MEASURING HEALTH NEEDS IN AN URBAN DISTRICT

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II. PREVENTIVE HEALTH ACTIVITIES IN RELATION TO SPECIFIC PROBLEMS[1]

THE adequacy of the public health clinic and nursing supervisory and educational activities in the 801 families surveyed in the Mott Haven Health District, New York City, before a district health organization was set up, can be measured most significantly when the services are considered in relation to the available evidence as to the prevalence of specific health problems in the families. The nurses are engaged primarily in the supervision of a few specific problems, although one might assume quite reasonably that in the majority of families, especially those that are economically less privileged, the public health nurse would find one or more health conditions for which her help and instruction would be of great value. The available services are directed to the care of those health problems which are brought to the nurses' attention through some type of public health activity, as, for example, the reports of physical defects of school children, of communicable diseases and of tuberculosis, or to the assistance of individuals who are referred by other agencies or refer themselves to a clinic, as is true in the case of most infant supervision. The present analysis is to determine to what extent the Health Department did give some supervision to families and individuals in the survey sample for the care of health needs which were or, from available sources, might have been known to the Department, and to determine the extent to which preventive health measures were provided from any source for the more common public health problems. The problems studied and re-

[1] From the Milbank Memorial Fund. The first paper which described the sample of families in the survey and reported on the extent of health service to the families was published in the January, 1936, issue of the *Quarterly*, xiv, No. 1, pp. 23-36.

ported on in the following pages include the correction of physical defects of school children, immunization against diphtheria, infant and maternal hygiene. The number of communicable diseases reported and the number of tuberculous families in the survey were too few for detailed study.

PHYSICAL DEFECTS OF SCHOOL CHILDREN

Health supervision was provided during the twelve-month period of study[2] to more families for the purpose of obtaining the correction of a physical defect in a school child than for the care of any other health problem. It has been shown that 5 per cent of all families received this type of health service and that these families were slightly more than half of the total number receiving any service. The adequacy of supervision for the correction of defects may be studied by considering the individual children who had some defect and the extent of the follow-up service given by the Health Department.

The records of the examination of school children by the school medical examiners were the source of information concerning the physical defects of children in these families which required some corrective treatment.[3] These records were supplemented by the school nurses' records of follow-up and corrections which had been made and by the families' statements concerning the correction of defects. To allow a reasonable amount of time for the nurse to follow up a defect and for the family to attend to its correction, we have omitted the records for children examined less than three months before the date of the investigator's visit. There were 116 children in the survey who had been examined from three to eleven months previous to the home visit and 74 had at least one physical defect which had been graded as in

[2] The families were visited between June and December, 1932, and the health services received in the twelve months preceding the date of the visit are the basis of this study.

[3] The name of every child of school age was checked against the records in the schools, not just those for whom the family informant had reported a defect. The results of all medical examinations on the child's record were copied, regardless of how long ago the examination had been made.

need of attention.[4] Although the number of cases is small, they should provide a fairly representative cross section of the situation in this district for all but a few higher income families with respect to the prevalence of physical defects found by the school medical examiner and the extent to which they were followed up and corrected.

Follow-up Service. The school nurses made visits to the homes of 26 of the children with defects, or 35 per cent. They advised the parent about the needed care for the child and in some cases assisted in making arrangements for obtaining medical care. In addition, the nurse held a conference at the school with five of the children or with parents, making a total of 42 per cent of the children for whom there was some follow-up service on record. The nurse made one home visit to two-thirds of the cases and never visited more than twice to secure the parents' interest in correcting a physical defect. The records seem to indicate that most of the children who were likely to receive any special attention from the nurse were given supervision within three months

Table 1. Follow-up service by the school nurse given to children with physical defects in a period of three to twelve months after the school medical inspection, and in families of various incomes, in the Mott Haven District, 1931-1932.

Economic Status of Family	Number of Children Examined	Children With One or More Defects Graded 3 or 4		Children With Defects Receiving Follow-Up Service	
		Number	Per Cent	Number	Per Cent
All Incomes	116	74	63.8	31	41.9
Relief	26	19	73.1	8	42.1
Poor	39	27	69.2	10	37.0
Moderate	35	19	54.3	9	47.4
Unknown	16	9	56.3	4	44.4

[4] Only defects recorded as 3 or 4 on the medical examination card have been counted. A four-fold grading system with 1 as satisfactory was supposed to be used, but many times the defect was not classified on the card, and simply the word "teeth," "tonsils," etcetera, was entered. None of these ungraded defects has been counted, although in some instances the nurse made a follow-up visit and a correction was reported. The failure to grade the defects so that the nurse will know which are in most urgent need of correction is a serious lack in the record.

of the examination.[5] Thus, when the children are classified into three groups according to the months elapsed since the medical inspection, the following percentages which had received follow-up service from the school nurse are obtained: three to six months, 38 per cent; six to nine months, 42 per cent; nine to twelve months, 47 per cent.

The extent of the follow-up service provided to children of different economic status[6] is shown in Table 1. The number of children in each income group is too small to have much significance but there is no evidence that children were selected by the school nurse for follow-up because of any knowledge of the economic status of the family. However, it should be remembered that the study was made in a period of declining wage rates and loss of employment and many families had become "poor" or had relief only in recent months. There was, nevertheless, a much higher percentage of children with physical defects needing attention among the lower income groups than the higher.

Table 2. Follow-up service by the school nurse given to children with specific defects in a three to twelve-month period after examination in the Mott Haven District, 1931-1932.

Physical Defect Graded 3 or 4	Number of Children Having Specified Defect	Children Given Follow-Up by the School Nurse	
		Number	Per Cent
One physical defect:	54	18	33.3
Nutrition	23	5	21.7
Tonsils	14	5	35.7
Teeth	11	6	54.5
Eyes	4	2	50.0
Cardiac	2	0	0
Two or more defects	20	13	65.0

[5] In the twelve-month period of this study there were nursing visits reported for five children with physical defects who had been examined more than one year previously and for whom there was no record of any earlier follow-up service.

[6] Income was computed for the twelve-month period preceding the investigator's visit to the family and the following classifications are used: "Relief," families receiving welfare for any part of the period; "poor," families with less than $1,400 income; "moderate," those with $1,400 or more. Most families of unknown income seemed to belong in the moderate group.

The type of defect noted and the presence of more than one serious condition seem to have had considerable influence on the selection of cases for follow-up, as is shown in Table 2. When poor nutrition was the only condition reported, the nurse had given special attention to only 22 per cent of the children, but in the case of teeth and eye defects one-half of them had had follow-up supervision. Of the twenty children with more than one physical defect, 65 per cent had had nursing supervision, but it is not possible to determine whether any specific defect had more influence on the nurse than another. It seems probable that the fact that the Health Department provided some facilities for correction in the district (six dental clinics and one eye clinic) was the chief reason for the nurses' selection of a relatively large proportion of eye and teeth defects for follow-up service.

Corrections. A report of a correction of at least one defect or of the condition being under treatment was given either on the nurses' records or the investigator's record for nineteen children, or 26 per cent of those with a defect needing attention. That the small percentage with corrections is not the result of including children for whom only three to six months had elapsed since their examination is shown by the fact that five of the twenty-one children in this most recently examined group reported a correc-

Table 3. Correction of physical defects of school children in relation to follow-up service by school nurse, in the Mott Haven District, 1931-1932.

Status of Child With Respect to Service from the School Nurse	Number of Children With Defects	Children With a Defect Corrected	
		Number	Per Cent
TOTAL CHILDREN	74	19	25.7
Follow-up at any time:			
Nursing contact	31	14	45.2
None	43	5	11.6
Follow-up before correction:			
Nursing contact	28	11	39.3
None	46	8	17.4

tion. Furthermore, for a group of thirty-three children with serious defects found on examination in the year previous to that included in our study, the school and nursing cards recorded a correction for only nine, or 27 per cent.

The per cent of children for whom treatment or a correction was reported was much higher among those who had had some follow-up service than among those without this service, the percentages being 45 and 12, as is shown in Table 3. But for three children[7] the parents had started or made the correction before the nursing supervision was given and if these are transferred to the group "without follow-up," the per cent of children with corrections in this group becomes 17 and that for corrections apparently related to the follow-up service is 39. Obviously, the benefits of the school medical examinations are not realized unless the correction of defects is carried out. A follow-up service by the nurses which reached most families promptly might be expected approximately to double the number of corrections. On the other hand, the follow-up service given to these families had resulted in a correction being made in less than one-half the cases. The reasons for failure to secure corrections should be studied in order to improve the effectiveness of school health work.[8]

Table 4. Physical defects corrected or under treatment from three to twelve months after examination for a group of 74 school children in the Mott Haven District, 1931-1932.

Type of Defect	Number of Defects Found	Number Corrected	Per Cent Corrected
TOTAL DEFECTS	96	23	24.0
Tonsils	29	5	17.2
Teeth	21	7	33.3
Nutrition	38	7	18.4
Eyes	5	3	60.0
Cardiac	3	1	33.3

[7] It should not be inferred that the follow-up of the three children was wasted effort that might have been avoided. In one case, there had been only a school conference at which the nurse discovered that a child had obtained glasses for a vision defect. For the other two children, there had been home visits, and since poor nutrition was one of the conditions needing attention, instruction of the mother was a needed service even though the associated defect had been corrected.

[8] A discussion of the reasons for failure is included in "Physical Defects—The Pathway to Correction." American Child Health Association, 1934.

Of the ninety-six different conditions for which these seventy-four children needed attention, there was evidence that 24 per cent had been corrected or were under treatment, as is shown in Table 4. Since few corrections were reported except for children who had received follow-up service, the differences in the rates for correction of specific defects are very similar to those discussed for follow-up of specific defects. The percentages of defective tonsils and of poor nutrition corrected were very low, only 17 and 18 per cent respectively, and since these were the most prevalent conditions they affect the general average of corrections very much. The correction of a nutrition defect takes a long time for some children and also is not readily recognized unless a re-examination was made and, therefore, such corrections may not have been completely reported. But if all nutrition cases are excluded, the corrections of other defects amounted to only 28 per cent of the defects reported.

DIPHTHERIA IMMUNIZATION

Immunization against diphtheria was reported for 55 per cent of all children in the survey under fifteen years of age. For children aged 6 to 14 years, the per cent was 64, but for preschool children, as shown in Table 5, it was 38 per cent. These are the total immunizations done at any time prior to the investigator's visit, and include all children who had been given three doses of toxin-antitoxin or toxoid. There was no information on the number tested to determine whether immunity had developed. Diphtheria is a more serious menace to the preschool child than the school child, and, although the immunization of 38 per cent of

Table 5. Immunizations against diphtheria received by children any time prior to the survey in the Mott Haven District, 1932.

Age Group	Children Immunized Against Diphtheria		Number of Children
	Per Cent of Total	Number	
UNDER 15 YEARS	54.8	675	1,231
0-5 years	38.3	173	452
6-14 years	64.4	502	779

those under six years of age represents a noteworthy accomplishment, an increase in the immunizations at very young ages should be a constant objective of the Health Department.

The date of immunization was indefinite for so many children that it was not possible to determine how many had been done in the twelve-month period of our study, but at least one-third of the immunizations had been done in 1931 or 1932. The survey was begun six months after the close of the intensive city-wide campaign conducted during a three-year period by the Diphtheria Prevention Commission.[9] This campaign apparently had met with marked success in the Mott Haven district.

The agency which administered the prophylaxis is shown in Table 6, using the family as a basis rather than the child. One or more children under fifteen years of age in 62 per cent of the families had received immunizing treatments. Fifty per cent of the families had had a child or children immunized at a school clinic, 45 per cent at some other clinic, and 16 per cent by a private physician. A family with more than one child may have had one child inoculated at school and another child at a clinic, or any other combination, but only 10 per cent of the families re-

Table 6. Agency used by families in different income groups for immunization of children against diphtheria in the Mott Haven District.

Agency Giving Immunization	Number of Families					Per Cent				
	All Incomes	Relief	Poor	Moderate	Unknown	All Incomes	Relief	Poor	Moderate	Unknown
School clinic	169	24	61	50	34	50.0	34.8	53.0	49.5	64.2
Other clinics	151	48	47	39	17	44.7	69.6	40.9	38.6	32.1
Private physician	55	8	17	23	7	16.3	11.6	14.8	22.8	13.2
Total families[1]	338	69	115	101	53	—	—	—	—	—

[1] Since a family might take one child to one agency and another child to a different agency, the sum of the families using each agency is greater than the number of families with a child immunized. The total number of families is the base for computing percentages.

[9] A record of this campaign is available in a published monograph, "Saving Children's Lives." Diphtheria Prevention Commission, The Department of Health, City of New York, 1932.

ported more than one source of this service. In the majority of families all children apparently had been immunized at the same time.

When the use of different agencies is considered in relation to the family income, some differences stand out. Among relief families, 69 per cent had had a child immunized at a clinic, as against from 32 to 41 per cent of families in other income groups. This is no doubt the result of a larger percentage of relief families having taken their children to clinics for other health needs. Families classified in the "moderate" income group had used a private physician much more frequently than any other group, 23 per cent compared with 12 to 15 per cent for the other groups. The proportion of families which had service from some source did not vary according to income.

INFANT HYGIENE

Health supervision of infants and instructive service to mothers in the Mott Haven district were provided by the Health Department through two Baby Health Stations and home visits by nurses, through the Henry Street Nursing Service, and hospital infant clinics. The extent of the educational and supervisory service rendered obviously can be measured only if account is taken of services by all the agencies. The Baby Health Stations were open to children up to two years of age, most of the Henry Street nursing care was given to new-born infants, and one of the two hospitals in the district admitted to its infant clinic only babies born in the hospital.

Extent of Service. The computation of the proportion of an infant population which had any health supervision in the first year of life offers some difficulty when the records available do not follow a specific group through infancy. In this study, the record of service received is for the twelve months previous to a given date and, obviously, this twelve-month period coincides with the

period of infancy in only a very few cases. It includes anything from the entire twelve months to a few days, either at the beginning or end of the infant period, for the population under two years of age at the date of the visit, and it is entirely possible that all this group might have service. The periods of observation for different infants cannot be added together and the equivalent years of infant life used as a base population to which may be related the total number of infants with service while under observation, because infant supervision is not a single contact but is usually a continuing service over a varying number of months.[10] An approximation to the method of following a specific group through infancy has been used in the present study, by using a changing population for each month of infant life[11] and counting for each month the number of infants who received their *first* health service. The number of infants under observation in each month of life is practically constant and the new cases at each month may be added together and related to the average infant population to obtain the percentage of infants which had health supervision of any amount sometime between birth and age one year.

One-half of the infants in the survey sample received health supervision from some agency by the end of the first year of life, on the basis of services reported or on file for 121 individuals observed from one to twelve months of the infant period, and an

[10] This represents what is done when the number of infants receiving health service from any agency in a calendar year is related to the number of births in the year to determine the per cent of infants which had service. The number of infants with service should include only those to whom the service given was the first ever received, in other words, an absolutely new case, not a "new case this year." When service is continued, as in the case of infant supervision, the later months of an infant's life cannot be considered independent of the earlier months of life. The method of obtaining the percentage of infants which received service is described in detail because often it is computed inaccurately.

[11] For example, the infant population observed for the third month of life is all infants in the study whose third month was from 0 to 12 months previous to the home visit, or those aged 3 to 15 months. The number of infants in this group who had their *first* service in the third month is used as typical of the new cases reached in the third month. The complete history of the service received since birth was copied for every child under two years of age and enables us to classify the infant as a new or old case in each month.

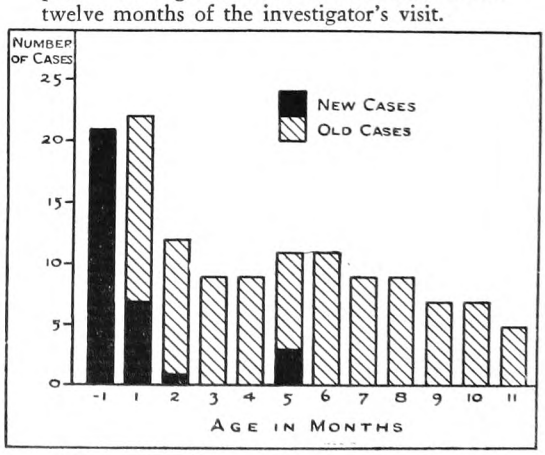
average of sixty-one infants under observation in each month of infancy. The Health Department had given service to 28 per cent, as shown in Table 7, and all of these had been to one of the infant clinics. According to the policy of the Department, the nurse should visit the homes of infants attending clinic in order to understand the family situation, but in this series of cases, the nurse had visited about 65 per cent of the clinic cases. No home visits were reported for infants not having first attended clinic. Health supervision was given by Henry Street nurses to eighteen, or 30 per cent, of the infants and only four of these were in the group which attended a Health Department clinic.

Table 7. Health services to an average group of sixty-one infants in the Mott Haven District, 1931-1932.

Agency Giving Service	Number of Infants	Per Cent[1]
All Agencies	32	52.5
Health Department	17	27.9
In clinic	17	27.9
Home visit by nurse	11	18.0
Henry Street Visiting Nurse Service	18	29.5
Other: clinic	3	4.9

[1] Per cent of 61 or the average infant population under observation for each month of infant life (*see* footnote 11).

Fig. 1. Number of infants supervised for the first time and number with previous service given supervision in each month of infancy by either an official or voluntary agency among an average population of 61 infants, which each month was composed of those infants who had passed through that month of life within twelve months of the investigator's visit.



Preventive health care is most effective in the early months of infancy and, as shown in Figure 1, most of the infants which received service from the different agencies came under supervision in the first or second month of life. Few new cases were reached after the third month, and the number of old cases given service in each month continued at about the same level

until the ninth month of life. Although the Health Department clinic was open to children up to two years of age, only five children aged one to two years at the date of the survey had attended after age one.

The agency which gave service in the different months of life is shown in Figure 2. Most of the infants cared for in the first month of life had home supervision by nurses from the Henry Street Nursing Service. These received new-born care, which usually was combined with postpartum care for the mother. Very few of these infants had supervision after the second month. Nearly all those under care after the neonatal period attended the Health Department clinics.

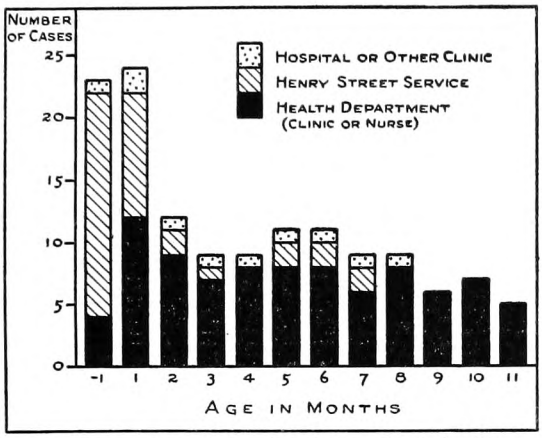


Fig. 2. Number of infants given health supervision in each month of infancy by various agencies among an average population of 61, which each month was composed of those infants who had passed through that month of life within twelve months of the investigator's visit.

Volume of Service. Infants with some health supervision at the Health Department clinics made frequent revisits to clinic, usually one or two per month, and the thirteen infants who were registered at clinic before the age of three months made an average of 9.8 visits up to the age of six months.[12] In the latter half of the infant period, revisits were less frequent and more than half the mothers had discontinued attendance before the infant was a year old. The average number of visits for the entire twelve months was 12.5[13] for the thirteen infants whose records were available up

[12] Service records at the clinic were copied after the investigator's home visiting was completed, and the clinic records were complete up to six months of age for all infants, regardless of age at the home visit.

[13] The average number of visits for a group of infants followed from birth to age one year may differ widely from that obtained by dividing the total visits to a clinic in

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to one year of age. The infants given care by Henry Street nurses had an average of seven visits. This was an intensive service, including bedside care for most, and the practice apparently was to give seven to ten visits within a short period following birth. Cases with fewer visits usually had been delivered in a hospital.

Economic Status and Service. Although the number of infants in the different income groups was too few to have much significance, the difference in the proportion with service is of some interest. The per cent of infants in "poor" or "relief" families which had attended a Baby Health Station was 37.5 as against 9.5 per cent of the infants in families of "moderate" or unknown income. Henry Street nurses gave care to 33 and 24 per cent of infants in each of these two broad income groups. The service by Henry Street nurses to one-fourth of the infants of "moderate" incomes is no doubt influenced by the fact that some had this care because they were industrial policy holders of the Metropolitan Life Insurance Company.

It is the purpose of the Health Department to make facilities for preventive health supervision available for all infants who do not have this care from private physicians. Each mother was asked specifically when and how often she had taken the baby to the doctor for examination or general care and not because of illness. Of the fourteen mothers in the "moderate" or unknown income group with babies from three to eleven months old, seven said they had taken the baby to the doctor once or twice in the second or third months of life. Of the thirty-one mothers in the "relief" and "poor" group, seven had taken their babies to a private physician up to three months of age, and none of the older infants who had not been to a physician in the first three months had any medical attention in later months. If this small sample of infants is at all typical, there was little preventive medical care given to

a twelve-month period by the number of infants who attended clinic. The two averages are comparable if the number of infants in the latter computation includes only those who had their first clinic contact in the period.

infants in the low-income families, and the 37.5 per cent who were attending an infant clinic represent not more than half of those who had not had infant supervision from a private physician.

MATERNAL HYGIENE

The health supervision of maternity patients both with respect to medical care and to instruction and assistance by a public health nurse was provided in the Mott Haven district by agencies other than the Health Department. Since this is an important health problem now generally accepted as within the scope of public health responsibility, the health department should know the status of maternity care in the community and take the leadership in coordinating services provided by different agencies and

Table 8. Prenatal care reported for a sample of maternity cases, classified according to the type of delivery care received, in the Mott Haven District, 1931-1932.

Attendant and Place of Delivery	Total Cases	Medical Prenatal Care Reported by Maternity Patients			Prenatal Care by Visiting Nurse[2]	Per Cent With Specified Prenatal Care	
		Physician[1]	No Medical Care	Unknown		Physician	Visiting Nurse
TOTAL	61	48	10	2	19	81.4	32.2
Private physician	31	24	5	2	8	82.8	27.6
At home	18	13	4	1	8	76.5	47.1
In hospital	13	11	1	1	0	91.7	0.0
Hospital physician							
In hospital, pay	11	9	2		3	81.8	27.3
In hospital, free	14	12	2		6	85.7	42.9
Hospital or clinic physician, in home	3	3	0		2	100.0	66.7
Midwife[3]	2		1				

[1] Private patients at delivery had prenatal care from a private physician; patients delivered by a hospital physician had prenatal care at a prenatal clinic.

[2] All cases visited by a nurse except one also had medical supervision. Nursing service was given by Henry Street except for two cases.

[3] One of the two midwife cases reported prenatal care by the midwife; the other had none.

in bringing the patient and services together. It should assure the provision of adequate facilities regardless of what agencies render care.

Data were collected on the extent of the medical and nursing care received by women in the survey who bore a child less than twelve months before the investigator's visit. The mother's statement on medical care is the only source of information, but the records of the service given by Henry Street nurses were transcribed. The type of prenatal and delivery care reported by the sixty-one maternity patients is summarized in Table 8.

Delivery Care. Medical care for 46 per cent of these births was provided through the ward and clinic facilities of hospitals and only 51 per cent were under the care of a private physician. Two women in this series were delivered by a midwife. Delivery care was given free to 28 per cent of the women and 18 per cent paid a small sum for hospital care but no medical fee. If this sample is fairly typical of at least 75 per cent of the families in the district, as it seemed to be, then there is a large community load to be cared for in this district. It seems likely that about one-third of all births were cared for as free or part-pay hospital patients.

Less than half of the private physicians' patients (42 per cent) were delivered in a hospital. The sample is overweighted with low-income families, and the hospitalization of private patients in the district is much higher, probably from 60 to 70 per cent since 80 per cent of all births in the district were in a hospital.

Prenatal Care. Ten of the fifty-nine women who gave a complete report on their maternity care said they had no care before confinement. Except for the two midwife cases, the highest proportion without prenatal care is found for the private physicians' patients who were delivered at home. Four of the seventeen patients, or nearly 25 per cent, had not seen the physician previous to the time of confinement. No prenatal care was reported for 14 per cent of the ward and dispensary patients.

The preventive value of prenatal care is dependent upon early medical supervision. The per cent of women in this series who had received any medical prenatal care up to a specific month of pregnancy is shown in Figure 3 and the per cent under the care of a private physician and of a hospital clinic is given also. Only 20 per cent had registered for prenatal care before the sixth month of pregnancy, but the per cent increased rapidly in the sixth and seventh months. It can be seen in Figure 3 that the increase in those two months was especially rapid for clinic cases and the delay in registering for care was greater for the private physician patients.

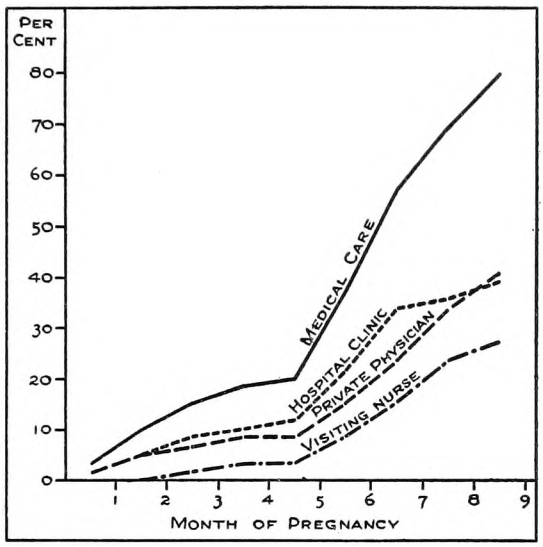

Fig. 3. Per cent of women who had received some medical prenatal care and some nursing care in or previous to each month of pregnancy, for a sample group of 61 maternity patients.

The period of pregnancy in which prenatal care was begun is shown in Table 9 for cases classified according to the type of delivery care. A larger proportion of the women who had free care than of those who were private patients began their medical supervision early enough in pregnancy to give opportunity for good prenatal care. Of the ward and dispensary patients, 48 per cent attended clinic in the sixth month or earlier, compared with visits to the physician by 31 per cent of all private patients and 17 per cent of those delivered at home.

In this series of cases, nearly all women who began care early made return visits fairly regularly. The average number of visits to a prenatal clinic by the twenty-two women reporting a definite number was 6.9 and only three of them made fewer than four

Month of Pregnancy	Number of Cases under Specified Care Which Began Prenatal Care in Stated Month					Per Cent of Cases under Specified Care Which Began Prenatal Care in Specified Month				
	Private Patient			Hospital Case	Henry Street Nurse	Private Patient			Hospital Case	Henry Street Nurse
	Total	Hospital Delivery	Home Delivery			Total	Hospital Delivery	Home Delivery		
TOTAL CASES	29	12	17	27	16[1]	100.0	100.0	100.0	100.0	100.0
Before the 5th	5	4	1	6	2	17.2	33.3	5.9	22.2	12.5
5th or 6th	4	2	2	7	3	13.8	16.7	11.8	25.9	18.8
7th or 8th	11	5	6	8	9	37.9	41.7	35.3	29.6	56.3
th	4	0	4	2	2	13.8	0.0	23.5	7.4	12.5
No supervision	5	1	4	4	—	17.2	8.3	23.5	14.8	—

[1] Excludes one case for which the month was not stated.

Table 9. Month of pregnancy in which prenatal care was begun by patients cared for by a private physician and by a hospital, and month in which nursing supervision started for a sample of maternity cases in the Mott Haven District, 1931-1932.

visits; but the average number of prenatal calls to a private physician by the twenty-two women reporting was 4.1 and eleven of them made fewer than four calls. This suggests that the need for education on preventive measures for expectant mothers is greater for the women in low-income brackets who went to their own physician than among those who used available clinic services. This may be partly the result of an economic barrier which keeps the private patients from making frequent visits for prenatal care and partly the result of education of the clinic group at previous births and the desire to be registered at the hospital for delivery care.

Assistance of a visiting nurse in carrying out the physician's instructions, in getting supplies, and making arrangements for delivery, is of inestimable value to patients of limited income or slight knowledge of maternal hygiene, nutrition, and related subjects, and this service should be available to most pregnant women. It is a service which, as Mustard has pointed out, does not compete with the physician in charge but in which the nurse

"supplements, assists, acts as his representative."[14] Nurses of the Henry Street Nursing Service made home visits in the prenatal period to seventeen women, or 28 per cent of the sixty-one maternity patients; and two others had home visits from a representative of the hospital clinic. Those with service from a Henry Street nurse were about equally divided between clinic patients and private physician cases who were delivered at home.

The nursing contact was not made early enough in pregnancy to assist in bringing the patient under early medical supervision, since only five of the women were visited before the seventh month. As the nursing supervision started late in pregnancy, nine of the 14 cases, for which the number of home visits was known, had from one to three visits, and the other five had from four to eight visits. One of the most difficult problems involved in improving prenatal care is to find the cases early in pregnancy.

Postpartum Care. A postpartum examination from one to two months after confinement should be included as part of an adequate maternity service. Among fifty-four women reporting, less than half had returned to the physician or clinic to be examined.

Table 10. Number and per cent of maternity patients who reported a postpartum examination, for a sample of cases in the Mott Haven District, 1931-1932.

Classification of Patient	Number of Women	Postpartum Medical Examination		Per Cent Which Had an Examination
		Yes	No	
TOTAL CASES	54[1]	25	29	46.3
Private patient	28	15	13	53.6
In hospital	12	12	0	100.0
At home	16	3	13	18.8
Hospital patient, part pay or free	26	10	16	38.5

[1] Excludes five women who failed to report on postpartum examination and two women delivered by a midwife.

[14] Mustard, H. S., M.D.: AN INTRODUCTION TO PUBLIC HEALTH. New York, The Macmillan Company, 1935, p. 173.

Wide differences were indicated for different types of patients, as shown in Table 10; all of the private patients delivered in a hospital reported a postpartum examination but only 19 per cent of the patients delivered at home by a private physician had been examined. This latter group had had the least amount of both prenatal and postpartum care.

All patients given nursing care in the prenatal period by Henry Street nurses were followed up in the postpartum period.