

# PUBLIC HEALTH NURSING SERVICE FOR URBAN PRESCHOOL CHILDREN<sup>1</sup>

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THE most effective and economical use of public health nursing service for preschool children in urban areas is a problem of increasing importance. This is true since more emphasis is being given to the health problems of young children and since localization of public health administration in health center districts is developing in our large cities. Such questions as the following challenge the administrator: How can the objectives of health supervision be accomplished for the largest number of children in the area? Which children should have the most attention? If the Health Department cannot give unlimited service to them all, which ones shall be selected? What qualitative measures of the service can be used effectively? How much time can be given to the individual child, and what measures shall be taken to assure reasonable continuity of supervision? How shall the services rendered by private agencies in the district be correlated with the official services so as to avoid gaps on the one hand and duplication on the other?

Such questions, all of which represent different aspects of a single problem, have been kept in mind in the present analysis of services received by an unselected sample of children aged one through five in low-income families in the Bellevue-Yorkville health district of New York City. The aim of the study is to utilize actual practice as a guide in determining standards for public health supervision, with particular reference to public health nursing activities.

<sup>1</sup> From the Milbank Memorial Fund, New York City.

An analysis of services received by an unselected sample of children one through five years of age in low-income families in Bellevue-Yorkville district of New York City.

Acknowledgments are made to the personnel of the Health Department and the private agencies in the district whose cooperation in obtaining the information was of great assistance.



also shows the median rentals in 1930. Supplementary information concerning income, obtained from the families in this poor section, reveals (Table 1) that only five of the 323 families with preschool children had as much as \$2,000 per year, while half had less than \$800 per year. In more than one-third of this latter group the father was reported unemployed. Of all the families in this study, over one-third received assistance from a public or private welfare agency. The population of the area studied includes 40 per cent foreign-born and 35 per cent native-born of foreign-born parents, Italy and Ireland being the foreign countries most frequently represented.

In ascertaining what health services were rendered to these children, the records of the City Health Department and private agencies were examined, observations were made of nurses at work in homes and clinics, and inquiries were made in the children's homes by special investigators.<sup>3</sup>

Data were collected regarding each child who was at least one year of age at the time of the investigator's visit, and who had had some health service during the preceding twelve months. While the data collected for any child cover one year, the records for the various individuals do not coincide in time. However, all the twelve-month periods fall within the calendar years 1930-1932.

Table 1. Yearly income of families containing preschool children in an area of the Bellevue-Yorkville District, New York City.

Income	Families with preschool children reporting each stated income	
	Number	Per Cent
TOTAL	323 <sup>1</sup>	99.9
Moderate + (\$2,000 and more)	5	1.5
Moderate (\$1,999—\$1,400)	52	16.1
Poor (\$1,399—\$800)	109	33.7
Very poor (Less than \$800)	157 <sup>2</sup>	48.6

<sup>1</sup> Excluding 21 families for whom the income was not stated.

<sup>2</sup> Including 55 families who received no income because of unemployment.

<sup>3</sup> Information from the homes was obtained in connection with a Maternity and Infancy Study in the same area, by Dorothy Wiehl of the Milbank Fund staff.

AGENCIES GIVING HEALTH SUPERVISION TO PRESCHOOL CHILDREN

When the Bellevue-Yorkville Health Demonstration, jointly supported by the New York City Health Department and the Milbank Memorial Fund, was undertaken, many of the health and social agencies operating in the district were housed in the health center on East 38th Street. This prevented duplication of effort and facilitated cooperation.

*The Official Agency.* Three Health Department clinics in the district offered health supervision to preschool children. An attending physician gave health examinations and both he and the nurse instructed mothers in routine care necessary to keep children well. The nurses visited the homes to learn of the home conditions, to explain the importance of regular medical supervision, to assist the mother in carrying out clinic recommendations, and to give any further instruction needed in the care of children.<sup>4</sup>

The policies varied according to age. In the *Manual of Instructions* for New York City Health Department nurses it is stated that "Babies from one to two years should be supervised every month, and children from two to three years every three months." The written instructions do not mention children from three to five years, since the entire City program provides a limited amount of health supervision for these ages. But the Bellevue-Yorkville program was extended to the older preschool group, using the same general standards for frequency of supervision. The *Instructions* also state that supervision shall be "in the home or health station, but preferably the station." The emphasis in the Health Department program is put upon clinic supervision, a large part of the nurses' time being spent in clinic.<sup>5</sup> It is the place provided for parents seeking advice about the health and care of

<sup>4</sup> Cooperation and service were given by the City welfare organizations to families needing work and home relief.

<sup>5</sup> In the three years represented in this study, approximately 32 per cent of the Bellevue-Yorkville nurses' total time was given to clinic services.

young children. It represents that newer phase of health department programs which supplements services for control of disease with education in practical rules for health. Since this program is that of an official agency, it is theoretically set up for *all* preschool children, but in actual practice there is a *selection* of cases.

*Voluntary Agencies.* The Bellevue-Yorkville District had at least as many private agencies concerned with the welfare and health of children as any district in the City.<sup>6</sup> They could select and limit the cases served, according to their various policies.

#### SERVICES RECEIVED

Reports of public health nursing activities are often confined to volume of service,<sup>7</sup> which is important for routine administrative purposes. In this study emphasis is placed on the detailed activities, shown by the extent to which services were rendered and relationship of services to special problems.

*Extent of Total Clinic Services.* How the program operated in the district is illustrated by the extent to which the 428 children who lived in the area the entire year received supervision from a Health Department or private agency.<sup>8</sup> The clinic registration for the children of different ages is given in Table 2. Seventy-nine

<sup>6</sup> These agencies include: New York Diet Kitchen Association, which conducts a clinic; Chapel of Incarnation, Prescott Memorial, and St. George's Clinics; Goddard Preschool Clinic; Friendly Aid Kindergarten, several day nurseries, and other small private organizations; and the Henry Street Visiting Nurse Association, which gives bedside care in the home during illness and makes follow-up visits for health supervision. Cooperation and service are also given by the Association for Improving the Condition of the Poor, the Charity Organization Society, Catholic Charities, Jewish Charities, and several smaller social agencies.

<sup>7</sup> For the total sample of children a total of 608 home visits by Health Department nurses was reported for the study period, the 195 preschool children visited having an average of 3.1 visits per child. Fifty-six children were visited one or more times by public health nurses from the private agencies in the district. In addition, a total of 1,356 clinic visits was recorded (996 at Health Department clinics and 360 at private agency clinics), the 203 preschool children (excluding 20 children for whom number of clinic visits was not stated) who attended clinics having an average of 6.7 clinic visits per child. This is considerably more than the clinic supervision given in most urban areas. In the Appraisal Form for City Health Work the standard given for children 1-5 years is two home visits and two clinic visits per child registered, although it is recognized that this standard is generally considered low.

<sup>8</sup> Sixty children were discharged; two died, 58 moved into or out of the district.

per cent of the one-year-olds had some clinic supervision as compared with 29 per cent of the four-year-olds. The intensive infant program was carried over to the one-year-old group, but in the

Table 2. The registration at private and official child health clinics in the Bellevue-Yorkville District, New York City, for an unselected sample of preschool children in low-income families by single years of age.

Age of Child	Number of Children	Children Registered at Clinic	
		Number	Per Cent
1-5 years	428	197	46.0
One	63	50	79.4
Two	95	49	51.6
Three	101	42	41.6
Four	89	26	29.2
Five	80	30	37.5

case-finding program more emphasis could profitably be directed to the older preschool children. The higher percentage for the five-year-olds attending clinics was due to the children getting ready for school who came to clinic for vaccination or physical examination.

The amount of clinic service varied with the child's age. Although the one-year-old children comprised only one-fourth of those attending preschool clinics, they returned more often than the older children and their visits added up to 45 per cent of the total. The amount of service for this age group was more than that of the combined groups aged two, three, and four years, although the children in these three groups made up two-thirds of the cases.

Arranging the distribution of services according to the frequency of visits made, it is seen, in Table 3, that 4 per cent of the children made 15 or more visits each and that these visits amounted to 29 per cent of the total. In the lowest frequency group, 1 to 4 visits, were 19 per cent of the children, and they received 15 per cent of the total clinic service. However, the majority, 56 per cent, of the children in the study had no clinic service.

The doctrine that district health programs shall be administered by the health department is becoming generally accepted. This

NUMBER OF CLINIC VISITS	NUMBER		PER CENT	
	Children Having Each Number of Clinic Visits	Total Clinic Visits	Children Having Each Number of Clinic Visits	Total Clinic Visits
TOTAL	412 <sup>1</sup>	1,246	99.9	99.9
None	231	0	56.0	—
1-4	78	188	18.9	15.1
5-9	61	414	14.8	33.2
10-14	25	284	6.1	22.8
15+	17	360	4.1	28.8

<sup>1</sup> Excluding 16 children for whom number of clinic visits was not stated.

Table 3. Frequency of visits to Health Department and private agency child health clinics for an unselected sample of children one through five years, in low-income families in the Bellevue-Yorkville District, New York City.

does not mean that the official agency must itself render all the service, which, in fact, it is not equipped to do; but it should coordinate the cooperation among all agencies serving the district. It seems particularly important that the health department in any city with localized service should assemble information as to which children are receiving supervision from other agencies, whose work is greatly needed and is of vital importance. Although 56 of the children in the sample studied attended clinics sponsored by private agencies, no record of this was found in the Health Department office.

*Continuity of Health Department Clinic Supervision.* Further discussion of distribution of services may be appropriately confined to the Health Department's activities. A qualitative measure of the service is the regularity with which clinic supervision is continued after registration.

In order to check up on regularity it is helpful to analyze the visits by quarters, as is done in Table 4, since the total of a year's visits could not serve as an index of continued supervision. Of the 428 preschool children studied, 172 had clinic record cards in the files of the Health Department, but only 141 of these children actually attended clinic during the year. Taking one clinic

PERIOD OF REGISTRATION	NUMBER OF CHILDREN REGISTERED IN EACH PERIOD	NUMBER OF CHILDREN ATTENDING CLINIC AT SOME TIME DURING YEAR	NUMBER OF CHILDREN CONTINUING CLINIC ATTENDANCE IN EACH QUARTER OF THE YEAR				NUMBER OF CHILDREN HAVING REGULARITY OF ATTEND- ANCE
			1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
TOTAL	172	141					44
Prior to year	122	91	59	43	35	23	23
First quarter	19	19		13	11	8	8
Second quarter	12	12			8	5	5
Third quarter	10	10				8	8
Fourth quarter	9	9					

Table 4. Continuity of attendance at Health Department clinics in each quarter of the year for 172 preschool children who lived in the Bellevue-Yorkville District the entire twelve months studied, according to the time of registration at clinic.

visit in each quarter of the year as the standard, Table 4 shows that only 26 per cent of the children registered reached this standard. Going into more detail, the table shows that of the 122 children registered before the study period, 91 attended some time during the year, but only 59 attended in the first quarter. Of these 59 children, 43 returned in the second quarter, and by the end of the year only 23 of these had had at least one visit in each quarter. Similarly, following through the children who registered in the first, second, and third quarters, we get the total of 44, or the 26 per cent mentioned above as having a standard regularity of clinic supervision.

*Frequency of Clinic Supervision.* Since it is one of the objectives of public health nursing "to teach the value of medical supervision and to assist in obtaining this regular health supervision," it is of interest to analyze in further detail the clinic attendance of this sample of children. For routine supervision of healthy preschool children a clinic visit every three months may be prescribed as a general policy, but more frequent visits for the individual child may be advised because of some special need. The clinic physician determines at the time of each visit when each child should return. The present study shows for 333 visits (about



half of the clinic visits for the sample of children) there was a recommendation written on the clinic record for the time of the next visit. In Figure 2, these are distributed according to the per

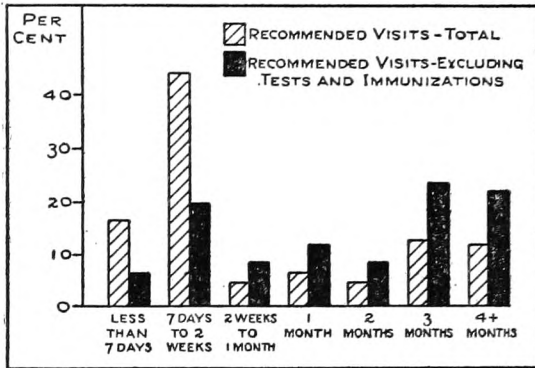


Fig. 2. Physicians' recommendations for return visits of preschool children to Health Department clinics.

cent of visits recommended for each interval of time.<sup>10</sup> The hatched bar represents all these visits, regardless of the problem, and indicates that the most frequent recommendation was to return in seven days to two weeks. For a smaller number of the visits the advice was to return in less than one week. For most of the remaining visits the physician recommended that the next visit should occur in three or more months.

In most instances a record of the problem explains the recommendation. If the child was given a tuberculin test or a Schick test, or was vaccinated for smallpox, the physician would instruct the mother to bring the child back in two or three days in order to read the results of those tests. At the time this study was made, toxin-antitoxin was being used for diphtheria immunization and the physician's recommendation was to return in a week for the second and third doses.

These immunizations and special tests increase the percentage of successive visits with brief intervals of time, and increase the volume of attendance at a clinic session. While two or three clinic visits for a few children for the giving and reading of some special

<sup>10</sup> In the analysis of services to a sample of children who were 1-5 years of age on a given date, some of the previous year's services to the one-year-old group would have occurred when the children were in the infant period. It is necessary to include these when considering the services received by the sample of children. But in this analysis of clinic visits only those visits occurring when the children were of preschool age (1-5) will be included. In other words, it will represent a cross section of preschool clinic practice.

test greatly increase the total clinic visits, in terms of continued health supervision over a period of time this does not mean that the average visits per child either meet or exceed a given standard. Such problems as these suggest the value of further classification of clinic visits in planning the administration of clinic services.

Excluding visits for these immunizations and tests, the distribution of all other clinic visits according to the interval of time recommended for return is also shown in Figure 2 by the black bar. In this group the recommendation for return in less than two weeks was due to some symptom of illness or other acute condition which led the physician to advise an early return.

*How Were These Recommendations Carried Out?* A type of analysis which could be used profitably is suggested in Table 5, which relates the performance of return clinic visits to the recommendation for them. Nearly one-third of the clinic visits corresponded exactly with the physician's recommendation. One-fifth of the visits were made early, over two-thirds were late and approximately one-eighth were never made.

Over two-thirds of the visits recommended to return in less than a week were promptly made and over one-third of those recommended to come within two weeks were made on time. But if an interval of four or more months was advised, the parents were evidently not willing to wait that long and brought the children back to clinic at an earlier date. Twenty per cent of all the clinic visits occurred before they were due, the reason being, according to the records for half of these visits, that a symptom of illness, an economic problem, a wish to weigh the child or to report the correction of a defect, had prompted the mother to bring the child back to clinic sooner than she had been advised. For the other children no reason was given for an early return. In some instances of early visits there might have been a need that was not recorded on the clinic card, but in general this

group represents families who demand more service than it is possible to give to all the children registered in clinic.

As shown in Table 5, there were 119 tardy visits, and the extent of tardiness is shown in Figure 3. Over half were less than two weeks late, while a sixth of the visits were two or more months overdue when the children finally returned to clinic.

While the percentages in Table 5 and Figure 3 give the actual facts about clinic attendance, it would require some modification to make these data suitable for practical use in the follow-up of clinic cases. Strictly speaking, the child who is told to return to

Table 5. Extent to which visits to Health Department preschool clinic correspond with the physician's recommendation for return visits.

RECOMMENDED INTERVAL OF TIME	TOTAL CLINIC VISITS	RELATION OF CLINIC VISITS TO RECOMMENDATION			
		On Time	Not on Time		Did Not Return
			Before Recom- mendation	After Recom- mendation	
PER CENT					
TOTAL	100.0	32.3	20.1	39.3	8.3
Less than one week	100.0	69.1	—	30.9	—
Seven days—less than two weeks	99.9	37.2	4.8	50.3	7.6
Two weeks—one month	100.0	11.4	31.4	34.3	22.9
Two months—three months	99.9	4.4	51.1	31.1	13.3
Four or more months	100.0	—	87.0	13.0	—
NUMBER					
TOTAL	303 <sup>1</sup>	98	61	119	25
Less than one week	55	38	—	17	—
Seven days—less than two weeks	145	54	7	73	11
Two weeks—one month	35	4	11	12	8
Two months—three months	45	2	23	14	6
Four or more months	23	—	20	3	—

<sup>1</sup> Excluding 30 visits for which the time interval recommended for the return visit had not elapsed by the end of the period studied.

clinic in ten days, for example, is late if he returns the fourteenth day. But in actual practice it would not be practical to classify the child as delinquent for missing the exact day. A period of grace is advisable. Just as a classification might be made by those administering a clinic, an estimate has been made here of those visits which were late enough to warrant some follow-up service and which, when added to those who did not return to clinic, form the problem of delinquency.<sup>11</sup>

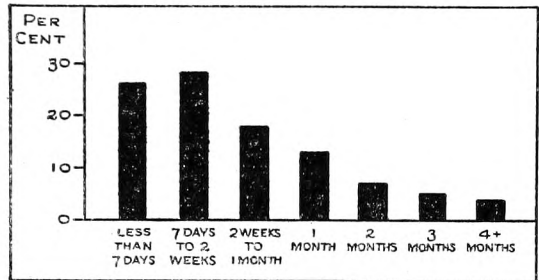


Fig. 3. Length of time 119 tardy clinic visits were overdue. In addition to these there were 25 that never returned.

*Supervision of Clinic Delinquency.* It is a policy in the Health Department clinic to mail postal cards to remind parents that the child should return to clinic, and it is also planned, when possible, for the nurse to visit the home to urge that the child return to clinic. In analyzing clinic delinquency which may occur with reference to any visit, it is necessary to continue using a visit as the unit; and, since the nurse is concerned about the regular attendance of all the clinic cases, the visits without a written recommendation for return may be added. There must, of course, be some basis of judging clinic delinquency if no special recommendation for return is charted on the clinic record, and here the nurse may use the standard for frequency of supervision suggested by the Health Department's written policy. This was used in the following analysis, and these additional visits were also classified according to relatively major and minor problems, since the relative severity of the problem involved would be expected

<sup>11</sup> If, for example, the next visit was advised in two or three weeks and the visit was made in seven days to two weeks or in one month, it was classified as approximately on time. If, however, the next visit was made in two months, it was classified as delinquent.

TYPE OF SERVICES GIVEN FOR CLINIC DELINQUENCY	ALL OVERDUE CLINIC VISITS		VISITS HAVING MAJOR PROBLEMS		VISITS HAVING MINOR PROBLEMS	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
TOTAL	275	100.0	192	99.9	83	100.0
None	192	69.8	138	71.9	54	65.1
Home visits only	45	16.4	35	18.2	10	12.0
Post cards only	26	9.4	12	6.2	14	16.9
Home visits and cards	12	4.4	7	3.6	5	6.0

Table 6. Type of services given by the Health Department for a sample of overdue visits to preschool clinic and the services given for these visits in which there were major and minor problems.

to influence the efforts made to bring about a return to clinic.<sup>12</sup>

Of 615 clinic visits expected, 275 were classified as overdue. This delinquency problem is analyzed in Table 6, where tardy visits are tabulated according to the efforts put forth to remedy delinquency. No service for clinic delinquency was recorded for 70 per cent of the overdue visits. Home visits were made for 16 per cent, post cards were mailed for 9 per cent, and both visits and cards were recorded for 4 per cent of these overdue visits. The figures for post cards may not tell the whole story, since the sending of reminders may not always have been recorded. The lack of services for delinquency was somewhat larger for cases with major problems than for those with minor problems. Also, from the standpoint of time when services were given, further analysis shows that overdue visits for children with major problems were not followed up any more promptly than those with minor problems. But as Table 6 shows, when services were given, major problems more often received home visits from the nurse and minor problems more frequently received post cards. However, the percentage of return visits for those cases for which some effort was made to get the child to return was no higher

<sup>12</sup> This arbitrary grouping was based on information on the clinic records. Nutrition and defects marked 3x or 4x, immunizations and special tests, and other conditions recorded as serious were called major problems, while the 1x and 2x defects and less serious conditions were called minor problems.

TYPE OF SERVICES GIVEN FOR CLINIC DELINQUENCY	TOTAL OVERDUE CLINIC VISITS	RESULTS ACCOMPLISHED IN TERMS OF A RETURN VISIT TO CLINIC	
		Number	Per Cent
TOTAL	275	210	76.4
None	192	152	79.2
Home visits only	45	30	66.7
Post cards only	26	22	84.6
Home visits and post cards	12	6	50.0

Table 7. Results in terms of a return visit to clinic following each type of service given by the Health Department, for an unselected sample of overdue visits to preschool clinic.

than for those whose delinquency apparently was given no special attention. This may be seen from a study of the figures in Table 7.

The same children were sometimes delinquent more than once. There were 125 children who did not return to clinic promptly, 75 of them being delinquent twice, 43 three times, and 31 four or more times. But the children who were repeatedly delinquent rarely received repeated follow-up services; only three of the 63 children who were visited in the home because of clinic delinquency were visited again because of a second delinquency. Repeated efforts would probably bring very few return results and, in any case, the parents should assume due responsibility.

*Immunizations.* One objective of the public health nursing program is to assist in securing immunizations against disease. This part of the program has been carried out with marked success; 55 per cent of the sample had been immunized against diphtheria and 51 per cent had been vaccinated against smallpox. It is evident that, in low-income families, clinic attendance is one of the biggest factors in securing these results, for over 80 per cent of the children who had attended child health clinics in the district received protection against diphtheria, while only 30 per cent of the children who had not attended clinics were immunized against this disease.

*Illnesses.* Information from the family revealed that exactly

TYPE OF CARE RECEIVED <sup>1</sup>	FOR 339 ILLNESSES		FOR 179 MAJOR ILLNESSES		FOR 160 MINOR ILLNESSES	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Private physician	47	13.9	39	21.8	8	5.0
Hospital	46	13.6	44 <sup>2</sup>	24.6	2	1.3
Hospital clinics	33	9.7	18	10.1	15	9.4
Health Department						
Diagnostician	13	3.8	13	7.3	—	—
Clinics	129	38.1	51	28.5	78	48.8
Nurses' home visits	43	12.7	31	17.3	12	7.5
Private agency						
Clinics	55	16.2	18	10.1	37	23.1
Home visits—Henry Street nurses	35	10.3	17	9.5	18	11.3
No care	30	8.8	18	10.1	12	7.5

<sup>1</sup> Each type of care as listed is independent of all other types of care.

<sup>2</sup> Includes 2 children who went to convalescent home.

Table 8. The extent of different types of care received for the illnesses that occurred in twelve months for an unselected sample of preschool children in low-income families in the Bellevue-Yorkville District, New York City.

half of the preschool children had no illnesses. The other half had one or more illnesses during the year. Some of these were relatively slight disturbances, so that sicknesses reported were classified as major or minor illnesses.<sup>18</sup> In Table 8, the incidence of illness is represented by a total of the two most important illnesses reported for each child. In analyzing the extent of care received for these illnesses, each type of care here given is independent of all other types.

It is not surprising to find that so large a percentage of the illnesses were given some service at the Health Department clinics, especially for the minor illnesses, since the mother who is accustomed to taking her child to the clinic naturally returns there when

<sup>18</sup> In this arbitrary grouping, when illnesses such as vomiting, cough or cold, red throat, stomach upset, and the like were reported as not being severe, they were called "minor" illnesses; while intestinal disturbances, acute respiratory, communicable disease, or other acute conditions were classed as "major" illnesses.

the child is ill. If symptoms warrant it, the clinic physician refers cases to a private physician (if the family can afford it) or to the hospital pediatric clinics. This is not shown, since each service is tabulated separately.

But, remembering that these children are all in low-income families, it is interesting to find that 22 per cent of all major illnesses had some service from private physicians. The same per cent of infant illness in this district had service from private physicians.<sup>14</sup> The Health Department diagnostician gave service to 7 per cent of the major illnesses, mostly communicable disease. Most of the hospital care was given in City hospitals. The Henry Street Visiting Nurse Association does not refuse home nursing care if the family cannot afford to pay for it. For 30 illnesses, 18 of which were major, no care was received.<sup>15</sup>

*Nurses' Home Visits.* The home visits made by the Health Department nurses cannot be considered apart from other activities. They constitute one means of accomplishing the various objectives of the program, and have been referred to in the foregoing paragraphs in relation to various phases of the work. The distribution of these total visits shows that 59 per cent of the children were not visited; 9 per cent of the children were visited once, 5 per cent four times, and 9 per cent five times or more. This latter group actually received 46 per cent of the total home visits. Some of these children visited several times had major problems, but for others who were also attending clinic regularly, there were only relatively minor problems recorded.

Fourteen per cent of the children who attended clinic were not visited in the home, while 16 per cent of those attending clinic

<sup>14</sup> Randall, M. G.: *Public Health Nursing Service for Infants*. Milbank Memorial Fund *Quarterly*, April, 1935, xiii, No. 2, p. 197.

<sup>15</sup> In addition there were two illnesses with fatal results. Both had hospital care. One child, four years old, died of poliomyelitis, the other, one year old, of gastro-enteritis. Both children had been visited in the home by the Health Department nurse and both were registered in the Health Department clinic. During the year they had attended clinic once and three times respectively.



had five or more home visits. Of the 287 children not attending clinic, 54, or 19 per cent, received one or more home visits. Six per cent of these children not attending clinic had five or more home visits.

It is necessary to consider continually the relative needs for service. The nurses' interest in the problems of an individual child is a most valuable asset in any community, and careful intensive health supervision for a few children may make the best contribution to the health work in the district. But the children who receive the most intensive services should be the ones who need it most.

In describing visits that nurses make in the homes of preschool children, reference is usually made to "teaching newer methods for maintenance of health and prevention of disease." It is always difficult to learn from the nurses' records the complete content of the home visits. Probably not every point can be charted. But

it is interesting to learn the extent to which the content of the visit is recorded and the extent to which some of the more usual points are included in a sample of visiting. This is shown in Table 9. In a sample of 470 home visits, the nurses most frequently recorded a discussion of general hygiene. Clinic delinquency was the next item most

Table 9. Extent to which given subjects of discussion were recorded as part of the content of an unselected sample of 470 home visits made by Health Department nurses to preschool children in the Bellevue-Yorkville District in New York City.

Subjects Recorded as Content of Home Visits	Visits Having Given Subject Recorded	
	Number	Per Cent
General hygiene	185	39.3
Clinic delinquency	134	28.5
Illness	122	25.9
Nutrition	101	21.5
Relief	62	13.2
Clinic attendance	55	11.7
Immunizations	36	7.6
Correction of defect	27	5.7
Behavior problem	3	.6

often recorded, and some illness or symptoms of illness came third in frequency. The limitations in recording of the content of home visits prevent this from being a complete picture, but there are

relative differences in the frequency of items which are significant in giving an account of the visits the nurses make in the homes.

*Extent of All Health Services.* A summary of the foregoing

Table 10. Extent to which health services were received by preschool children who lived the entire year in low-income families of the Bellevue-Yorkville District, New York City.

Services Received	Infants Receiving Each Specified Service	
	Number	Per Cent
TOTAL	428	
No public health service	157	36.7
One or more services	271	63.3
Agency giving service		
Health Department	201	47.0
Private agencies	124	29.0
Type of service		
Clinics		
Health Department clinics	147	34.3
Private agency clinics	57	13.3
Hospital pediatric clinics	31	7.2
School examinations	12	2.8
Country care	11	2.6
Home visits		
Health Department nurses	175	40.9
Henry Street nurses <sup>1</sup>	21	4.9
Other agency nurses	32	7.5

<sup>1</sup> Excluding visits for morbidity service.

were available. And this is especially significant since a study of infant services revealed that only 6 per cent of the infants in this same area did not receive some health supervision.<sup>16</sup> According to the general plan to give supervision throughout the period of childhood, it would be expected that a higher percentage of the preschool children would continue under supervision.

There were 233 preschool children who had no Health Department service, and in the families of 151 of these, another member

<sup>16</sup> *Op. cit.*

analyses for the total sample of preschool children who lived in the district the entire year is shown in Table 10. It illustrates the extent to which these children received the different types of services available in the district. For this table a child may have been counted in one or more of the groups. In fact one-eighth of these children received services from both public and private agencies. It is significant that 37 per cent of the children had no health supervision in a district where so many services

of the family received some service from the Health Department. An infant was visited by the Health Department nurse in the homes of 114 of these preschool children but no record was found that indicated a knowledge of these older children. And a school child was visited by the Health Department nurse in the homes of 79 of these preschool children.

#### SUMMARY

An analysis of the public health nursing services for an unselected sample of children ages one through five years, living in a low rental area of the Bellevue-Yorkville District of New York City, shows that either public or private agency services were extended to 63 per cent of the children in these low-income families. Two-thirds of the children who had service received an amount considerably above the generally accepted standards.

Nine per cent of the children received 46 per cent of the nurses' home visits, while 59 per cent of the children were not visited. Four per cent of the children received 29 per cent of the total clinic service, while 56 per cent of the children did not attend any clinic. From information on the clinic records, some of the children having repeated services had no more serious problems than some of the children having a limited amount of supervision. This leads one to remark that intensive services for a few children may make the most valuable contribution to the health program of a district only when the children who receive them are the ones most in need of services.

The Health Department program emphasizes services offered in child health clinics. A qualitative measure of these services is shown by the continuity of supervision. Upon the basis of at least one visit to clinic in each quarter of the year, 26 per cent of the children registered in Health Department clinics had regularity of supervision.

At considerably over half of the Health Department clinic visits

Nursing Service of U. S. P. H. S. 1944  
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involving some major problem, the physician recommended a return visit to clinic in less than two weeks. Immunizations, tuberculin, and other special tests necessitating return to clinic in a short time greatly increase the percentage of successive visits which occur during brief periods of time. There should be provision for these extra clinic visits, which increase the volume of clinic attendance, but they need not necessarily be included in the plan for average visits per child for continued health supervision. Classification of clinic visits by problem would facilitate planning for clinic services.

Excluding visits for these special immunization problems, the most frequent recommendation of time for return to clinic is approximately three months. The age of the child influences the recommendation for return to clinic, the one-year-old children having more frequent supervision than the older children.

How recommendations for return to clinic were actually carried out is shown by the fact that 32 per cent of the sample of clinic visits were on time, 20 per cent occurred before they were due, and 39 per cent were late visits, leaving only 8 per cent with failure to return.

An analysis of the problem of clinic delinquency reveals that there was no follow-up for 70 per cent of the overdue visits. The delinquent cases with major problems were not followed up any more promptly than those with minor problems. When reminders were given, however, post cards were sent to cases with minor problems, while the cases with major problems were more often visited in the home by the nurse.

A commendable record was attained in the immunization program of preschool children, 55 per cent having been immunized against diphtheria and 51 per cent vaccinated against smallpox.

Clinic services were extended to 79 per cent of the one-year-old children, to 42 per cent of the three-year-olds, and to 38 per cent of the five-year-old children. Doubtless in a program of case-

finding more emphasis could profitably be directed toward the older preschool children.

In the families of 151 preschool children for which there was no record of health supervision services, other members of the family had some Health Department nursing service. Considerable case-finding can be accomplished in a generalized program, if effort is directed toward bringing under supervision all the young children in the families in which other phases of the health program are being carried out.

For the children receiving health supervision services from private agencies in the district, no records were found in the Health Department indicating that any supervision was being given. In this connection one may add that, to make the best use of combined services in a district, it would seem advisable for the official agency to take the leadership in coordinating the cooperation of all the agencies to obtain the most effective distribution of services among the entire population. This would include the assembling of information as to which children are receiving health supervision from other agencies in the district.