the paper already quoted on 'Maternal Mortality in Childbirth in India',—namely—intercristal, 9.12 in.; interspinal, 8.37 ins.; external conjugate, 6.93 in. These latter measurements were taken in Bombay, where the people are of a smaller stature than in the United Provinces where the former were taken.

The above brief résumés indicate the many important avenues in which research is needed.

Osteomalacia is a serious matter for the women of

India. Not only is it a frequent cause of maternal mortality in childbirth and of stillbirth, but it is probably far more common, as a general disease, than is imagined. It is little mentioned in English textbooks of midwifery, hence medical students hear little about it and it tends to be undiagnosed.

The facts given in the five papers briefly quoted, which should be fully read in order to be appreciated, afford much food for thought. We know there is a calcium deficiency in osteomalacia. We know that light treatment and increase of Vitamin D will at least greatly improve cases of osteomalacia. But we do not yet understand why certain classes or castes should be affected—Hindu Khatras in Amritsar, Agarwala Baniyas in Delhi, Bohra Mohamedans in Bombay, Marwari Hindus in Calcutta. Certain facts in the different papers are of special interest:—

(1) *Strict Purdah* was only observed by a minority of the women in each series of cases. Kashmir appears to be the most affected, but Vaughan says purdah is less strict there than in the plains of India.

(2) *Lack of Exercise*, or inactive life, was drawn attention to. But ten of Stapleton's seventy-three cases had been accustomed to outdoor exercise.

(3) *Nutritional Causes*. Vaughan draws attention to the exclusive use of cooked food and of vegetable oil for cooking by Kashmiri women; but says that rickets does not occur among the children. This looks as if there were no marked deficiency of Vitamin D in the diet, the babies being presumably under the same conditions as their mothers as regards light.

It seems as if a careful co-ordinated research carried on among the different classes most affected would lead to good results. We believe that Dr. Grace Stapleton is continuing work in this direction and is collecting further data as to distribution, epidemiology, etc.

Anaemia, which is responsible for a high mortality

in pregnancy and childbirth, is a most urgent matter for investigation. It has formed an important part of the Bombay enquiry and the Indian Research Fund Association has recently engaged a special worker (Dr. Lucy Wills) to carry the investigation further. The readiness which the Indian Research Fund has shown to support and finance enquiries on the diseases of pregnancy is in keeping with the wide outlook and broad vision so common with research workers.

The same breadth of vision is not always shown by our administrators, as was proved in 1919, when Dr. Dagmar Curjel applied to be seconded from the Women's Medical Service in order to carry out an enquiry on the causes of infant mortality in India, under the Indian Research Fund Association. This was sanctioned by the Council of the Dufferin Fund and the scheme for the research was approved by the Committee of the Research Fund. It was timed to last two years and to cost approximately £2,000. It was thrown out by the Minister for Education at Simla whose final sanction was needed, and who was credited with saying, 'What does it matter if a woman has one child or two?' It was a pity no one pointed out that the object of research is not so much to improve the *quantity* as the *quality* of the race, a need which is very great in the India of to-day. Had that enquiry on the causes of infant mortality been carried out ten years ago we should be in a better position now to organize infant welfare work and to ensure that energy, time and money, are spent to the best advantage.

The Association of Medical Women in India. Mention has already been made in an earlier chapter¹ of the foundation of this Association, and of the share which it and its United Kingdom branch, took in the reorganization of the Dufferin Fund. It has also been described how the

¹See above, chapter III.

Association organized the supply of medical women for military hospitals during the war. In 1916 the Association prepared a memorandum on the then condition of medical relief by women and laid it before Lady Chelmsford when she assumed the position of President of the Dufferin Fund.

In 1913, the Association drew up a scheme for the employment of medical women in public health posts and submitted it to the Government of India. It has also, at various times, made recommendations to Government regarding hospital statistics, research in connexion with diseases of pregnancy and other matters connected with medical aid by women. It has held many general and local meetings, at which papers of great interest have been read and discussed. In 1926, a meeting of the Northern Division was combined with a postgraduate course organized by the Honorary Secretary, Dr. Curjel Wilson, and largely attended by medical women in the north of India. This course was rendered possible by means of a generous grant from the Countess of Dufferin's Fund.

The affairs of the Association are managed by a Council which meets annually in spite of difficulties due to distance. A quarterly journal is published, which serves to keep the members in touch with each other, and forms the nucleus of what it is hoped may one day be a valuable source of information regarding obstetrics and gynecology in the tropics.

CHAPTER ELEVEN

CONCLUSION

Retrospect and Prospect

It is now sixty years since the first qualified medical woman arrived in India (1869), and a brief résumé of past and present medical relief by women will be of interest.

At that time there were no hospitals staffed by women. In 1927 there were 183¹ hospitals staffed by women, of which 93 were carried on by medical missionaries, 25 by members of the Women's Medical Service, and 62 by other medical women in the employment of Provincial Governments, Indian States or Local Committees.

In addition to these hospitals staffed by women only, there are a considerable number of women's wards in district and municipal hospitals, under the care of women Assistant or Sub-assistant Surgeons, supervised by the Civil Surgeon or male Assistant Surgeon. Some such hospitals, which cannot employ an assistant woman doctor, retain a midwife, that is, a woman who has had a year's training in nursing and midwifery, and who acts as a sort of attendant on the women in the female wards and as assistant to the Civil or Assistant Surgeon when dealing with the women patients where nurses are not employed.²

Trained nurses, both Indian and Anglo-Indian, are now

¹ *Annual Report of the Countess of Dufferin's Fund, 1927*, (with Map).

² The women patients appreciate the presence of these midwives or *dais*, and the system of retaining them would be all to the good, but for the not uncommon practice of using them to examine and report on those gynecological cases who object to examination at the hands of the Civil or Assistant Surgeon. The midwives, of course, have no knowledge of gynecology.

met with more frequently than before in civil hospitals, but this chiefly applies to the large towns. Most municipal and district hospitals have to exercise great economy and cannot meet the cost of trained nurses; nor is the importance of good nursing realized fully, outside the large towns.

In these large towns there are many women's wards in general hospitals where women attend who do not object to treatment by male doctors, but with these we are not at present concerned.

There are twelve provincial centres of the Countess of Dufferin's Fund in different parts of the country, each organizing or aiding some form of medical relief by women—hospital, nursing, training of midwives, etc.

There is a Women's Medical Service for India, with forty-two members, who take part in hospital, teaching or administrative work.

There is an Association of Medical Women in India, with 281 members and 65 associates, which publishes a quarterly journal.

There is a Medical College at Delhi, staffed by medical women and with 121 women students, while 132 women students are studying for university degrees in other medical colleges. Eight more are taking the apothecary or certificate course.

There are four medical schools staffed by medical women where 351 students are studying for the Sub-assistant Surgeon's diploma, while 94 other women students are studying for the same diploma in mixed schools.

There is an all-India association for maternity and child welfare (the Lady Chelmsford All-India League for Maternity and Child Welfare), which publishes a quarterly journal and assists five schools for health visitors in Madras, Calcutta, Poona, Delhi and Lucknow. It has provincial and local branches.

There is an all-India association for assisting the train-

ing of indigenous *dais* (Victoria Memorial Scholarships Fund), besides many local centres.

There are, as previously indicated in this book, many provincial and local centres where maternity and child welfare work is being carried on.

In addition to their actual medical duties, many medical women sit on maternity and child welfare committees, hold classes for indigenous *dais*, classes in first aid or home nursing, supervise the work of health visitors, give expert assistance and lectures at the time of Baby Week, and, in general, play a part which would be seriously missed if the supply should fail. Some have risen to high and responsible positions. There is a Chief Medical Officer, Women's Medical Service (Miss Agnes Scott, M. B.), a Superintendent of Medical Aid to Women, United Provinces (Miss Shirin Commissariat, F. R. C. S. I.), a Principal Medical Officer, Travancore State (Mrs. Poonen Lukose, M. D.), a Vice-President of the Madras Legislative Council (Mrs. Muthulakhshmi Reddy, M. B.).

We have seen that the movement for medical aid by women was initiated by the missionary societies. Medical missionaries were carrying on excellent work, medical and surgical, at a time when the Dufferin hospitals were struggling with insufficient funds, inadequate staff and not a few annoying and hampering restrictions. Some medical missionaries initiated big schemes for training indigenous *dais*, working out the details in their scanty leisure. The earliest boards for the standardized training and examination of Indian nurses were organized by their united action. Perhaps the most valuable part of their work, if we could grasp its significance, is the collective influence of their lives and work on the hundreds and thousands of Indian women and girls with whom they come into daily contact.

Only fourteen years have elapsed since the birth of the Women's Medical Service, yet it has played an important

part in India. Besides its large centres for medical and surgical relief, it trains nearly one third of the women medical students in India, and has organized the chief all-India movements for maternity and child welfare. Nearly all the papers on research summarized in the previous chapter were written by members of the Service.

An interesting development of the years has been the large increase of Indian women doctors. Many of them hold high qualifications. They compose nearly one third of the cadre of the Women's Medical Service, and many of the remainder engage in private practice, chiefly in the large towns. Some carry on maternity or nursing homes.

Outside the strict confines of women's medical work, there have been many important movements in different parts of India nearly related to it—the increasing work of the Seva Sadan Society in the Bombay Presidency in connexion with the training of women as doctors, nurses and health visitors—the organization of the Red Cross Society in connexion with child welfare work in different provinces—the vigorous extension of the St. John's Ambulance Association and the multiplication of classes for first aid, home nursing and home hygiene—the opening and development of the Girl Guide movement—the initiation of classes for physical culture of girls by the Young Women's Christian Association and others—the awakening of interest in the conditions of women industrial workers—the movement for educational reform among Indian women culminating in the Delhi Conference of 1928—the demand for legislation restricting early marriage—the numberless local efforts for the betterment of maternity and child welfare conditions. In many of these movements Indian women take leading parts and always in increasing numbers.

The India we know to-day is a changed country from the India of sixty years ago; but we are too apt to forget that the changes are mostly in the large centres, and that the conditions of sixty years ago are still prevailing

in many rural areas.

The experience of medical women, accumulated during sixty years, points to the great need for more women's hospitals and for a better distribution, so that there shall not, as at present, be two or three in one place and great areas without medical aid. There is need for better organization, in order that women Sub-assistant Surgeons and midwives should be available for areas where hospitals are few; that they should not work independently, with their inevitably scanty stock of knowledge, but under the supervision of a first class medical woman. In fact, what is needed is the appointment of a medical woman at the administrative headquarters of each of the larger provinces to organize, inspect and secure the best possible medical relief for women from the available material.

The need for energetic action to reduce maternal mortality in childbirth and infant mortality has been shown already in this book, and to us it is clearly indicated that the time has come to establish a Bureau of Maternity and Child Welfare at the headquarters of the Government of India, controlled by a medical woman working in the department of the Commissioner for Public Health. Such an official would have no administrative control in the provinces; a medical woman, therefore should be appointed Assistant Director of Public Health in each of the larger provinces.

A Research Department for diseases of pregnancy and infancy is needed, either in connexion with the Central Bureau, or, preferably, in connexion with an existing research organization. This is one of the most important fields of tropical research—too important to be left to the occasional services of honorary workers.

The expenditure on these reforms would not be great in comparison with the results to be attained, and we think that most people will agree that it is the duty of a civilized Government to incur it, in order to remedy such an

extraordinary amount of suffering and loss of life as has been shown to occur in India.

Subsidies to the Women's Medical Service, whether made from central or provincial funds, would enable these reforms to be carried out easily and efficiently.

The sixty years during which medical women have been working in India have produced far reaching political changes. The reins of government, especially as regards medicine and public health, are now largely in the hands of Indians; will they be more ready than their predecessors have been to help forward medical relief of women, and, especially, to reduce the terrible toll of suffering and death in childbirth and the high rate of infant mortality? Or will these changes tarry, until Indian women have become sufficiently strong and united to demand organized relief for themselves and their children?

APPENDIX I

MATERNAL MORTALITY IN CHILDBIRTH IN INDIA

It is not easy to estimate the correct maternal mortality partly owing to the lack, in most cases, of medical certification of death, and partly owing to the frequency of deficient registration of births. The former leads to the putting down of deaths, for which childbirth is accountable, to other causes; and the latter, when maternal deaths are counted per 1000 births, leads to an appearance of an unduly high maternal deathrate. Births more easily escape registration than deaths, and this error, no doubt, often creeps in, especially in connexion with the smaller municipalities. In the *Annual Report of the Public Health Commissioner with the Government of India, 1926*, rates of maternal mortality in childbirth are given for different towns, which vary from a minimum of 1.2 per 1000 for Rangoon to a maximum of 48 per 1000 for Parorru but, for the reasons mentioned above, these cannot be depended on.

The following rates of maternal mortality in childbirth are probably more or less correct:—

Source of information	Cases	Maternal Deaths	Rate per 1000 Births
<i>Bombay Corporation Health Officer's Report, 1924.</i>	21,838	365	16.7
<i>Calcutta Corporation Health Officer's Report, 1924.</i>	17,219	320	18.0
<i>Madras Corporation Midwives, 1924.</i>	7,027	33	4.7
<i>Bombay Corporation Midwives, 1924.</i>	1,850	9	4.8
<i>Calcutta Corporation Midwives, 1924.</i>	4,380	9	2.0
<i>Delhi Municipal Midwives, 1925-26.</i>	306	nil	
<i>Simla Municipal Midwives, 1925-26.</i>	600	4	6.5
<i>Bengal Enquiry, 1919-25.</i>	3,844	47	12.2

It will be seen that the rates for the midwives' organizations are the least, due partly to the fact that the work is done by trained midwives, and partly to the fact that abnormal cases are not attended, but are sent to hospital. In the case of the Bombay and Madras midwives' organizations, efforts had been made to trace the cases sent to hospital and include the result in these figures; this accounts for the rates being higher than in Calcutta.

The Bengal Enquiry was undertaken for the verification of vital statistics in Bengal. It was carried on for five years in an area consisting of small towns and villages, the average population each year being 15,549. A staff of three doctors and fifteen peons kept the people under constant supervision. During this period of five years 3844 conceptions took place with 47 deaths directly due to pregnancy or labour—that is 12·2 per 1000 births.

Even this deathrate is much higher than in other countries. In England, in 1925, the maternal deathrate in childbirth was 3·86 per 1000 births.

The high maternal deathrate in India is due to :—

- (1) bad attendance at the time of childbirth.
- (2) lack of any legislation requiring registration and supervision of midwives.
- (3) lack of medical aid and of women's hospitals.
- (4) lack of antenatal centres, both for treatment and research.
- (5) the existence of certain serious and fatal diseases connected with pregnancy, such as anaemia and osteomalacia.

APPENDIX II

INFANT MORTALITY

It may excite surprise that, in considering the subject of infant and child welfare, the closely related one of infant mortality has not been further dwelt on. The reason is not far to seek and is the same as in the case of maternal mortality during childbirth.

The figures for infant mortality are more accurate than those for maternal mortality, as all that is required for the total figures is the number of deaths, not the causes. But there are various fallacies and sources of error which vitiate such figures as exist, and they must be remembered in assessing the value of the statistics. Many births actually escape registration.

Registration is not compulsory all over India. Even where it is compulsory, many births escape it. The returns are made for the most part by illiterate people and the work is hardly ever a paid whole-time job; public opinion is quite indifferent and, where there is compulsory registration, few prosecutions are made and defaulters escape with fines insufficient to have a deterrent effect. In some large towns special officers are employed whose duty it is to pay house to house visits and so secure information regarding births. In such places the statistics are fairly reliable. Deaths also escape registration, but not to such an extent as births. In Bombay, for example, a body may not be disposed of without a certificate, though not a medical one. Migration accounts for some errors. In industrial areas, especially, a woman goes to her village to have her child and returns to the town when it is a few months old. The child may or may not have been registered in the village, but if the death takes place in the town it swells the infant

mortality rate there. Such factors helped to give rise to the extraordinary returns for two years (1922-1924) for the city of Poona where the infant mortality rate was given as over 1,000 per mille!

The *Annual Report of the Public Health Commissioner* for 1925 gives the infant mortality rate for British India as 174 per mille. The rates for large towns are very much higher, e.g., Bombay 359, Calcutta 326, Cawnpore 420. The number of deaths of infants under one week and one month is a high proportion of the total—practically fifty per cent of the deaths occur during the first month of life and more than half of these (64.75 per cent) in the first week of life.

The figures give us an approximate idea of the loss of infant life in India. When we come to scrutinize the causes of these deaths, we find that we really know very little about them. It must be remembered again that death in India is not certified by a medical practitioner and indeed no doctor may have seen the infant. If the Chief Medical Officer to the Ministry of Health in England complains of inaccuracy in stating the cause of death¹ what can we expect in India! Hence headings such as 'fevers', 'respiratory diseases', 'convulsions', 'diarrhoea', 'debility', really convey no information, and accurate knowledge of the causes of infant deaths is not available. Investigation of this problem is urgently required, not only for its own sake, but also in order that welfare work for infants may be conducted on lines which will serve to combat the high infant mortality rate in the most efficient manner. Improvement of registration, on the necessity of which all are agreed, would also advance the progress of infant welfare work and make it possible for existing agencies to be more effective.

¹ *The State of the Public Health*, 1925, pp. 21 f.

APPENDIX III

EARLY MOTHERHOOD

The following facts as to the age of Indian women at the time of the first delivery were collected by Balfour :

- (1) 847 consecutive primiparae were observed in Bombay Hospitals. The average age of these was 18·7 years. 75 among them were below 17, that is, 57 were 16, 11 were 15 and 7 were 14 years of age. In the Hindu community the proportion below 17 was 12·3 per cent, in the Mahomedan community it was 10·3 per cent, in the Christian community it was 2 per cent. A fair number of the Hindus were Brahmins.
- (2) 2312 consecutive primiparae, delivered at the Government Hospital for Women and Children, Madras, had an average age of 19·5 years. 12 was the youngest age, 7 mothers being 13, and 22 mothers 14 years of age.
- (3) 90 consecutive primiparae, delivered in their own homes and in the Seva Sadan Hospital in Ahmednagar, had an average age of 18·2 years. More than half of these were Brahmins. One was 14, 6 were 15 years of age.
- (4) 3964 cases of childbirth were reported from all-India hospitals, of these only 10 were below 15 years of age. 13 was the youngest age.

Exaggerated reports are sometimes made as to the frequency of early motherhood in India. It is true that the marriage ceremony takes place very early, but cohabitation does not usually begin until after puberty. In 188 cases specially investigated in the Cama Hospital,

Bombay, enquiry was made as to the age at which menstruation, cohabitation and the birth of the first child (or miscarriage) took place, and the average worked out at 13·4, 16·6 and 19·1 years respectively. In 481 cases collected by Curjel (see Chapter X) the average age at the commencement of cohabitation was 13·83 years. In collecting these cases, however, the enquiry as to the age at the commencement of cohabitation was not made directly, as in Bombay, but by a question as to when the girl went to live at her husband's house, which might not always be understood.

In the Bombay cases cohabitation had begun below 16 in half the number. It was found that in the cases where the mother was below 17 at the time of childbirth (that is, in 75 cases) the incidence of maternal disease was rather higher, and the average infant birth weight was slightly less, than in the case of the older mothers.

POSTSCRIPT

It is stated on page 63 that women doctors are not allowed to attend patients in the European Hospital at Simla. Since this passage was written the rule has been altered, and the medical woman in charge of the Lady Reading Hospital is now allowed to attend cases there.

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