THE FREQUENCY OF CITY HEALTH DEPARTMENT SERVICES FOR INFANTS¹

AN ANALYSIS OF THE INTERVAL OF TIME BETWEEN INFANT VISITS IN HOME OR CLINIC FOR HEALTH DEPARTMENT SERVICES IN BELLEVUE-YORKVILLE DISTRICT OF NEW YORK CITY

by RUTH L. LEWIS

Woften an infant should be seen by a public health nurse or a clinic physician is a question that cannot be answered specifically. In practice, standards for frequency of health supervision are set up as administrative guides which, in general, are the basis of recommendations for return visits; although special problems in the family, social or economic, and poor health make more intensive services to some babies advisable. This paper presents an analysis of 1,049 infant visits in the Bellevue-Yorkville district of New York City according to the interval of time between visits and according to any reasons for service recorded which seemed to influence the frequency of supervision. It provides a quantitative picture of the amount of service given in more detail and from a point of view not available from the usual tabulations of clinic and nursing service. It also shows to what extent the mothers brought the babies to the clinic and the nurses visited the homes in accordance with the established standard.

A previous report² discussed the health supervision given by the Health Department and by private agencies to a group of 779 infants born in this area between July 1, 1931 and June 30, 1932.³ For the special analysis presented here, which supplements the earlier report, the records of 56 infants were picked at ran-

¹ From the Milbank Memorial Fund.

² Randall, M. G.: Public Health Nursing Service for Infants. Milbank Memorial Fund *Quarterly*, April, 1935, xiii, No. 2, p. 185.

⁸ The data were from a special investigation of all births in the Bellevue-Yorkville district except those to families living in high-rental apartment houses. Very few of the families in the survey had as much as \$2,000 a year and one-fourth of the fathers were unemployed the entire year.

dom⁴ from those for all infants who had attended a Health Department clinic. These infants had 1,049 contacts⁵ in home and clinic, giving a total of 993 intervals.⁶

Health Department Standard for Frequency of Service. The Manual of Instructions for the New York City Department of Health nurses states that: "Babies under one year of age should be supervised in the home or the clinic every two weeks, but preferably in the clinic so that the babies may be weighed." The clinic physician has the responsibility of giving appointments for an early return to clinic if there is a special problem, and the nurse has the responsibility of maintaining clinic attendance and of making at least one visit to the home to check up on general conditions. Other visits to the home are governed largely by the clinic attendance of the infant, since frequent home visits are unnecessary when adequate clinic attendance is being maintained.

Home Visits. The 169 home visits made by the nurses represent 16 per cent of the total 1,049 Health Department contacts. Seventy per cent of the infants were visited at least once after clinic attendance in order to check on general conditions in the home. Nearly three-fourths of these visits were made in less than two weeks after registration. Over one-half of the infants not receiving a routine check-up in the home had been visited previous to clinic registration. Thus, a check was made on general home conditions for 88 per cent of the infants. After these visits are made there is seldom any need to revisit unless the child is irregular in clinic attendance or unless there is a special problem which the nurse can take care of more satisfactorily in the home.

⁴ The average number of clinic visits made by these infants was 15 per year, approximately the same as for the whole group, for which the average was 14 visits.

⁵ The word "contact" in this paper is used to refer to service given the infant either in the home or in clinic.

⁶ Since frequency of service is being shown in terms of the interval of time that elapsed between any two successive contacts with the infant by the Health Department, there is one less interval for each infant than the number of visits, on which to base this study of the frequency of service.

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Since the need for further home visiting depends largely on the lack of clinic supervision of the infant, the nurse would consider clinic attendance in her decision as to whether a home visit is

required. That she has done so is shown by the fact that 65 per cent of the remaining home visits were made to infants who were either not attending clinic at all or were irregular in their attendance. Adequate clinic attendance was being maintained at the time that 35 per cent of the home visits were made. While there may have been reasons that were not record- = ed for these home visits,

Interval of Time Between Clinic Visits	Visits Made to Well- Baby Clinic in Each Interval of Time		
	Number	Per Cent	
Any Interval	802 ¹	100.0	
Less than 1 week 1 week but less than 2	90	II.2	
weeks 2 weeks but less than 3	367	45.8	
weeks	182	22.7	
3 weeks but less than I month I month but less than	81	10.1	
2 months	52	6.5	
2 or more months	30	3.7	

Table 1. Interval of time between visits to Health Department well-baby clinic in Bellevue-Yorkville, New York City.

 $^{1}\,\mathrm{In}$ addition to these there were 22 visits for which no return visit was made.

an analysis such as this may focus attention on the advisability of questioning the need for some of these visits.⁷

Interval of Time between Clinic Visits. The intervals between visits to a Health Department clinic portray the frequency of nearly all actual supervision, since, as shown above, the home visits by the nurse were very few and were supplementary to the clinic supervision, especially to maintain regular clinic attendance.

Table 1 shows the visits to clinic that occurred in each specified interval of time. Eleven per cent of the visits were made in intervals of less than one week, 46 per cent from one week to less than two weeks, and 23 per cent at intervals of two weeks to less than three weeks. For 6 per cent of the visits a month elapsed,

⁷ In a previous study, op. cit., it was shown that for a sample of infants in low-income families, 26 per cent received no home visits during the first year of life from the Health Department nurses.

and for 4 per cent two or more months passed before the next clinic attendance. In other words, 57 per cent of the visits to clinic were made in less than two weeks, and 20 per cent were made in three weeks or more.

While the routine policy calls for a visit to clinic every two weeks, there were only 90 clinic visits for which a definite date to return was noted on the clinic record. These were nearly all in connection with a revisit for some special need, and frequently the return date was earlier than the usual two weeks. For example, weekly visits were required for diphtheria immunization;⁸ a return in three days was necessary for the reading of a tuberculin test; and, if the mother arrived too late to see the doctor on one visit, she might have been told to come back in a few days. Seventy of the appointments were for intervals of less than two weeks, and 74 per cent of these were kept. Apparently when a definite appointment was made and the mother understood the importance of keeping the appointment, she usually cooperated.

The reasons why clinic visits for which no appointment date was recorded were made sooner or later than the routine two weeks' interval are classified in Table 2, according to information on the clinic records. For the largest group of the early visits with recorded reasons (28 per cent), the visit was made because of some slight illness—cold, red throat, and the like—and the mother returned to clinic for advice. Even though the Health Department clinics are primarily for well babies, they examine infants brought in by the mother, if necessary refer them to agencies that give service for illness, and sometimes make the arrangements with these agencies for the infant's care. The health education of the mother includes teaching the symptoms which indicate the need for special advice concerning her baby, and it is natural that she depends on the clinic to give her that advice and

 $^{^{8}\,\}mathrm{At}$ the time these data were collected, three doses of toxin-antitoxin were being given for diphtheria immunization.

assistance. From this angle it seems that illness may be considered an adequate reason for early supervision.

For 14 per cent of the "early" visits, the purpose was stated as "weighing" but the records did not carry sufficiently detailed information to indicate the necessity for weighing every few days, as occurred for some infants.

For 56 per cent of the "early" visits, no reason was recorded. The nurse would probably be able to supply this information if she were using this type of analysis for evaluating her own work. She might be surprised to find that a small group of mothers had formed the habit of returning with their babies to clinic every week or less, when no particular problem was involved.

For the visits that occurred in intervals of over two weeks, few reasons were given for the delay. In some instances, supervision

Table 2. Reasons for visits to Health Department well-baby clinic made in intervals of less than two weeks, and for those made in intervals of more than two weeks, when no definite appointment was recorded. Bellevue-Yorkville district, New York City.

Time and Reason for Clinic Visit	Clinic Visits in Each Specified Classification		
	Number	Per Cent	
Clinic Visits in Less than Two Weeks	391	100.0	
Reason Recorded			
Illness	108	27.6	
Weighing	56	14.3	
Examination not made on previous visit	5	I.3	
Formula or nutrition problem	4	I.0	
No reason recorded	2.18	55.8	
CLINIC VISITS IN OVER TWO WEEKS	194	100.0	
Reason Recorded			
Care given by another agency	5	2.6	
Out of town for a short period	I	0.5	
Home visits made by nurse	2	1.0	
Illness-not able to attend clinic	I	0.5	
Mother unable to come to clinic	I	0.5	
No reason recorded	184	94.9	

was being given by other agencies, and in a very few instances the infant was temporarily away from the district. But for 95 per cent of the visits that were made in intervals of over two weeks, no reason was recorded for the delay in regular supervision.

Relation of Problems to Frequency of Clinic Visits. It seems advisable to consider the problems noted for each of the clinic visits, since the severity or nature of these problems should determine the need for more or less frequent service than the bi-monthly attendance suggested. From the information given on the clinic records, the problems have been classified in three groups: (1) major problems-those which might necessitate an early return to clinic (which includes all illnesses, nutrition when there is a definite formula problem or the child is classed as malnourished or overweight, a defect when an immediate correction was advised or when a service could be rendered in clinic regarding a defect, such as strapping a hernia, and an economic problem in which the mother was told to return to clinic for cod-liver oil, clothes, etc.); (2) minor problems-those not requiring an early return (all problems which would not fall in the first group); and (3) no problems noted on the clinic record. As shown in

Classification of Problems	INTERVAL OF TIME BETWEEN VISITS TO CLINIC					
	Any Interval	Less Than Two Weeks	Two Weeks or More		Less Than Two Weeks	Two Weeks or More
	Number			Per Cent		
Any Problem	802	457	345	100.0	57.0	43.0
Major problems (Group 1) Minor problems	306	2.02	104	100.0	66.0	34.0
(Group 2)	381	193	188	100.0	50.7	49.3
No problems (Group 3)	115	62	53	100.0	53.9	46.I

Table 3. Comparison of the interval of time between visits to Health Department well-baby clinic according to the severity of problems recorded for the previous clinic visit. Bellevue-Yorkville district, New York City.

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Table 3, more severe problems seem to have a slight influence on early attendance at clinic. Two-thirds of the visits with major problems occurred in less than two weeks as compared with one-half of



Fig. 1. Interval of time between clinic or home nursing services to infants in the Bellevue-Yorkville health district.

the visits with minor problems.

Interval of Time between Health Department Services. A composite picture of all services given 56 infants in the first year of life is shown by an analysis of the clinic and home vis-

its combined. The distribution of intervals of time between these contacts with a Health Department physician or nurse is shown in Figure 1. For 21 per cent of the visits (made in home or clinic) there was a time interval of less than a week before the next visit; for 39 per cent of the visits, the interval was from one week to less than two weeks; and for 19 per cent, the interval was two weeks but less than three weeks. Nine per cent of the visits showed a lapse of three weeks to one month, 8 per cent a lapse of a month, and for 3 per cent the interval of time was two months or more. Thus, for more than half of the visits, there was an interval of less than the standard, or two weeks.

Reasons for "early" visits were found on the records for over one-half of all "early" visits. As shown in Table 4, 19 per cent of the "early" supervision was due to illness and the next largest group (11 per cent) to early attendance at clinic for the purpose of weighing. For 43 per cent of these "early" visits there was no reason or special problem recorded.

Although the amount of services specified in the Health Department standard for frequency of infant supervision in New York City exceeds that of many urban centers, it is evident that

Reasons for Services	Services Given for Each Specified Reason		
	Number	Per Cent	
Total Services	599	100.0	
Clinic appointment	52	8.7	
Clinic following home visit	52	8.7	
Illness	115	19.2	
Weighing in clinic	64	10.7	
Routine visit in home following clinic	34	5.7	
Repeated home visits for clinic delinquency	8	I.3	
Formula, economic or other problem in home	IO	I.7	
Visiting others in family	5	0.8	
No reason recorded	259	43.2	

Table 4. Reasons for services given to infants at intervals of less than two weeks by the New York City Health Department in Bellevue-Yorkville district.

some mothers sought and received an unusual amount of service. In order to cope with this problem and to make a fair distribution of services to all infants in the district who need it, an occasional analysis of the actual practice would assist in determining what changes of policy are necessary to make the most effective use of available services. The nurse, through her knowledge of family situations and health problems of the infant, could determine which mothers were making unnecessary visits and could analyze also some of the reasons for delayed revisits. More attention to giving definite appointments for the next visit and some special attention to those mothers who attend irregularly might improve the regularity of supervision.