## The Increasing Sterility of American Women.

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This investigation is based upon numbers which may seem too small to admit of deductions as to conditions existing throughout a great country, but I feel justified in doing so, as the data are exact and cases are carefully sifted, and, in addition, many details are corroborated to a decimal by independent observers in far distant points; by Dr. Wilbur, in the census of Michigan, and Dr. Abbott and Dr. Kuszynsky, in that of Massachusetts; by the careful observations of Dr. Chadwick in Boston, and for the eighteenth century by town records from Massachusetts communities. Certain data are taken from each, as no one investigation covers all the points I have developed, and some have never before been presented, so that no record for comparison exists; all are indirectly corroborated by correlated facts. Whatever view may be thought of the results obtained, the data presented certainly suffice to indicate the imperative need for further and more extended investigation in this direction.

The sterility of woman has increased hand in hand with the much-discussed decrease of fecundity, everywhere to some extent, but in the United States to an excessive degree, as fecundity has diminished more rapidly than in other countries. From a sterility of two per cent in the eighteenth century, and a fecundity of five children to the marriage (conditions better than those obtaining in any other country and such as led to the Malthusian theory of super-fecundation, the fear of overpopulating of the earth's surface), after a lapse of one century, from first we have passed to last, and the other extreme is now presented;

sterility greater, and fecundity less than that of the woman of any other nation, unless it be France, who for this reason must yield her proud position of one-time supremacy and retrograde to the rank of a second-class power.

Among the laboring class in St. Louis, 21 per cent of all marriages are sterile, 24 per cent among the higher classes, but of foreigners, only 17 per cent; throughout the State of Massachusetts, Americans 20.2 per cent, foreigners 13.3 per cent, and in the city of Boston nearly 25 per cent. Among the laboring class, American-born, the fecundity in the eighteenth century, five children to all marriages, at the beginning of the nineteenth century 4.5, is now and was at the end of that century 1.8 to 2.1; in Missouri 2.1, in Michigan 1.8, in Boston 1.8, somewhat more among American born of foreign parentage, while it is much more among foreigners-e. g., the Irish, in St. Louis 4, in Boston 3.5, in Michigan 5; the Germans, in St. Louis 3.4, in Michigan 6, and in Massachusetts, for all foreigners, 4.9 children to the marriage. Fecundity is somewhat less among the native Americans, also among the higher classes, least of all among college graduates, 1.6 children to the married couple; in England 1.5, while for the population at large it is 4.2.

I have called attention to the frequency of miscarriage and divorce as concomitants and causes of sterility, mainly to emphasize that barrenness is not altogether due to physical causes, to pelvic disease amenable to local treatment, and that sterility is but too often artificially produced, the result of moral causes or the sequence to intentional miscarriage and the methods which precede it, the prevention of conception, both of which competent investigators have shown to be far too frequent. Divorce in Canada shows 1 to 63,000 marriages; in England, 1 to 11,600; in Germany, 1 to 13,000; in France, 1 to 12,500; in all the United States, 1 to 185; in Massachusetts, 1 to 13.8, and Rhode Island, 1 to 8.2 marriages.

Miscarriages are found in the proportion of 1 to 2.8 labors at term among Americans; while 1 to 5.5 is the usually accepted standard. Among Americans of American parentage, the frequency is somewhat greater, 1 to 2.7; among American-born of foreign parentage somewhat less, both in St. Louis and Boston; 1 to 3 among negroes, worse.

There is an absolute and primary barrenness due to utero ovarian disease, mainly to atresia, gonorrhoea, and to endometritis, with acrid discharge destructive to the spermatozooids; this is here for the first time clearly distinguished from relative, or secondary, sterility-i. e., conception and miscarriage. This primary sterility is much less frequent, 12 per cent among Americans, from 10 per cent to 11 per cent among foreigners, which means relative sterility for Americans 9 to 12 per cent, for foreigners 3 to 6 per cent, showing that among American-born there is a much greater proportion of sterility, of childlessness due to abortion; this may be due to disease or to traumatism, more often accidental, authorities say, for not much of the barrenness of woman is intentional. All sterility was, in the American colonies, 2 per cent; in parts of Russia it is to-day 2.8 per cent; in Norway, 2.5 per cent; hence, primary barrenness can certainly, in this country, not exceed 8 per cent-my records show 9 per cent-8 per cent of 20-23 per cent of the childless. Even in absolutely primarily barren marriages sterility is once in four or five cases due to the male, showing that absolute sterility in woman is not common; and that sterility is not mainly due to utero-ovarian disease is evident from its rapid increase, hand in hand with the astounding progress of gynaecological science, which, we have every reason to believe, would reduce the number of childless women to a minimum were sterility referable to tangible physical causes.

Sterility is a sad affliction for the innocent sufferer, and for her our best efforts must be exerted; but if so rarely due to pelvic malformation and disease, why do I present these thoughts to the gynaecological section of a medical society? It is because we must seek to stay the progress of this abnormal state—because men and women are in ignorance of the suffering prone to follow wilful and self-inflicted sterility; and it is this subject which claims a prominent chapter in the gynaecology of the future—preventive gynaecology.

The death rate of nations has steadily decreased in the last decade by the development of preventive medicine, and so may sterility decrease and birthrate increase with the progress of preventive gynaecology.—N. Y. Med. Journal.