EFFECT OF FREQUENCY OF FAMILY VISITING UPON THE REPORTING OF MINOR ILLNESSES

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A NUMBER of longitudinal studies of families have been made in order to observe the incidence of illness among their numbers. It is recognized by those who have conducted such studies that the interval between visits to the family has a marked effect upon the accuracy of reporting past illnesses, especially those of a minor nature. Thus, the memory of the informant constitutes an important factor which may influence the level of illness obtained in any morbidity study.

The purpose of this paper is to consider some of the effects of the frequency of family visiting upon the accuracy of reporting minor illnesses. The data are limited to acute respiratory diseases because most illnesses in this class are of a minor nature.

The material used is drawn from five different morbidity studies: Hagerstown, the study made by The Committee on the Costs of Medical Care, the Baltimore Study, made by Frost and his associates, the Eastern Health District of Baltimore Study, and a study of two suburban communities in Westchester County, New York.

DESCRIPTION OF THE FIVE MORBIDITY STUDIES

Hagerstown. The general morbidity study conducted by the United States Public Health Service in Hagerstown, Maryland, included 1,815 families observed during a twenty-eight month period beginning in November, 1921. The families were selected from areas which were representative of the different economic classes in the community. In selecting the families some preference was given to those with children. A preliminary house-to-house survey was made which was followed by a series of sixteen canvasses, each household being visited at intervals of from six to eight weeks (1).

[1] From the Milbank Memorial Fund.

Committee on the Costs of Medical Care. The general morbidity study conducted by the Committee on the Costs of Medical Care included 8,758 families from 130 localities in eighteen states. These families were observed for twelve months during the period February, 1928–June, 1931. They were selected by the state and local health officers without respect to the presence or absence of illness at the time of the initial visit. The surveyed groups tended to be composed chiefly of families with children. After the initial visit these families were visited at intervals of from two to four months. In this study emphasis was placed on obtaining records of all medical care for illness (2).

Baltimore. The study of acute minor respiratory diseases conducted by Van Volkenburgh and Frost included 114 families observed in Baltimore, Maryland during two consecutive years, 1928–1930. The 114 families who volunteered to serve as the special study group were recruited from three sources: (1) the faculty of The Johns Hopkins University; (2) a list supplied by the Instructive Visiting Nurse Association of Baltimore; and (3) the private practice of especially interested physicians. Each family agreed to report by telephone immediately upon the occurrence of any respiratory illness whatever, and to report weekly by postcard even if no case had occurred. Whenever an illness was reported, the family was visited by a staff physician who obtained a record of the illness (3).

Eastern Health District of Baltimore. The general morbidity study was conducted by the United States Public Health Service and the Milbank Memorial Fund during five consecutive years, 1938 to 1943. The sample studied was composed of approximately 1,700 white families living in the Eastern Health District of Baltimore, Maryland. The district was considered as fairly representative of localities in the city in which the wage-earning population lived. Monthly visiting was the method used to gather the illness data (4).

Westchester County, New York. The study of acute respira-

tory illness in two suburban communities in Westchester County, New York was carried on by the Milbank Memorial Fund during three school years, September to June, 1946–1949. The mean number of families visited during the three years of the study was 530 in Pleasantville and 570 in Mt. Kisco. All families in which there were one or more children attending grade school or high school were included in the study. These families were visited every 28 days during the three school years (5).

A summarization of the important characteristics of each of the five studies is presented in Table 1. It is apparent that all these studies were similar with respect to the fact that their populations were composed of families, chiefly those with children. However, there was a wide variation in the interval between visits to the family, or reports from the family, of from one week or less in the Baltimore Study to eight to sixteen weeks in the C.C.M.C. Study. Also, two studies concentrated on only one type of illness.

Incidence of Respiratory Illness

Acute respiratory illness constitutes a relatively high proportion of the total illnesses reported in a general morbidity study. For example, such illnesses formed 40 per cent of the total in the C.C.M.C. Study; 44 per cent in the Eastern Health District Study; and 61 per cent in the Hagerstown Study. Sydenstricker pointed out that the Hagerstown Study included three winter seasons and that during one of them there was an outbreak of influenza. However, he felt that these facts did not seriously distort the data on respiratory disease because of the tendency to underreport such illness (1). An influenza epidemic also occurred during the period of the C.C.M.C. Study. Collins felt that its influence upon the respiratory illness rate was minor since at that particular time only one-fourth of the total families were being observed (2).

Since the acute respiratory diseases are ubiquitous, and there is no evidence of any marked change in their frequency

Table 1. Description of important characteristics of the five morbidity studies.

Characteristics of the Studies	Hagerstown Study 1921–1924	Costs of Medical Care Study 1928–1931	Baltimore Study 1928–1930	Eastern Health District Study 1938–1943	Westchester County Study 1946–1949
Type of Illness Included	All Illness	All Illness	Acute Minor Respiratory Disease	All Illness with Special Interest in Chronic Disease	Acute Respiratory Illness
Frequency of Visits or Reporting	Visits Every 6–8 Weeks	Visits Every 8–16 Weeks	Weekly Reports or More Frequently	Visits Every Month	Visits Every 28 Days
Type of Population	Families With Some Preference to Those With Children	Families—Mainly Those With Children	Families With Children	Families Typical of White Population of Entire E.H.D.	Families With School-Age Children
Method of Recruiting Families	Selected for Convenience for Repeated Visiting	Areas Selected by Health Officers—Families by a House-to-House Canvass	Recruited From Faculty of Johns Hopkins, List of The Visiting Nurse Ass'n and the Practice of Especially Interested Physicians on a Voluntary Basis	All Families in a Random Sample—of City Blocks	All Families in Which There was a School Child
Number of Families	1,815	8,758	114	1,500–1,700 5,108	Mean Number for 3 Years—1,100
Number of Persons	16,517 (person years)	38,544 (person years)	471		4,348
Rate per 1,000 Population (Crude)	664	349	2,779	606	1,414
Rate per 1,000 Population (Adjusted)[1]	681	343	2,582	631	1,415

[1] Adjusted to age distribution of population of all studies combined.

from year to year except during periods when influenza is epidemic, it seems proper to compare the results of these studies where various visiting intervals have been used in the collection of records of illness. It must be emphasized, however, that there may be some variation in the frequency of respiratory illness in various communities and such comparisons as are made do not warrant a strict or precise interpretation.

The first comparison is made between the study conducted by Frost in Baltimore and that made in Westchester County. Table 2 and Appendix Table 1 show the age incidence of acute respiratory illness obtained in these two studies. The two studies are comparable with respect to the following: In both, attention was concentrated upon respiratory illness only, and both studies included only families with children in them. The data for the families in Pleasantville and Mt. Kisco include only those where the occupation of the head of the household was in the professional or managerial class. Thus, these fam-

Table 2. Incidence of acute respiratory illness by age in the professional and managerial class of Pleasantville and Mt. Kisco combined, and in 114 families in Baltimore.

Age Groups	Pleasantville and Mt. Kisco (Professional and Managerial) Sept., 1947–May, 1948	Baltimore Families[2] Nov., 1929–Oct., 1930	Ratio of Baltimore to Pleasantville and Mt. Kisco
	Rate Per 1,000 Persons		
All Ages[1]	1,779	2,779	1.56
0– 4	2,982	3,882	1.30
5– 9	2,649	3,406	1.29
10–14	1,835	2,500	1.36
15–19	1,673	2,042	1.22
20–29	1,250	2,349	1.88
30–39	1,601	2,319	1.45
40–49	1,191	2,039	1.71
50+	839	1,914	2.28

[1] Excludes unknown ages.

[2] The Baltimore rates have been computed on a nine month basis to approximate the Westchester data. From the total of 1,468 cases which occurred from November, 1929 to November, 1930, the 159 cases that occurred in June, July, and August were subtracted. The remaining 1,309 cases were distributed in the same proportions among the age groups as the original 1,468 cases and new rates computed.

ilies are more nearly comparable with those studied by Frost.

The rates in Table 2 have been computed on a nine-month basis, the period from September to May. Data for the Baltimore Study include the period which Van Volkenburgh and Frost considered as a normal or average year with respect to the presence of influenza in the population. Column 3 of the table shows the ratios of the Baltimore rates at each age to the rates in the sample population from Westchester County. For all ages, the incidence of respiratory illness in Baltimore was 56 per cent higher than that noted in the Westchester Study. The comparison of the incidence at specific ages indicates that reporting of illness among adults was much more complete for those in the Baltimore Study than in the Westchester Study. At ages under 20 the Baltimore rates were from 21 to 36 per cent higher than those noted in the Westchester Study. The Westchester County Study was an experiment to learn whether ultra violet lights in the schools might affect the illness rate among school children. The data suggest that the mothers gave greater attention to remembering illnesses of the school children than those among the adult members of the family.

It is apparent from the data presented in Table 2, that weekly reporting of illness by volunteer families, as in the Baltimore Study, was a more effective procedure for obtaining the real incidence of respiratory illness than was reporting every four weeks as was done in the two communities in Westchester County.

The second comparison is made between the study conducted in Westchester County and the study made in the Eastern Health District of Baltimore. Table 3 and Appendix Table 2, show the incidence of acute respiratory illness by age in the two areas. These two studies are comparable with respect to frequency of family visits; in one, visits were made every twenty-eight days, in the other every thirty days. An important difference between the two studies is the fact that in the Westchester County Study attention was centered upon

respiratory illness only, whereas the Eastern Health District investigation included the reporting of all types of illness. The data for the families in Pleasantville and Mt. Kisco include only those where the occupation of the head of the household was in the clerical, skilled or unskilled working class. These families are more nearly comparable to those in the sample from the Eastern Health District which was believed to be representative of the working-class population of Baltimore.

The rates shown in Table 3 have been computed for the nine-month period, September–May. For all ages, the Westchester County rates were 90 per cent higher than those in the Eastern Health District. This excess of incidence was particularly marked among school-aged children. Over twice the amount of acute respiratory illness was reported for them than was reported for the children of similar ages in the Eastern Health District. Again, the special interest in school-aged children in the Westchester County Study appears to have resulted in more complete reporting of their illnesses.

Table 3. Incidence of acute respiratory illness in Pleasantville and Mt. Kisco combined, 1947–1948 (clerical, skilled, semi-skilled and unskilled classes), and in the Eastern Health District of Baltimore, 1940–1941.

Age Groups	Pleasantville and Mt. Kisco[1] Sept., 1947–May, 1948	Eastern Health District of Baltimore Sept., 1940–May, 1941	Ratio of Pleasantville and Mt. Kisco, to Eastern Health District of Baltimore
	Rate Per 1,000 Population		
All Ages[2]	1,152	606	1.90
0– 4	1,775	1,170	1.52
5– 9	2,053	1,016	2.02
10–14	1,206	589	2.05
15–19	1,163	420	2.77
20–24	667	445	1.50
25–34	945	527	1.79
35–44	844	516	1.64
45–54	818	509	1.61
55+	518	569	0.91

[1] Includes only families where the head of the household was in the clerical, skilled, semi-skilled, or unskilled occupational class.
[2] Excludes unknown ages.

Part of the difference in incidence of respiratory illness noted in the two studies is no doubt due to the fact that in one a record of all illnesses was being sought; in the other, only respiratory illnesses were recorded. It is a greater tax on the memory to recall accurately all illnesses which have occurred in the family during the past month than to recall only those of a respiratory nature.

The third comparison is made between the Hagerstown Study and the C.C.M.C. Study. Both of these studies included all morbidity. However, in the C.C.M.C. Study emphasis was placed upon illnesses which had some medical care or for which medicine amounting to fifty cents or over was purchased at a drug store. Also, there was a wide difference between the two studies with respect to the interval between visits. Families in Hagerstown were visited every six to eight weeks, those in the C.C.M.C. Study every eight to sixteen weeks.

The annual incidence of acute respiratory illness by age is shown in Table 4 for Hagerstown and the C.C.M.C. Study. Column 3 of the table shows that for all ages, the Hagerstown families reported 90 per cent more respiratory illness than was

Table 4. Annual incidence of acute respiratory illness in Hagerstown, 1921–1924, and in the Committee on the Costs of Medical Care Study, 1928–1931.

Age Groups	Hagerstown 1921–1924	Committee on Costs of Medical Care 1928–1931	Ratio of Hagerstown to the Costs of Medical Care Study
	Annual Rate Per 1,000 Person Years		
All Ages	664	349	1.90
0– 4	921	537	1.72
5– 9	935	424	2.21
10–14	786	303	2.59
15–19	525	253	2.08
20–24	467	263	1.78
25–34	548	317	1.73
35–44	587	303	1.94
45–54	588	284	2.07
55–64	576	307	1.88
65+	585	303	1.93

reported for those in the C.C.M.C. Study. Part of the differences noted in this table may be due to the effect of an influenza epidemic in Hagerstown during the period of the study. However, the interval between visits is probably the most important factor which affected the accurate reporting of minor illnesses, such as colds and other respiratory ailments.

The comparisons between the results of morbidity studies which have been made suggest that there are two factors which may affect the accuracy of reporting minor illnesses, such as those which fall into the class of respiratory diseases. Of first importance is the interval between visits to the family. The point of emphasis in the study is evidently also important. This is illustrated by the C.C.M.C. Study where the emphasis was on medical care, and is also illustrated by the two studies confined to the investigation of respiratory illness only. The highest rates of respiratory illness were obtained from these latter studies. All of these studies have been of great value and have served a useful purpose. In planning future studies, however, if greater precision in the reporting of minor illness is desired than has been obtained in the past, careful consideration should be given to the factors which may greatly affect the results of any investigation of morbidity.

Failure to Report Illness because of Memory Factor

Collins has pointed out that "survey data on the incidence of illness suffer from the fact that minor cases and even cases serious enough to disable and confine the patient to bed are not all remembered, particularly the ones which occurred some months prior to the visit of the enumerator" (6).

Collins used for illustration data from two surveys made in Western New York State by the United States Public Health Service in which visits were made at intervals of from one to five months. Figure 1, taken from his material, shows for each survey area not the actual incidence rates, but the ratio of the recorded case incidence in each prior month, to the case incidence in the first month prior to the visit. In each area the

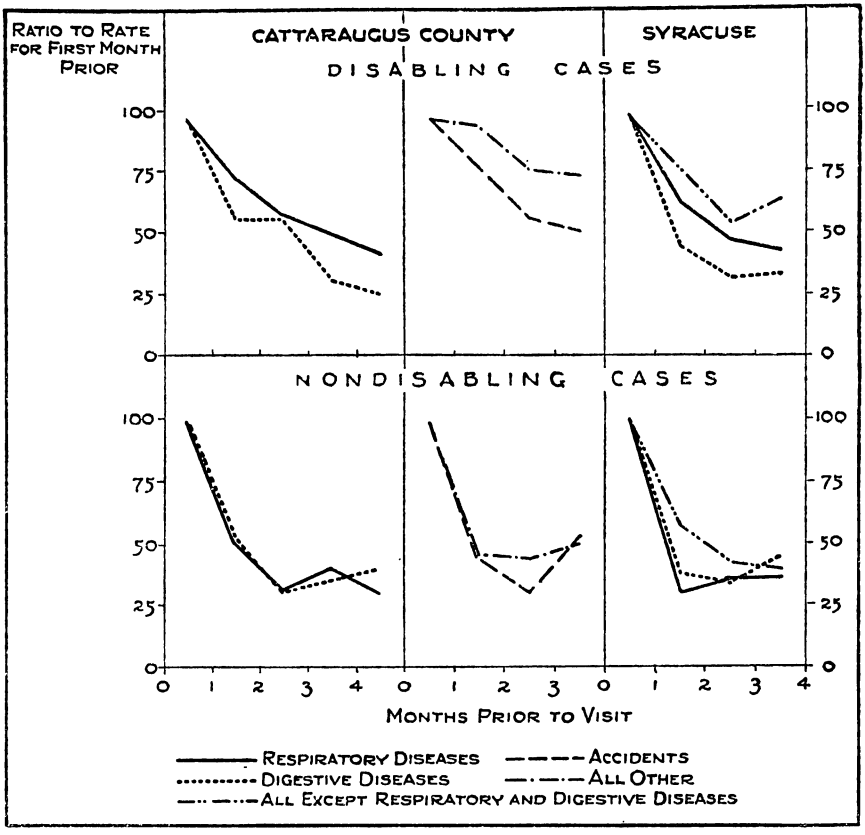

Fig. 1. Ratio (per cent) of recorded case incidence from certain causes in different months prior to the interview, to the case incidence for the first month prior to the interview—house-to-house surveys of illness in two localities in New York State. (Rates corrected for seasonal variation. On this chart zero on the horizontal scale represents the day of the interview and the rate for the first month prior is plotted midway between 0 and 1 month. Similarly, the second month is plotted midway between 1 and 2 months, etc.)

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reported case incidence fell off rapidly as the time between visits increased. This was particularly true for cases which did not cause disability, but even the disabling cases decreased considerably.

The effect of memory on the reporting of illness can be further illustrated by a study of respiratory illnesses, all of which had their onset within twenty-eight days prior to the visit to the

family, and all of which were completed in the interval between visits to the family. Only completed illnesses were included because it may be assumed that failure to report illnesses present in the family on the day of the visit occurs infrequently and thus has a minor effect upon the level of the rate of illness. In other words, completed illnesses which have occurred in the past are those most apt to be forgotten by the informant.

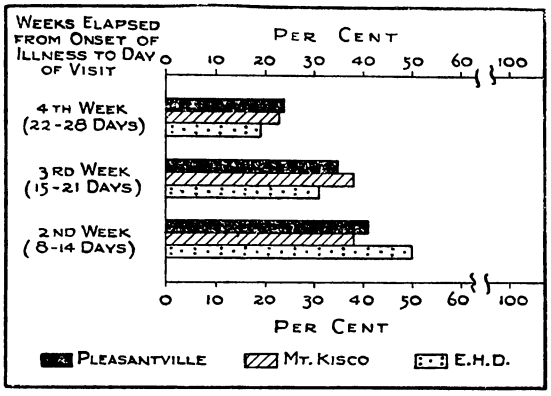

Fig. 2. Distribution of completed cases of acute respiratory illness by week of onset of the illness prior to the day of the visit. Pleasantville and Mt. Kisco, 1947–1948, and Eastern Health District of Baltimore, 1938–1943.

The data for this analysis are from the studies in Westchester County and in the Eastern Health District of Baltimore. A sample of 100 families was drawn from the population of Pleasantville and 100 from Mt. Kisco for the study year 1947–1948. A sample of 112 families was drawn from the Eastern Health District. Each of the 112 families had one or more school-age children and all were under observation in June, 1938.[2]

Figure 2 and Appendix Table 3 show for Pleasantville, Mt. Kisco, and the Eastern Health District of Baltimore the distribution of completed cases of acute respiratory illness according to the week of onset of the case. Cases where the onset occurred within the first week prior to the visit have been excluded. In each of the three communities there was a decrease in the proportion of reported cases as the interval between the visit and

[2] The method of selection of the samples was as follows: The families in Pleasantville were arrayed by family serial number and every fourth family was included in the sample. The same procedure was followed in selecting the Mt. Kisco group.

The families with a case of chronic disease in them and with school children in them in the Eastern Health District Study were listed by block and a random sample was drawn from the listing. The 112 families constituted 50 per cent of such families under observation in June, 1938.

the onset of the case lengthened. This decrease was most striking in the families studied in the Eastern Health District of Baltimore. Fifty per cent of the cases included had their onset during the second week before the visit and only 19 per cent during the fourth week. Pleasantville and Mt. Kisco had fairly similar proportions of the total reported cases with onset in the different weeks but these communities also showed a marked decrease in the cases which appeared in the fourth week prior to the visit to the family. It is quite apparent that the interval of time between visits to the family for the purpose of collection of records of minor illnesses does affect the accuracy of reporting.

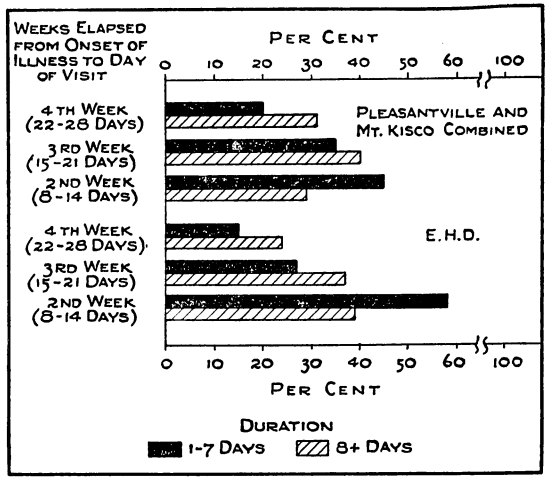

Fig. 3. Distribution of completed cases of acute respiratory illness by duration and according to week of onset of the illness prior to the day of the visit. Pleasantville and Mt. Kisco combined, 1947–1948, and Eastern Health District of Baltimore, 1938–1943.

The influence of memory of the informant upon the accuracy of reporting minor illnesses can be shown most strikingly by taking into account the duration of the illness. Figure 3 and Appendix Table 4 show the distribution of completed cases of acute respiratory illness according to the week of onset and the duration of the case. Cases where the onset occurred within the first week prior to the visit have been excluded.

The upper section of Figure 3 shows the distribution of the cases in the Pleasantville families and the Mt. Kisco families combined. The cases with the one to seven-day durations showed a marked decrease from 45 per cent with onsets in the second week prior to the visit to only 20 per cent in the fourth week. The decrease in the reported cases with durations of eight or more days was less marked.

The lower section of Figure 3 shows the same type of data for the families drawn from the Eastern Health District of Baltimore. The cases with durations of one to seven days showed a marked decrease as the interval from the onset to the visit increased. Fifty-eight per cent of these cases had their onsets during the second week prior to the visit and only 15 per cent in the fourth week prior. This decrease in reporting the shorter illnesses is more striking in the Eastern Health District families than among those in Pleasantville and Mt. Kisco.

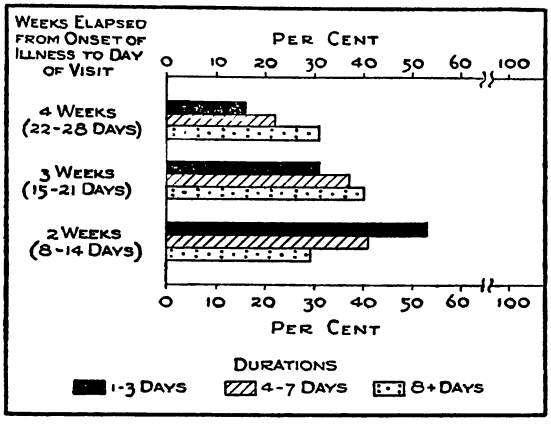

Fig. 4. Distribution of completed cases of acute respiratory illness classified by duration and by the week of onset of the case prior to the day of the visit, Pleasantville and Mt. Kisco, 1947–1948.

The facts brought out in Figure 3 can be further illustrated by consideration of illnesses of relatively short duration, that is, those lasting from one to three days. Figure 4 and Appendix Table 4 show the cases of respiratory illnesses reported in the families in the Westchester County Study according to three categories: those which lasted one to three days; those where the duration was from four to seven days; and those which lasted eight days or longer. The distribution of the cases in each category is according to week of onset prior to the visit to the family.

The distribution of the reported cases with durations of one to three days showed a steady and marked decrease as the time between the visit and the onset of the case lengthened. The cases with a duration of four to seven days showed only a slight decrease from the second to the third week. There was a more striking decrease from the third to the fourth week prior to the visit. It is apparent that the greatest loss of cases due to failure

to remember and report them occurs among those of the shortest duration.

The data from the two communities in Westchester County may be used to estimate the loss of cases of minor respiratory illness in each week prior to the visit to the family. Table 5 shows the incidence of reported cases of acute respiratory illness with onset in each of the four weeks before the visit to the family. The data include incompleted as well as completed illnesses at the time of the visit to the family and are shown for persons under 20 years of age and for adults 20 years and over. It is quite apparent that the rates, both for young persons and adults, are highest for the week of the visit. Thereafter, the decline in incidence is definite and regular in both groups of population.

From the data presented in Table 5 it is possible to estimate the loss of cases of minor respiratory illness due to faulty reporting if the interval between visits is extended over a period of fourteen weeks. Figure 5 shows for each week prior to the visit of the family the per cent of cases which were not reported. Beyond the fourth week previous to the visit the data are based

Table 5. Rate of acute respiratory illness in each of four weeks prior to the visit to the family—Westchester County, 1947–1948.[1]

Classification as to Week of Onset of Illness	Number of Cases of Illness	Rate per 1,000 Population
	462 persons aged 0–19	
Week of Visit	306	662.3
Second Week Prior	225	487.0
Third Week Prior	166	359.3
Fourth Week Prior	113	244.6
	513 persons aged 20+	
Week of Visit	173	337.2
Second Week Prior	129	251.5
Third Week Prior	104	202.7
Fourth Week Prior	64	124.8

[1] Based on a sample of 200 families.

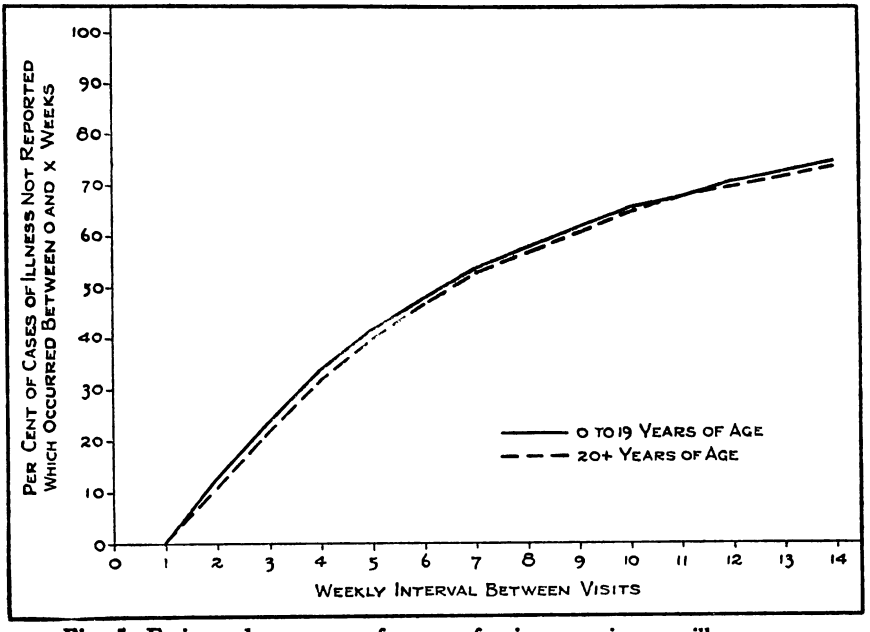

Fig. 5. Estimated per cent of cases of minor respiratory illness not reported which occurred in successive weeks prior to the visit to the family.

upon an extrapolation of the Westchester County experience.[8]

This analysis has served to emphasize some of the factors inherent in studies of morbidity based on observation of families which affect the completeness of reporting of minor illnesses. The interval between visits to the family is of first importance because of the inability to remember accurately past events which are considered minor. The longer the interval between vists the greater is the loss of such cases. The point of emphasis of the study is also of importance. Concentration on one or two types of illness or upon one particular class of illnesses will result in greater precision in their reporting.

The data of the study presented by Van Volkenburgh and Frost demonstrate that weekly reporting and concentration upon a particular class of illnesses in volunteer families will probably yield the highest results. It should be pointed out, however, that study of a population composed of volunteer

[8] The estimate of the proportion of unreported cases in the weeks prior to the visit was derived by application of the method of Least Squares. The formula used is as follows: Log $Y = a + bx$ (9).

families has the limitation of their not being a random sample of the general population of the community. Consequently, such a study may not afford a representative picture of the particular illness experience in the community about which it is desired to learn.

Summary

Some of the effects of the frequency of family visiting upon the accuracy of reporting minor illnesses among their members are described in this paper. The material used is drawn from five different morbidity studies: Hagerstown, the study made by the Committee on the Costs of Medical Care, the Baltimore Study, made by Frost and his associates, the study made in the Eastern Health District of Baltimore, and a study of two suburban communities in Westchester County, New York.

These studies were similar in that the populations studied were composed of families, chiefly those with children. There was a wide variation in the interval between visits to the family, or reports from the family, of from one week or less in the Baltimore Study, to eight to sixteen weeks in the C.C.M.C. Study. Also, two of the studies concentrated on only one type of illness —minor respiratory diseases.

The comparisons between the results of morbidity studies which have been made suggest that there are two factors which may affect the accuracy of reporting minor illnesses, such as those which fall into the class of respiratory diseases. Of first importance is the interval between visits to the family. The point of emphasis in the study is evidently also important. This is illustrated by the C.C.M.C. Study where the emphasis was on medical care, and is also illustrated by the two studies confined to the investigation of respiratory illness only. The highest rates of respiratory illness were obtained from these latter studies.

The effect of memory on the reporting of illness was illustrated by a study of respiratory illnesses, all of which had their onset within twenty-eight days prior to the visit to the family,

and all of which were completed in the interval between visits to the family. The data for this analysis are from the studies in Westchester County and in the Eastern Health District of Baltimore. In each of the three communities there was a decrease in the proportion of reported cases as the interval between the visit and the date of onset of the case lengthened. This decrease was most striking in the families studied in the Eastern Health District of Baltimore. It is quite apparent that the interval of time between visits to the family for the purpose of collection of records of minor illnesses does affect the accuracy of reporting.

This analysis has served to emphasize some of the factors inherent in studies of morbidity based on observation of families which affect the completeness of reporting of minor illnesses. The interval between visits to the family is of first importance because of the inability to remember accurately past events which are considered minor. The longer the interval between visits, the greater is the loss of such cases. The point of emphasis of the study is also of importance. Concentration on one or two types of illness or upon one particular class of illnesses will result in greater precision in their reporting.

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Appendix Table 1. Population and cases of acute respiratory illness. Pleasantville and Mt. Kisco combined and 114 families in Baltimore.

AGE GROUPS	PLEASANTVILLE AND MT. KISCO (Professional and Managerial) Sept., 1947–May, 1948		BALTIMORE Nov., 1929–Oct., 1930	
	Population	Cases	Population	Cases[1]
ALL AGES	1,820	3,237	471	1,309
0– 4	165	492	110	427
5– 9	316	837	64	218
10–14	231	424	50	125
15–19	162	271	24	49
20–29	76	95	43	101
30–39	338	541	94	218
40–49	371	442	51	104
50+	161	135	35	67

[1] From the total of 1,468 cases which occurred from Nov. 1929 to Nov. 1930, the 159 cases that occurred in June, July, and August were subtracted. The remaining 1,309 cases were distributed among the age groups in the same proportions as the original 1,468 cases.

Appendix Table 2. Population and cases of acute respiratory illness. Pleasantville and Mt. Kisco combined and the Eastern Health District of Baltimore.

Age Groups	Pleasantville and Mt. Kisco (Clerical, Skilled, Semi-Skilled and Unskilled) Sept., 1947–May, 1948		Eastern Health District of Baltimore Sept., 1940–May, 1941	
	Population	Cases	Population	Cases
All Ages	2,528	2,911	5,108	3,093
0– 4	218	387	429	502
5– 9	339	696	381	387
10–14	316	381	406	239
15–19	326	379	483	203
20–24	120	80	506	225
25–34	291	275	980	516
35–44	481	406	715	369
45–54	269	220	588	299
55+	168	87	620	353

Appendix Table 3. Distribution of completed[1] cases of acute respiratory illness by the weeks elapsed from the onset of the illness to the day of the visit. Pleasantville and Mt. Kisco 1947–1948 and the Eastern Health District of Baltimore.

Days Elapsed from Onset of Illness to Visit	Pleasantville 1947–1948	Mt. Kisco 1947–1948	Eastern Health District of Baltimore
	PER CENT		
Total	100.0	100.0	100.0
22–28 days	23.7	23.4	19.0
15–21 days	35.4	38.3	31.1
8–14 days	40.9	38.3	49.9
	NUMBER		
Total	362	243	373
22–28 days	86	57	71
15–21 days	128	93	116
8–14 days	148	93	186

[1] Excludes illnesses present on the day of the visit.

Appendix Table 4. Distribution of completed[1] cases of acute respiratory illness by the weeks elapsed from the onset of the illness to the day of the visit according to the duration of the case. Pleasantville and Mt. Kisco combined 1947–1948 and the Eastern Health District of Baltimore.

Days Elapsed from Onset of Illness to Visit	Pleasantville and Mt. Kisco	Eastern Health District of Baltimore	Pleasantville and Mt. Kisco	Eastern Health District of Baltimore
	Per Cent		Number	
	Duration 1–3 days			
Total	100.0	100.0	158	31
22–28 days	16.5	25.8	26	8
15–21 days	31.0	25.8	49	8
8–14 days	52.5	48.4	83	15
	Duration 4–7 days			
Total	100.0	100.0	250	187
22–28 days	22.4	13.4	56	25
15–21 days	37.2	27.3	93	51
8–14 days	40.4	59.3	101	111
	Duration 8+ days			
Total	100.0	100.0	197	155
22–28 days	31.0	24.5	61	38
15–21 days	40.1	36.8	79	57
8–14 days	28.9	38.7	57	60

[1] Excludes illnesses present on the day of the visit.