TECHNICAL REPORT
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業 績 報 告 書

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PILOT SURVEY OF HOME VISITS
HIROSHIMA

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家庭訪問による罹病調査の方法論に関する試験的調査

広島

PURPOSE

The long term Adult Health Study conducted by Atomic Bomb Casualty Commission (ABCC) currently provides, on the basis of two-year cycles, regularly scheduled clinical examinations for exposed survivors and nonexposed control groups in Hiroshima and Nagasaki. However, it has been recognized that biennial contacts with subjects under study should not be depended upon to provide complete information concerning episodes of illness occurring during intervals between examinations. Therefore, extensive field investigations of such illness episodes now are being planned by ABCC.[1] Two methods of obtaining this information may be considered:

Directly from the Adult Health Study subjects by home visits

Indirectly from records of community medical institutions

Obviously, the level of cooperation which might be expected from the subjects governs the feasibility of planning to obtain information directly by home visits. It is the purpose of this report to describe the pilot surveys designed and conducted primarily to provide this preliminary data concerning potential cooperation. Additional **essential** planning information provided by these pilot surveys concerned such problems as:

Appropriate interval between home visits

Proper informant where families or groups are involved

目　的

現在原爆傷害調査委員会（ＡＢＣＣ）が行なっている長期成人健康調査では，広島と長崎の被爆者ならびに非被爆対象群を２年の周期をもって定期的の診断をすることになっている．２年毎に１回の診断だけでは，診察と診察との中間に起きた疾病を完全につかむことができない．このような診察周期の中間の罹病資料を入手するために大規模な野外調査を計画している．[1]　野外調査では２通りの方法を考えている．すなわち，

家庭訪問を行ない，対象から直接資料を求める方法

病院の診察記録から間接的に資料を求める方法

前者の家庭訪問により直接に資料を得る場合，調査計画の成否はいうまでもなく対象が調査に協力をするか否かに依存している．本調査は主としてこの協力状態に関して参考的資料を得るために試験的に実施された．さらにこの調査からは，

適切な訪問間隔

応答者としては本人と家族の中，いずれが適当であるか

調査員の種類および必要人員

Type and number of interviewers required

Effectiveness of daily health calendars

Content of questionnaire

The previously mentioned alternative method of obtaining information from community medical records also is being evaluated in a similar investigation, for which a separate report[2] will be published.

METHOD

SAMPLE AND SCHEDULE FOR SURVEYS

The sample used for these pilot surveys was made up of survivors selected from Hiroshima Railway workers and members of their families. It totaled 119 subjects, all of whom are also included in the ABCC Adult Health Study. It should be mentioned that the railway worker subjects in this sample also are included in the larger separate survey concerning use of community medical records to obtain information on episodes of illness.[2]

Table 1 shows the schedule for the three pilot surveys, the specific items studied, and the number of informants contacted out of the sample of 119.

健康カレンダーの有用性

質問票の内容

等計画を立てる上に重要な資料が得られた.

一方，病院の診察記録から資料を得る方法についても同様な試験的調査が行なわれたが，それは別に報告する.[2]

調査方法

調査対象および調査期間

広島鉄道従業員およびその家族の被爆者中，ＡＢＣＣの成人健康調査に含まれている 119名を本調査の対象とした．本調査の対象である鉄道従業員は，病院の診察記録から罹病資料を得るために実施した別の，大規模な調査の対象に含まれていることを付記する.[2]

この調査は調査項目と調査時期を異にする3調査からなっている．各調査の項目，期間および調査対象数を示すと表1の通りである.

TABLE 1 METHODOLOGY OF MORBIDITY STUDIES; SURVEY SCHEDULE, ITEMS STUDIED, AND NUMBER OF SUBJECTS

表1 罹病調査の方法；調査期間，調査項目，調査対象数

SURVEY 調査	ITEMS STUDIED 調査項目	SURVEY PERIODS 1960 調査期間，1960年	NUMBER OF SUBJECTS 調査対象者数	
FIRST 第1回	INTERVAL BETWEEN VISITS 訪問間隔 TYPE OF INFORMANT 応答者の種類 EFFECTIVENESS OF HEALTH CALENDAR 健康カレンダーの使用効果	6 JANUARY-26 APRIL 16 WEEKS 1月6日—4月26日 16週	118	1 REFUSAL 1人は協力拒否のため除外
SECOND 第2回	INTERVAL BETWEEN VISITS 訪問間隔 TYPE OF INFORMANT 応答者の種類 EFFECTIVENESS OF HEALTH CALENDAR 健康カレンダーの使用効果	27 APRIL-19 JULY 12 WEEKS 4月27日—7月19日 12週	115	1 REFUSAL AND 2 MIGRATIONS 1人の協力拒否者，2人の転出者を除外
THIRD 第3回	INTERVAL BETWEEN VISITS 訪問間隔 TYPE OF INTERVIEWER 調査員の種類	18 AUGUST-9 NOVEMBER 12 WEEKS 8月18日—11月9日 12週	112	3 MIGRATIONS 3人の転出者を除外

SUBGROUPS STUDIED

In each pilot survey, the subjects were classified into four subgroups according to the items studied. The subgroups were generally matched by sex, age, and exposure status. Table 2 shows the number in each subgroup, the item studied, and the alphabetical designations used throughout subsequent tables to indicate these subgroups. Tables 3 through 5 show distribution of the subgroups by survey, sex, age, and exposure distance.

Alteration in alphabetical designations for the subgroups in the third survey indicates the resampling which was done because of concern for possible bias.

調査群

各調査とも調査項目に従って対象を4群に分け，各群の性，年齢構成および被爆状態による分類がほぼ等しくなるようにした．各群の構成員数，調査項目および各群を標示するアルファベット文字を表2に示した．以下，本論文の以後の各表では各群はこのアルファベット文字で示されている．各調査毎に各群の性，年齢構成および被爆距離別分布を示すと表3－5の通りである．

第3回調査では，各群のアルファベット文字が前2回の調査と異なるのは，標本の偏りを恐れて標本の再抽出を行なったためである．

TABLE 2 METHODOLOGY OF MORBIDITY STUDIES; NUMBER OF SUBJECTS, BY INTERVALS BETWEEN VISITS, TYPE OF INFORMANT AND TYPE OF INTERVIEWER

表2 罹病調査の方法；訪問間隔，応答者および調査員の種類別調査対象者数

SURVEY 調査	INTERVAL BETWEEN VISITS 訪問間隔	NUMBER AND TYPE OF INFORMANT 応答者の種類				TOTAL 計
		SUBJECT 本人	GROUP DESIGNATION 調査群	FAMILY MEMBER 家族	GROUP DESIGNATION 調査群	
FIRST 第1回	ONE MONTH 1ヵ月	30	A	30	B	60
	ONE WEEK 1週	30	C	28	D	58
	TOTAL 計	60		58		118
SECOND 第2回	ONE MONTH 1ヵ月	28	A	30	B	58
	THREE MONTHS 3ヵ月	30	C	27	D	57
	TOTAL 計	58		57		115

		NUMBER OF INFORMANTS AND TYPE OF INTERVIEWER 調査員の種類				
		CONTACTOR 連絡員	GROUP DESIGNATION 調査群	PUBLIC HEALTH NURSE 保健婦	GROUP DESIGNATION 調査群	TOTAL 計
THIRD 第3回	ONE MONTH 1ヵ月	28	W	29	X	57
	THREE MONTHS 3ヵ月	30	Z	25	Y	55
	TOTAL 計	58		54		112

TABLE 3 METHODOLOGY OF MORBIDITY STUDIES; SURVEY I, SUBJECTS BY ALPHABETICAL DESIGNATION, AGE, SEX, AND DISTANCE FROM HYPOCENTER

表3 罹病調査の方法；第1回調査，調査群別調査対象者の年齢性および被爆距離による分布

AGE 年齢	TOTAL 計	GROUP 群 A		GROUP 群 B		GROUP 群 C		GROUP 群 D	
		MALE 男	FEMALE 女	MALE 男	FEMALE 女	MALE 男	FEMALE 女	MALE 男	FEMALE 女
TOTAL 計	118	13	17	13	17	13	17	14	14
0-19	2	1	1	-	-	-	-	-	-
20-39	54	6	8	7	8	6	8	5	6
40-59	43	5	6	4	6	5	5	7	5
60+	19	1	2	2	3	2	4	2	3
DISTANCE IN METERS 被爆距離（m）									
TOTAL 計	118	30		30		30		28	
<2000	62	14		14		18		16	
3000-3500	56	16		16		12		12	

TABLE 4 METHODOLOGY OF MORBIDITY STUDIES; SURVEY II, SUBJECTS BY ALPHABETICAL DESIGNATION, AGE, SEX, AND DISTANCE FROM HYPOCENTER

表4 罹病調査の方法；第2回調査，調査群別調査対象者の年齢，性および被爆距離による分布

AGE 年齢	TOTAL 計	GROUP 群 A		GROUP 群 B		GROUP 群 C		GROUP 群 D	
		MALE 男	FEMALE 女	MALE 男	FEMALE 女	MALE 男	FEMALE 女	MALE 男	FEMALE 女
TOTAL 計	115	11	17	13	17	13	17	14	13
0-19	2	1	1	-	-	-	-	-	-
20-39	54	6	8	7	8	6	8	5	6
40-59	40	3	6	4	6	5	5	7	4
60+	19	1	2	2	3	2	4	2	3
DISTANCE IN METERS 被爆距離（m）									
TOTAL 計	115	28		30		30		27	
<2000	61	14		14		18		15	
3000-3500	54	14		16		12		12	

TABLE 5 METHODOLOGY OF MORBIDITY STUDIES; SURVEY III, SUBJECTS BY ALPHABETICAL DESIGNATION, AGE, SEX, AND DISTANCE FROM HYPOCENTER

表5 罹病調査の方法；第3回調査，調査群別調査対象者の年齢，性および被爆距離による分布

AGE 年齢	TOTAL 計	GROUP 群 W		GROUP 群 X		GROUP 群 Y		GROUP 群 Z	
		MALE 男	FEMALE 女	MALE 男	FEMALE 女	MALE 男	FEMALE 女	MALE 男	FEMALE 女
TOTAL 計	112	12	16	13	16	10	15	15	15
0-19	2	1	-	-	-	-	1	-	-
20-39	53	6	7	6	8	3	7	8	8
40-59	39	4	6	5	6	5	4	5	4
60+	18	1	3	2	2	2	3	2	3
DISTANCE IN METERS 被爆距離（m）									
TOTAL 計	112	28		29		25		30	
<2000	59	16		14		14		15	
3000-3500	53	12		15		11		15	

HEALTH CALENDAR AND SURVEY CARD

Before commencing the first survey, interviewers visited all of the subjects and sought their cooperation. At that time, the method of making entries in the health calendar (Appendix I) was explained and it was requested that the subjects personally make the entries daily throughout the period of study. At the time of the second visit the interviewers questioned the subjects about episodes of illness during the interval, referring to the entries on the health calendar, and made entries on the survey card (Appendix II) which is identical in form with the health calendar. The health calendar was used in all three pilot surveys.

INTERVIEWERS

Public health nurses and contactors of the ABCC Department of Medical Sociology were used as interviewers. The type and number of interviewers were as follows:

First survey	2 public health nurses
Second survey	1 public health nurse from previous survey
Third survey	2 public health nurses, 2 contactors

Two public health nurses were engaged in the first survey. In order to eliminate possible bias caused by individual differences between the interviewers, it was arranged that an equal proportion of subjects from each subgroup was assigned to each interviewer. Furthermore, in the third survey, consideration was given to differences arising from the type of interviewer (public health nurse or ordinary contactor). Personnel in this instance were selected by the supervisor of the Patient Contacting Section, ABCC Department of Medical Sociology. The two contactors used had 4.5 and 6.5 years experience for an average which approximates that for ABCC contactors generally. The public health nurses each had about one year of experience.

健康カレンダーおよび調査票

第１回調査を開始する前に調査員が，全調査対象を訪問し，この調査に対する協力を求めた．この際，健康カレンダー（付録Ⅰ）の記入方法を説明し，調査期間中，毎日調査対象自身が記入するように依頼した．次回の訪問時に調査員は健康カレンダーの記入事項を参照しながら，調査対象にその間の疾病について質問し，健康カレンダーと同形式の調査票（付録Ⅱ）に記入した．なお健康カレンダーは各調査とも用いられた．

調査員

医科社会学部の保健婦および連絡員がこの調査の調査員として用いられた．各調査における調査員の種類および数は次の通りである．

第１回調査	保健婦２名
第２回調査	保健婦１名（前回の調査員の１人）
第３回調査	保健婦２名，連絡員２名

第１回調査には保健婦２名が従事したが，調査員の個人差による偏りを除くため，２名の受けもつ対象人員の割合は各群では等しくなるようにした．また第３回調査では調査員の種類（保健婦と普通連絡員）による差異を検討したが，この場合の人選は医科社会学部連絡課長が行ない，従事した連絡員の経験年数はそれぞれ 4.5，6.5年で連絡員のほぼ平均である．一方保健婦の経験年数はほぼ１年である．

TYPE OF INFORMANT

In the first and second surveys a study was made of the differences that occurred when the informant was the subject himself and when the informant was another member of the subject's family. When a railway worker was the subject, the family member was the wife or parent and when a member of a railway worker's family was the subject, an attempt was made to obtain information from the head of the family (railway worker) as often as possible.

INDEXES OF ILLNESSES

Two indexes of illnesses, that is, **incidence** and **period prevalence**, were used in the analysis of the data. The definitions of the two indexes are shown graphically in Figure 1.

応答者の種類

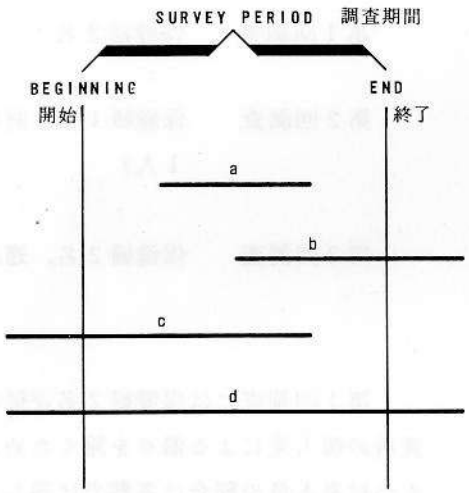
第1，2回調査では，応答者が対象者自身である場合とその家族の場合との差異を調査した．家族として鉄道従業員が対象の場合にはその妻，または親を選び，鉄道従業員の家族が対象の場合には，できるだけ主人（鉄道従業員）に質問するようにした．

疾病量を表わす指数

資料の解析には**発病率**と**期間有病率**の2つの疾病量を表わす指数を用いたが，その定義を図示すれば図1の通りである．

FIGURE 1 METHODOLOGY OF MORBIDITY STUDIES: INDEX OF ILLNESSES USED IN ALL SURVEYS

図1 疾病量を表わす指数



Each horizontal line denotes an illness, the terminal points marking the inception and end.

水平の線は疾病の持続していた期間を示し，線の両端は疾病の開始および終了した時を示す．

INCIDENCE 発病率	a + b
PERIOD PREVALENCE 期間有病率	a + b + c + d

Incidence is the number of illnesses which had their inception during the survey period, that is, illnesses such as *a* + *b* in Figure 1. **Period prevalence** is the number of all illnesses which existed during the survey period, and is expressed as *a* + *b* + c + *d* in Figure 1.

発病率とは図1に示すa＋bのごとく，調査期間中に新しく発病した疾病件数である．また**期間有病率**とは図1に示すa＋b＋c＋dのごとく，調査期間中に存在した全疾病件数である．

RESULTS OF THE STUDY

LEVEL OF COOPERATION

The number of persons who refused to cooperate with this study was 1 out of 119 subjects in the first survey, 1 additional refusal out of 115 in the second survey and none in the third survey (112 subjects). The reason given for the single refusal in the first survey was the unfavorable impression of ABCC received at an examination in 1953. The refusal in the second survey came from the husband of the subject who refused in the first survey.

Included in the 119 subjects in the first survey were 5 individuals who had refused examination for the ABCC Adult Health Study but who nevertheless cooperated with this pilot survey. The reason for refusing examination at ABCC was stated to be ill-feeling toward ABCC and not illness at the time of the scheduled examination.

Six of 118 subjects in the first survey; 3 of 115 subjects in the second survey and 3 of 112 subjects in the third survey stated that they wished to be reexamined at ABCC because of illness. They were examined either as referral cases or by advancing the regular examination schedule. As result, hepatitis, anemia, senile emphysema, hypertention, cholangitis, cystitis, and lipoma were detected.

PERSONNEL REQUIREMENTS

There are individual differences, but an interviewer can interview on the average 14 to 15 subjects in one day (with full use of vehicle). Including subsequent office work, the number of the daily completed contacts would be not less than 7.5 per interviewer. In the pilot study for morbidity surveys conducted by Simon in Nagasaki in April 1957,[3] an average of one hour was required to complete the contact of one subject.

調査成績

協力状態

この調査に対して協力を拒否したものは，第1回調査では 119名中1名，第2回調査では 115名中1名で，第3回調査（ 112名）では拒否したものはなかった．第1回調査時の拒否の理由は，本人に対する1953年のＡＢＣＣの診察時の悪印象から由来しており，第2回調査時に協力を拒否したものは第1回に拒否した者の夫である．

成人健康調査の診察は拒否するが，この調査に対しては協力した者は第1回調査時 119名中5名あった．ＡＢＣＣにおける診察を拒否する理由は，ＡＢＣＣに対する悪感情であって診察予定時の病気のためではない．

病気のため，ＡＢＣＣにおいて再診察を希望する者は，第1回調査で 118名中6名，第2回調査で 115名中3名，第3回調査で 112名中3名であった．これらの者は紹介患者として，または正規の診察予定を少し繰り上げて診察され，その結果，肝炎，貧血，老人性肺気腫，高血圧，胆道炎，膀胱炎および脂肪腫が発見された．

調査に要した作業量

個人差もあるが1人の調査員は平均1日14—15人の面接が可能である（ただし自動車を自由に使用して）．書類整理をも含めると，処理できる数は1人で 7.5人は下らない．ちなみに，1957年4月に長崎で，Simonによって行なわれた罹病調査の試験調査においては,[3] 1人の訪問調査を完了するのに平均1時間を要している．

INTERVAL BETWEEN VISITS. Comparison of period prevalence and incidence is shown in Tables 6-17 for intervals between visits of one week, one month, and three months.

Comparison of Weekly and Monthly Visits. In the first survey both the reported period prevalence and incidence in the subgroups visited monthly was lower by 20-30 per cent than in subgroups visited weekly (Table 6). This differential is seen for all definitions of illness used: complaint of illness, absent from work at least one day, confined to bed at least one day, doctor seen at least once, or medicine taken at least once.

訪問間隔. 訪問間隔を1週，1月，3月とした場合の期間有病率および発病率の比較を表6—17に示した.

1週と1月の比較. 第1回調査においては期間有病率，発病率ともに1月毎に訪問した群では，1週毎に訪問した群と比較して20—30%減少している（表6）．この傾向は病感を訴える，少なくとも1日欠勤した，少なくとも1日病床についた，少なくとも1回病院に行った，少なくとも1回薬を飲んだのいずれを疾病と定義した場合も同様である.

TABLE 6 METHODOLOGY OF MORBIDITY STUDIES; SURVEY I, PERIOD PREVALENCE AND INCIDENCE OF ILLNESS BY CLASSIFICATION, AND INTERVAL BETWEEN VISITS

表6 疾病の分類別，訪問間隔別期間有病率および発病率（第1回調査）

CLASSIFICATION 疾病の分類	MONTHLY VISITS 毎月訪問 A+B		WEEKLY VISITS 毎週訪問 C+D		RATIO MONTHLY TO WEEKLY 比 1月／1週
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
16 WEEK PREVALENCE 16週期間有病率					
ALL ILLNESSES 全疾病	126	2.10	155	2.67	0.79*
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	32	0.53	46	0.79	0.67**
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	32	0.53	41	0.71	0.75
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	58	0.97	78	1.34	0.72
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	83	1.38	99	1.71	0.81
16 WEEK INCIDENCE 16週発病率					
ALL ILLNESSES 全疾病	107	1.78	135	2.33	0.76**
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	28	0.47	35	0.60	0.78
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	28	0.47	32	0.55	0.85
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	47	0.78	66	1.14	0.69**
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	70	1.17	83	1.43	0.82
SUBJECTS IN GROUP 調査群の調査対象者数	60		58		

**Highly significant 有意 P ≤.01
*Significant 有意 P ≥.01 to ≤0.5

When examined in relation to sex, this differential is noted almost exclusively in males as shown in Table 7. For females no significant difference is found. When studied further by age, comparing those under and those over 50 years of age, the difference is found mostly in the younger groups as shown in Table 8.

Next, when illnesses for which doctors have been consulted are classified by certain characteristics as shown in Table 9, the period prevalence reported in the subgroups visited monthly is lower than that in the subgroups visited weekly not only for acute but for chronic diseases as well.

この傾向を更に性別にみると表7のごとく，主として男のみにみられる．女には有意な差異は認められない．これを更に年齢別に50才以下と50才以上に分けてみると，表8のごとくこの差異は主として若い年齢層に認められる．

次に，医師の治療を受けた疾病について疾患別に分類してみると，表9のごとく急性のみならず慢性疾患においても，1週に比較して1月の群の期間有病率は減少を示している．

TABLE 7 METHODOLOGY OF MORBIDITY STUDIES: SURVEY I, PERIOD PREVALENCE OF ILLNESS BY CLASSIFICATION, INTERVAL BETWEEN VISITS, AND SEX

表7 疾病の分類別，訪問間隔別，性別期間有病率（第1回調査）

CLASSIFICATION 疾病の分類		MONTHLY VISITS 毎月訪問 A+B		WEEKLY VISITS 毎週訪問 C+D		RATIO MONTHLY TO WEEKLY 比 1月／1週
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
16 WEEK PREVALENCE 16週期間有病率						
ALL ILLNESSES 全疾病	MALE 男	49	1.88	77	2.85	0.66*
	FEMALE 女	77	2.26	78	2.52	0.90
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤						
	MALE 男	8	0.31	25	0.93	0.33*
	FEMALE 女	24	0.71	21	0.68	1.04
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床						
	MALE 男	9	0.35	22	0.81	0.42*
	FEMALE 女	23	0.68	19	0.61	1.10
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診						
	MALE 男	27	1.04	48	1.78	0.58*
	FEMALE 女	31	0.91	30	0.97	0.94
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬						
	MALE 男	32	1.23	46	1.70	0.72
	FEMALE 女	51	1.50	53	1.71	0.88
SUBJECTS IN GROUP 調査群の調査対象者数	MALE 男	26		27		
	FEMALE 女	34		31		

*Significant P>.01 to ≤.05
有意

TABLE 8 METHODOLOGY OF MORBIDITY STUDIES: SURVEY I, PERIOD PREVALENCE OF ILLNESS BY CLASSIFICATION, INTERVAL BETWEEN VISITS, AND AGE

表8 疾病の分類別，訪問間隔別，年齢別期間有病率（第1回調査）

CLASSIFICATION 疾病の分類	AGE IN YEARS 年齢	MONTHLY VISITS 毎月訪問 A+B		WEEKLY VISITS 毎週訪問 C+D		RATIO MONTHLY TO WEEKLY 比 1月／1週
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
16 WEEK PREVALENCE 16週期間有病率						
ALL ILLNESSES 全疾病	<50	97	2.20	105	2.92	0.76
	50+	29	1.81	50	2.27	0.80
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	<50	19	0.43	31	0.86	0.50*
	50+	13	0.81	15	0.68	1.19
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	<50	19	0.43	29	0.81	0.54*
	50+	13	0.81	12	0.55	1.49
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	<50	43	0.98	49	1.36	0.72
	50+	15	0.94	29	1.32	0.71
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	<50	64	1.45	71	1.97	0.74
	50+	19	1.19	28	1.27	0.93
SUBJECTS IN GROUP 調査群の調査対象者数	<50	44		36		
	50+	16		22		

*Significant P>.01 to ≤.05
有意

TABLE 9 METHODOLOGY OF MORBIDITY STUDIES: SURVEY I, PERIOD PREVALENCE OF ILLNESS BY DISEASE AND INTERVAL BETWEEN VISITS

表9 疾患の種類別，訪問間隔別期間有病率（第1回調査）

DISEASE 疾患の種類	MONTHLY VISITS 毎月訪問 A+B		WEEKLY VISITS 毎週訪問 C+D		RATIO MONTHLY TO WEEKLY 比 1月／1週
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
16 WEEK PREVALENCE 16週期間有病率					
TOTAL 総計	58	0.97	78	1.34	0.72
MEDICAL DOCTOR SEEN 医師受診	51	0.85	65	1.12	0.76
ACUTE DISEASE 急性疾患	39	0.65	43	0.74	0.88
COMMON COLD 感冒					
LASTED LESS THAN ONE WEEK 1週未満	10	0.17	13	0.22	0.77
LASTED TWO WEEKS AND OVER 2週以上	19	0.31	14	0.24	1.60
OTHER その他	10	0.17	16	0.28	0.61
CHRONIC DISEASE 慢性疾患 †	12	0.20	22	0.38	0.53
SEVERE 重症 ‡	7	0.12	9	0.16	0.75
OTHER その他	5	0.08	13	0.22	0.36
DENTIST SEEN 歯科医師受診	7	0.12	13	0.22	0.55
SUBJECTS IN GROUP 調査群の調査対象者数	60		58		

†International Statistical Classifications included: 下記の疾患（国際疾病分類）を含む.

Pulmonary tuberculosis(002)‡, 肺結核 TB of peritoneum(011)‡, 腹膜結核 Anemia(293), 貧血 Neurosis(318), ノイローゼ Hypertension(444)‡, 高血圧 Endocarditis(421)‡, 心内膜炎
Chronic bronchitis(502), 慢性気管支炎 Stomach ulcer(540)‡, 胃潰瘍 Hepatitis(583)‡, 肝炎 Chronic colitis(572), 慢性大腸炎 Anal fissure(574)‡, 痔瘻 Nephritis(593)‡, 腎炎
Menopausal symptoms(635), 閉経期障害 Eczema(701), 慢性湿疹 Arthritis(725), 関節炎 Lumbago(726). 腰痛

Comparison of Monthly and Trimonthly Visits The intervals between visits of one month and three months were compared twice on different samples in the second and third surveys. The reported period prevalence and incidence is lower when the interval between visits is three months as compared with one month although there is a difference of degree depending on the definition of illness as is seen in Tables 10 and 11. However, no consistent difference in relation to sex or age is seen (Tables 12-15).

1月と3月の比較. 訪問間隔が1月と3月の比較は第2，3回調査において，標本を変えて2回行なった．訪問間隔が3月の場合の期間有病率，発病率は1月の場合に比較して，疾病の定義によって程度に差はあるがいずれも減少している（表10—11）．ただし性または年齢別にみると，一定の傾向は認められない（表12—15）．

TABLE 10 METHODOLOGY OF MORBIDITY STUDIES; SURVEY II, PERIOD PREVALENCE AND INCIDENCE OF ILLNESS BY CLASSIFICATION AND INTERVAL BETWEEN VISITS

表10 疾病の分類別，訪問間隔別期間有病率および発病率（第2回調査）

CLASSIFICATION 疾病の分類	MONTHLY VISITS 毎月訪問 A+B		TRIMONTHLY VISITS 毎3ヵ月訪問 C+D		RATIO TRIMONTHLY TO MONTHLY 比 3月／1月
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK PREVALENCE 12週期間有病率					
ALL ILLNESSES 全疾病	72	1.24	70	1.23	0.99
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	18	0.31	15	0.26	0.84
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	16	0.28	12	0.21	0.75
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	41	0.71	42	0.74	1.04
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	43	0.74	36	0.63	0.85
12 WEEK INCIDENCE 12週発病率					
ALL ILLNESSES 全疾病	54	0.93	47	0.82	0.88
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	13	0.22	6	0.11	0.50
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	12	0.21	4	0.07	0.33*
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	30	0.52	28	0.49	0.94
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	32	0.55	21	0.37	0.67
SUBJECTS IN GROUP 調査群の調査対象者数	58		57		

*Significant $P>.01$ to $\leq .05$
有意

TABLE 11 METHODOLOGY OF MORBIDITY STUDIES; SURVEY III, PERIOD PREVALENCE AND INCIDENCE OF ILLNESS BY CLASSIFICATION AND INTERVAL BETWEEN VISITS

表11 疾病の分類別，訪問間隔別期間有病率および発病率（第３回調査）

CLASSIFICATION 疾病の分類	MONTHLY VISITS 毎月訪問 W+X		TRIMONTHLY VISITS 毎３ヵ月訪問 Y+Z		RATIO TRIMONTHLY TO MONTHLY 比 3月／1月
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK PREVALENCE 12週期間有病率					
ALL ILLNESSES 全疾病	87	1.53	72	1.31	0.86
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	16	0.28	7	0.13	0.46
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	9	0.16	4	0.07	0.44
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	54	0.95	46	0.84	0.88
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	51	0.89	41	0.75	0.84
12 WEEK INCIDENCE 12週発病率					
ALL ILLNESSES 全疾病	60	1.05	50	0.91	0.87
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	6	0.11	4	0.07	0.64
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	3	0.05	2	0.04	0.80
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	33	0.58	27	0.49	0.84
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	30	0.53	25	0.45	0.85
SUBJECTS IN GROUP 調査群の調査対象者数	57		55		

TABLE 12 METHODOLOGY OF MORBIDITY STUDIES, SURVEY II, INCIDENCE OF ILLNESS BY CLASSIFICATION, INTERVAL BETWEEN VISITS, AND SEX

表12 疾病の分類別，訪問間隔別，性別発病率（第２回調査）

CLASSIFICATION 疾病の分類		MONTHLY VISITS 毎月訪問 A+B		TRIMONTHLY VISITS 毎３ヵ月訪問 C+D		RATIO TRIMONTHLY TO MONTHLY 比 3月／1月
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK INCIDENCE 12週発病率						
ALL ILLNESSES 全疾病	MALE 男	25	1.05	27	1.00	0.95
	FEMALE 女	29	0.85	20	0.67	0.79
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	MALE 男	3	0.13	4	0.15	1.15
	FEMALE 女	10	0.29	2	0.07	0.24*
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	MALE 男	3	0.13	2	0.07	0.54
	FEMALE 女	9	0.26	2	0.07	0.27*
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	MALE 男	14	0.59	19	0.70	1.19
	FEMALE 女	16	0.47	9	0.30	0.64
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	MALE 男	15	0.63	8	0.30	0.48
	FEMALE 女	17	0.50	13	0.43	0.86
SUBJECTS IN GROUP 調査群の調査対象者数	MALE 男	24		27		
	FEMALE 女	34		30		

*Significant $P > .01$ to $\leq .05$
有意

TABLE 13 METHODOLOGY OF MORBIDITY STUDIES, SURVEY III, INCIDENCE OF ILLNESS BY CLASSIFICATION, INTERVAL BETWEEN VISITS, AND SEX

表13 疾病の分類別，訪問間隔別，性別発病率（第３回調査）

CLASSIFICATION 疾病の分類		MONTHLY VISITS 毎月訪問 W+X		TRIMONTHLY VISITS 毎３ヵ月訪問 Y+Z		RATIO TRIMONTHLY TO MONTHLY 比 ３月／１月
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK INCIDENCE 12週発病率						
ALL ILLNESSES 全疾病	MALE 男	30	1.20	29	1.16	0.97
	FEMALE 女	30	0.94	21	0.70	0.74
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	MALE 男	3	0.12	1	0.04	0.33
	FEMALE 女	3	0.09	3	0.10	1.11
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	MALE 男	2	0.08	1	0.04	0.50
	FEMALE 女	1	0.03	1	0.03	1.00
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	MALE 男	20	0.80	16	0.64	0.80
	FEMALE 女	13	0.41	11	0.37	0.90
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	MALE 男	16	0.64	12	0.48	0.75
	FEMALE 女	14	0.44	13	0.43	0.98
SUBJECTS IN GROUP 調査群の調査対象者数	MALE 男	25		25		
	FEMALE 女	32		30		

TABLE 14 METHODOLOGY OF MORBIDITY STUDIES, SURVEY II, INCIDENCE OF ILLNESS BY CLASSIFICATION, INTERVAL BETWEEN VISITS, AND AGE

表14 疾病の分類別，訪問間隔別，年齢別発病率（第２回調査）

CLASSIFICATION 疾病の分類	MONTHLY VISITS 毎月訪問 A+B		TRIMONTHLY VISITS 毎３ヵ月訪問 C+D		RATIO TRIMONTHLY TO MONTHLY 比 ３月／１月
AGE IN YEARS 年齢	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK INCIDENCE 12週発病率					
ALL ILLNESSES 全疾病 <50	40	0.95	33	0.94	0.99
50+	14	0.88	14	0.64	0.73
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤 <50	7	0.17	5	0.14	0.82
50+	6	0.38	1	0.05	0.13*
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床 <50	6	0.14	4	0.11	0.79
50+	6	0.38	0	-	-
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診 <50	23	0.55	19	0.54	0.98
50+	7	0.44	9	0.41	0.93
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬 <50	22	0.52	15	0.43	0.83
50+	10	0.63	6	0.27	0.43
SUBJECTS IN GROUP 調査群の調査対象者数 <50	42		35		
50+	16		22		

*Significant P>.01 to ≤.05
有意

TABLE 15 METHODOLOGY OF MORBIDITY STUDIES, SURVEY III, INCIDENCE OF ILLNESS BY CLASSIFICATION, INTERVAL BETWEEN VISITS, AND AGE

表15 疾病の分類別，訪問間隔別，年齢別発病率（第3回調査）

CLASSIFICATION 疾病の分類	AGE IN YEARS 年齢	MONTHLY VISITS 毎月訪問 W+X		TRIMONTHLY VISITS 毎3ヵ月訪問 Y+Z		RATIO TRIMONTHLY TO MONTHLY 比 3月／1月
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK INCIDENCE 12週発病率						
ALL ILLNESSES 全疾病	<50	48	1.23	34	0.94	0.76
	50+	12	0.67	16	0.84	1.25
ABSENT FROM WORK AT LEAST 1 DAY 1日以上の欠勤	<50	4	0.10	3	0.08	0.80
	50+	2	0.11	1	0.05	0.45
CONFINED TO BED AT LEAST 1 DAY 1日以上の就床	<50	3	0.08	2	0.06	0.75
	50+	0	-	0	-	-
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	<50	27	0.69	15	0.42	0.61
	50+	6	0.33	12	0.63	1.91
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	<50	25	0.64	19	0.53	0.81
	50+	5	0.28	6	0.32	1.14
SUBJECTS IN GROUP 調査群の調査対象者数	<50	39		36		
	50+	18		19		

Next, when illnesses for which doctors have been consulted are classified by the kind of disease (doctor, dentist; acute, chronic; severe), as shown in Tables 16, 17 the incidence reported in the subgroups visited trimonthly is considerably smaller than that in the subgroups visited monthly for chronic but not for acute disease.

次に医師の診察を受けた病気について，疾患の種類（医師，歯科医師；急性，慢性；重症度）によって分類してみると，表16，17のごとく慢性疾患では訪問間隔が3月の場合は，訪問間隔が1月の場合に比較して発病率はかなりの減少を示しているが，急性疾患ではそのような傾向は認められない．

The results of these pilot surveys were compared with those from other morbidity studies. In the California Health Survey (1954-55)[4] which was concerned with the methodology of the National Health Survey of United States, study was made of illnesses which had occurred during the four weeks prior to the visit. It was found that all illness, both acute and chronic, was reported with lower frequency with increasing time from the date of interview, and the incidence reported in the fourth week before the visit was only 40 per cent of that in the week immediately

この調査成績を他の罹病調査成績と比較してみると，米国の国民健康調査の方法論の検討のために行なわれたCalifornia州健康調査(1954—55)[4]では，訪問前4週間の病気について検討を行なっ

TABLE 16 METHODOLOGY OF MORBIDITY STUDIES; SURVEY II, INCIDENCE OF ILLNESS BY DISEASE AND INTERVAL BETWEEN VISITS

表16 疾患の種類別，訪問間隔別発病率（第２回調査）

CLASSIFICATION 疾患の種類		MONTHLY VISITS 毎月訪問 A+B		TRIMONTHLY VISITS 毎３ヵ月訪問 C+D		RATIO TRIMONTHLY TO MONTHLY 比 ３月／１月
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK INCIDENCE	12週発病率					
TOTAL	計	30	0.52	28	0.49	0.94
MEDICAL DOCTOR SEEN	医師受診	25	0.43	23	0.40	0.93
ACUTE DISEASE	急性疾患	19	0.33	21	0.37	1.12
CHRONIC DISEASE	慢性疾患 †	6	0.10	2	0.04	0.40
SEVERE	重症 ‡	5	0.09	1	0.02	0.22
OTHER	その他	1	0.02	1	0.02	1.00
DENTIST SEEN	歯科医師受診	5	0.09	5	0.09	1.00
SUBJECTS IN GROUP 調査群の調査対象者数		58		57		

†International Statistical Classification included: Lipoma (226)‡, Neuralgia (366), Cataract (385)‡, Hypertension (444)‡, Chronic Pharyngitis (512), Ulcer of stomach (540)‡, Hepatitis (583)‡.
下記の疾患（国際疾病分類）を含む 脂肪腫 神経痛 白内障 高血圧 慢性咽頭炎 胃潰瘍 肝炎

TABLE 17 METHODOLOGY OF MORBIDITY STUDIES, SURVEY III, INCIDENCE OF ILLNESS BY DISEASE AND INTERVAL BETWEEN VISITS

表17 疾患の種類別，訪問間隔別発病率（第３回調査）

CLASSIFICATION 疾患の種類		MONTHLY VISITS 毎月訪問 W+X		TRIMONTHLY VISITS 毎３ヵ月訪問 Y+Z		RATIO TRIMONTHLY TO MONTHLY 比 ３月／１月
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK INCIDENCE	12週発病率					
TOTAL	計	33	0.58	27	0.49	0.84
MEDICAL DOCTOR SEEN	医師受診	28	0.49	22	0.40	0.82
ACUTE DISEASE	急性疾患	22	0.39	19	0.35	0.90
CHRONIC DISEASE	慢性疾患 †	6	0.11	3	0.05	0.45
SEVERE	重症 ‡	4	0.07	2	0.04	0.57
OTHER	その他	2	0.04	1	0.02	0.50
DENTIST SEEN	歯科医師受診	5	0.09	5	0.09	1.00
SUBJECTS IN GROUP 調査群の調査対象者数		57		55		

†International Statistical Classification included: Hypertension(444)‡, Liver disorder (583)‡, Neuralgia (366), Chronic conjunctivitis (370).
下記の疾患（国際分類）を含む 高血圧 肝障害 神経痛 慢性結膜炎

preceding the visit. In addition, it was stated that for conditions for which a doctor was seen there was hardly any difference for acute diseases, but for chronic diseases the reported incidence decreased with increasing interval from the time of visit. The rate in the fourth week before the visit was only 40 per cent of that in the first week. On the other hand, a study conducted at Charlotte, North Carolina (Feb. 1957)[5] showed hardly any difference between incidence in the second week and first week before the visit. Further, it was reported in the British Survey of Sickness by Gray (1949)[6] that in an investigation of illnesses three months before the visit, the incidence of serious illnesses showed hardly any change but that reports of influenza and common cold showed a marked decrease with increasing time from the visit. Furthermore, Miyoshi,[7] in a morbidity study of infants, records a decrease of 20 per cent in the reported incidence when visits are made once a year as compared with three times a year.

TYPE OF INFORMANT. In both the first and second surveys comparisons were made between information obtained from the subject himself and from a member of his family. As shown in Tables 18 and 19 the reported period prevalence and incidence were very nearly the same whether a member of the family was the informant or whether the subject himself was the informant. The results were almost the same in the first survey (intervals of one week and one month) and the second and third surveys (intervals of one month and three months). No particular relationship to sex or age is seen (Tables 20-23).

On the other hand there were many instances in which the subjects themselves were interviewed even though a family member had been designated as the informant. Such instances were common when subjects were housewives. In the group in which subjects were designated as informants, approximately 80 per cent of the interviews were with the subjects. In the group for which a family member had

たが，全疾患では急性，慢性疾患とも訪問前に遡るにつれて発病率が低くなり，訪問前4週目の発病率は訪問前1週目の40%に減少している．また医師の診察を受けた病気では急性疾患では殆んど減少しないが，慢性疾患では訪問前に遡るにつれて発病率が減少し，訪問前4週目では1週目の40%に減少することを報告している．また同じく，North Carolina 州 Charlotte 市の調査（1957年2月）[5] では，訪問前2週目の発病率は訪問前1週目の発病率に比較して殆んど減少しないことを示している．また Gray の英国疾病調査（1949年）[6] では，訪問前3ヵ月の病気を調査し，重症疾患では殆んど差がないが，流行性感冒や感冒は訪問前に遡るにしたがって発病率は著しく減少することを報告している．また三好[7] は乳児の罹病調査において年1回訪問の場合は，年3回訪問の場合の発病率より20%減少することを報告している．

応答者の種類. 第1回調査および第2回調査において，応答者が本人の場合と家族の場合の比較を行なった．表18，19のごとく，応答者が家族の場合と本人の場合とを比較しても期間有病率および発病率は殆んど同じである．この傾向は第1回調査（訪問間隔が1週と1月），第2，3回調査（訪問間隔が1月と3月）のいずれの場合もほぼ同様である．また性および年齢による差異も認められない（表20—23）．

応答者が家族と指定された群においても，本人に会った場合もしばしばあり調査対象が家庭の主婦の場合にこの例が多い．**本人**に会った割合は応答者が本人の群で約80%，応答者が家族の群で

been designated as informant, 50 per cent of the interviews actually were with **subjects.** This leads to the belief that differences in reporting illness episodes actually may be more marked than shown here between groups in which the family member **actually** is the informant and those where the subject is the informant.

The results of these pilot surveys may be compared with those of other studies. The study at Charlotte, North Carolina,[5] demonstrated a decrease in incidence by approximately 10 per cent when the respondent was designated to be the subject compared with designating that the respondent be the subject or family member in case of absence of subject. Similarly, the California Health Survey[4] demonstrated a difference of 20-25 per cent, particularly in minor diseases.

約50%であるので，この点を考慮すると応答者が家族と本人の場合の差異は実際にはさらに著しいものと考えられる．

この調査成績を他の調査と比較するとNorth Carolina州Charlotte市[5]の調査では応答者が本人の場合は，「本人」または「本人が不在の場合は家族」の場合の発病率より約10%減少することを示し，またCalifornia州健康調査[4]では，特に軽症の疾患において同じく20—25%減少することを示している．

TABLE 18 METHODOLOGY OF MORBIDITY STUDIES; SURVEY I, PERIOD PREVALENCE AND INCIDENCE OF ILLNESS BY CLASSIFICATION AND TYPE OF INFORMANT

表18 疾病の分類別，応答者の種類別期間有病率および発病率（第1回調査）

CLASSIFICATION 疾病の分類	TYPE OF INFORMANT 応答者の種類				RATIO 比 B+D／A+C
	RELATED HOUSEHOLD MEMBERS 家族 B+D		SUBJECT 本人 A+C		
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
16 WEEK PREVALENCE 16週期間有病率					
ALL ILLNESSES 全疾病	134	2.31	147	2.45	0.94
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	37	0.64	41	0.68	0.93
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	34	0.59	39	0.65	0.90
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	72	1.24	64	1.07	1.16
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	88	1.52	94	1.57	0.97
16 WEEK INCIDENCE 16週発病率					
ALL ILLNESSES 全疾病	113	1.95	129	2.15	0.91
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	28	0.48	35	0.58	0.83
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	26	0.45	34	0.57	0.79
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	61	1.05	52	0.87	1.21
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	74	1.28	79	1.32	0.97
SUBJECTS IN GROUP 調査群の調査対象者数	58		60		

NOTE: The proportion of interviews with actual subject : B+D 0.45
注 実際に本人に面接した割合： A+C 0.75

TABLE 19 METHODOLOGY OF MORBIDITY STUDIES; SURVEY II, PERIOD PREVALENCE AND INCIDENCE OF ILLNESS BY CLASSIFICATION AND TYPE OF INFORMANT

表19 疾病の分類別，応答者の種類別，期間有病率および発病率（第2回調査）

CLASSIFICATION 疾病の分類	TYPE OF INFORMANT 応答者の種類				RATIO 比
	RELATED HOUSEHOLD MEMBERS 家族 B+D		SUBJECT 本人 A+C		
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	B+D／A+C
12 WEEK PREVALENCE 12週期間有病率					
ALL ILLNESSES 全疾病	68	1.19	74	1.28	0.93
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	18	0.32	15	0.26	1.23
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	16	0.28	12	0.21	1.33
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	37	0.65	45	0.78	0.83
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	36	0.63	43	0.74	0.85
12 WEEL INCIDENCE 12週発病率					
ALL ILLNESSES 全疾病	49	0.86	52	0.90	0.96
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	11	0.19	8	0.14	1.36
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	10	0.18	6	0.10	1.80
DOCTOR SEEN AT LFAST ONCE 1回以上の医師受診	26	0.46	32	0.55	0.84
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	25	0.44	28	0.48	0.92
SUBJECTS IN GROUP 調査群の調査対象者数	57		58		

NOTE: The proportion of interviews with actual subject; B+D 0.50
注 実際に本人に面接した割合： A+C 0.82

TABLE 20 METHODOLOGY OF MORBIDITY STUDIES; SURVEY I, PERIOD PREVALENCE OF ILLNESS BY CLASSIFICATION, TYPE OF INFORMANT, AND SEX

表20 疾病の分類別，応答者の種類別，性別期間有病率（第1回調査）

CLASSIFICATION 疾病の分類		TYPE OF INFORMANT 応答者の種類				RATIO 比
		RELATED HOUSEHOLD MEMBERS 家族 B+D		SUBJECT 本人 A+C		
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	B+D／A+C
16 WEEK PREVALENCE 16週期間有病率						
ALL ILLNESSES 全疾病	MALE 男	62	2.30	64	2.46	0.93
	FEMALE 女	72	2.32	83	2.44	0.95
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	MALE 男	17	0.63	16	0.62	1.02
	FEMALE 女	20	0.65	25	0.74	0.88
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	MALE 男	16	0.59	15	0.58	1.03
	FEMALE 女	18	0.58	24	0.71	0.82

Continued 続く

TABLE 20 (Cont.) (続き)

CLASSIFICATION 疾病の分類		TYPE OF INFORMANT 応答者の種類				RATIO 比 B+D／A+C
		RELATED HOUSEHOLD MEMBERS 家族 B+D		SUBJECT 本人 A+C		
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	MALE 男	42	1.56	33	1.27	1.23
	FEMALE 女	30	0.97	31	0.91	1.06
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	MALE 男	39	1.44	39	1.50	0.96
	FEMALE 女	49	1.58	55	1.62	0.98
SUBJECTS IN GROUP 調査群の調査対象者数	MALE 男	27		26		
	FEMALE 女	31		34		

NOTE: Proportion of interviews with actual subject: B+D male 男 0.26 female 女 0.83
注 実際に本人に面接した割合： A+C male 男 0.78 female 女 0.86

TABLE 21 METHODOLOGY OF MORBIDITY STUDIES; SURVEY II, PERIOD PREVALENCE OF ILLNESS BY CLASSIFICATION, TYPE OF INFORMANT, AND SEX

表21 疾病の分類別，応答者の種類別，性別期間有病率（第2回調査）

CLASSIFICATION 疾病の分類		TYPE OF INFORMANT 応答者の種類				RATIO 比 B+D／A+C
		RELATED HOUSEHOLD MEMBER 家族 B+D		SUBJECT 本人 A+C		
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	
12 WEEK PREVALENCE 12週期間有病率						
ALL ILLNESSES 全疾病	MALE 男	36	1.33	33	1.38	0.96
	FEMALE 女	32	1.07	41	1.21	0.89
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	MALE 男	8	0.30	4	0.17	1.76
	FEMALE 女	10	0.33	11	0.32	1.03
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	MALE 男	6	0.22	3	0.13	1.69
	FEMALE 女	10	0.33	9	0.26	1.27
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	MALE 男	19	0.70	24	1.00	0.70
	FEMALE 女	18	0.60	21	0.62	0.97
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	MALE 男	19	0.70	16	0.67	1.04
	FEMALE 女	17	0.57	27	0.79	0.72
SUBJECTS IN GROUP 調査群の調査対象者数	MALE 男	27		24		
	FEMALE 女	30		34		

NOTE: Proportion of interviews with actual subject: B+D male 男 0.23 female 女 0.70
注 実際に本人に面接した割合： A+C male 男 0.86 female 女 0.79

TABLE 22 METHODOLOGY OF MORBIDITY STUDIES; SURVEY I, PERIOD PREVALENCE OF ILLNESS BY CLASSIFICATION, TYPE OF INFORMANT AND AGE

表22 疾病の分類別，応答者の種類別，年齢別期間有病率（第1回調査）

CLASSIFICATION 疾病の分類	AGE IN YEARS 年齢	TYPE OF INFORMANT 応答者の種類				RATIO 比
		RELATED HOUSEHOLD MEMBER 家族 B+D		SUBJECT 本人 A+C		
		NUMBER	RATE PER PERSON	NUMBER	RATE PER PERSON	B+D／A+C
16 WEEK PREVALENCE 16週期間有病率						
ALL ILLNESSES 全疾病	<50	91	2.46	111	2.58	0.95
	50+	43	2.05	36	2.12	0.97
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	<50	20	0.54	30	0.70	0.78
	50+	17	0.81	11	0.65	1.25
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	<50	19	0.51	29	0.67	0.76
	50+	15	0.71	10	0.59	1.21
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	<50	49	1.32	43	1.00	1.32
	50+	23	1.10	21	1.24	0.89
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	<50	64	1.73	71	1.65	1.05
	50+	24	1.14	23	1.35	0.84
SUBJECTS IN GROUP 調査群の調査対象者数	<50	37		43		
	50+	21		17		

NOTE: Proportion of interviews with actual subject 注 実際に本人に面接した割合

B+D <50 0.55 50+ 0.55
A+C <50 0.80 50+ 0.88

TABLE 23 METHODOLOGY OF MORBIDITY STUDIES; SURVEY II, PERIOD PREVALENCE OF ILLNESS BY CLASSIFICATION, TYPE OF INFORMANT, AND AGE

表23 疾病の分類別，応答者の種類別，年齢別期間有病率（第2回調査）

CLASSIFICATION 疾病の分類	AGE IN YEARS 年齢	TYPE OF INFORMANT 応答者の種類				RATIO 比
		RELATED HOUSEHOLD MEMBER 家族 B+D		SUBJECT 本人 A+C		
		NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	B+D／A+C
12 WEEK PREVALENCE 12週期間有病率						
ALL ILLNESSES 全疾病	<50	42	1.17	53	1.47	0.80
	50+	26	1.24	21	1.24	1.00
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	<50	8	0.22	11	0.27	0.81
	50+	10	0.48	4	0.24	2.00
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	<50	9	0.25	9	0.22	1.14
	50+	7	0.33	3	0.18	1.83
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	<50	25	0.69	30	0.73	0.95
	50+	12	0.57	15	0.88	0.65
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	<50	24	0.67	28	0.68	0.99
	50+	12	0.57	15	0.88	0.65
SUBJECTS IN GROUP 調査群の調査対象者数	<50		36		41	
	50+		21		17	

NOTE: Proportion of interviews with actual subject 注 実際に本人に面接した割合：

B+D <50 0.50 B+D 50+ 0.48
A+C <50 0.81 A+C 50+ 0.85

TYPE OF INTERVIEWER. As shown in Table 24 the reported period prevalence and the incidence of all illnesses were lower when the interviewer was a public health nurse as compared with a lay contactor.

However, as previously mentioned, the contactors had 4.5 - 6.5 years of experience, while the public health nurses had only one year. Therefore, it is possible that the difference is attributable to the difference in experience between the public health nurses and the contactors rather than to any difference in ability between the two types of workers. However, F. E. Linder, *et al*[8] in a comparison between public health nurses (when in uniform and when not in uniform) and nonmedically-trained interviewers state that the reported incidence of both symptoms and illnesses was higher in the case of nonmedically-trained interviewers than in the case of public health nurses.

調査員の種類. 表24のごとく，調査員が保健婦の場合は，普通の連絡員の場合の期間有病率および発病率に比較して，各々の定義による疾病とも減少している．

しかし前述のごとく，連絡員の経験年数は4.5－6.5年であるに反し，保健婦の経験年数は僅か1年である．それ故，この差が保健婦と連絡員の能力の差と考えるよりも，経験年数の差と考える方がより自然であろう．なお，F. E. Linder等[8]は保健婦（制服をつけた場合とつけない場合）と医学的教育を受けていない調査員の場合を比較し，症状，疾病とも発病率は医学的教育を受けていない調査員の方が，保健婦の場合よりも高いことを報告している．

TABLE 24 METHODOLOGY OF MORBIDITY STUDIES; SURVEY III, PERIOD PREVALENCE AND INCIDENCE OF ILLNESS BY CLASSIFICATION, AND TYPE OF INTERVIEWER

表24 疾病の分類別，調査員の種類別，期間有病率および発病率（第3回調査）

CLASSIFICATION 疾病の分類	TYPE OF INTERVIEWER 調査員の種類				RATIO 比
	PUBLIC HEALTH NURSE 保健婦 X+Y		CONTACTOR 連絡員 W+Z		
	NUMBER 実数	RATE PER PERSON 率	NUMBER 実数	RATE PER PERSON 率	X+Y／W+Z
12 WEEK PREVALENCE 12週期間有病率					
ALL ILLNESSES 全疾病	68	1.26	91	1.57	0.80
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	9	0.17	14	0.24	0.71
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	3	0.06	10	0.17	0.35
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	41	0.76	59	1.02	0.75
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	39	0.72	53	0.91	0.79
12 WEEK INCIDENCE 12週発病率					
ALL ILLNESSES 全疾病	39	0.72	71	1.22	0.59*
ABSENT FROM WORK AT LEAST ONE DAY 1日以上の欠勤	4	0.07	6	0.10	0.70
CONFINED TO BED AT LEAST ONE DAY 1日以上の就床	1	0.02	4	0.07	0.29
DOCTOR SEEN AT LEAST ONCE 1回以上の医師受診	20	0.37	40	0.69	0.54*
MEDICINE TAKEN AT LEAST ONCE 1回以上の投薬	17	0.31	38	0.66	0.47*
SUBJECTS IN GROUP 調査群の調査対象者数	54		58		

*Significant P>.01 to ≤.05
有意

EFFECTIVENESS OF HEALTH CALENDARS. Health calendars were used for all subjects in all surveys. The proportion of those with satisfactory entries is as shown in Figure 2 and Table 25. Although the proportion of entries was approximately 70 per cent during the first month after commencement of the study, it became poorer as time elapsed and decreased to approximately 40 per cent four months later and remained at about that level for the period (seven months in all). When reviewed by interval between visits no difference was seen in the entry rate between the one week and one month subgroups, but comparison of the one month and three month subgroups (second survey; four to seven months after commencement of study) reveals that the entry rate of the three month interval subgroup is approximately half that of the one month subgroup (Table 26).

健康カレンダーの有用性. 健康カレンダーは各調査の全調査対象に使用した．その記入の良好なものの割合をみると，図２，表25のごとく，調査開始後１ヵ月間の記入率は約70％である．時が経過するにつれ悪くなり，４ヵ月後には約40％に減少し，その後はほぼ同様の値を示している（調査期間７ヵ月）．これを訪問間隔別にみると，記入率は１週と１月の群の間では差異はないが，１月と３月の群を比較すると（第２回調査；調査開始後４－７月）では，訪問間隔が３月の群の記入率は１月の群のそれの約半分となっている（表26）．

FIGURE 2 METHODOLOGY OF MORBIDITY STUDIES; PROPORTION OF SATISFACTORY ENTRIES ON HEALTH CALENDARS BY DURATION OF SURVEY

図２ 健康カレンダー記入の良好なものの割合（経過期間別）

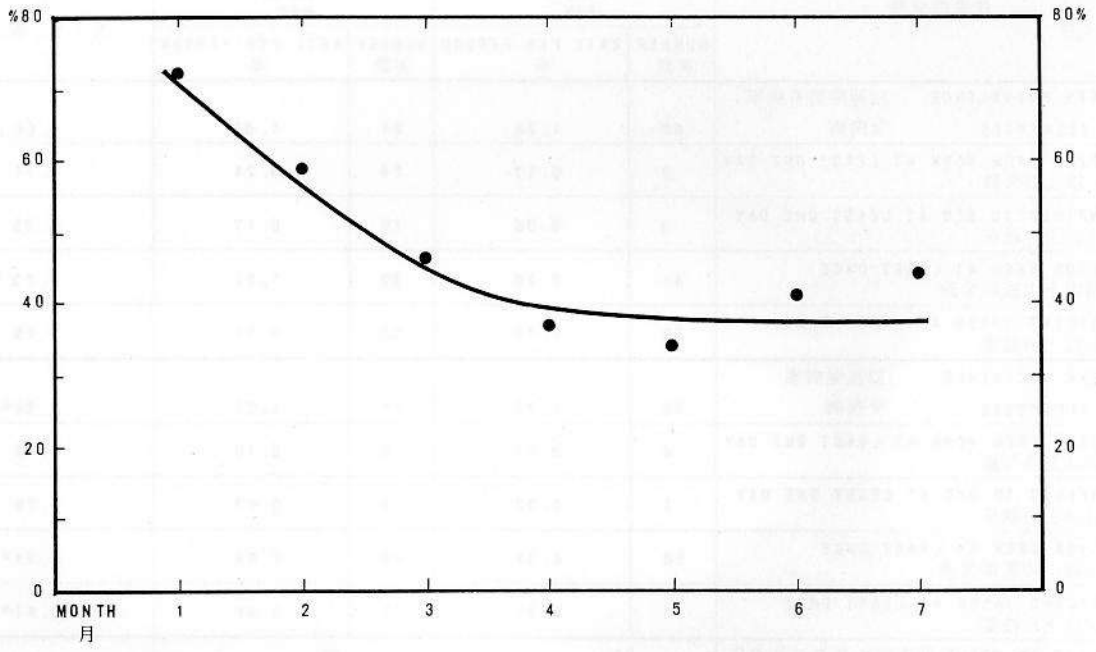


TABLE 25 METHODOLOBY OF MORBIDITY STUDIES, SURVEY I AND II, SATISFACTORY DESCRIPTIONS ON HEALTH CALENDARS BY WEEKS ELAPSED AND SEX

表25 調査の経過週別，性別，健康カレンダーの記入の良好なものの割合（第1，2回調査）

SEX 性	HEALTH CALENDAR 健康カレンダー	WEEKS ELAPSED 経過週数						
		SURVEY I 第1回調査				SURVEY II 第2回調査		
		1-4 JAN. 1月	5-8 FEB. 2月	9-12 MAR. 3月	13-16 APR. 4月	17-20 MAY 5月	21-24 JUN. 6月	25-28 JUL. 7月
MALE + FEMALE 男女計	CALENDARS MAINTAINED 健康カレンダーの総数	292	291	288	288	58	58	58
	SATISFACTORY DESCRIPTIONS 記入の良好なものの数	214	173	137	108	20	24	26
	%	73.3**	59.5**	47.6 *	37.5	34.5	41.4	44.8
MALE 男	CALENDARS MAINTAINED 健康カレンダーの総数	134	134	134	134	24	24	24
	SATISFACTORY DESCRIPTIONS 記入の良好なものの数	105	86	68	52	9	10	12
	%	78.4	64.2	50.7 *	38.8	37.5	41.7	50.0
FEMALE 女	CALENDARS MAINTAINED 健康カレンダーの総数	158	157	154	154	34	34	34
	SATISFACTORY DESCRIPTIONS 記入の良好なものの数	109	87	69	56	11	14	14
	%	69.0	55.4	44.8 *	36.4	32.4	41.2	41.2

TABLE 26 METHODOLOGY OF MORBIDITY STUDIES, SURVEY I AND II, SATISFACTORY DESCRIPTIONS ON HEALTH CALENDARS BY INTERVALS BETWEEN HOME VISITS AND SEX

表26 訪問間隔別，性別，健康カレンダーの記入の良好なものの割合（第1，2回調査）

SEX 性	HEALTH CALENDAR 健康カレンダー	INTERVAL BETWEEN HOME VISITS 訪問間隔			
		SURVEY I 第1回調査		SURVEY II	第2回調査
		WEEKLY 毎週	MONTHLY 毎月	MONTHLY 毎月	TRIMONTHLY 毎3ヵ月
MALE + FEMALE 男女計	CALENDARS MAINTAINED 健康カレンダーの総数	919	240	174	57
	SATISFACTORY DESCRIPTIONS 記入の良好なものの数	511	121	70	10
	%	55.6	50.4	40.2 *	17.5
MALE 男	CALENDARS MAINTAINED 健康カレンダーの総数	432	104	72	27
	SATISFACTORY DESCRIPTIONS 記入の良好なものの数	251	60	31	5
	%	58.1	57.7	43.1 *	18.5
FEMALE 女	CALENDARS MAINTAINED 健康カレンダーの総数	487	136	102	30
	SATISFACTORY DESCRIPTIONS 記入の良好なものの数	260	61	39	5
	%	53.4	44.9	38.2 *	16.7

**Highly significant $P \leq .01$ 有意

*Significant $P > .01$ to $\leq .05$ 有意

Thus, although it would depend upon the number of entries to be made and the interval between visits, it seems that though the health calendar would be effective in case of a short term study, such as a one month National Health Survey, for long periods of study the entry rate would be poor and the calendar would be of little use.

このように健康カレンダーは，記入項目の多少，訪問間隔にもよるが，調査期間が1ヵ月間の国民健康調査のように，短期間の調査の場合には有効であるが，調査期間が長期にわたる場合は，記入率が悪く，　使用価値は少ないものと考えられる．

RELIABILITY OF DIAGNOSES REPORTED BY INTERVIEWERS. On the occasion of home visit, the subjects reporting being attended by doctors were asked what diagnoses were made. These were reviewed by an ABCC physician who then checked the reliability of the reported diagnoses by directly questioning the examining doctors. Results are shown in Table 27, which reveals some misreported cases. To cite a case of misreported severe chronic disease at the time of the first survey, chronic gastritis was reported as peptic ulcer. As for misreported acute diseases, hepatitis was reported as gastritis or fatigue, and also a case of acute gastritis was reported as a common cold.

調査員によって報告された診断名の信頼性. 家庭訪問の時，医師の診断を受けた対象者に対しては，その診断名を聞き，記入した．この診断名の信頼性を直接，ＡＢＣＣの医師が診察した医師に照会して調べると表27のごとく，若干の誤って報告された例がみられる．第1回調査時に誤って報告された重症慢性疾患の1例を挙げると，慢性胃炎が胃潰瘍と報告されている．急性疾患では肝炎が胃炎また疲労と報告されたり，急性胃炎が風邪と報告された例もある．

Further, the decrease of misreported cases of chronic diseases in the second and third surveys as compared with the first survey is believed to be due to repeated checks on the same subjects.

また，慢性疾患の誤って報告された例が第1回調査に比べて第2，3回調査時に少なくなっているのは，同一人を対象として調査を繰り返したためであろう．

TABLE 27 METHODOLOGY OF MORBIDITY STUDIES, RELIABILITY OF DIAGNOSIS REPORTED BY INTERVIEWERS, BY SURVEY AND CLASSIFICATION OF ILLNESS

表27　疾患の種類別，調査員によって報告された診断名の信頼性（第1，2，3回調査）

SURVEY 調査	CLASSIFICATION 疾患の種類	TOTAL NUMBER OF ILLNESSES FOR WHICH PHYSICIAN WAS CONSULTED 医師の診察を受けたもの	NUMBER OF DIAGNOSES MISREPORTED 診断名が誤って報告されたもの
FIRST 第1回	ACUTE 急性	82	5
	CHRONIC, SEVERE 慢性，重症	16	4
	CHRONIC, OTHER 慢性．その他	18	1
SECOND 第2回	ACUTE 急性	43	5
	CHRONIC, SEVERE 慢性，重症	17	0
	CHRONIC, OTHER 慢性，その他	10	0
THIRD 第3回	ACUTE 急性	45	3
	CHRONIC, SEVERE 慢性，重症	20	0
	CHRONIC, OTHER 慢性，その他	21	0

DISCUSSION

LEVEL OF COOPERATION

Refusal to cooperate with the study may become a problem when attempting to learn of the illnesses of all subjects over a long period, as would be the case in the proposed field study.

In these pilot surveys, over a period of ten months one subject out of 118 refused and there was one refusal prior to commencement of the study. Simon[3] conducted a pilot study of one month's duration of 596 subjects at Nagasaki. There was no refusal at the time of the study, but upon classifying the attitudes of the subjects toward the study as good, fair, or poor, he found that 27 subjects (4.7 per cent) were classified as poor and he believed they would probably become refusals if the study were to be continued in the future. In view of the decrease of the entry rate on the health calendar in this study from 70 per cent at the start to 30 per cent three months later, it is evident that consideration must be given to increase of the refusal rate after repeated surveys. Compliance with requests of those wishing examination at ABCC because of illness between scheduled examinations of the Adult Health Study may be effective in preventing an increase in the proportion of refusals.

INTERVAL BETWEEN VISITS

If the purpose of the proposed field study is to learn the absolute amount of illness occurring in the intervals between examinations in the Adult Health Study, the interval between visits must be considered in relation to the recall factor. Thus, the most effective interval between visits, considered from the point of omission of illness, might differ according to the disease that is to be studied. In case of acute respiratory diseases such as the common cold, visits at intervals of one week or less as

考　按

協力状態

予定されている本格的調査のように，長期間にわたって，全対象の疾病を求めようとする場合には，調査に対する協力の拒否が問題となると思われる．

この調査では10ヵ月の調査期間で，118名中1名が拒否し，調査開始前に1名の拒否があった．Simon[3]は長崎で596名を対象に，1ヵ月間の試験調査を行ない，調査時に協力を拒否した者はないが，調査に対する協力状態を良，可，不良に分け，不良に分類されるもの27名（4.7%）は将来調査を続行する場合に協力を拒否するであろうと述べている．今回の調査で，健康カレンダーの記入率を見ると，調査当所の70%から，3ヵ月経過後には30%に落ちる点から考慮しても，将来，調査の繰り返しによる拒否率の増加を考慮せねばならないことは明白である．成人健康調査の診察の周期の中間で，疾病のため，ＡＢＣＣの診察を希望する者に対しては，診察に応ずることが予想される拒否率の増加を防ぐ有効な方法と考えられる．

訪問間隔

予定される本格的調査が，成人健康調査の診察周期の中間に起った疾病の絶対量を求めることを目的とする限り，記憶因子と関連して，訪問間隔を考慮せねばならない．このように，回答洩れの点から最も有効な訪問間隔を考える場合には調査する疾病により異なり，風邪ひきのごとき急性呼吸器疾患の場合には Van Volkenburgh[9] の行

conducted by Van Volkenburgh[9] are desirable. Daily visits as conducted by Lidwell, *et al*[10] may also be made in some cases. On the other hand, Ciocco, *et al*[11] state that a check made once a year would suffice for chronic diseases. However, it has been demonstrated by this study that even for chronic diseases omissions increase as the interval between visits becomes longer, the rate of omission being higher at intervals of one month than at intervals of one week and higher at intervals of three months than at intervals of one month. The same tendency was observed in the California pilot study.[4] In view of this, an interval of one month or less is desirable when considered only from the point of view of the recall factor, although, of course, there is a difference depending on the definition and severity of chronic disease.

On the other hand, failure to report illness because of impatience with repeated questioning may naturally be considered to increase proportionally as the interval becomes shorter. This is a particularly important factor to consider in a prolonged study.

Therefore, the interval between visits in a long term morbidity study should be decided with consideration for both the recall factor and the failure to report as well as the time and expense required for the study.

INFORMANT AND INTERVIEWER

As for the informant, the results of these pilot surveys and those of similar pilot studies conducted in United States[4,5] show it is desirable to make inquiries of the subjects themselves whenever possible. An evaluation was made of the accuracy of information by type of interviewer employed, but no conclusion was reached. This is because individual differences between interviewers are considered to be great; the number of cases studied was small; and a great difference in experience and training exists between the public

なったように1週間あるいはそれ以下の間隔の訪問が望ましく，さらにLidwell等[10]のように毎日の訪問を行なうこともある．しかし他方Ciocco等[11]は慢性疾患では年1回の調査でも充分であると述べている．しかし今回の調査では，慢性疾患でも訪問間隔が1週より1月，1月より3月と間隔が長くなるにつれ回答洩れが多くなることを示し，また，米国California州で行なわれた試験調査[4]でも同様の傾向が見られる点から，もちろん慢性疾患の定義および重症度の如何によっても異なるが，記憶因子の点からのみ考えれば，訪問間隔は1月またはそれ以下であることが望ましい．

しかし一方，訪問間隔が短くなるに比例して，調査の繰り返しによる苛立たしさから回答洩れが多くなることは当然考えられる．このことは調査が長期にわたる場合には特に重要な要因である．

従って，長期の罹病調査における訪問間隔は，記憶と調査の繰り返しによる2種類の回答洩れを考慮し，さらに，調査に要する作業量と費用を考慮して決定されるべきであろう．

応答者および調査員

応答者については，この調査の結果および米国で行なわれた類似の調査[4,5]が示す通り，なるべく本人に聞くことが望ましい．また調査員としては，個人差も大きいと考えられるが，この調査では件数が少なく，また保健婦と連絡員では経験年数に大きな差異があるので，調査員の種類によ

health nurses and lay contactors concerned. Therefore, solution to this problem must await further study. However, as the data of Linder, *et al*[8] also show, it has been indicated that nonmedically-trained contactors have an aptitude not inferior to that of public health nurses in this type of morbidity study.

RELIABILITY OF DIAGNOSES REPORTED BY INTERVIEWERS

In consideration of the purpose of obtaining information regarding illness episodes in the interval between regular scheduled examinations of the Adult Health Study, the data may be divided into the following three grades for accuracy and uniformity of diagnoses:

Examination at ABCC

Examination at other hospitals as inpatient or outpatient

Diagnoses reported by interviewers

In this study a check was made of diagnoses reported by interviewers and diagnoses by doctors from hospitals other than ABCC. As previously mentioned, some cases were misreported. Therefore, although the level of diagnoses reported by interviewers would suffice if only disability were the problem considered, it would not suffice to make an observation by specified disease. It would be necessary to obtain as much information as possible based on medical records directly from the examining doctors. Furthermore, in consideration of the difference in the diagnoses according to doctors as shown by the pilot morbidity study[2] conducted on workers of the Hiroshima Railway Division, it would be desirable to confine observation by specified disease to those patients examined at ABCC or inpatients of other hospitals.

る資料の確実性の判定に関しては結論は得られず，この問題の解決は将来の調査を待たねばならない．しかし，Linder 等[8] の資料も示すごとく，医学的教育を受けていない連絡員もこのような罹病調査では保健婦に劣らず適性をもつものであることが暗示された．

調査員によって報告された診断名の信頼性

成人健康調査の正規の診察周期の中間における疾病の資料を得る目的からすれば，診断名の正確性，均一性という点から，資料は次の３段階に分れる．すなわち，

ＡＢＣＣにおける診察

他の病院における入院患者または外来患者の診察

調査員の報告による診断名，である．

今回の調査では調査員の報告による診断名と，ＡＢＣＣ以外の病院の医師の診断名の調査を行なったが，前述のごとく，若干誤って報告された例があった．従って病気による日常活動の制限のみを問題とするならば，調査員の報告による診断名で充分であるが，病類別に観察しようとするならば，不充分であって，できるだけ，診察した医師に直接会って診察記録を基とした資料が必要であろう．さらにまた，広島鉄道従業員を対象とした試験的罹病調査[2] が示すように医師によって診断名のつけ方に差異があることを考慮すると，病類別に観察する場合にはＡＢＣＣにおいて診察したものか，他の病院の入院患者に限定することが望ましい．

CRITIQUE

Inasmuch as the three surveys were conducted on the same subjects, it is conceivable that the second and third surveys have been affected by failure to report illness because of impatience with repeated checks. To eliminate this, it would seem advisable to rotate the sample with each survey as done in the British Survey of Sickness (1949).[6] However, rotation of the sample was actually not feasible because only 118 subjects were available for the pilot surveys. Moreover, the purpose of the study included observation of the changes in the level of subject cooperation by observation of the refusal rate and consistency of entries on the health calendar in a prolonged study such as that proposed. Although consideration must be given to the effect of repeated checks if the absolute level is the question to be studied, e.g., observation of the total amount of disease within a certain study period, it is believed there is little bias from repeated checks if comparative observations on two or more factors are to be made as in these pilot surveys.

Moreover, due to the small number of subjects, in few cases were differences by comparison of various factors statistically significant and in many cases only an observation of tendency could be made. For more definitive answers, it will be necessary to conduct a study on a larger sample and on a greater number of factors.

CONCLUSIONS

Pilot surveys were conducted concerning the methodology of home visits to obtain information on illness episodes occurring between the regularly scheduled examinations for the ABCC Adult Health Study. During a ten month period from January to November 1960 a selected sample of 119 exposed Hiroshima railway workers and members of their families, who are also included in ABCC Adult Health Study, were interviewed with the following results:

批　判

今回の調査では，３回の調査とも同じ対象を用いて行なったので，第２，３回調査では，調査の繰り返しによる苛立たしさから生ずる回答洩れの影響を受けていることが想像される．この影響を除くためには，英国疾病調査（1949）[6] のように調査ごとに，標本を交代して行なえば良いと考えられるが，今回の調査対象が 118名の少数であるため，実際問題として標本の交代はできないこと，および予定される本格的調査が，全対象に長期間にわたって行なわれることが予想されるので，その場合の調査対象の協力状態の変化をも，拒否率，健康カレンダーの記入状態により，観察する目的もあるので，標本の交代は行なわなかった．しかし，調査期間内の総疾病量の観察のように，絶対量を問題とする場合には，調査の繰り返しによる影響を考慮しなければならないが，今回の調査のように，２つ以上の要因について相対的な観察を行なう場合には，調査の繰り返しによる偏りは少ないものと考えられる．

また調査対象数が少ないため，種々の要因の比較による差異が統計的に有意である場合は少なく，単に傾向を観察し得るに止った場合が多かったが，もっと決定的な成果を得るには，将来さらに標本数の大きな対象について，さらに多くの要因について検討する必要がある．

結　論

ＡＢＣＣの行なう成人健康調査の診察周期の中間において起った疾病についての資料を得るための試験的調査として，成人健康調査にも含まれる広島鉄道従業員および家族 119名を対象に，1960年１—11月の10ヵ月間，家庭訪問による罹病調査の方法論を検討し，次の結果を得た．

The refusal rate was two out of 119 subjects, including one subject who refused prior to the beginning of the surveys. Five subjects who had refused examination in the ABCC Adult Health Study cooperated in the pilot surveys.

この調査に対する拒否率は 119名中 2 名で，そのうち 1 名は調査開始前に協力を拒否した．成人健康調査の診察は拒否したが，この調査に対して協力したものは 5 名であった．

One interviewer could complete on the average not less than 7.5 contacts a day.

この調査において調査可能な人員は，調査員 1 人あたり，1 日平均 7.5人は下らない．

Although there was some difference according to illness, period prevalence and incidence differed with the interval between visits, those of one month interval showing a decrease of 20-30 per cent from those of one week interval while those of three month intervals dropped approximately 10-20 per cent below those of one month interval. However, hardly any decrease was noted in cases attended by doctors.

訪問間隔による期間有病率，発病率の差異は，疾病の種類によっても多少差があるが，1月の場合は1週の場合の20—30%，3月の場合は1月の場合の約10—20%減少している．ただし医師にかかった場合の期間有病率，発病率は殆んど減少しない．

When the designated informants were family members both period prevalence and incidence were only slightly smaller than when informants were the subjects themselves.

応答者が家族の場合は，本人の場合よりも，期間有病率，発病率ともにわずかに減少する．

No definite conclusion could be drawn with regard to comparison of public health nurses and lay contactors as interviewers because of the difference in the number of years of experience between the two. However, lay contactors seemed to perform at least as well as public health nurses.

調査員が保健婦の場合と，普通の連絡員の比較は，両者の経験年数の差もあり，明確な結論を下せなかった．ただし，普通の連絡員は少なくとも保健婦に劣らず適性である事が暗示された．

Although the health calendar is useful for a study of short duration (e.g., one month), it cannot be considered useful in a prolonged study since the entry rate progressively decreases.

健康カレンダーは短期間（例えば 1 ヵ月間）の調査の場合は有用であるが，調査期間が長期間になると，記入率が次第に悪くなり，有用とは思われない．

Some discrepancies were noted between the diagnoses reported by interviewers and those obtained by direct inquiry from the examining doctors.

調査員が報告した診断名と，診察した医師に直接照会した診断名との間に若干の相違がみられた．

健康カレンダー
(HEALTH CALENDAR)

姓 名 (Name) _____

		1日	2日	3日	4日	5日	6日	7日	8日	9日	10日	11日	12日	13日	14日	15日	16日	17日	18日	19日	20日	21日	22日	23日	24日	25日	26日	27日	28日	29日	30日	31日
病日 (Ill days)																																
病気の内訳 (Particulars concerning Illnesses)	体の具合が悪かった日 (Complained of ill health)																															
	病気で会社・学校・家事など日常の仕事を休んだ日 (Absent from daily work at company, school, home, etc., because of illness)																															
	病気で床についた日 (Ill, confined to bed)																															
	病院に行った日 (Visited hospital)																															
	往診を受けた日 (Visited by doctor)																															
	入院した日 (Hospitalized)																															
	薬を飲んだ日 (Took medicine)																															
	あんま・おきうなどをした日 (Received massage, moxacautery, etc.)																															
	病気の名前 (できるだけ記入して下さい) (Diagnosis) (Please enter as best as you can)																															
備考 (医者にかかった場合は医者の名前・住所をここに記入して下さい)	(Remarks) (Please enter here the name and address of doctor if attended by one)																															

NOTE: English appears for purposes of this report. In actual use, the form was in Japanese only.
注 この報告のために英語を挿入したが，実際のカードには日本語だけを用いた．

記入の仕方：(Method of Entry)

このカレンダーは次の記号で毎日記入して下さい。 (Please make entries daily in this calendar, using the following marks:)

① 元気でどこも悪い所のない日……病日の欄に○印をして下さい。(Days well, without any complaint.... (make an ○ mark in the appropriate block of the Ill Days column)

② 体の具合が悪かったり、医者にかかったり、病気のために日常の仕事を休んだりなどをした日……病日の欄に×印をし、内訳けの欄にその内容に従って✓印をして下さい。

(Days sick, seen by doctor, absent from daily work because of illness, etc..... make an × mark in the appropriate block in the Ill Days column and make ✓ in the appropriate block of the classification column.)

調　査　票
(SURVEY CARD)

姓　名 *(Name)* _____

		1日	2日	3日	4日	5日	6日	7日	8日	9日	10日	11日	12日	13日	14日	15日	16日	17日	18日	19日	20日	21日	22日	23日	24日	25日	26日	27日	28日	29日	30日	31日
病　日 *(Ill days)*																																
病気の内訳 *(Particulars concerning Illnesses)*	体の具合が悪かった日	*(Complained of ill health)*																														
	病気で会社・学校・家事など日常の仕事を休んだ日	*(Absent from daily work at company, school, home, etc., because of illness)*																														
	病気で床についた日	*(Ill, confined to bed)*																														
	病院に行った日	*(Visited hospital)*																														
	往診を受けた日	*(Visited by doctor)*																														
	入院した日	*(Hospitalized)*																														
	薬を飲んだ日	*(Took medicine)*																														
	あんま・おきうなどをした日	*(Received massage, moxacautery, etc.)*																														
	病気の名前（できるだけ記入して下さい）	*(Diagnosis) (Please enter as best as you can)*																														
備　考（医者にかかった場合は医者の名前・住所をここに記入して下さい）		*(Remarks) (Please enter here the name and address of doctor if attended by one)*																														

NOTE: English appears for purposes of this report. In actual use, the form was in Japanese only.

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