CONGRESS AT BELFAST.

CONFERENCE ON HYGIENE OF CHILDHOOD.

ADDRESS

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THE HYGIENE OF THE CHILD, WITH SPECIAL REFERENCE TO IRELAND.

WE are met to-day to consider that important aspect of the question, the hygiene of childhood, which specially concerns sanitarians.

IMPORTANCE OF THE HYGIENE OF THE CHILD.

Ample evidence is now at hand to demonstrate the national importance of bettering the hygiene of childhood :—

1. One out of three deaths at all ages, it is calculated, occurs under five years of age, one out of five during infancy, and one out of nine total deaths at all ages occurs under three months of age.

2. Places with high infantile mortalities continue to suffer somewhat excessively throughout the first twenty years of human life, and, as a consequence, efforts which are successful in lowering the mortality of infancy also bring about a reduction of mortality at higher ages.

3. Those experienced in public health work know that the amount of sickness in any place varies approximately with the number of deaths; hence, in towns with a high infantile death-rate there is more sickness and there is a lower standard of health, both in youth and adult life, than in those districts where the wastage from infant mortality is less.

4. A high infantile mortality-rate denotes also a high infantile deterioration-rate. To put it another way, the conditions of life which bring about infantile mortality in a family, or in a given area, often produce physical and even mental weakness in other members of the family, that is, among those who manage to escape early death. Of this physical and mental deterioration (feeble-mindedness) I have had frequent examples in an industrial school in Belfast, and I have observed the curious fact that children admitted in certain years show a mental capacity and

physique distinctly below the average as compared with children who enter in other years.

It is, therefore, safe to affirm that the city or town, the county or country, which strives to secure the best type of hygiene for its children, will reap its reward, not alone in a lowered infantile death-rate, but in an increased physique and higher mental development among those attending school, as well as in lessened mortality, even up to adult age.

INFANTILE MORTALITY THE INDEX OF SOCIAL WELFARE AND OF SANITARY ADMINISTRATION.

As it has been well said by Dr. Arthur Newsholme in his monograph on "Infant and Child Mortality," that "infant mortality is the most sensitive index we possess of social welfare and of sanitary administration, especially under urban conditions," it is clear that not only will that city be greatest which cares most for its children, but that one of the best tests of a civilisation is whether it contributes to produce good healthy children. On the other hand, where there is a want of care for the young in any area, there will certainly be found under these circumstances not only a high death-rate among the children, but also a prevalence of those conditions which bring about national degeneration.

PRINCIPLES DETERMINING A GOOD CHILD HYGIENE ARE KNOWN, BUT ARE DIFFICULT TO APPLY.

With the gradual accumulation of scientific medical knowledge and of public health experience, there is now a wonderful agreement as to the various preventive measures which are necessary, either in the family or in the community, to diminish the death-rate and to increase the health of children; in other words, we know fairly well the broad principles which determine a good infantile hygiene, but what is still wanting is sufficient power to apply the knowledge in a thoroughly practical way. An illustration will make this clearer: At the present time about three-fourths (some say four-fifths) of the mothers of infants among the industrial classes nurse their children, either wholly or in part, while among those whom we term the easy or well-to-do people, the number who can, or who will do their duty in this maternal respect is much smaller, and yet the deaths of infants in the first year of their lives are more numerous among the former than among the latter, and would be higher still were it not that so many mothers among the working people nurse their offspring. The cause of this marked difference in these two classes is not poverty alone, as the low infantile mortality of Ireland (Table No. I.), 95 per 1,000 in 1910, indicates when compared with England and Wales, which was 106 during the same year, while in Scotland the rate was 121 in 1908 (last available figures)

The divergence seems rather to be due to the effect of certain influences (happily removable) which, although, no doubt, often associated with poverty, seem to be less prevalent among the well-to-do classes.

INFLUENCES CAUSING WASTAGE OF INFANT LIFE.

These adverse factors may be grouped under two heads:—(a) Conditions which take their origin in the habits and homes of the people; (b) Conditions which are due to the ignorance of the mothers.

(a) *Habits and homes of the people.*—As a result of the first set of causes children die as a consequence of carelessness, exposure to contamination from dirt, either direct or indirect (flies, etc.), and to disease-germs, especially those of the infectious group; also as a result of domestic overcrowding, because the parents do not grasp the importance of a clean house and of a sanitary environment, and because they often fail to realise that they should try to finance their earnings in such a way that enough is left for proper housing, food, and clothing.

(b) *Maternal ignorance.*—The conditions that are due to want of training of the mother for the duties of maternity are shown in very many ways: 1st. She has too often no knowledge to guide her in spending her money in the purchase of the proper food (especially from a nutritive point of view) for her child.

2nd. She cannot get or afford, as the well-to-do mother is able, skilled guidance and experienced help in preparing the food; and

3rd. She is often totally ignorant either how to keep the food or to prepare it under the safest conditions, and, the most common and worst fault of all, she often gives her child its food irregularly, improperly, and unwisely (too much or too little).

DARK SPOTS IN THE HYGIENE OF CHILDREN IN IRELAND.

So far as Ireland is concerned, there are two directions in which we must press for improvements in the hygiene of the child: these are infantile mortality and school hygiene. While Ireland, as a whole, had the low infantile death-rate of 95 per 1,000 births in 1910, yet if we segregate that country into civic unions, that is, those containing towns which in 1901 had a population of 10,000 inhabitants or upwards, and which represent chiefly the urban districts, in these civic unions we find in 1910 (see Table 1) an infantile mortality of 128, while in the remainder of Ireland, the rural districts, the rate was only 74.

Of the two great cities of Ireland (see Table 2), Belfast with a population in 1911 of 385,492 had in 1910 an infantile mortality of 143, and Dublin City with 309,272 had one of 142; while, on the other hand, it was (see Table 3) 139 in Liverpool, 132 in Manchester, 121 in Glasgow, and only 103 in Edinburgh and in London.

Table 1.

Showing the number of Deaths under one year of age in every 1,000 Births registered during the year 1910 in the whole of Ireland, and in the Civic Unions (Urban Districts and Rural Districts.

	No. of Deaths under one year per 1,000 Births.
All Ireland	95
Total Civic Unions (Urban)	128
Total Rural Districts	74

Table 2.

Showing the number of Deaths under one year of age in every 1,000 Births registered during the year 1910 in twenty-two of the principal Town-districts of Ireland.

	No. of Deaths under One Year per 1,000 Births.		No. of Deaths under One Year per 1,000 Births
Clonmel	146	Portadown	109
Belfast	143	Galway	107
Dublin Registration Area	142	Ballymena	107
Kilkenny	139	Lisburn	105
Wexford	129	Cork	96
Newtownards	128	Newry	92
Limerick	125	Lurgan	89
Waterford	124	Armagh	89
Tralee	116	Queenstown	80
Drogheda	113	Dundalk	75
Londonderry	111	Sligo	75

Table 3.

Showing the number of Deaths of Infants under one year of age to every 1,000 Births in Belfast, Dublin Registration Area, and in Liverpool, Manchester, Glasgow, Edinburgh, and London, during the years 1901—1910.

Area.	Deaths of Infants under One Year of Age to every 1,000 Births.									
	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Belfast	154	151	134	154	136	144	136	147	139	143
Dublin Registration Area	168	162	151	169	143	146	156	146	141	142
Liverpool	188	163	159	196	153	172	144	141	144	139
Manchester	198	151	169	187	159	169	147	152	136	132
Glasgow	150	130	144	146	131	131	130	137	133	121
Edinburgh	148	122	121	130	133	118	127	122	119	103
London	148	140	130	145	130	131	116	113	108	103

TUBERCULOSIS MORTALITY.

Diagram 1.

Showing the Death-rate in Ireland during eleven years, 1900—1910.

(Diagram reproduced (in part) from the Report of the Registrar-General for Ireland, by permission of the Controller of His Majesty's Stationery Office)

	1907	1908	Decrease in one year.	1909	Decrease in one year.	1910	Decrease in one year.
Deaths from all forms of Tuberculous disease }	11,679	11,293	386	10,594	699	10,016	578
Death-rate per 1,000 of estimated population from all forms of Tu- berculous disease }	2·7	2·6	—	2·4	—	2·3	—

The following deductions may be made from these figures:—

1. That the death-rate from tuberculosis, 2·3 per 1,000, is the lowest recorded since 1864, the year in which registration of deaths was introduced.

2. That there has been a decrease of one-seventh of the total number of deaths from tuberculosis in three years.

3. That there were 32 fewer deaths each week from tuberculosis in 1910 than in 1907.

Or,

4. That in every two days in 1910 there were about 9 fewer deaths when compared with 1907.

5. As it is generally recognised that there are about 7 or 8 patients suffering from tuberculosis for each death, the decrease in mortality shows there were about 12,000 fewer people suffering from tuberculosis in Ireland in 1910 than there were in 1907, that is actually a number almost equal to the population of one of the larger Ulster towns, Lisburn.

SCHOOL HYGIENE AND TUBERCULOSIS IN IRELAND.

The other matter demanding attention has to do with that aspect of the many-sided tuberculosis problem in Ireland which concerns the national or primary schools. While the death-rate in Ireland from tuberculosis is still much higher than it is in England and Wales, or Scotland (though we are all delighted to see that there is a marked and steady improvement since Her Excellency the Countess of Aberdeen began her splendid health campaign in 1907—see Diagram I.), how is it that Ireland, as is shown in the Yellow Book, "Tuberculosis in Ireland," published in 1908, has a comparatively lower death-rate from tuberculosis than either England and Wales, or Scotland, in the period of life under five years of age, while the first great increase in the tuberculosis death-rate begins in this country with school age (5 to 10 years), and continues during it (10 to 15 years), the increase growing steadily during the whole period of school attendance until it reaches its maximum height about the age of 25 years? When we consider the admittedly insanitary condition of so many of the Irish primary schools, to which attention has been so frequently drawn, does it not seem as if the children of Ireland become during school life specially exposed to the direct contagion of consumption, or that the natural forces of their bodies, which we term their resisting power to the attacks of disease, that is their general tone and vigour, become weakened when attending these unhealthy schools, so that tuberculosis, previously latent, springs into existence? Further, is it not remarkable that, while the female death-rate showed in the period 1901–1905 a reduction of 35·5 per cent. in England, and 32·9 per cent. in Scotland, there was

actually an increase between these years in Ireland of 29·8 per cent.? And is it not still more extraordinary that the increase in female mortality from tuberculosis in Ireland at the age period, 10 to 15 years, between the two groups of years, 1871-1880 and 1901-1905, amounted to 29·8 per cent. as compared with an increase of only 2 per cent. in males? Is such a large and such an exceptional increase related to some incident of school attendance? Did more girls go to the national schools during those thirty years than boys, or are girls more prone to tuberculosis than boys during school life in Ireland? We throw these questions out for discussion to-day.

HOW TO IMPROVE THE HYGIENE OF CHILDHOOD.

In trying to improve the hygiene of the child, keeping always in view the important fact that in health matters prevention is better than cure, we must press for increased vigour in both public and personal hygiene. We must do everything in our power to cultivate the growth of the public sanitary conscience, so that all over Ireland the various county, urban, and rural councils may realise fully the pregnant words of Sir John Simon that they are the "appointed guardians of masses of human beings whose lives are at stake in the business." We must urge our health authorities to redouble their efforts to provide proper housing, without domestic overcrowding, and a decent environment for every dwelling, parks, and open-air breathing spaces, a good and efficient water supply, proper sewerage, prompt and efficient house and street scavenging arrangements, guaranteed pure food and milk, protection in the fullest degree from infectious disease, the adoption of the Notification of Births Act, visitation of the houses by a sufficient number of tactful and carefully trained health inspectors, who should themselves possess a practical knowledge of the management of a home and of children, thorough medical inspection of the schools, which should be hygienic in every respect, with proper playgrounds, and where instruction in the laws of health should be a necessary subject.

But, in addition, the problem of child hygiene must be attacked in a more direct and personal way by training women for the duties of maternity; in other words, we must show them the supreme importance of intelligent and painstaking mothering as well as the necessity for looking properly after their household. The value of such teaching increases the nearer it can be brought to the time when it can be practically applied. The Royal Commission on Physical Deterioration recommended that continuation classes should be established for instruction in domestic science at which girls, who had left school at an early age, should be obliged to attend, say twice a week, during certain months of the year. They suggested that

"the course of instruction at such classes should cover every branch of domestic hygiene, including the preparation of food, the practice of household cleanliness, the tendance and feeding of young children, the proper requirements of a family as to clothing, everything in short that would equip a young girl for the duties of a housewife." Surely the time has come when attendance on such classes should be made compulsory. Other means for combating the ignorance and fecklessness of mothers are:—

1. Improving the education of midwives so that while they are attending poor women they will be able to give them, as part of their duties, hints as to the management of their children.

2. Establishment of babies' clubs, really schools for mothers, which should be made self-supporting. Of these we have admirable examples in Belfast doing splendid work, an account of which is to be given in another section.

3. Child-welfare exhibitions. We know how much was accomplished in Ireland by the Tuberculosis Exhibition, which was really a great object-lesson to the people in its visits to every part of the country; and we have recently seen what has been done in Dublin by the largely-attended "Ui Breasail" Exhibition, as an educating agent in almost every department of health. We owe the initiation and the carrying out of these splendid methods for teaching the public, to the genius, the capacity for work, and the driving force of one of Ireland's greatest benefactors, Lady Aberdeen. We want another of these exhibitions, somewhat similar to the one held in New York in the early months of this year on behalf of Child Welfare. In giving a comprehensive picture of child-life, this American Exhibition made use of model houses and apartments; it demonstrated not only clothing, but the economics of clothing; it showed the proper housing of the child, the furnishing of the home, the play-shop, the school, the care of the infant in the home, and recreations and amusements. In connection with this exhibition there were daily conferences and addresses on every phase of child-life, concerts, folk-dances, and gymnastic displays. Its teaching value to the masses was very great. It was indeed a veritable educational institution with curriculum, textbooks, charts and models, a corps of teachers, and a body of students.

We all rejoice that we have made, and that we are making, great progress in Ireland in improving the health of the people, but we must not forget the children who constitute the very bed-rock of public health, and who are the hope of the coming generation; for, as has been well said by an American citizen:—

"If we are hoping to reform mankind, we must begin, not with adults whose habits and ideals are set, but with children who are still plastic; we must begin with children in the home, the school, the street, and the playground."