

SURVEYS ON HEALTH & MEDICAL CARE IN HONG KONG

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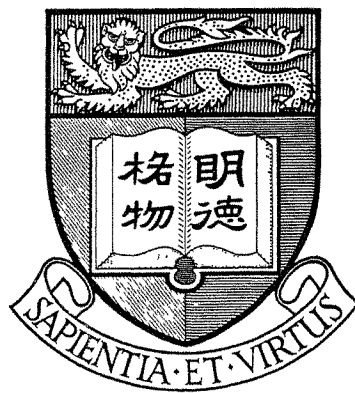
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Survey on Health and Medical Care in Hong Kong

GOPD Report

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PREFACE

This survey has examined the working of General Outpatient Departments and assessed their contribution to a national system of care operating at different levels and in different sectors, both private and public.

All systems, by definition, must include a feedback loop. Health services need efficient evaluation if they are to function as systems. Such an evaluation and its benefits can be achieved by applying the techniques of health services research, but only if this can be done on a continuity basis and if the results can be effectively implemented.

There has been little support for health services research in recent years, anywhere, in contrast to the massive investment in biomedical aspects of medicine. The latter has of course, in turn, increased the need for evaluation orientated research. In Hong Kong the concept of health services research has hardly gained any standing outside of some academic units.

If innovations in therapeutics and medical care have any potential to improve health, for example in terms of quality of life or life expectancy, then they must be evaluated to determine whether they do in fact create benefits which are measurable and achieved at an affordable cost.

Medical practitioners and managers of health services both need to recognise the value of research data in the planning and operation of health services. This research must become an integral part of the service. It follows that there is a need for good quality purpose-designed records and monitoring procedures, in both clinical and administrative sectors, and this would be accepted by all health service personnel.

There is an urgent need for the departments which are responsible for health service management to adopt, as formal policy, a continuing review of the mechanisms needed for the cycle of research, development, evaluation and implementation.

Health services research is a multi-disciplinary approach to evaluation. Health service management will only benefit from this process if it can provide the resources for research and a stable environment in which it can develop. Research requires adequate funding, competent management and particularly opportunities for implementation. Too often research findings are not acted upon.

This study is one of only a few in Hong Kong that might be regarded as health services research. It is a modest contribution, limited and constrained by time and resources. However it could be regarded as an important first step from which we can formulate new objectives for continuing research, linked to specific questions about the efficiency and effectiveness of the service. Health services cannot function without good intelligence; each activity of the service should be

clearly tied to evaluation procedures. Investment in such mechanisms now will pay dividends in both the short and long term. There has often been an assumption that health services research, by its nature (i.e. that of an applied or general type) is not of top scientific quality; this is not necessarily so. What is even less scientific is much of the current approach to health service management in that it attempts to function without adequate intelligence.

What should the priorities be for health services research in Hong Kong?

First, we need to focus on strategic issues with well timed and cogently presented research results. There should be better coordination between institutions in the government, professional and academic sectors. There are skills and other resources here which are not being utilized. There is growing acceptance that epidemiological methods can be used to provide a **rapid** assessment of health care and to evaluate innovations. There is an urgent need to promote training in this field and provide tenured posts to support health services research and evaluation. Such investment would be small in relation to the budgets required for running the service.

Second, research should be aimed at the needs of the consumers as well as management. Much health and medical research is directed at biomedical aspects or alternatively psychological and sociological aspects. Now there is a need for more emphasis on the operation of services and their evaluation in terms of objectives, costs and benefits.

GOPD Survey

Summary

1. Survey population and response rate

A survey of patients attending GOPD was carried out in 73 morning, afternoon, evening and Sunday/public holiday sessions distributed through 12 clinics. It succeeded in capturing a wide range of health and medical information from a large representative sample of GOPD attenders (n=1214). The size of the sample and the prevalence of most of the important attributes we sought information about lead to a very acceptable level of precision in the survey measurements. The response rate for the interviews was high, ranging from 82% for Sunday/public Holiday clinics up to 89% for morning clinics.

2. Social and demographic aspects of attenders

The socio-economic and demographic aspects of the sample provide insights to the characteristics of GOPD users. In comparison to the general population they included more females (55% vs 49%) and more older people (≥ 60 years) and fewer younger people (10 - 59 years). The GOPD population had fewer individuals who were never married and a higher proportion of current or ever married patients compared with the general population.

The level of educational attainment of GOPD attenders was lower than in the general population; 59% of patients had only primary level education or below. The majority work in service or production related jobs.

The declared monthly income in 585 respondents indicated a higher proportion in the lower bands (\$1,000 - \$3,000) and fewer in the upper brackets (\geq \$10,000) than in the general population. Similarly, family monthly income ranged from less than \$1,000 (6.0%) to \geq \$10,000 (23.5%) compared with general population ratios of 1.3% and 39.5% respectively.

Patients who favoured afternoon and evening clinics were younger than other attenders and the proportion of men using afternoon and Sunday/public holiday clinics was higher than in other clinic sessions.

3. Health risk

Health risk behaviour was assessed with respect to tobacco and alcohol use. 29% of males and 5% of females attending GOPDs were smokers. The highest proportion of smokers were in the elderly group but one in ten of attenders in the 13 - 20 years group smoked. 36% of smokers used one pack or more daily. Thirteen percent of attenders were regular users of alcohol.

4. Self-rating of current health condition

Patients' current health condition was assessed in terms of their own self-rating. The majority (52%) who rated their current condition as poor or very poor were in the 13 - 39 years age band of our survey population; 26% of respondents with poor ratings were in the group 40 - 59. More males than females reported less than good ratings. Those who rated their current condition as poor tended to spend more on health care in the three months before the survey.

The recent and acute nature of the illness in patients with new problems appears to be reflected in their lower prevalence of perceived good condition. In contrast patients attending with hypertension had better than average self-ratings.

5. Demand for medical care

The use of medical care services from different sources was examined in terms of the frequency of consultations over the previous three-month period and showed a wide variation when divided into low (0-2), intermediate (3-4) and high (5+) consultation bands. There were no gender differences but young people showed the lowest consultation rates overall, although those aged 0-12 had a significantly higher proportion in the intermediate band than 13-19 year olds. Patients with new problems had consulted least whereas up to 79% with chronic disease and other illnesses of more than 3 months duration had consulted at least once per month during the previous 3 months.

6. Hospitalization

A study of hospitalisation patterns show that more patients with a poor rating of current condition had been hospitalised compared with those self-rating as fair or good. 12% of all patients in the sample had been hospitalised at least once in the last year; 70% of these had been admitted to government hospitals. There was no gender difference in hospitalisation rates; the highest rates were in children under the age of 12 (16%), followed by those aged 40-59 (14%) and those over 60 (13%). The lowest rate (3%) was among teenagers. When assessed by health problems, patients with diabetes had the highest hospitalisation rates (26%) followed by those with longest standing other problems (16%). Overall, hospitalisation was more frequent in patients with higher consultation rates.

7. Health beliefs and practices

Traditional health beliefs and practices may be an important determinant of utilization behaviour. A large minority (45%) of GOPD attenders used self medication in the early stages of an illness; one fifth of these had been influenced by advertising for proprietary medicines. In addition 19% took tonics more than once per month on a regular basis. Self medicators tended to be younger and better educated. The hot/cold concept was acknowledged by most subjects (89%) and 65% of these would modify their diet during illness as well as taking prescribed medicines.

Forty one percent of the surveyed patients frequently changed their doctors. The commonest reason for doing so was stated to be persistence of symptoms. Doctor-shopping shows little association, after adjustment for other factors, with most of the social and demographic variables in the study. Those less likely to shop were aged over 60, those with chronic diseases such as diabetes and hypertension and those who were regular users of GOPD.

8. Medical work in GOPDs

The medical work undertaken in general out-patient departments was studied in detail.

Throughput: There is wide variation in throughput times between different clinics with similar workloads. We found that many clinics processed the large numbers of attenders well ahead of closing time; in some cases we estimate their patients were all discharged up to 1.5 hrs before the end of the session.

Attendance patterns: The majority (96%) of GOPD attenders were former users of the service. The majority of former attenders (62%) and new attenders (86%) presented with new problems. The majority of patients with new problems had first developed symptoms within one week of presentation. One fifth of these had taken no prior action but the remainder had used some form of self care including over-the-counter drugs (25%), leftover drugs (14%) or Chinese herbs (10%). Substantial groups had sought professional (39%) or lay (22%) medical advice before attending the clinic. The early use of services for patients with old problems was mainly confined to government clinics (72%) while 20% of these patients had used private medicine. The earlier use of private medicine was more popular with patients presenting with new problems and new attenders had almost exclusively used private medicine before this GOPD visit.

Health problems: Respiratory complaints comprise the biggest group (66%) of new problems. Among patients with old problems musculo-skeletal complaints (33%) and circulatory and respiratory problems together (36%) were the largest groups.

Outcomes: The outcomes of a clinic attendance were characterised by low levels of investigation and higher levels of treatment. 75% of patients left the clinic without apparently any knowledge of the presumptive diagnosis. However only 2.5% of patients left without medicines and the most common prescription was for 3 medicines, the average ranging from 2.4 (new patients) up to 2.8 (former attenders).

Recalls to the clinic ranged from 11% in patients with new problems up to 20% in patients with old problems and 26% in those with diabetes or hypertension. The interval between this visit and the subsequent visits was usually less than one month. However many patients were not told when to return and some who should probably be seen regularly (though not necessarily frequently) did not receive specific advice on the need for a return.

Referral patterns and their likely impact on the higher tiers of the government health service were analysed. Referral rates were estimated at 4.91% to specialist clinics and 0.57% to A&E departments. The overall contribution of GOPDs to the work of specialist clinics by new referrals is estimated at 7.9% of the total specialist OPD workload.

The impact of GOPD referrals to A&E departments, on hospital admissions, was similarly examined. Assuming that the admission ratio for GOPD referrals is either the same or as much as double the overall rate for all A&E attenders, then we estimate that GOPD referred patients account for 2.1% up to 4.2% of all hospital admissions originating from A&E.

Management of chronic disease: An important component of medical work in GOPDs includes the continuing care of patients with chronic disease. We studied two problems, diabetes and hypertension, in order to document patterns of care and possible gaps in medical management. The workloads represented by these patients are considerable; 7.2% of all patients had diabetes and 24% had hypertension. An assessment of the content of follow-up clinic visit by these patients indicates that there are many deficiencies in routine practice and gaps in continuity of care.

9. Preventive health care and counselling

In order to function effectively at the primary health care level the service should allocate adequate resources to preventive health activities, including psychological support to patients and patient education on specific topics related to the management of their health problems. We find little evidence of health screening or counselling in the context of present GOPD activities but have identified several areas where it is urgently needed.

10. Patient satisfaction

Patients' satisfaction with their medical care at GOPD was assessed. Overall we found that patients' expectations were low and satisfaction levels generally high. The main source of dissatisfaction arose from aspects of clinic organisation. Waiting time was unpopular with those who could least afford it, particularly younger patients. Patients' knowledge about how the clinic system operates was poor; only 14% understood the purposes of the block appointment system.

Satisfaction was related to patients' expectations about the outcome of a consultation. The majority of patients (80%) expected some form of medication following their payment of fees at the shroff, although younger and better educated patients were least likely to expect medication. A major source of dissatisfaction concerned the amount of medical information offered in their last consultation with a GOPD doctor. More than 60% found that they did not have as much understanding of their health problem as they would wish.

11. Economic aspects of recent medical care

A study of economic aspects of recent medical care for GOPD attenders helped to explain the reasons for their use of GOPD services. The majority of attenders had spent less than \$100 on their medical care in the past three months (66%) and 17% had spent nothing. The amount spent was related to age, site of majority care, consultation patterns and health problems. Older patients, those who obtained the majority of their care from GOPD and those with chronic disease were less likely to have spent more than \$100 whereas those with a higher consultation rate were more likely to have spent greater sums.

12. Alternative styles of medical care

Patients in this survey supported the concepts of patient held-records and nurse practitioners. These approaches to the provision of support for routine medical care, especially for patients with chronic disease, would have wide acceptance.

Conclusions and recommendations

1. The population of GOPD attenders comprises patients who are on average older and poorer and less well educated than the general population. They mostly work in service and production jobs and in general we might therefore expect their health experience to be worse and their medical care needs to be higher than the population average. Patients who obtain the majority of their care from GOPD's are either accustomed or obliged to restrict their spending on health care. The most likely explanation is that their disposable income available for this purpose is small. We recommend that when changes in the delivery of care through GOPD's are considered, the possible social disbenefits of changes should be set against the attractions of marginal cost-cutting.

The lower proportion of men using the service and their pattern of attendance, such as a preference for Sunday clinics may indicate their difficulties in taking time from work to obtain medical care. The poorer self-ratings for current condition in men probably reflects a higher threshold for symptoms before seeking medical help. There are therefore several pointers to possible difficulties for men in these socioeconomic groups who seek medical care.

2. The survey findings suggest that an assessment of medical need in certain specified groups of patients attending all medical care facilities would provide useful information on both utilization behaviour and the process by which some patients become regular attenders. Examples here include those with high consultation rates such as children under 12 years (and their parents) and patients with good self-rated current condition such as hypertensives who comprise 24% of all attenders at GOPD.
3. Lay health beliefs and practices are a prominent feature of GOPD attenders. In particular the use of self medication by over-the-counter drugs and leftover drugs points to the need for improved health education and the appropriate use of proprietary medicines by which self-care for minor illnesses might be improved. On the other hand patients should be advised to discard unused prescribed drugs after an illness

episode. The reasons for doctor-shopping clearly point to the need for a better understanding of patients' expectations of medical care together with improved doctor-patient communication and disclosure of medical information about their problems, such as persistent symptoms. There are several indications that satisfaction is related to low expectations which in turn are associated with the low cost of a GOPD attendance. From the point of view of both the consumer and the service, the acquisition of better medical knowledge and an improved understanding of how the system works would enhance the use and efficiency of the service and opportunities to evaluate it.

4. The results of studies on medical work in GOPD clearly indicate the need for systematic operational studies of the management of clinics. The use of time for consultation and the scheduling of appointments should be reviewed and factors related to the throughput of patients examined. The problems of rapid discharge of clinic attenders and early closing of clinics should be resolved. We have identified several areas where the content and quality of care in GOPD should be improved. There is scope for the development of agreed management protocols for patients with different types of medical need. The long term management of patients with chronic disease appears to be fragmented and incomplete. The adoption of a planned and prescriptive approach to this group of patients should aim to make better use of existing resources in clinics. Purpose-designed comprehensive records would be necessary in such an approach.

The outcome of consultations in GOPD should be examined in relation to presenting complaints and objective findings. In particular we have drawn attention to the (a) poor level of doctor-patient communication with few patients receiving information about the presumptive diagnosis and (b) the high level of medication, involving the majority of patients who commonly receive three different types of medicine. The reasons for both recalling patients frequently and allowing follow-up to lapse should be studied in more detail. More comprehensive and less frequent contacts (including the avoidance of unnecessary prescription renewals) would benefit both patients and the health service. Modification of recall practices could have a beneficial effect on clinic workloads, without detriment to the care of patients.

Referral rates to A&E departments and specialist clinics were low in comparison to the total workloads of these facilities. Further studies of the type and severity of the medical problems in referred patients are certainly warranted. However these studies should be done in conjunction with a detailed audit of the other components of medical work in

these units, including the medical decisions which lead to patients being retained at specialist clinics. We find no evidence that patients referred from GOPD's to A&E departments are responsible for a high proportion of admissions to hospital. Even working with the assumption that their admission rates are twice those experienced by all A&E attenders, we estimate that they comprise only slightly more than 4% of all admissions from A&E.

Several deficiencies in the general standards of care were identified. They include inadequate records, which hindered the work of this survey and gaps in the management of patients with chronic disease, particularly diabetes and hypertension which together comprised a quarter of the attending population. The establishment of 'model' clinics for the implementation and evaluation of new methods of working should be considered a high priority. These clinics can also provide support for the training needs of GOPD doctors who expressed great interests in such activities (see report of our survey on doctors).

5. The information we have obtained on patient satisfaction requires careful interpretation and qualification. We take the view that many patients are ill-equipped to make an informed judgement of the quality of care. Some of their expectations, such as that for some form of prescribed medicine, may be quite inappropriate, as may be the action of providing it. For these and similar aspects of care provided in clinics we believe that patient education should be improved, the aim being to promote the acquisition of appropriate medical knowledge by patients. This in turn is likely to lead to a more rational use of services and greater adherence to medical advice. The social, medical and economic benefits would be considerable. At the administrative level an immediate improvement in the use of clinics would result from a proper understanding of the existing block appointment system.
6. The results of this enquiry strongly suggest that patients would accept a number of innovations and additions to traditional styles of medical care. We suggested two, namely, patient-held records and the involvement of nurse practitioners in running clinics. The first of these would help to promote patient education; this form of disclosure requires an adequate explanation. The second would help to match clinic time and other resources, including skills, to patients needs on the day of attendance. Patients who are medically stable, free from symptoms and otherwise adjusted to their condition and its treatment need not proceed to an obligatory consultation with a doctor. In general, the efficient and appropriate use of non-medical personnel in

clinics will assist changes in several aspects of practice including records, prescriptive management plans and patient education and counselling, the need for which has been emphasised in this report.

7. We believe that this survey, which has subjected the GOPD service to considerable scrutiny, has provided important information and insights on health needs and service. Since the large majority of primary care is provided by private doctors, a similar survey in this sector of health care is warranted.

1. INTRODUCTION

Synopsis

1.0 Background

2.0 Aims

1. INTRODUCTION

1.0 Background

The Government out-patient system is an important component of the health services provided through Government subsidies in Hong Kong. The system is heavily utilized as a point of first contact with medical care and a wide spectrum of patients and problems are dealt with on an 'open door' basis.

There is increasing recognition that in order to maximise the use of scarce resources all medical services should be subject to some form of evaluation. Following the establishment of the new Department of Health and in parallel with a growing interest and debate about the role of family medicine in Hong Kong, new questions have been raised about the effectiveness and appropriateness of the style of medical practice which has been long established in Government out-patient departments (GOPD's). The original aims of the service were to provide a form of population-based monitoring of communicable disease and other health problems in a way which was available, accessible and affordable to the majority of Hong Kong citizens. There is now a recognition that any medical care services, such as out-patient clinics, need to adopt a systems approach in order to monitor and evaluate the work which is being carried out and to be able to respond to changing needs and demands for medical care in the population.

2.0 Aims

In light of the above, the principal aims of the survey were to:

- (a) assess the role which GOPD's play as centres of first contact for patients with either new problems or long standing chronic disease.
- (b) identify the social and demographic characteristics of the clientele who use GOPD's regularly and will continue to do so in the future.
- (c) estimate their need and demand for out-patient services.
- (d) record patients' views on and expectations of the quality of services and care received in GOPD.
- (e) assess the outcomes of consultations in terms of investigations, treatment, recalls and referrals.
- (f) estimate the costs of health for patients who mainly choose GOPD services.
- (g) to identify operational aspects of clinics which might be modified or improved using existing resources.

2. METHODOLOGY

Synopsis

- 1.0 Patients and sample size
- 2.0 Sampling of clinics
- 3.0 Selection of patients in clinics
- 4.0 The instrument
- 5.0 Data processing and analysis
- 6.0 Interviewers
- 7.0 Quality assessment

1.0 Patients and sample size

The target population of the present study consisted of all patients who attended government GOPDs in Hong Kong during our study period. To obtain a representative sample from this population, the first stage of sampling selected a set of clinic sessions from the GOPDs in the territory; in the second stage individual patients within each clinic session were selected.

On the basis of the estimated available time and manpower resources, it was determined that 70 to 80 clinic sessions could be sampled and that during each sampled session, about 20 patients on average could be recruited, yielding a sample size of approximately 1500 patients. This would mean that for an attribute with, say, a prevalence of 50% in the population, the 95% confidence limits of a sample estimate would be about 2.5% on each side. The precision would be even higher if the prevalence of the attribute is different from 50% at which the standard error is greatest. It was therefore expected that satisfactory precision would result from a sample of this size.

As the scope of information to be gathered from the subjects was very large, it was felt that the average length of interviews might be too long if it was obtained from every subject. Therefore, the complete version of our instrument which was in the form of a structured questionnaire was only administered in one third of sampled patients. One third were asked a core section of the instrument together with a selected set of questions from the complete questionnaire. The core section and another set of questions were used in the remaining third. Consequently, every subject was asked the core set of questions and at least two thirds of the subjects answered any single question. This should be borne in mind when one examines the results as the sample size for different variables would accordingly be different. While the length of interview was considerably shortened in two thirds of cases, the precision of any estimate based on two thirds of the total sample size was still considered to be very satisfactory.

2.0 Sampling of clinics

There are 54 GOPDs in Hong Kong. Three types of clinic sessions are available, i.e. day, evening, and Sunday/public holiday. While every GOPD provides day sessions, only 19 and 8 of them respectively offer services in the evening and Sunday/public holidays. The relative throughput of each type of clinic session in 1988 indicated that the total number of clinic sessions to be selected during the study period, between mid-November and December 1989, should be in the ratio of 56 day sessions, 14 evening sessions and 2 Sunday/public holiday sessions. However, as the small number of subjects to be recruited in two Sunday/public holiday sessions might preclude a meaningful analysis on this important sub-group, it was decided that 9 such sessions should be selected.

In selecting the 56 day sessions, the day clinics in the territory were stratified into three groups depending on the general impression about the casemix, for example the relative proportions of patients with chronic medical conditions like hypertension or diabetes mellitus seen at these clinics. This information together with data on the throughput in 1988 of these three categories of clinics, led to the 56 clinic sessions being divided into:

- 16 in clinics with high proportions of chronic cases
- 35 in clinics with medium proportions of chronic cases
- 5 in clinics with low proportions of chronic cases

To minimize the time in travelling and to facilitate arrangements at each clinic site selected, a small number of clinics were randomly drawn according to the type of sessions offered and the relative casemix as described above. The clinics and the number of sessions included for each of them are shown in Table 2.1. The locations of these clinics can be found in Figure 2.1. Table 2.2 is a detailed schedule of the dates and sites of clinics sampled.

3.0 Selection of patients in clinics

Three interviewers were dispatched to each clinic during a selected session. Depending on the number of consulting doctors during a session, systematic sampling was carried out as follows:

- if more than three doctors were consulting, one in seven patients seen in each of the three randomly selected consulting rooms were recruited. Thus, the 1st, 8th, 15th, etc. patients in these rooms were sampled.
- if there were three doctors consulting, then the 1st, 8th, 15th etc. patients in each room were selected.
- if there were two doctors consulting, then the 1st, 8th, 15th etc. patients of each room were sampled. In addition, the 2nd, 9th, 16th etc. patients of one of the two rooms were also selected.
- if there was only one consulting doctor, patients selected were the 1st, 2nd, 3rd, 8th, 9th, 10th etc. patients.

Each selected patient was handed a chit informing him or her of their selection at the shroff when they obtained their discs. After the consultation, they were approached by interviewers who first obtained their consent before proceeding with the interviews which took place in the waiting hall or a designated room. For patients younger than twelve years of age or for those patients who were considered mentally incapable of responding to the questionnaire, the accompanying adult was interviewed as a proxy respondent.

4.0 The instrument

The instrument was in the form of a structured questionnaire with the following sections:

- A. Sociodemographic variables I
- B. Experience with GOPD and reason of present visit
- C. Details of a 'new problem' (a health problem of less than three months' duration) if relevant
- D. Details of an 'old problem' (a health problem with a duration of more than three months, excluding diabetes mellitus and hypertension) if relevant
- E. Details of any other health problems in the preceding month
- F. Care of diabetes mellitus if relevant
- G. Care of hypertension if relevant
- H. General health
- I. Patient satisfaction
- J. Utilization of services
- K. Predestined medical affinity and 'doctor-shopping'
- L. Medication and self-medication
- M. Dietary practices
- N. Sociodemographic variables II
- O. Interviewer observations
- P. In cases where proxy respondents were interviewed, they were not asked any questions which follow Section G. Instead, a special Section P was asked which included a selection of questions from sections H to N.

Both English and Cantonese versions of the questionnaire can be found in the Appendices.

The complete version of the instrument was only administered on one-third of subjects. Two shorter versions consisting respectively of

- Sections A to G, H to J, N and O (or P for proxy respondent) and
 - Sections A to G, K to M, N and O (or P if proxy respondent)
- were used in one-third of subjects each.

5.0 Data processing and analysis

Completed questionnaires were checked, coded and then key-punched into data files on magnetic tapes. These files were then downloaded into IBM AT compatible personal computers where data editing and analysis was carried out. Statistical analysis was performed mainly using SPSS/PC+ (SPSS Inc., 1986). Chi-square tests were used to examine the relationship between attributes. T-tests, ANOVA and their non-parametric analogues were employed to test differences between means. Multivariate analysis by logistic regression was done whenever appropriate on the LOGRESS package (McGee, 1986).

6.0 Interviewers

11 interviewers, 9 full-time and 2 part-time, were recruited for the purpose of data collection in the GOPD study (Table 2.3).

All of the interviewers were either departmental research staff or registered nurses specially recruited for the study. One of the nurses was retired and all except one were female.

All of the interviewers participated in a training programme before the actual collection of data. During the orientation, the interviewers received English and Cantonese versions of the questionnaire and the items were explained. They were also encouraged to review the questionnaire on their own before attending practice sessions.

The interviewers attended a final briefing during which problems were identified and questions answered.

7.0 Quality assessment (QA)

The quality of each interviewer's work was assessed by checking variations in the questions were posed and responses recorded, by checks of the responses and by the frequency of missing values. The relative proportion of diabetes and hypertensive patients interviewed was compared with official statistics so that the representativeness of each interviewer's sample of patients could be checked.

Reliability coefficients by question or by interviewer were determined by simple percentage agreements as follows:

$$\frac{\text{number of responses identical to standard responses}}{\text{total number of responses}} \times 100\%$$

See Appendix 3 for a detail account of the results of quality assessment and comments.

3. DEMOGRAPHIC ASPECTS OF THE STUDY POPULATION

Synopsis

- 1.0 Introduction
- 2.0 Demographic data
 - 2.1 Age and sex distribution
 - 2.2 Ethnicity
 - 2.3 Marital status
 - 2.4 Education level
 - 2.5 Employment
 - 2.6 Personal monthly income
 - 2.7 Family monthly income
 - 2.8 Smoking
 - 2.9 Health care expenditure
- 3.0 Comments

1.0 Introduction

The results of this survey are the product of visits to 12 different clinics during 30 morning sessions, 27 afternoon sessions, 14 evening sessions and 9 Sunday/public holiday sessions. A total of 1548 patients were interviewed yielding an overall response rate of 86.6% (response rate for morning sessions was 88.7%, for afternoon sessions 89.4%, for evening sessions 86.2%, and for Sunday/public holidays 82.2%). Details regarding survey statistics are provided in Table 3.1.

The interviews conducted during seven of the nine Sunday sessions and all of the interviews performed by one of the interviewers were deleted from the final sample. In the first case, the deletion was made so that the sample would conform to the scheme outlined in Section 2 on Methodology. In the second case, the deletion was necessary because the validity of the data was questioned. (See Appendix 3). The final sample size used for statistical analysis was 1214. (312 respondents answered all the questions; 342 answered sections A to J, N and O; 343 answered sections A to G, and K to O; and 217 answered sections A to G, and section P).

This section describes the demographic features of the sampled population, drawing comparisons when appropriate with characteristics of the general population of Hong Kong.

2.0 Demographic data

2.1 Age and Sex Distribution

Table 3.2 shows the age and sex distribution of the sampled GOPD population compared to that of the general population of Hong Kong (Census and Statistics, 1990). A larger proportion (55%) of the GOPD sample was female (55% compared to 49% in the Hong Kong general population.) In addition, the GOPD sample had a higher proportion of elderly patients (over the age of 60) and fewer younger patients (10-59) than the general population. It is unclear why such a relatively high proportion of male children were sampled.

Table 3.3 compares the median age and gender distribution of patients who attended GOPD clinics during different times of the day. Patients who attended evening clinics tended to be younger. More men sought medical attention during the afternoon or on Sunday/public holiday sessions. This difference is statistically significant. (Chi-square=102.42; df=3; P=0.0000)

2.2 Ethnicity

Nearly all patients surveyed were Chinese. (Table 3.4)

2.3 Marital Status

The proportion of patients surveyed who never married, were currently married or were widowed, divorced or separated differed markedly from the general population. The GOPD population had a lower proportion who have never been married and a higher proportion who were currently or had previously been married. (Figure 3.1)

2.4 Education Level

Information regarding the educational level attained by patients or, in the case of children under the age of 12, the patient's father is depicted in Figure 3.2. In general, surveyed attenders of the GOPD had received less education than the general public. 59% of the surveyed attenders (or their fathers) had only achieved primary school education or less compared with 49% of the general Hong Kong population.

2.5 Employment

The majority of patients were full-time workers, housewives or retirees (Figure 3.3). The majority of those who had full-time jobs were engaged in service or production-related work. Table 3.5 shows the comparison with the general Hong Kong public. There were more subjects who are service workers and fewer engaged as professionals, administrators or managers.

2.6 Personal Monthly Income

997 patients were asked about their personal monthly income. The 217 patients under the age of 12 were not asked this question as they were not expected to have a significant personal monthly income. Of the 997 patients queried, 585 disclosed information about their monthly income. Interestingly, only 446 patients had reported having full or part-time employment, leaving the source of income for 139 respondents somewhat obscure.

The reported personal monthly income ranged from less than \$1,000 to over \$10,000. The median income is between \$3,000 to over \$5,999. Table 3.6 compares the data regarding GOPD respondents with that for the general population. The percentage of respondents in the income brackets was calculated excluding missing values. 4.3% of the survey respondents had a personal monthly income of \geq \$10,000; the corresponding figure for the general population was 9.8%. 23.1% of survey respondents had a personal monthly income of less than \$3,000; 15.1% of the general population fell into the same category. These data indicate a lower personal monthly income for GOPD survey respondents relative to the general Hong Kong population.

2.7 Family Monthly Income

Information regarding family monthly income was sought from all patients. In patients under the age of 12 years, parents were contacted by telephone to obtain this data. Attempts to collect information were successful from 70% of patients.

The reported domestic monthly income ranged from less than \$1,000 to over \$10,000. The median income was between \$6,000 and \$10,000. Table 3.7 compares the family monthly income of the survey respondents with that of the general Hong Kong population. Notably, 52.9% of survey respondents had a domestic income of greater than \$6,000, compared with 70.4% of the general population. 6% of survey respondents reported a family monthly income of less than \$1,000, while the corresponding figure for the general Hong Kong population is only 1.3%. Thus, the data indicate that the respondents have a lower family monthly income than the general Hong Kong population.

2.8 Smoking

Table 3.8 shows that 16% of respondents smoked. Of those who smoked, over half claimed to smoke less than 1 pack per day. This corroborates the findings of the general household survey, but is considerably lower than the proportion of smoking subjects in the study on health risks, fitness and quality of life conducted by Chinese University of Hong Kong in Shatin. Further details are given in the section on Health Risk Behaviour.

2.9 Health Care Expenditure over the past 3 months

Table 3.9 describes the health care expenditure of the respondents. Health care expenditure, for the purposes of this survey included the money spent on professional consultations (western or traditional), hospital charges, accident and emergency costs, all medications, vitamins, tonics, hospitalizations and excludes foods, eye glasses and dentures. 17% reported spending no money, two-thirds of respondents spent \$100 or less and 5% spent over \$750 during the previous 3 months.

3.0 Comment

When compared with the general public of Hong Kong, the patients surveyed at the GOPD clinics were more predominantly female, older, nearly all of Chinese background, presently or previously married, less educated and were in lower personal or family monthly income bands.

4. HEALTH RISK BEHAVIOUR

Synopsis

- 1.0 Introduction
- 2.0 Use of tobacco
 - 2.1 Prevalence of smokers
 - 2.2 Gender of smokers
 - 2.3 Proportion of age groups who smoke
 - 2.4 How much smoked
- 3.0 Use of alcohol
- 4.0 Comments
- 5.0 Summary

1.0 Introduction

As social habits have considerable impact on the health of a society, this survey explored the GOPD attenders' use of tobacco and alcohol. Information of this type should be available to assess the adequacy of counselling and other preventive health activities in clinical services. Because smoking habits are easier to quantify, statistical analysis with adjustments for age, gender, hospitalization rate and health care expenditure was carried out for smokers, but not for alcohol drinkers, was performed.

2.0 Smoking

2.1 After adjustments for age and sex were made, the overall prevalence of smoking in this sample was calculated to be 15.9%.

2.2 79% of smokers were male while 36% of non-smokers were male (Table 4.1).

2.3 The highest proportion of non-smokers were aged 13-20 (89%) and over 70 (89%); the lowest proportion is in the group of patients between 20 and over 70 years of age. These differences in proportions are not statistically significant (Table 4.2).

2.4 64% of patients who smoked stated that they smoked less than one pack of cigarettes a day. (Figure 4.1) All patients in this survey who smoked more than one pack per day were male and 42% were over 60 years of age. No significant difference in hospitalization between smokers and non-smokers and no significant differences in health care expenditure were detected between smokers and non-smokers. (Tables 4.3 & 4.4)

3.0 Alcohol Use

13% of patients reported ever drinking alcoholic beverage during the past month.

4.0 Comments

The results of this survey corroborate the findings of others performed in Hong Kong on the prevalence of smoking (Census and Statistics, 1990). There were no significant differences noted between expected and observed rates of smokers in any of the age groups. The data point to the need for further health education of the public - especially younger people - regarding the hazards of tobacco use. This survey did not uncover any differences in health status or health care expenditure between smokers and non-smokers in GOPD attenders.

Studying the use and abuse of alcohol is always a difficult matter. The definition of and distinction between socially acceptable use and abuse are often culturally based and usually unclear. The problems associated with alcohol are not thought to be major concern for ethnic Chinese in Hong Kong. However, the connection between alcohol use and organic or functional problems may not always be identified. For example, the Hong Kong Council of Social Service noted that alcohol was detected in 43% of blood samples of injured workers, and a study of absentees from work found that 9% of respondents reported alcohol as a contributory factor (working group on alcoholism in 1983). A previous study conducted in Hong Kong reported that the lifetime prevalence of alcohol abuse and/or dependence in Hong Kong males was about 9% and perhaps one-tenth of that in females (working group on alcoholism, 1983). Another community-based study conducted by the Chinese University of Hong Kong noted that few women and a small proportion of men ever drink alcoholic beverage (Donnan SPB et al, 1988) The conclusion that few ethnic Chinese consume alcohol is corroborated by the results of the GOPD survey. The lower proportion (13%) found in this study may be due to a higher number of women in the sample.

Alcoholism and related disabilities seem to account for only a small proportion of illnesses treated in general and psychiatric hospitals or psychiatric outpatient clinics in Hong Kong (Lo TCM, Leung CM, 1988). However, there are signs that the social use of alcohol is changing and further studies to relate drinking behaviour to general health, and to assess the need for appropriate counselling and medical services are needed.

More effective use could be made of the opportunity for patient education when smokers attend GOPD's with health complaints.

5.0 Summary

1. 16% of surveyed GOPD attenders were smokers.
2. The heaviest smokers were male and over 60.
3. 13% of surveyed GOPD attenders reported ever drinking alcoholic beverages in the past month.
4. Clinical records in GOPD's should assist the identification of patients with high risk social habits; none of this information is systematically recorded in the present system.
5. There is a need for more appropriate patient education, counselling and support in GOPD's for patients with high risk profiles.

5. GENERAL HEALTH OF GOPD ATTENDERS

Synopsis

- 1.0 Introduction
- 2.0 Patients' self-rating of current condition
 - 2.1 By age group
 - 2.2 By gender
 - 2.3 By hospitalization
 - 2.4 By health care expenditure
 - 2.5 By illness profile.
- 3.0 Number of consultations over the past 3 months
 - 3.1 By age groups
 - 3.2 By gender
 - 3.3 By illness profile
 - 3.4 By hospitalization
- 4.0 Hospitalization within the past year
 - 4.1 By age group
 - 4.2 By gender
 - 4.3 By illness profile
- 5.0 Functional status
 - 5.1 Need for accompaniment
 - 5.2 Vision
 - 5.3 Hearing
 - 5.4 Dentition
- 6.0 Comments
- 7.0 Summary

1.0 Introduction

In order to understand the health needs of a population, one must first have an appreciation for its general health status. Without the benefit of direct physical or laboratory measurements, this assessment of the general health of GOPD attenders was based on data collected from patients about their (1) self-rating of health; (2) consultations with health care providers over the previous 3 months; and (3) hospitalizations over the previous year. In addition, we asked patients questions about their functional status: the need for accompaniment, the condition of their eyesight, their hearing and their teeth. Based on this information, conclusions regarding general health status and the need for health care are drawn.

2.0 Self-ratings of current condition

Patients were asked to rate their current condition. (Table 5.1) 21% stated their condition was poor or very poor, 61% fair and 18% good. The ratings were further analyzed by (1) age groups; (2) gender; (3) hospitalization within the past year; (4) illness profile and (5) health care expenditure over the past 3 months.

2.1 By age groups

Of the 185 patients who rated their current condition as poor or very poor, 48% were either under the age of 12 or over the age of 60. 27% were between 40 and 59 years and 25% were between 13 and 39 years of age.

Of the 532 patients who rated their condition as fair, 56% were either under the age of 12 or over the age of 60. 18% were between 40 and 59 years and 26% were between 13 and 39 years of age.

Of the 153 patients who rated their condition as good, 64% were either under the age of 12 or over 60. 26% were middle aged (40-59) and 10% were teenagers or young adults (13-39) (Table 5.2).

2.2 By gender

Table 5.3 shows that 78% of females, compared to 80% of males, rated their condition as fair or good. This difference is statistically significant ($\chi^2=8.69$; $df=2$; $p=0.0214$).

2.3 By hospitalization

16% of patients with a poor or very poor self-rating, 11% with a fair self-rating and 11% with a good self-rating had been hospitalized within the past year. These differences are not statistically significant (Table 5.4).

2.4 By health care expenditure

Health care expenditure, for the purposes of this survey, was defined as the sum of money spent on all professional consultations (western or traditional), hospital charges, accident/emergency costs, all medications, vitamins, tonics, and hospitalizations and excluded foods, eyeglasses and dentures.

Patients who rated their condition as poor or very poor spent more and those who rated their health as good spent less on health care over the past 3 months (Table 5.5). The difference is statistically significant. (chi-square=16.06; df=4; p=0.0029)

2.5 By illness profile

The illnesses for which patients sought consultation at the GOPD were categorized into new problems (those of less than 3 months duration), old problems (those of greater than 3 months duration), diabetes, hypertension and a combination of the above.

Of the 185 patients who rated their condition as poor or very poor, 58% presented with new problems, 22% with old problems, 3% with diabetes, 8% with hypertension and 9% with a combination of the above.

69% of the 532 patients in fair condition presented with a new complaint, 8% with an old problem, 2% with hypertension, 15% with diabetes and 6% with a combination.

Of the 153 patients in good condition, 37% sought attention for a new problem, 12% for an old one, 3% for diabetes care, 42% for high blood pressure and 5% for a combination of complaints.

In general, patients with old problems and a combination of ailments tended to rate their condition as poor or very poor, those with new problems or diabetes as fair and those with hypertension as good. The differences noted are statistically significant. (chi-square=107.9; df=8; p=0.000) The lowest proportion rating their health as good was found among attenders with new problems and highest among patients attending for continuing care of hypertension. (Table 5.6)

3.0 Number of consultations over the past 3 months

The reported use of professional consultations over the previous 3 months showed a wide range (Figure 5.1). 158 (18%) reported zero consultations, 25 (3%) reported at least one consultation per week. Two patients reported over 60 consultations during the 3 month period.

3.1 By age groups

In general, children and young adult patients tended to seek care less frequently (Table 5.7). 59% of patients 0 - 12 years, 82% 13 - 19 years and 60% of patients 20 - 39 years had 2 or fewer consultations during the previous 3 months, while only 44% of patients 40 - 59 years and 39% of patients over 60 years fell into the same category. Middle-aged and older patients tended to consult medical professionals more frequently. 56% of 40 - 59 year-old patients and 61% of patients over 60 consulted a physician at least once a month. Only 39% of patients under 40 consulted with the same regularity. These differences are statistically significant. (chi-square=47.85; df=8; p=0.0000)

3.2 By gender

There were no statistically significant differences in consultation seeking behaviour between males and females (Table 5.8).

3.3 By illness profile

Patients presenting with new problems had consulted fewer physicians; 61% of these patients had seen 2 or fewer doctors during the past 3 months (Table 5.9). Patients with illness of greater than 3 month duration, diabetes, hypertension or a combination of problems had generally consulted a greater number of doctors. 67-79% of these patients had consulted a doctor at least once a month during the previous 3 months. These differences are statistically significant. (Chi-square = 72.72; df = 8; p =0.0000)

3.4 By hospitalization

Table 5.10 shows that patients who had consulted a greater number of physicians during the past 3 months were also statistically more likely to have been hospitalized during the past year. (chi-square=16.76; df=2; p=0.0002)

4.0 Hospitalization with the past year

105 (12%) patients reported having been hospitalized at least once during the past year. Of those hospitalized, 70% were admitted to government hospitals (Figure 5.2).

4.1 By age group

The highest rate of hospitalization was noted in patients under 12 years old. 34 (16%) had been hospitalized at least once during the previous year. The lowest rate was seen among teenagers. 3% of this group had been hospitalized. Of all patients hospitalized, 65% were either under 12 years or over 60 years of age (Table 5.11). The differences noted are statistically significant. (chi-square=11.83; df=4; p=0.0187)

4.2 By gender

There were no differences in hospitalization between the two genders (Table 5.12).

4.3 By illness profile

Patients with diabetes had the highest hospitalization rates (26%) followed by those with old problems (16%) and hypertension (14%). The observed pattern was borderline in terms of conventional cut-off levels for statistical significance (chi-square=9.18; df=4; p=0.0568) (Table 5.13).

5.0 Functional status

Insofar as general health is related to functional status, the survey attempted to explore levels of dependency by asking questions about the need for accompaniment and the condition of eyesight and hearing. A question about dentition was also asked. (This data set excludes information from patients under the age of 12 years.)

5.1 Need for accompaniment

16% of respondents were accompanied to clinic. The highest proportion was seen in patients ages 13-20 (Figure 5.3). Of those accompanying the patients, the most frequent were spouses and mothers (Table 5.14). 61% of accompanying patients were females.

5.2 Eyesight

12% of patients reported visual impairment with or without corrective lenses (Table 5.15). 20% of patients over the age of 60 reported impaired vision (Table 5.16). The proportion of patients complaining of poor vision increases with age. The differences noted between age groups are statistically significant. (chi-square=28.45; df=3; p=0.0000). More women than men reported visual difficulty (data was not controlled for age).

5.3 Hearing

9% of patients noted impaired hearing, with or without hearing aids (Table 5.15). Table 5.17 shows that 16% of patients over the age of 60 reported hearing difficulties and the proportion increases with age. (chi-square=27.06; df=3; p=0.0000) There were no significant gender differences in hearing ability noted.

5.4 Dentition

57% of all patients have all natural teeth and 10% had no teeth or full dentures. Table 5.18 shows that 64% of patients over age 60 needed partial or full dentures and

the proportion increases with age. (chi-square-142.31; df=9; p=0.0000) Table 5.15 demonstrates that more females than males wore or needed dentures (data not controlled for age).

6.0 Comment

Twenty-one percent of GOPD attenders rated their current condition as poor while a comparable small proportion (18%) rated their condition as good. That the majority reported a fair self-rating may reflect their true health status or perhaps a reluctance to overstate their condition. In an attempt to link health self-rating and the need for health care, one might argue that patients with a poor rating are in greatest need of services. If this is accepted, then the results of this survey would suggest that these people are more likely to be between 40 and 59 years of age, more likely to have been hospitalized within the past year and are more likely to have an illness of greater than 3 months duration.

The validity of using patient's self-ratings as an indicator of need for health services can be challenged, however this technique is used in many health surveys and has a strong measure of 'face validity'. At the extreme ratings - poor or good - the validity is supported by other indicators of morbidity used in this study, namely the number of consultations over the past 3 months and hospitalization within the past year. The proportion of patients who had no consultations is the same as those who rated their as good. A greater proportion of patients who rated their condition as poor had been hospitalized in the past year (but this difference was not statistically significant).

For the majority of GOPD patients who rated their condition as fair, however, it is not easy to reconcile any differences among perceived health status, the true need and the actual utilization of health services. For example, patients over 60, those with hypertension and those with diabetes did not rate their health poorer than expected, yet a large proportion were frequent (1 or more times per month) attenders of the GOPD. This observation corroborates the claim that many patients with chronic illness have an informal understanding that they should return to clinic once a month, if for nothing else but renewal of medications. While it is recognized that patients with chronic conditions need long-term follow-up, in the absence of poor health their true health care needs might not require monthly visits to GOPD and might better be served in a different setting. Consultation rates in this group might also reflect patients' uncertainty about their progress, inadequate knowledge of their health problem and poor adjustment to their disease and its treatment. It is well recognised in other industrialised countries that many patients attending primary health care services have affective problems. A more detailed study of the psychological status of GOPD attenders should be considered together with the implications for workloads, clinical management and training of medical officers.

The information on functional status confirms that elderly patients, more of whom are women, have greater disability of vision and hearing and have fewer natural teeth. However, there was no evidence uncovered that suggests the elderly patients who attend GOPD are dependent to the extent that they come accompanied more frequently. Assessment of unmet need in this area would require further enquiries to a general population sample.

What factors - demographic, cultural, socio-economic, functional or physiologic - account for differences in perceived health, the need for health care and the utilization of services cannot be fully established at this point. Multivariate analysis might have proved useful but could not be accomplished within the time frame of this survey and is further hindered by the relatively small sample size of some response categories. What would also be informative, but was not available, are objective measures of the physiological and functional status of attenders and information on the severity of illness.

Without possession of such information, conclusions and inference can only be made on the basis of subjective, and perhaps less reliable, data from patients reports.

7.0 Summary

1. 21% of GOPD attenders rated their condition as poor or very poor, 61% as moderate and 18% as good.
2. Patients' self-ratings of their current condition showed variation by age, gender, hospitalization, health care expenditure and illness profile.
3. The number of consultations over the past 3 months among GOPD attenders had a wide range (0 - 70).
4. The number of consultations varied with age, illness profile and hospitalization.
5. 12% of patients had been hospitalized over the past year.
6. The rate of hospitalization varied with age. The greatest rate was seen in patients <12 years of age.
7. Further studies are needed to determine what factors determine patients' needs for and expectations of health services.
8. These future studies should not only focus on demographic differences but also seek objective measures of the severity of illness and assess the psychological status of GOPD attenders.

6. HEALTH BELIEFS AND HEALTH PRACTICES OF GOPD ATTENDERS

Synopsis

- 1.0 Introduction
- 2.0 Self-medication
 - 2.1 Reasons for self-medication
 - 2.2 Practice of self-medication
- 3.0 Dietary Practices
 - 3.1 The concept of hot/cold and its effects on diet
 - 3.2 Diet restriction
 - 3.3 The taking of tonics
- 4.0 Doctor-shopping
 - 4.1 Description of doctor-shoppers
 - 4.2 The choice of doctors in doctor-shopping
 - 4.3 Reasons for doctor-shopping
 - 4.4 The belief in predestined medical affinity
 - 4.5 Requests for specific doctors in the GOPDs
- 5.0 Comments and Conclusions

1.0 Introduction

The Theory of Reasoned Action is currently one of the most promising models offering a general explanation and prediction of behaviour. Formulated and developed by social psychologists Fishbein and Ajzen (1975; 1980), it asserts that human social behaviour is not controlled by unconscious motives; it is not thoughtless. Rather, people decide to engage or not to engage in a given action by carefully considering its implications.

According to the theory, "beliefs influence attitudes and subjective norms; these two components influence intentions; and intentions influence behaviour" (Ajzen and Fishbein, 1980, p.80). Beliefs are therefore considered central to the predictions of health behaviour. It is within this framework that the present study has set out to examine some of the health beliefs as possible contributors of self-medication, dietary practices, and doctor-shopping.

As in the west, the first step in help-seeking behaviour is the individual's recognition that something is going wrong. The next step is to decide, by virtue of the need, whether a particular problem should be handled medically by a doctor, or in some other ways such as by talking to a relative or friend, or even by self-medication.

Diet modifications are also a very common means of disease treatment as well as prevention among chinese in Hong Kong (Ho and Donnan, 1985). As these traditional dietary rules are too complex and numerous, the present study only chose to examine the concept of the hot/cold distinction and its effects on diet, the practices of diet restriction (gai hou) and the taking of tonics.

Doctor-shopping refers to the change of doctors without professional referral, which is a rather prevalent phenomenon in Hong Kong (Yeung and Chow, 1986; Lee, 1982). This behaviour may have its own advantages, as it reflects a possibility that the patients are recognizing their right to shop for what they believe to be the best care available. However, it may also mean that an adequate record of the patient's medical history is difficult to obtain, as patients usually do not keep the first or the second doctor informed about the changes they have made. The follow up of the progress of the patient and a continuity of care will be difficult to achieve. Subsequently any diagnosis or treatment would hardly be as accurate as it might be.

This study also looked at the traditional concept of "predestined medical affinity" and its relationship with doctor-shopping. "Affinity" is a concept which might have been introduced into China through the teachings of Buddhism as early as two thousand years ago. It is a "matter-of-fact" concept in the understanding of interrelationship between almost anything in the universe. In the context of doctor-patient relationship, patients can test to see if they "match" the doctor with whom they have their consultations by consulting different doctors: medical affinity

exists if the recovery after a consultation is speedy, otherwise the situation demands shopping for a different doctor.

A description of who these shoppers are, how they shop and the reasons for their behaviour were examined. Requests for specific doctors in the GOPDs, which may reflect affinity, was also covered.

2.0 Self-medication

2.1 Reasons for self-medication

In the present sample, the most common reasons for self-medication were either that patients did not think their symptoms were severe enough (51%), or simply because of convenience (30%, Fig. 6.1).

2.2 Practice of self-medication

45% of the patients in the present sample claimed that they would self-medicate without seeking professional help (Table 6.1). Of the patients who had presented to the GOPDs with problems of less than three months' duration, only a minority reported that they had self-medicated prior to their visit (5% had used chinese herbs, 14% took medication bought over-the-counter, and 8% used left-over medication). The practice of self-medication for those with more chronic problems was even less likely (only 3% used chinese herbs, 6% took over-the-counter medication, and a 4% took left-over medication).

Although previous evidence showed that chinese traditional cures or remedies were more popular than the use of western medicine in self-medication (eg, Lee, 1974, 1980; Winchell, 1981; Tan, 1984; etc.), the present data suggested that western drugs or tablets were utilized more often (Table 6.2).

A breakdown of the data further indicated that those who self-medicated were more likely to be younger patients with secondary education or above ($X^2=15.48$; d.f.=1; $p=0.0001$; Table 6.3).

Although most of the patients in the study said that the main influence on their self-medication was from either other lay-persons (24%) or previous experiences of their own (28%), 19% cited the influence of media messages (Fig. 6.2).

3.0 Dietary Practices

3.1 The concept of hot/cold and its effects on diet

89% of the patients interviewed claimed to believe in the

concept of hot/cold (Table 6.4). The present data did not indicate any relationships between patients' belief in the concept and demographic variables.

43% of the patients who claimed to believe in hot/cold reported that their belief had a strong influence on their diet (Table 6.5). Associations with demographic variables were again not significant.

3.2 Diet restriction

36% of the patients interviewed indicated that they restricted their diets without seeking professional help (Table 6.6). However, 65% of the patients in the sample believed that following certain dietary rules while taking the medication prescribed would expedite recovery during illnesses (Table 6.7).

64% of the patients who restricted their diet and took prescribed medication said they did not discuss their own practices of diet restriction with their doctors either because they did not feel the need to do so (55%), or simply because they were not asked on the matter (35%) (Table 6.8 and Fig. 6.3).

3.3 The taking of tonics

19% of the sampled patients said that they took tonics at least once per month (Table 6.9) and 5% took them less frequently. No significant relationship was found between the consumption of special food or tonic and income.

4.0 Doctor-shopping

4.1 Introduction

Estimates of doctor-shopping in Hong Kong have varied from a low of 28% (Ho and Donnan, 1985) to a high of 61% (Lee, 1982). The prevalence of shopping amongst the GCPD subjects was 41% (Table 6.10). This result is consistent with the 46% prevalence of shopping found in the general population health survey.

4.2 Description of doctor-shoppers

A breakdown of the data indicates that these patients were more likely to have consulted private doctors and practitioners of Chinese medicine previously ($X^2=15.94$; d.f.=1; $p=0.0000$ and $X^2=7.33$; d.f.=1; $p=0.0068$ respectively, Tables 6.11 to 6.14). A significantly higher prevalence of shopping was found among patients aged less than 40, compared with those aged 40 or older ($X^2=43.56$; d.f.=1; $p=0.0000$, Table 6.15).

Shopping was more prevalent among patients with secondary or better levels of education (at about 48%) and least prevalent among post-secondary educated subjects (about 27%). Patients with primary education or lower had an intermediate prevalence of shopping (about 36%, $X^2=15.44$; d.f.=2; $p=0.0004$; Table 6.16).

Multivariate analysis using logistic regression was performed to clarify the relationship between the behaviour of doctor-shopping and demographic variables (Table 6.17). The results indicate that elderly patients aged 60 or above, those presenting with diabetes or hypertension, and those who were previous attenders at the GOPD were less likely to be doctor-shoppers. Other factors including gender, education and family income were not found to be significant independent determinants.

Further reference to doctor-shopping is made in the report on the general population health survey.

4.3 The choice of doctors in doctor-shopping

60% of the patients who shopped for doctors reported reliance on lay recommendations for their choice of doctors, while a 31% suggested that their choice of a doctor was purely by chance (Fig. 6.4).

4.4 Reasons for doctor-shopping

The main reported reason for patients changing their doctors without referral was a persistence of symptoms (66% of those who shopped) (Fig. 6.5). However, the present data suggest that patients with illnesses of a more chronic nature, such as hypertension (HT) and diabetes mellitus (DM), were the least likely to shop around for doctors ($X^2=43.65$; d.f.=2; $p=0.0000$; Fig. 6.6). This is generally consistent with the data from the general population health survey.

4.5 The belief in predestined medical affinity

Although 17% of the patients interviewed said that they had never heard of the concept of "predestined medical affinity", 65% of the patients in the sample claimed that they had a fairly strong or stronger belief in the concept (Table 6.18).

In contrary to other reports in the literature, the present data do not suggest that patients' belief in the concept was related to the practice of doctor-shopping. In fact only 7% of all patients who shopped for doctors reported that the reason for their behaviour was due to a "mismatch" with their doctors (section 6.2 above for reasons of doctor-shopping, or Fig. 6.5).

4.6 Requests for specific doctors in the GOPDs

Patients' requests for specific doctors when visiting the GOPDs may be relevant to the belief in medical affinity.

34% of the patients claimed that they had requested for a specific doctor in the GOPD clinics previously (Table 6.19), and a breakdown of the data shows a borderline relationship between a belief in affinity and the frequency to make requests ($X^2=3.82$; d.f.=1; $p=0.0505$; Table 6.20).

A further breakdown of data indicates that those who often made specific requests were more likely to be younger ($X^2=27.50$; d.f.=2; $p=0.0000$; Fig. 6.7), female ($X^2=4.13$; d.f.=1; $p=0.0420$; Table 6.21), less well educated ($X^2=3.53$; d.f.=1; $p=0.0602$; Table 6.22), or whose monthly domestic income was less than \$6000 per month ($X^2=15.53$; d.f.=3; $p=0.0014$; Fig. 6.8).

From cross-tabulations these patients were more likely to be previous attenders of the clinic ($X^2=9.39$; d.f.=1; $p=0.0022$; Table 6.23), and they did appear to be more satisfied with the services offered (section 12 for a report on patient satisfaction).

5.0 Comments and Conclusions

Local studies on the process of medical help-seeking have shown that in the initial stage of common diseases, people were most likely to self-medicate, using chinese and/or western home remedies, rather than to seek help from western-trained doctors or practitioners of traditional chinese medicine. In his study in Kwun Tong in 1980, Lee reported that 58% of his respondents would self-medicate, although the percentage of self-medication might be more if those less serious and self-limiting diseases were also considered.

However, only 45% of the patients in the sample self-medicated before seeking help from GOPDs, and western medication was used more often than chinese remedies. Those who self-medicated tended to be younger or better educated, who might indeed hold different beliefs or opinions from those sampled in studies conducted in the early 80s or even the 70s.

As 20% of the patients reported that their self-medication was influenced by media messages, it would be intriguing to pursue what was portrayed in these messages as a general reflection of the lay expectations of both western and chinese medicine.

While 89% of the sample claimed to believe in hot/cold, only 43% of these patients said that their belief had a strong effect on their diet. A minority (36%) of the sample would restrict their diet as a way of coping with their illness before seeking professional help, but 65% of the patients interviewed would

follow traditional dietary rules as well as taking their prescribed medicine to expedite recovery. This finding might lend support to the lay contention that certain traditional dietary rules would fill "explanatory and behavioural niches left open in western medicine" (Koo, 1984).

19% of the patients said they took tonics more than once a month, but again contrary to previous findings, this practice was not related to any demographic variables.

41% of the patients frequently changed their doctors without referral, and the main reported reason for their doctor-changing behaviour was a persistence of symptoms. However, the present data also suggest that elderly patients, patients presenting with diabetes or hypertension, who were also likely to be elderly.

Indeed the majority of care of these patients was obtained from GOPD clinics (88% of HT and 76% of DM patients, see section 9 of the present report). This might support the supposition that attenders of GOPDs are a distinctive group of patients in the population, who may continue to utilize the services for a variety of reasons other than the quality of care offered, such as convenience, costs of services etc. (see also section 12 on patient satisfaction).

Other findings on doctor-shopping in the present sample are inconsistent with the literature, as factors such as gender, education, family income, nature of illness and a belief in medical affinity, all noted by previous studies to be related to shopping behaviour, are not significant when adjusted for other study variables.

Patients "expected" to shop for doctors were instead more likely to request specific doctors in the GOPDs: those who were female, less well educated, with a lower monthly domestic income, or believing in the concept of predestined medical affinity. It might be that these patients had already found a doctor in the GOPDs with whom medical affinity existed, therefore they would not need to shop any further. However, only 34% of the patients interviewed had made such specific requests.

That the present sample was not representative of the population of Hong Kong may explain the low agreement with the findings of previous local studies. Further research should therefore include subjects besides GOPD attenders, especially those who frequently utilize services offered from the private sector, if a more comprehensive picture on various health practices is anticipated.

7. CHARACTERISTICS OF SURVEY CLINICS

Synopsis

1.0 Introduction

2.0 Location and resources of survey clinics

3.0 Workloads, duration of sessions and differences

3.1 Estimate for clinic workload

3.2 Estimates for duration of clinic sessions

3.3 Differences in workload and completion of work among clinics and sessions

4.0 Comments and conclusions

5.0 Summary

1.0 Introduction

A common focus of criticism and complaints about the GOPD clinics is that very large numbers of patients are seen there during each session. This great influx of people seeking consultation at each session, it has been claimed, precludes the physicians from spending any meaningful length of time with patients and thus limits their ability to assess adequately any concern except the most trivial or obvious. Certainly, conditions demanding that doctors allocate no more than 3.3 minutes per patient do little for patient or physician satisfaction and are detrimental to the aim of providing high quality primary health care.

The Department of Health has recognized and attempted to deal with the problem of heavy patient loads. In an effort to distribute the work throughout a clinic session, numbered discs and the block appointment system were introduced. No operational studies were conducted before the introduction of the system, however, and there have been no formal measurements of the effect of the intervention on the process of care delivery. (Of note, our survey, as discussed in Section 12, indicates that only 14% of GOPD attenders know about and understand the block appointment system.)

The block appointment has often been used as a method of managing patients who attend a clinic. However in Hong Kong, because the majority of patients attend on a "walk-in" basis (including recalled patients), it does not address the problem or alter the number of patients who queue to be seen. These patients wait in the hope of obtaining one of a limited number of discs - a ticket to be seen by a physician during a particular session. Under ordinary circumstances, without a disc one will not be seen. Hence, patients wise to the system arrive early in the session to get a disc and then return after an appropriate interval to see the doctor.

Given these groundrules for operation, one would expect to find the clinics with patients waiting to be seen throughout clinic hours and not amassed during certain periods of a clinic session. However, informal observations during this survey noted that many of the clinics were essentially empty during some parts of the sessions, mainly during the later hours. (This, apparently, in some specialist clinics, is akin to closing early, as one patient complained in a letter to the editor of the South China Morning Post on 1 February 1990.)

In order to understand more fully the process of care in the GOPD, particularly the "true" work-load and the amount of time available to see patients, an evaluation of clinic throughput is necessary. Without the benefit of formal operational studies, a preliminary analysis is attempted here using data obtained during the survey about interview ending times, the total number of patients seen during clinic sessions and the number of doctors available for consultation.

2.0 Location and resources of survey clinics

12 different clinics were surveyed, 2 on Hong Kong Island, 5 Kowloon and 5 in the New Territories. The resources available at each of the clinics varied in terms of the number of consultations room available at the site and the number of doctors available per session. Table 7.1 shows that the number of consultation rooms and the number of doctors at the clinics' disposal ranges from one to eight. All see large numbers of patients. Few of the clinics have laboratory or radiological facilities on-site.

3.0 Workloads, duration of sessions and differences

3.1 Estimate for clinic work-load

In order to estimate relative workloads, an index was constructed. Such an index is necessary to account for the variations in the number of patients seen in different clinics. This index adjusts for the differences in the numbers of rooms and doctors available for consultation among the surveyed clinics, as well as for the effect of attending during different "office hours" (morning, evening and Sunday/public holiday sessions are four hours long; afternoon sessions are three hours). The index is calculated as follows:

$$\text{Index} = \frac{\text{Total number of patients seen in the sampled rooms during a session}}{\text{Total number of consultation rooms available during a session}}$$

In general, the larger the index number, the greater the clinic work-load.

3.2 Estimates for duration of clinic sessions

The sampling frame of this survey has been described in the report's section on methods (Section 2). Essentially, every seventh patient in a randomly designated consultation room was deemed eligible for interview. Patients were interviewed after they had seen the doctor, and the interviewers noted the patient's disc number and the beginning and ending times of the interview. Hence, if the disc system were to run true, the ending times of the interviews should roughly correlate with the completion of work in the clinic. The greatest number of patients that could be seen in the sampled consultation room after the last interview started is six. The average length of the interview was 13 minutes 47 seconds. If one assumes that doctors spend less than 3.3 minutes with each patient, then the ending time of the last interview should approximate the end of clinic.

3.3 Differences in work-load and completion of work among clinics and sessions

Table 7.2 demonstrates the differences in work-load indices among the clinics sampled and among sessions at the same clinic. Indices tend to be higher at evening and Sunday/public holiday clinics, and lower at afternoon clinics, while the work-load indices of morning clinics lie between these two groups.

Figures 7.1 and 7.2 depict the estimation of clinic sessions throughput by plotting the proportion of interviews completed by time after the beginning of a clinic session. Each surveyed clinic's performance is represented by a "bar-whisker" graph showing the time at which the first, 10%, 25%, 50%, 75%, 90% and 100% of the interviews were completed. In all clinics and in all sessions (except at NKC during the morning session), 100% of the interviews had been completed at least 13 minutes and as much as 1 hour and 29 minutes prior to the official clinic closing time.

The completion of clinical work varied from clinic to clinic and to greater or lesser degrees during a particular session. For example, the performance of the clinics with morning sessions was highly variable, even for clinics with similar work-loads. Afternoon clinics, in general, tended to show less variation and to spend less time to complete work than the morning clinics. A comparison between SJ in the afternoon and ST in the morning, clinics with similar work-load indices, illustrates this point. Both clinics have work load indices of 35, yet the time required for a given proportion of work is different. The work-load of the evening clinics varies the most from clinic to clinic, yet the time of work completion does not seem to vary significantly. It appears that the work of the evening clinics is essentially complete about 30 minutes prior to the official closing time. Only two Sunday/public holiday clinics were evaluated in this analysis. They completed their work in a similar time frame.

The performance of a given clinic seems to remain constant throughout the day. The throughput of VP during the morning and the afternoon are comparable, as is that of LT during the morning, afternoon, and on Sunday/public holidays sessions.

4.0 Comment

Utilizing indirect though empirically valid measures of clinic throughput and clinic work-loads, a number of observations can be made. First, both work-loads and the time required to process them vary from clinic to clinic. Second, clinical work is generally completed well before the official clinic closing time. This implies that 1) the disc and block-appointment system do not

serve to distribute the work-load evenly throughout the clinic session hours and 2) patients are getting even less than the official 3.3 minutes per consultation allotted to them.

These observations lead to further questions and the need for further studies. Specifically, operational studies would identify the factors that account for variations in clinic throughput. Factors such as clinic management style, clinic facilities, physician characteristics and decision making, patient demographics and case-mix should be examined. At the same time, attention should be paid to the quality of work being performed. The amount of time actually spent with patients and how it differs from doctor to doctor or with the severity of the patient's illness, are quality of care measures that deserve scrutiny.

Based on the results of operational studies and further health services research, strategies to improve the delivery of health care to patients in clinics might be considered. Before any interventions are made, desired outcomes should be specified and methods worked out for measuring the process of care towards the designated outcome. Feedback regarding performance should be given periodically and performance then re-measured. Only by establishing a feedback loop between health services research and health services delivery of the kind described in this section can the quality of health care in GOPD in Hong Kong be improved.

5.0 Summary

1. The work-loads of clinics vary from clinic to clinic and from session to session.
2. The performance of a given clinic, i.e., the rate at which it processes a given work-load seems to remain constant.
3. The work-load of a clinic is completed well before the official closing time.
4. Patients may be getting even less than the allotted 3.3 minutes per consultation.
5. The disc and block-appointment system are not used by patients or doctors to help distribute the work-load throughout the session hours.
6. Further studies are necessary to determine factors which account for the variations in clinic throughput. These preliminary findings suggest that, with other adjustments to methods of working in clinics, there are important opportunities to improve the quality of care during consultations and in general improve the efficiency of clinic management.

7. Health services research (including operational studies and quality of care assessments) should be indivisably linked to health services delivery systems to optimize the standard of health care.

8. CLINICAL WORK OF GENERAL OUTPATIENT DEPARTMENT CLINICS

Synopsis

- 1.0 Introduction
- 2.0 Attendance pattern
- 3.0 Coping strategies
- 4.0 Sites of previous consultation
- 5.0 Health problems
 - 5.1 New problems
 - 5.2 Old problems
- 6.0 Morbidity
 - 6.1 New problems
 - 6.2 Old problems
- 7.0 Outcomes
 - 7.1 Investigations
 - 7.2 Diagnosis and treatment
 - 7.3 Recalls and referrals
 - 7.4 Impact of GOPD's on work of A&E and specialist clinics
 - 7.5 Impact of GOPD's on hospital admissions
- 8.0 Comments

CLINICAL WORK OF GENERAL OUTPATIENT CLINICS

1.0 Introduction

A cross-sectional study of the type used in this survey can identify patterns of utilization of services, the profile of health problems in the attending population and the medical work and other actions carried out at a typical OPD visit. Cross-sectional studies may not provide reliable information on the cumulative health service use by attenders but will indicate where further operational studies might usefully be implemented. Figure 8.1 summarizes the salient features of patients using GOPD's in terms of attendance status, profile of health problems, site of previous consultations, investigations, treatment and outcome. In this study, 'new problems' and 'old problems' were defined respectively; as any health problems which first developed less than and more than three months before the date of interview. DM and HT are abbreviations for diabetes mellitus and hypertension respectively; these problems were used as indicators of care provided for chronic disease.

2.0 Attendance pattern

Of the 1214 patients in the survey sample, the majority, 1167 (96%), were former attenders and 47 (4%) were new attenders.

3.0 Coping strategies

The 703 patients (both new and former attenders) who presented with only new problems were asked about their use of various coping strategies. Most patients (75%) first developed symptoms within one week before the interview. 125 of 703 (18%) consulted GOPD immediately after the onset of symptoms. The remainder had either exclusively or in combination opted for rest (24%), modification of diet (31%), over-the-counter (OTC) drugs (25%), Chinese herbs (10%), or left-over medication from a previous episode (14%). Substantial minorities had sought either professional advice (39%) or lay advice (22%). (Table 8.1)

4.0 Sites of previous consultations

Among former attenders with old problems, the majority (72%) of those who had sought professional advice had used government clinics; one in five or more had patronised private/other western doctors and 5% had used alternative medicine. A much larger proportion (38%) of former attenders with new problems had used private medicine before coming to GOPD. Similarly new attenders with both new and old problems had almost exclusively used private care before making this GOPD visit.

5.0 Health problems

5.1 New problems

The majority of both former (61%) and new (87%) attenders presented new problems at the consultation. The total number with new problems at the consultation reported by the survey was 798, 66% of all attenders.

5.2 Old problems

The workload on the survey days included 505/1167 (43%) former attenders and 6/47 (13%) new attenders with longer standing health problems. These are divided for further discussion into old problems and diabetes and hypertension; information from the latter groups has been used as an indicator of care for patients with chronic disease (see later). Patients with exclusively old problems, as defined in the survey, comprised 14% of the former attenders.

6.0 Morbidity

The patients queried declared a spectrum of health problems (Table 8.2).

6.1 New problems

523 of the 798 (66%) patients with new problems had acute or chronic respiratory disease; musculo-skeletal complaints (11%) and digestive complaints (8%) were the next most common problems. 54 (7%) patients reported non-specific symptoms including headache, fever and tiredness. Problems classified as nervous system/mental illness (4%) made up the remainder.

134 (17%) of the 798 patients reported a second new problem. The distribution of these complaints again shows a predominance of symptoms related to respiratory, musculo-skeletal and digestive systems.

6.2 Old problems

261 (21%) patients presented with old problems. The spectrum show some variation from that of new problems. The dominant features were musculo-skeletal complaints (33%) with circulatory and respiratory problems together amounting to a further 36%.

37 (14%) of the 261 patients noted another old problem. The nature of their complaints is described in the table.

7.0 Outcomes

7.1 Investigations

Investigation rates were uniformly low for former and new attenders with both new and old problems. Only 4% had some form of investigation. There was little variation between patients with new or old problems.

7.2 Diagnosis and treatment

In contrast to investigation, treatment received a high priority in all of these contacts. Only 30 (2.5%) of patients left the clinic without some form of medication. For new problems, the number of prescriptions averaged 2.4 (new attenders) up to 2.8 (former attenders) treatments. The modal number of prescriptions was 3 and no less than 613 (50%) had 3 or 4 medicines (Table 8.3). Despite the high treatment rate the majority of patients (70%) apparently left the clinic without knowing the presumptive diagnosis.

7.3 Recalls and referrals

Patients were asked whether they were invited to attend the clinic again and whether they were referred onto another service.

The overall recall ratio was 16%. Recall rates varied markedly between old problems (20%), new problems (11%) or chronic disease (26%). The majority of patients who were recalled after the survey consultation (and who were given a time at which to do so) were asked to return within one month; 54% fell into this category.

The overall referral rate was 5%. Referrals were mainly made to specialist clinics (82%) or A&E departments (10%). Referral rates varied between different clinical problem groups; new patients with new problems and former attenders with old problems were most frequently referred. Former attenders with new problems and patients with diabetes and hypertension were least often referred. More work is needed to document the referral process but these preliminary data can be used to estimate the contribution of GOPD's to medical work in other tiers of the system. Details are given in the following sections.

7.4 Impact of GOPD's on work of A&E and specialist clinics

The point estimate obtained from the survey indicates that 5.48% of all attenders were referred. 4.51% of these went to specialist clinics and 0.53% to A&E. The direction of 0.44% is unknown but we could assume that 0.4% went to specialist and 0.04% to A&E.

The total referral rates would therefore be

to specialists: $4.51\% + 0.4\% = 4.91\%$
to A&E $0.53\% + 0.04\% = 0.57\%$

To estimate the impact of GOPDs on work of A&E and specialist clinics, the relevant statistics of the year 1988 (Director of Medical and Health Services, 1990) were used when appropriate in this section.

Total GOPD attendances in 1988 equaled 5,277,138 among whom 4,439,216 were seen by a doctor and the remainder received injections or dressings.

We can therefore expect total referrals from GOPD to be

to Specialists: $4,439,216 \times 0.0491 = 217,966$
to A&E: $4,439,216 \times 0.0057 = 25,304$

To assess the impact on the work of specialist clinics, for the purpose of this exercise, we assume that the 217,966 referrals are made to government specialists. The total number of attendances at all government specialist clinics in 1988 = 2,754,924 so that the contribution of GOPDs to the overall workload of specialist clinics = $217,966/2,754,924 = 7.9\%$. This does not of course include any estimate of the number of returns initiated by specialists after the first contact with these patients. Additional operational studies would be required to examine the cumulative effect of GOPD referrals on specialist clinic workloads.

7.5 Impact of GOPD's on hospital admissions

Attendances at 11 A&E (government and government assisted) departments in 1988 was 1,200,409, among which 343,713 were admitted (28.6%). Assuming that the admission ratio for patients referred to A&E by GOPD is the same (ie 28.6%) then the total number admitted would be $25,304 \times 0.286 = 7,237$. If either the severity of the problems in this group or other factors related to the referral lead to a higher admission rate (say twice the average level) then the number admitted would be $25,304 \times 0.286 \times 2 = 14,474$.

The total number of inpatients treated in 1988 in the 10 hospitals with A&E departments (ie excluding Chai Wan) was 552,849. This amounts to 77.7% of all inpatients treated in government and government assisted hospitals.

The proportion of patients admitted to hospitals through A&E departments can be estimated as $343,713/552,849 = 62.2\%$. To these patients GOPD contributes between 7,237 and 14,474 patients.

Taking the lower estimate, then

$7,237/343,713 = 2.11\%$ of all admissions via A&E originate from GOPD.

and $7,237/552,849 = 1.31\%$ of admissions from all sources originate from GOPD referrals to A&E.

Taking the upper estimate of patients admitted from GOPD referrals, then

$14,474/343,713 = 4.21\%$ of admissions via A&E originate from GOPD.

and $14,474/552,849 = 2.62\%$ of all admissions.

8.0 Comment

Comment: A more detailed study of patients, their use of medicines, and coping strategies, particularly for minor and self-limiting illness, would provide useful pointers to areas for innovation in health education. A census of OTC drugs would point to aspects where their use, together with other actions for symptomatic relief, might be better informed. The use of properly evaluated instructions of this kind, "packaged inserts", could become an obligatory feature of OTC drugs in Hong Kong. On the other hand the use of left-over drugs from a previous illness should be discouraged. Patients should be advised to discard surplus drugs after an episode. This might be linked to the case for labelling of all prescribed drugs with proper names about which there should be no dispute on the grounds of safety and the patients' right to know.

The general pattern of work in GOPD's is concerned with patients who have usually used the same clinic before but the majority of attenders presented on the survey days with new problems. The task of clinic doctors is therefore largely to identify patients with probably serious complaints who require appropriate investigation and/or referral and separate them from those with minor and self limiting problems. The other important group comprised patients with diabetes and hypertension, 24% of the whole clinic population. Most of these were attending for continuing care, the content of which is discussed later. Many patients had used other sources of medical care, mainly in the private sector.

Most (95%) of the new patients with new problems had previously tried private medicine before moving to a government clinic. Other data in the survey suggest that the reasons for preferring GOPD concern cost more than any other factor.

Investigation rates were low; fewer than one in twenty patients with new problems were apparently screened. The question arises as to whether these figures reflect appropriate clinical decision

making and care. A more detailed audit of presenting complaints and clinical findings would be necessary to provide an answer. Such an approach would only be possible if a structured and comprehensive record was introduced into clinics. However the effectiveness of simple screening tests, such as urine analysis and ESR, in new patients at their first contact, is probably beyond reasonable doubt. However with the present clinic management approach, the serious lack of time provided for individual consultations and the absence of a structured medical record with provision for linking investigations to other clinical information, further expenditure on investigations would probably be wasted.

In contrast, the dominant treatment orientated approach seems inappropriate given the small amount of information collected about individual problems. Polypharmacy is very prevalent in this service and merits a thorough review, from which new therapeutic guidelines could be developed. The economic as well as clinical benefits would be considerable. Such an approach must be linked to patient education and a change in patients' expectations of the outcome after a consultation. The fact that 70% of patients had no idea of the diagnosis is another pointer to the need for a change in policy towards patient education. Such an approach could be given prominence in any new continuing education programmes for medical officers in this service.

The proportion of patients recalled is an interesting statistic. This study cannot provide sufficient information to model the effects of recall on clinic workloads but relatively simple additional operational studies would allow this. In our sample of 1214 patients, 194 (16%) were asked to come back. If the clinics are assumed to be full now, and if the average recall interval is 2 weeks, then a modest increase in the interval of, say, only one week would either release a number of clinic 'slots' or allow an increase in the time allocated to each patient. A simulation exercise based on modification of follow-up intervals for patients attending a diabetic clinic is shown in Table 8.4. Lengthening the follow-up interval by only 30% released 900 fifteen minute clinic appointments in one year. Several other options, which could be chosen by the clinic team for evaluation, were created by this analysis.

There has been considerable speculation about the influence of referrals on the burden of medical work at specialist levels of care and on hospital admissions. The contribution of GOPDs to medical work at specialist levels of care is relatively small. Furthermore it is worth noting that referrals cannot directly be related to admissions. Although the act of referral may create some medical and social pressures for admission, in the final analysis it is medical decision-making at the point of admission which determines admission rates. This study clearly indicates that the great majority of both referrals to specialist clinics and admissions to hospital must originate from sources other than the GOPD referral pathways. To identify areas where decisions and the use of resources could be better matched to patients'

medical needs, the content of medical work and decision-making at this higher level of the system should be subject to a separate study. More operational studies of this type would help to construct a model of referral, recall and admissions at the interface between primary and secondary care.

9. THE MANAGEMENT OF CHRONIC DISEASE: DIABETES AND HYPERTENSION

Synopsis

- 1.0 Introduction
- 2.0 Management of diabetes
 - 2.1 Care site
 - 2.2 Diagnosis
 - 2.3 Investigation
- 3.0 Management of hypertension
 - 3.1 Care site
 - 3.2 Diagnosis
 - 3.3 Investigation
- 4.0 Comments

1.0 Introduction

Diabetes and hypertension were used as indicators of patterns of care for patients with chronic disease and a relatively high level of medical dependency.

2.0 Management of diabetes:

88 (7%) of the 1214 patients attending had a diagnosis of diabetes (DM). Only 67 (76%) of them were attending for continuing care for DM and the remainder for other intercurrent problems.

2.1 Care site

Use of different sites of care ranged from 1 up to a total of 4. However the majority used either the survey clinic (76%) or another GOPD. 9% usually used private sources while as many as 6% had preferred to use other sources including herbalists. (Table 9.1)

2.2 Diagnosis

31 (36%) had been diagnosed within two years and a further 30% within two to five years (Table 9.2). The majority of these patients were treated with oral medication and 6% were receiving insulin. (Table 9.3)

2.3 Investigation

Patients were asked about the type of contacts and investigations carried out to monitor control of their diabetes and detect complications. In the previous 12 months 90 to 92% had not received examinations for assessment of their eyes or feet. Similarly 90% had not had their weight measured and a further 3% were only weighed once. Blood tests had been carried out in 48 (55%) but 18 (38%) of these said these were not for diabetes, or they did not know. 30 patients who apparently had blood sugar tests were asked about the result of the estimations; 8 out of 28 were not told or could not remember, 10 said the result was either too high or too low. In our sample of 88 diabetics only one patient had experienced self-monitoring of blood sugar. The frequency of urine monitoring was similarly low with 41% either not testing at all (18%) or testing only once or twice per week. Only 14 responses were obtained to a question on why monitoring was not carried out; 11 of these stated that the method had not been taught or that they still did not understand it. (Table 9.4)

3.0 Management of hypertension

Hypertension was a common problem in the attending population. 296 (24%) of the surveyed attenders of the GOPD reported this diagnosis.

3.1 Care site

The majority (88%) of these patients received their usual care from GOPDs, most of these at the survey clinic. A minority of patients had used between 2 and 5 different care sites, involving other GOPDs and other private and western doctors. Only 3% had resorted to alternative forms of medicine for their blood pressure treatment. (Table 9.5)

3.2 Diagnosis

Twenty three percent had been diagnosed within 1 to 2 years, 34% between 2 and 5 years ago; however 43% had been receiving care for hypertension for 5 years or longer. (Table 9.5)

3.3 Investigation

Virtually all patients (99%) had a blood pressure measurement at each clinic visit. However, within the previous 12 months, examination of the optic fundus (8%), blood tests (14%) and urine examinations (18%) were low priorities. 28% did not know their usual blood pressure. On the other hand home blood pressure monitoring, a still relatively novel procedure, was practiced by 2 (10%), either by self monitoring or using the assistance of others such as family or friends. (Table 9.7)

4.0 Comments

The information obtained on two chronic diseases, diabetes and hypertension, can be used as an indicator of the general organisation of medical work for patients with medical problems which require long term care. This should include some form of prescriptive follow-up routine with limited but specific investigations at planned intervals. Apart from blood pressure measurement there is little evidence that this is happening in GOPDs.

Even allowing for imperfect recollection and omissions in patient responses, there is apparently no systematic management of these patients. The pattern of treatment regimens suggests that the patients receiving oral hypoglycaemics gravitate to GOPDs whereas a higher proportion of insulin treated patients in the public sector is probably retained in specialist clinics. However the risk of complications attached to patients on oral medication may be very high and they require a carefully monitored programme of follow-up with specific assessments at regular intervals.

An audit of the past medical care of patients with diabetic and hypertensive complications in Hong Kong would reveal areas where there are important gaps in both the content and continuity of care. In the case of diabetes it is doubtful that any benefit is gained from attendances which appear to be devoid of any relevant investigations or patient education. A particularly serious deficiency appeared to be in monitoring blood sugar levels, together with lack of anticipatory care for diabetic complications, for example in the eyes and feet. On the other hand the finding that 10% were monitoring blood pressure at home may be an important sign that many patients would be willing and able to undertake, together with their families, tests which are often considered to be the sole domain of health professionals. Although the majority of these patients used GOPD there is sufficient variation or duplication in care for many patients to introduce additional problems in continuity of care.

There are strong arguments for special clinic arrangements to be established for the management of patients with diabetes and hypertension. This could be planned and delivered with the participation of other health professionals. One encouraging sign is that the majority of patients accepted the proposal that they might be helped with their long term care by another health worker such as a nurse practitioner. (See section 13) The idea of the diabetes nurse specialist is well established in many western health systems and has recently been introduced in some clinical services in Hong Kong. Centres elsewhere have shown that nurse practitioner-run blood pressure clinics are cost-effective and acceptable to patients.

Overall the results of this inquiry suggest a complete reappraisal of the services provided at GOPD's for patients with diabetes and hypertension should be undertaken. This could be undertaken jointly by primary medical care, specialist and health services research staff. New programmes for care could be developed based on agreed clinical protocols. This would ensure that appropriate and specific examinations and investigations would be carried out at prescribed intervals by a team, in which tasks were delegated according to the necessary level of skill and experience required. In particular the referral pathways between primary and secondary care should be properly worked out and then evaluated.

The relevance of the findings on the management of diabetic and hypertensive patients should be considered for patients with other chronic problems such as respiratory disease, and other endocrine and haematological problems.

10. PREVENTIVE HEALTH MEASURES AND COUNSELLING

Synopsis

- 1.0 Introduction
- 2.0 Counselling regarding tobacco use
- 3.0 Counselling regarding alcohol use
- 4.0 Counselling about diet, weight and cholesterol
- 5.0 Counselling regarding drug abuse
- 6.0 Counselling regarding sexual matters
- 7.0 Health screening - cervical pap smear
- 8.0 Other health counselling activities
- 9.0 Comments
- 10.0 Summary

1.0 Introduction

Arguably two of the most important functions of a primary care physician in developed countries, preventive health care and counselling responsibilities are frequently neglected. The reasons for this that are often cited include a lack of time, uncertainties regarding benefits versus cost and a reluctance to discuss sensitive issues with a patient whom one hardly knows. This survey attempted to estimate how much preventive health care is being delivered in the GOPD.

2.0 Preventive Health and Counselling Regarding Smoking

This survey found that the proportion of surveyed GOPD attenders who smoke was about 16%. 20% of surveyed GOPD attenders who had been counselled by a doctor regarding smoking. Of those who reported that they had received counselling, the largest proportion were older than 60, (the age group which was identified as having the highest proportion of >1 pack 1 day smokers) (Figure 10.1). The majority of those counselled were male as are most smokers.

Whether patients were counselled or not varied with their illness (Table 10.1). Only 15% of patients presenting with new problems while 37% of patients presenting of old problems received counselling. The proportion of patients with diabetes, hypertension or a combination of problems who were counselled ranged from 19% to 24%. These differences are statistically significant (chi-square = 26.97, df = 4, p = 0.0000). The presence of respiratory tract infection (of either less or greater than 3 months duration) did not affect the physicians' counselling behaviour (Table 10.2), but that of chronic obstructive airway disease did (Table 10.3). The differences noted for chronic obstructive airway disease are statistically significant (chi-square - 11.35, df = 1, p = 0.0008), but still only roughly half of these patients were counselled about tobacco use.

74% of smokers stated that they had been advised to quit smoking. Non-GOPD doctors were most frequently cited as offering such advice, followed by family members, GOPD doctors, friends, others and other health professionals (Table 10.4).

60% of smokers stated that they had attempted to quit. The greatest influence to quit came from the patients own initiative in 56% of cases and from doctors in 11% (Table 10.5).

3.0 Counselling regarding Alcohol Use

16% of the surveyed GOPD attenders reported that they had received counselling regarding alcohol use. Most people counselled about alcohol use were male. 9% of patients with new problems were counselled. The proportion of patients with old problems, hypertension, diabetes or a combination of ailments

ranged from 19% to 29% (Table 10.6). The difference noted are statistically significant. (chi-square=30.28; df=4; p=0.0000).

4.0 Counselling regarding Diet, Weight and Cholesterol

The proportion of patients who received preventive health counselling regarding diet, weight or cholesterol was small (Table 10.7). The patients' gender did not affect the likelihood of receiving counselling (Table 10.8).

Tables (10.9-10.11) show that the proportion of patients who received counselling varied with illness presentation categories. The proportion was lowest among the patients presenting with a new problem; 2% had received counselling about cholesterol, 4% about weight, and 12% about diet. The proportions were highest for patients with diabetes; 14% had been counselled about cholesterol, 27% about weight and 55% about diet, (but still the overall proportions are low). The proportion of patients with old problems, hypertension or combination of problems who were counselled about cholesterol, weight or diet ranged from 5% to 28%, diet counselling occurring the most frequently. These differences are statistically significant (For cholesterol: chi-square=26.83; df=4; p=0.0000. For weight: chi-square=20.15; df=4; p=0.0005. For diet: chi-square=38.90; df=4; p=0.0000.)

The presence of cardiovascular disease did not affect the rate of counselling regarding diet, weight or cholesterol counselling (Tables 10.12-10.14). The overall counselled rate was low (21% for diet, 15% for weight and 6% for cholesterol).

5.0 Counselling regarding Drug Use

Only 12% of GOPD patients surveyed reported having been counselled about drug use.

6.0 Counselling regarding Sexual Habits

2% of GOPD patients surveyed reported having asked a physician regarding a sexual issue. 1% of GOPD patients surveyed stated that a physician had counselled regarding sexual habits.

7.0 Health Screening - Cervical Pap Smear

Data regarding cervical pap smear screening were collected in patients over the age of 20. Only 17% were certain that they had ever had a cervical pap smear; 4% were uncertain (Figure 10.2). Of those who had had at least one cervical pap smear, 86% reported that it had been performed in the last year (Table 10.15). The age distribution of the women screened indicates that the largest proportion was between 31 and 50 years old (Figure 10.3). Women went to several different facilities for their last screening

including the Family Planning Association clinics, private doctors, specialist outpatient departments, GOPD, MCHC's and other sites (Table 10.16). Only 17% of women screened had their last test performed at the GOPD.

8.0 Other health counselling activities

No information regarding the counselling of and screening for other health problems (such as breast cancer, osteoporosis, adult immunizations) was collected.

9.0 Comments

How services in the non-GOPD sector compare cannot be determined, but on the basis of the data collected, there appears to be very little health counselling or health screening activity in the GOPD. Most of the counselling seems to occur in older patients (for example, for smoking) and patients with old problems, diabetes and hypertension, when much damage of poor health habits has already been done. More attention needs to be paid to younger patients who can look forward to the benefits of healthier life styles. How the level of preventive health activity in the GOPD compares with the rest of Hong Kong cannot be determined from this study. In the U.K. and U.S.A. counselling and preventive health measures are recognized to be vital parts of an efficient health maintenance program. In some cases counselling from a doctor regarding health issues is used as a powerful and effective form of intervention and therapy. For example, randomized trials of counselling suggest sustained benefits in reducing smoking. (Rose G et al, 1982; Russell MAH et al, 1979) In some conditions, counselling is considered part of first line therapy. Certainly this is true in the management of some diabetics, the obese, and some patients with cardiovascular disease. Similarly it is now generally accepted that patients with chronic obstructive lung disease should be advised against smoking and helped to quit and that diabetics, hypertensives and patients with cardiovascular disease should be counselled about their diet and weight, in addition to smoking. By providing patients with information about their disease and what they can do to help themselves, patients can become more effective partners in their health care. In addition to improving patient compliance with therapy, this may enhance the doctor - patient relationship and the satisfaction of both parties.

Health counselling and screening require adequate resources and more time than the 3.3 minutes currently allocated to a consultation. Thus, within the current framework of the GOPD, a meaningful health maintenance program simply cannot function. If preventive health is to be considered as vital to the health of GOPD attenders as it is in other developed countries, then some changes within the GOPD must be instituted. These changes need not necessarily include the outlay of exorbitant amounts of

further funds or the addition of substantial amounts of work on health care providers. Rather, an organizational restructuring and re-allocation of existing resources could provide a large part of the solution. Further studies to evaluate the medical and economic aspects of these proposals should be undertaken. Measures of health knowledge and other benefits before and after these changes are instituted should be taken to monitor progress.

10.0 Summary

1. There is little preventive health care or counselling being delivered to GOPD patients.
2. How services in the non-GOPD sector compare cannot be determined.
3. Most of the counselling is directed at patients with old problems, diabetes and hypertension and older patients, when much of the damage of poor health behaviour has already occurred.
4. Organizational restructuring and reallocation of funds may allow for a higher level of preventive health care and health education activity to occur in the GOPD.

11. ECONOMIC ASPECTS OF HEALTH CARE FOR GOPD ATTENDERS

Synopsis

- 1.0 Introduction
- 2.0 Overall expenditure in the past three months
- 3.0 Social and demographic factors influencing expenditure
- 4.0 Comments and conclusions

1.0 Introduction

The ability to pay is well established as a factor which strongly influences the demand, as opposed to the need, for health and medical care. In order to ensure equity in the provision of care to a defined population, services should be delivered in a way which ensures that charges are not detrimental to access.

2.0 Overall expenditure in the past three months

Respondents were asked about the amount of money they spent on health care which included consultations, hospitalization, medication and tonics, but excluded food, denture and eyeglasses. The amount is shown in Table 11.1. Over two thirds spent less than \$100 on all these items combined in the three-month period and nearly one sixth had spent nothing.

3.0 Social and demographic factors influencing expenditure

The relationships between amount spent and gender, age, employment status, monthly household income and site for majority of health care in the past year are shown in Tables 11.2-11.6. The distributions suggest that the elderly, low income groups and users of GOPD's were more likely to have spent less than \$100 during the previous 3 months.

A multivariate analysis using logistic regression was performed to examine the independent relationship between amounts spent and a number of potentially interacting, social, demographic and economic variables. The dependent variable, expenditure on health care, was dichotomized into two levels, ie spending more, or less, than \$100 in the past three months.

Table 11.7 shows that, as expected, the greater the number of consultations one had in the past three months, the more likely it was for the patient to have spent more than \$100.

An odds ratio (a measure of relative risk) of 1.0 would indicate no difference between the index and comparison groups in these analyses.

As expected, the odds ratio, in favour of spending > \$100 progresses from 15.97 to 209.48 for an increase in consultations from 1-2 up to 5 times or more. On the other hand the elderly (OR = 0.4) and those who chose GOPD's rather than other sites of care (OR = 0.19) were less likely to have spent > \$100 on health care. One unexpected finding was that patients with diabetes and hypertension were less likely (OR = 0.51) than those with new or old problems to have spent > \$100.

4.0 Comment and Conclusions

These findings are consistent with the other results in this series of studies, in that they clearly show that the clientele of GOPD services are older people and those with low levels of disposable income for health care. The importance of chronic disease such as diabetes and hypertension, as an independent determinant of low levels of expenditure, may reflect a further adjustment of these patients to contain costs in what is recognised as a life long problem.

12. PATIENT SATISFACTION

Synopsis

- 1.0 Introduction
- 2.0 General Aspects of Satisfaction
 - 2.1 Disc waiting time
 - 2.2 Awareness of the block appointment system
 - 2.3 Medication expected and dispensed
- 3.0 Satisfaction with Doctors in the Last Consultation
 - 3.1 Physician affiliation
 - 3.2 Adequacy of medical information offered
 - 3.3 Perceived competence
- 4.0 Satisfaction with the Work of Nurses and Minor Staff
- 5.0 Comments and Conclusions

1.0 Introduction

Patients' satisfaction with their medical care has long been considered important to understanding the functioning of a health system, and indeed it has empirical relations to a variety of health care variables and outcomes. As satisfaction is based on patients' assessments of the performance of the health care system, it potentially represents an intermediate method for evaluating the quality of health care.

In almost all instances, patients enter any form of treatment with certain expectations about their problems and what will and should take place (Turk and Rudy, 1987). They usually hold an explanatory model about their disorder, its etiology, course, prognosis, and treatment.

Like most investigations of patient satisfaction, the present study has implicitly used a discrepancy approach: that is, satisfaction is referred to a matching of expected care with the perception of the care actually received.

For general aspects of satisfaction, GOPD attenders were asked if they were satisfied with the disc waiting time. This refers to the time spent in obtaining an "appointment" disc to see a doctor in the GOPD, which is to be distinguished from the waiting time for a consultation after a disc is bought from the shroff.

A question on the patients' awareness of the "Block Appointment System" was also included. Notices of the system are posted on the walls of each clinic including the approximate consultation time for any corresponding number on the discs. This system has been introduced so that patients may use the information on these notices as a guideline of when to return to the clinic for their consultation after they bought a disc.

Questions were also included on whether medication was expected and dispensed after a consultation.

In the survey patients' satisfaction with a doctor in the GOPD was examined on three aspects:

- (1) affiliation, including the doctor's attitude such as warmth and kindness, willingness to listen, and attention to patients' emotional problems arising from their illness;
- (2) the amount of medical information offered; and
- (3) technical performance and competence defined in traditional medical terms.

The present study also asked questions on GOPD attenders' satisfaction with the work of other clinic staff.

2.0 General Aspects of Satisfaction

2.1 Disc waiting time

32% of the patients interviewed found the disc waiting time too long (Table 12.1). A significant age trend was seen with younger patients reporting more dissatisfaction ($X^2=18.02$; d.f.=3; $p=0.0004$; Table 12.2). When controlling for clinic attendance, the data showed that elderly patients, who were former attenders of GOPDs, were more likely to report satisfaction with the disc waiting time, while the converse was true of the youngest age groups ($X^2=15.04$; d.f.=2; $p=0.0005$; Fig. 12.1).

2.2 Awareness of the block appointment system

Only 14% of the patients interviewed were aware of this system (Table 12.3).

2.3 Medication expected and dispensed

81% of the patients interviewed in the present study expected some form of medication after a consultation with a doctor (Table 12.4). A breakdown of these data by age suggested that younger (aged 20-39) patients were the least likely to expect any medication after a consultation ($X^2=19.41$; d.f.=1; $p=0.0000$; Table 12.5). A further breakdown by education showed no significant difference between those who least expected medication and the others.

Nevertheless over 95% of the patients recalled that medication was dispensed for each visit (Table 12.6).

3.0 Satisfaction with Doctors

3.1 Physician affiliation

85% of the patients interviewed reported that the attitude of the doctor with whom they just had a consultation was acceptable (Table 12.7), and these patients were likely to be the older and less well educated patients in the study ($X^2=5.52$; d.f.=1; $p=0.0188$; Table 12.8). Again these elderly patients who reported more satisfaction were previous attenders of the GOPDs ($X^2=15.03$; d.f.=2; $p=0.0005$; Fig. 12.2). Patients who had a better self-rating of health were also more satisfied than others ($X^2=4.38$; d.f.=1; $p=0.0363$; Table 12.9).

73% of the patients interviewed said that their doctor had spent as much time as they had expected in listening to their presentation of problems (Table 12.10). 87% of the patients interviewed claimed that doctors should also pay attention to the emotional issues arising from their physical illnesses (Table 12.11). 73% of the patients in the

study found their doctors to be as reassuring as they had expected (Table 12.12).

However, the patients who claimed to be satisfied with their doctors' attitude in their last consultation were more in favour of the service provided by private doctors, if the costs of services were not considered ($X^2=13.82$; d.f.=1; $p=0.0002$; Table 12.13).

3.2 Adequacy of medical information offered

As for the amount of medical information offered in their last consultation with a GOPD doctor, 63% of the patients said that they did have as much understanding of their own condition as they would wish (Table 12.14). The present data again suggests that these satisfied patients were likely to be elderly and were previous attenders of the GOPDs ($X^2=16.15$; d.f.=1; $p=0.0001$; Table 12.15 and $X^2=19.21$; d.f.=2; $p=0.0001$; Fig. 12.3 respectively).

Patients with a better self-rating of their current condition also reported more satisfaction with their understanding ($X^2=24.33$; d.f.=1; $p=0.0000$; Table 12.16).

However, patients who had claimed satisfaction with the adequacy of medical information offered were found to prefer service of private practices, if costs were not considered ($X^2=9.26$; d.f.=1; $p=0.0023$; Table 12.17).

3.3 Perceived competence

63% of the patients interviewed reported that they were satisfied with the doctor's technical competence, but 29% were not able to comment because there was simply no physical examination during their last consultation (Table 12.18). Elderly patients, who were previous attenders of GOPDs, were more likely to report satisfaction with their doctor's technical competence ($X^2=12.08$; d.f.=2; $p=0.0024$; Fig. 12.4).

However, if costs of services were ignored, patients satisfied with their GOPD doctor's clinical skills would still prefer to consult private doctors ($X^2=4.75$; d.f.=1; $p=0.0293$; Table 12.19).

4.0 Satisfaction with the Work of Nurses and Minor Staff

59% of the patients interviewed reported that they were satisfied with the work of the nurses in the GOPDs, but about 39% were not able to comment due to limited contact with nurses (Table 12.20).

About 80% of the patients interviewed claimed they were satisfied with the work of minor staff. 16% were not able to comment (Table 12.21). Again younger patients (aged 0-19) reported more

dissatisfaction with the work of the minor staff. Elderly previous attenders were more likely to be satisfied ($X^2=16.27$; d.f.=2; $p=0.0003$; Table 12.22).

Overall, satisfaction levels for nurses and minor staff were greater than 90% for all ages.

5.0 Comments and Conclusions

Nearly one in three patients in the study reported that the disc waiting time was too long. More dissatisfaction was reported from younger patients. From casual observations, elderly GOPD attenders usually start queueing up for discs even before a clinic opens. However, as special priority discs are reserved for those aged over 60 to see the doctor in the beginning of each session, it is not surprising to find that these patients in the study were more likely to find the disc waiting time to be tolerable.

Although a "Block Appointment System" was introduced to save patients' time in waiting to be seen by clinic doctors, only 14% of the patients interviewed were aware of this system.

As suggested previously, local patients have high expectations for western drugs, and a special fondness for their administration by injection (Yee, 1986; Topley, 1975; Lee, 1975): a consultation is likely to be most dissatisfying if no drugs are dispensed. Indeed the majority of the patients interviewed in the present study expected some form of medication after a consultation with a doctor. However, patients aged 20-39 in the study who had at least secondary education were the least likely to expect medication. This may suggest that the younger generation, being better educated and informed than previously, have come to understand that medications might not necessarily be prescribed during every medical consultation.

In general, more than half of the patients interviewed reported that they were satisfied with the aspects of health care delivery examined in the study. It was also noted that satisfied patients were more likely to be elderly patients aged sixty or above, while the younger and better educated patients in the sample, who might well be more out-spoken, were less satisfied with the services offered in the GOPDs.

A "survivor effect" may account for the present phenomenon: only those who have come to terms with what is being offered will continue to utilize GOPD services. However, that satisfaction was the main reason for these patients to utilize GOPDs services as a major form of medical care may be challenged.

In order to minimize respondent burden, the present questions on patient satisfaction did not allow for patient expectations to be tapped. However, without a detailed set of probing questions it is impossible to tell whether those patients who appeared to be

"satisfied" were genuinely happy with the quality of care that they received, or whether they simply had lower expectations of the system. One possible method of distinguishing these patients from the others in the present study is to examine their preferences for medical services if costs are ignored: patients may expect less from a service which is relatively inexpensive.

Cross-tabulations of satisfaction by patients' preference for services did show that those who claimed to be satisfied with the attitude of doctors, the adequacy of medical information and the technical competence of GOPD doctors were more in favour of private practice if the costs of services were not considered. This suggests that some patients only reported to be satisfied with the services offered in the GOPD because of the cheap services regardless of the quality; otherwise private practices would have been preferred.

Another possible factor which might affect patients' expectations of the quality of GOPD services was the self-rating of their current health: those who claimed that their condition was either fair or good might not have as high expectations of the service as the others. Indeed these patients were significantly more likely to have claimed satisfaction with the GOPD doctor's attitude and the amount of medical information he offered during their consultation.

Future studies should examine patient expectations more directly, if the level of patient satisfaction is to provide a perspective that contributes to a comprehensive evaluation of the structure, process and outcome of services.

Patient satisfaction is also a useful prediction of health-related behaviours such as medical adherence and switching providers. There is, therefore, a need to develop mechanisms for consumer participation in the quality assessment of medical services, for example, in the form of community health councils.

13. ALTERNATIVE HEALTH CARE ARRANGEMENTS

Synopsis

- 1.0 Introduction
- 2.0 Patient-held records
- 3.0 Consultation with Trained Nurses
- 4.0 Comments
- 5.0 Summary

1.0 Introduction

Among the major shortcomings we identified in the survey are the lack of adequate explanation and disclosure to patients absence of any structured medical records, problems with continuity of care and the limited time allotted for each consultation. In order to improve some aspects of this situation, alternative health care arrangements should be considered. This survey explored the attitudes of patients toward two possible options: patient-held records and consultations with trained nurses.

2.0 Patient-held records

When asked whether they would like to have possession of a record with a summary of their health problems, 76% replied that they would be in favor of such an arrangement.

3.0 Consultation with trained nurses

All patients were asked whether they would be in favor of a system by which patients with non-serious problems or those requiring routine continuing care could be seen by a specially trained nurse. 64% replied that they would, find this acceptable. Similarly 64% of diabetics and 69% of hypertensive patients indicated that, if they were without symptoms and doing well, they would be prepared to be helped in their follow-up care by another trained health personnel rather than a doctor.

4.0 Comments

The responses of the GOPD attenders indicate that they are not opposed to alternative health care arrangements. These arrangements have been utilized to great benefit in the U.K. and also in the U.S.A. In Hong Kong, patient-held records would help to bridge the gaps in medical care which may arise because of multiple consultations. They would also contribute to a new approach to patient education. The construction and maintenance of good quality records would at least in part be patient-driven. The question remains however whether all medical practitioners would support this method of information recording and transfer. Duplication of work and waste of resources could potentially be avoided; by documenting treatment in progress, polypharmacy and the risks of iatrogenic disease might also be avoided.

Specially trained nurses in the style of nurse practitioners could be of great benefit to health care delivery in Hong Kong. If, as the results of this survey suggest, the great majority of GOPD attenders are either not seriously ill or report for administrative purposes (such as medication renewals), trained nurses should be able to meet the needs of many patients. Such an arrangement would reduce the patient load of individual doctors, allowing them to spend more time with patients who

really do need their attention. In other developed countries, specially-trained nurses work under the supervision of doctors, the patients find this arrangement very satisfactory and the nurses find the work and responsibility professionally as well as personally rewarding.

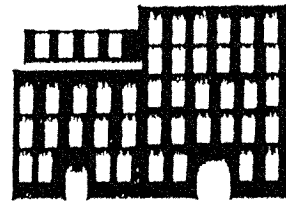
The concept of specially trained nurses (often designated as nurse practitioners or nurse-specialists) has already achieved wide acceptance in some services in Hong Kong. The counter-claim, that the public would not accept seeing a nurse instead of a doctor, is not substantiated by this survey.

5.0 Summary

1. The majority of surveyed GOPD attenders are in favor of patient-held medical records.
2. The majority of all patients are in favour of an arrangement whereby a specially trained nurse could provide some of their care.
3. By establishing a comprehensive medical records system, there is a potential to limit duplication of work (i.e. waste of money and time).
4. By documenting treatment in progress, polypharmacy and other risks for iatrogenic disease might be avoided.
5. Specially-trained nurses should be able to deal with the needs of many patients who present to GOPD. By limiting the number of patients who see doctors, physicians would be able to spend more time with those who are truly in need of their professional attention.

SURVEYS ON HEALTH AND
MEDICAL CARE
IN
HONG KONG

1 GOPD



HEALTH PROBLEMS, PATTERNS OF
UTILISATION, MEDICAL WORK AND
OUTCOMES IN PATIENTS ATTENDING
GENERAL OUTPATIENT DEPARTMENTS

Tables, Figures & Appendices

Department of Community Medicine
University of Hong Kong

Department of Health
Hong Kong Government

March 1990

Survey on Health and Medical Care in Hong Kong

GOPD Report

Tables, Figures and Appendices

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INTRODUCTION TO TABLES, FIGURES AND APPENDICES

This volume contains the tables, figures and appendices referred to in the text of the GOPD report. The purpose of this arrangement is to allow the reader to turn the pages of the text in conjunction with or independently from those of the tables and figures. We believe that the information provided in the two volumes are complementary and hope that this format will enhance the appreciation for the data we present.

This volume is organised to correspond to the individual sections of the text, with the tables and figures of each section being grouped separately. All the tables for a particular section will appear first, followed by all the figures. The numbering corresponds to that in the text; the page numbers of the tables or figures of a given section may be found in the table of contents. Section 1 (Introduction) and Section 13. (Alternative care and arrangements) have no tables or figures.

The appendices contain further details of subjects mentioned to in the text. Namely, we include the English and Cantonese versions of the survey instrument, a summary of the quality assessment of the interviewers and a list of references.

Table 2.1: Sampled GOPD's and the number of sessions

<u>Name of clinic</u>	<u>No. of sessions</u>
<u>Day</u>	
1. Sai Ying Pun Jockey Club Polyclinic	8
2. Lady Trench Polyclinic	8
3. Violet Peel Health Centre	9
4. Sham Shui Po Public Dispensary	3
5. Ngau Tau Kok Jockey Club Clinic	9
6. North Kwai Chung Clinic	6
7. Shatin Clinic	8
8. St. John Hospital	5*
	<hr/>
	Sub-total: 56*
<u>Evening</u>	
1. Yau Ma Tei Jockey Club Clinic	5
2. Kwun Tong Jockey Club Health Centre	6
3. Lek Yuen Health Centre	3
	<hr/>
	Sub-total: 14
<u>Sunday/public holiday</u>	
1. Lady Trench Polyclinic	3
2. Kwun Tong Jockey Club Health Centre	3
3. Violet Peel Health Centre	3
	<hr/>
	Sub-total: 9
	<hr/>
	Total: 79*

*6 sessions were subsequently sampled at St John Hospital because of the very low attendance on the days of study in comparison with other clinics. These numbers therefore became 6, 57 and 80 accordingly.

Table 2.2: GOPD clinic Survey Schedule

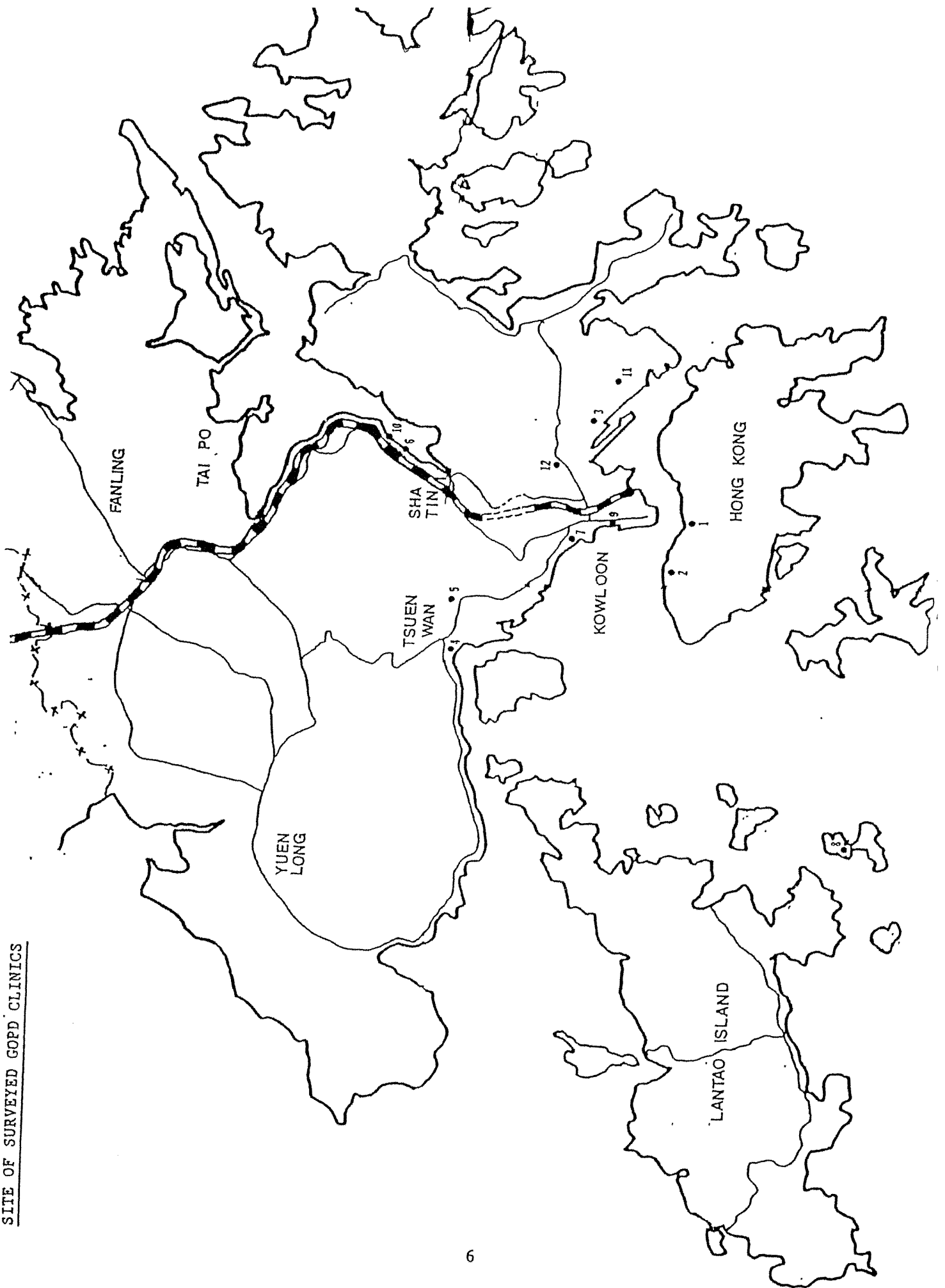
	SUN	MON	TUE	WED	THUR	FRI	SAT
I	12	13	14	15	16	17	18
II					VP NTK NKC	VP NTK NKC	
III							
I	19	20	21	22	23	24	25
II	VP LT -	VP - KT -	(VP) - NTK ST	- - (NTK) -	SYP LT (ST)	SYP LT ST	
III		NKC	ST	-	LY	ST*	
I	26	27	28	29	30	1	2
II	VP*	SYP*	SYP	(VP)	VP*	-	(YMT)
III	(LT) RB	LT ST (ST)	LT SYP SSP	(NTK)* SSP	- -	NTK	KT
I	3	4	5	6	7	8	9
II	VP*	-	-	-			
III	LT (RB)*	SJ	SJ	(SJ)		SJ	
I	10	11	12	13	14	15	16
II	-						
III	RB						

Key: * Quality assessment sessions
 () Quality assessment sessions originally scheduled

Table 2.3: Background of interviewers in GOPD study

Code	Sex	Full/part time	Background
01	.female	full-time	research assistant
02	female	full-time	field nurse
03	female	full-time	research assistant
04	male	full-time	research assistant
05	female	full-time	SRN (retired)
06	female	full-time	RN
07	female	full-time	RN
08	female	full-time	RN
09	female	full-time	research assistant
10	female	part-time	field nurse
11	female	part-time	RN

Figure 2.1
SITE OF SURVEYED GOPD CLINICS



KEY

SITE OF SURVEYED GOPD CLINICS

- 1 Violet Peel Health Centre
- 2 Sai Ying Pun Jockey Club Polyclinic
- 3 Ngau Tau Kok Jockey Club Clinic
- 4 Lady Trench Polyclinic
- 5 North Kwai Chung Clinic
- 6 Shatin Clinic
- 7 Sham Shui Po Public Dispensary
- 8 St. John Hospital
- 9 Yau Ma Tei Jockey Club Clinic
- 10 Lek Yuen Health Centre
- 11 Kwun Tong Jockey Club Health Centre
- 12 Robert Black Health Centre

Table 3.1

GOPD Clinic Survey Statistics

Clinics Surveyed	a. # sessions sampled			b. total and (average) #patients seen			c. total and (average) #patients in sampled rooms			d. total and (average) # patients interviewed			e. % of total# patients interviewed (d/b)			f. % of total # of patients in sampled rooms interviewed (d/c)					
	am	pm	night	am	pm	night	am	pm	night	am	pm	night	am	pm	night	am	pm	night			
	5	4	-	825 (165)	451 (113)	658 (219)	825 (165)	451 (113)	-	586 (195)	68 (17)	-	67 (22)	12	15	10	12	15	-		
VP																					
SYP	4	4	-	918 (230)	616 (154)	-	680 (170)	503 (126)	-	-	76 (19)	-	-	8	11	-	11	14	-	-	
NTK	5	4	-	800 (160)	474 (119)	-	800 (160)	474 (119)	-	-	97 (19)	-	-	12	13	-	12	13	-	-	
LT	4	4	-	823 (206)	665 (166)	-	584 (146)	482 (121)	-	720 (240)	70 (18)	-	83 (28)	9	7	-	12	10	-	12	
NKC	3	3	-	391 (130)	272 (91)	-	391 (130)	272 (91)	-	-	64 (21)	-	-	16	19	-	16	19	-	-	
ST	4	4	-	566 (142)	408 (102)	-	487 (122)	386 (97)	-	-	75 (19)	-	-	13	14	-	15	15	-	-	
SSP	2	1	-	116 (58)	40 (40)	-	116 (58)	40 (40)	-	-	41 (21)	-	-	35	38	-	35	38	-	-	
SJ	3	3	-	374 (125)	210 (70)	-	374 (125)	210 (70)	-	-	37 (12)	-	-	10	13	-	10	13	-	-	
YMT	-	-	5	-	-	1187 (237)	-	-	767 (153)	-	-	103 (21)	-	-	-	9	-	-	-	13	
LY	-	-	3	-	-	476 (159)	-	-	476 (159)	-	-	92 (31)	-	-	-	19	-	-	-	19	
KT	-	-	6	-	-	1736 (289)	-	-	1293 (216)	-	-	156 (26)	-	-	-	9	-	-	-	12	
RB	-	-	-	3	-	715 (238)	-	-	715 (238)	-	-	84 (28)	-	-	-	-	-	-	-	12	
Subtotal	30	27	14	9	4813	3136	2333	4257	2818	2536	559	395	351	234	559	395	351	234	559	395	351
Total	80			13,681 (171)			11,632 (145)			1539* (19)			11%			13%			13%		

* Information regarding 9 interviews is missing
 Total number of interviews completed = 1548

Government servants and their dependents:
 Proportion of the total number of patients seen by GOPD clinic doctors and proportion of the total number of patients in the GOPD survey sample

Clinic	cases seen by doctor		Patient interviewed for survey		Disc allotment		% G (A/B)	% H (C/D)	% I (E/E+F)
	A GS/DGS	B total	C GS/DGS	D total	E GS/DGS	F GP			
*VP (d)	38,616	97,561	24	167	100	600	39.6	14.3 ^u	14.3
*SYP (d)	29,844	128,799	1	145	110	801	23.2	0.7	12.0
NTK (d)	12,703	73,651	20	113	60	285	17.2	17.7	17.4
*LT (d)	28,138	104,227	1	77	105	380	27.0	1.3	21.6
LT (s)	3,503	18,663	4	21	20	320	18.8	19.0	5.9
NKC (d)	6,806	63,814	2	115	30	300	10.7	1.7	9.1
ST (d)	13,196	73,316	18	131	-	-	18.0	13.7	-
SSP (d)	3,761	26,689	2	56	15	95	14.1	3.6	13.6
SJ (d)	5,998	46,203	2	64	-	-	13.0	3.1	-
YMT (e)	5,974	58,944	7	103	-	320	10.1	6.8	-
LY (e)	7,018	36,819	11	92	-	-	19.1	12.0	-
KT (e)	3,869	68,924	5	101	-	320	5.6	5.0	-
RB (s)	1,482	12,488	4	29	-	-	11.9	13.8	-
Total	160,908	810,098	101	1214	+ -	+ -	19.9	8.3	+ -

(d) = day
 (e) = evening
 (s) = sunday/public holiday
 * = sessions with 1 room designated for use by GS/DGS
 - x - = no separate disc allotment (quota) for GS/DGS
 + (x = total number of disc, if number was provided)
 = no total calculated

Table 3.2: Age distribution (in percentages) by sex of sample in comparison with Hong Kong general population (mid-1989 estimates)

Age	Male		Female	
	GOPD Sample N=542	HK population	GOPD Sample N=672	HK population
0-9	19.9	14.6	12.6	14.2
10-19	8.5	15.4	7.0	14.7
20-29	9.4	19.6	10.1	20.1
30-39	11.3	18.9	12.4	18.6
40-49	8.9	10.8	8.5	9.7
50-59	12.9	9.6	14.7	8.8
60-69	18.5	7.1	20.1	7.5
70-79	9.2	3.3	11.9	4.5
80+	1.5	0.8	2.7	2.0

Table 3.3: Median age and proportion female seen at different clinic sessions

Sessions	Median age	% female
morning	55	59
afternoon	39	50
evening	36	57
Sunday/Public holiday	48	46

X² = 102.42
df = 3
P = 0.0000

Table 3.4: Ethnic background of surveyed patients

Ethnic Background	Frequency	%
Chinese	1209	99.6
Non-Chinese	5	0.4

**Table 3.5: Occupational distribution of the employed
in comparison with Hong Kong general population**

	Percentage	
	GOPD Sample	HK population
Professional, administrative and managerial	8.5	11.8
Clerical and related workers	18.0	19.3
Sales workers	10.3	11.8
Service workers	22.2	17.0
Production and related workers, transport equipment operators and laborers	40.0	39.1
Others	0.9	1.0

**Table 3.6: Distribution of reported personal monthly income of
GOPD survey respondents compared with Hong
Kong general population**

Reported Monthly Income	GOPD	Percentage	
		adjusted*	Hong Kong
\$1,000	1.5	2.6	2.0
\$1,000 - 2,999	12.0	20.5	13.1
\$3,000 - 5,999	31.2	53.2	56.5
\$6,000 - 9,999	11.4	19.5	18.6
\$10,000	2.5	4.3	9.8
Missing data	41.3	-	

*adjusted to exclude missing values
Sample size = 997 (patients under 12 years did not supply
information)

Table 3.7: Distribution of reported family monthly income of GOPD survey respondents compared with Hong Kong general population

Reported Income	GOPD	Percentage	
		adjusted	Hong Kong
<\$1,000	4.2	6.0	1.3
\$1,000 - 2,999	4.9	7.1	5.4
\$3,000 - 5,999	23.8	34.0	23.0
\$6,000 - 9,999	20.6	29.4	30.7
\$10,000	16.5	23.5	39.5
Missing data	29.9	-	-

*adjusted to exclude missing values
 Sample size = 1214 (information for patients under 12 years was collected by telephone from parents)

Table 3.8: Smoking habits of surveyed GOPD attenders

n = 654
 missing value = 49

Amount Smoked	Frequency	%
None	538	84
< 1 pack/day	66	10
1 pack/day	24	4
> 1 pack/day	12	2
	640	100

Table 3.9: Health care expenditure over the past 3 months

Amount Spent	Frequency	%
0	146	17
1 - 100	428	49
101 - 250	130	15
251 - 500	89	10
501 - 750	24	3
> 750	40	5
Refused to answer/missing data	14	2
	871	100

Figure 3.1: Marital status of GOPD
 survey respondents compared with
 Hong Kong general population

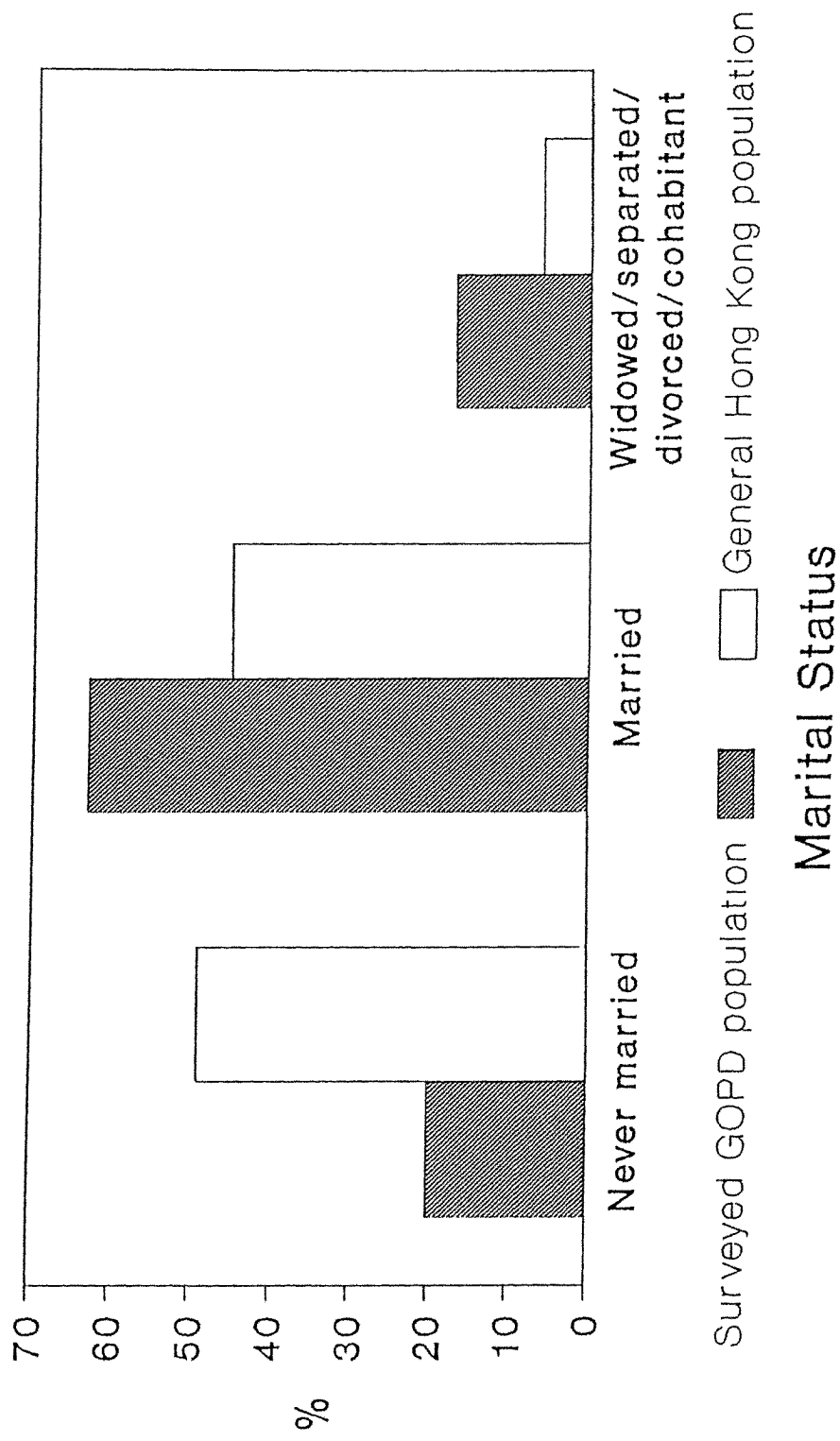


Figure 3.2: Education level of GOPD survey respondents (or their fathers) compared with H.K. general population

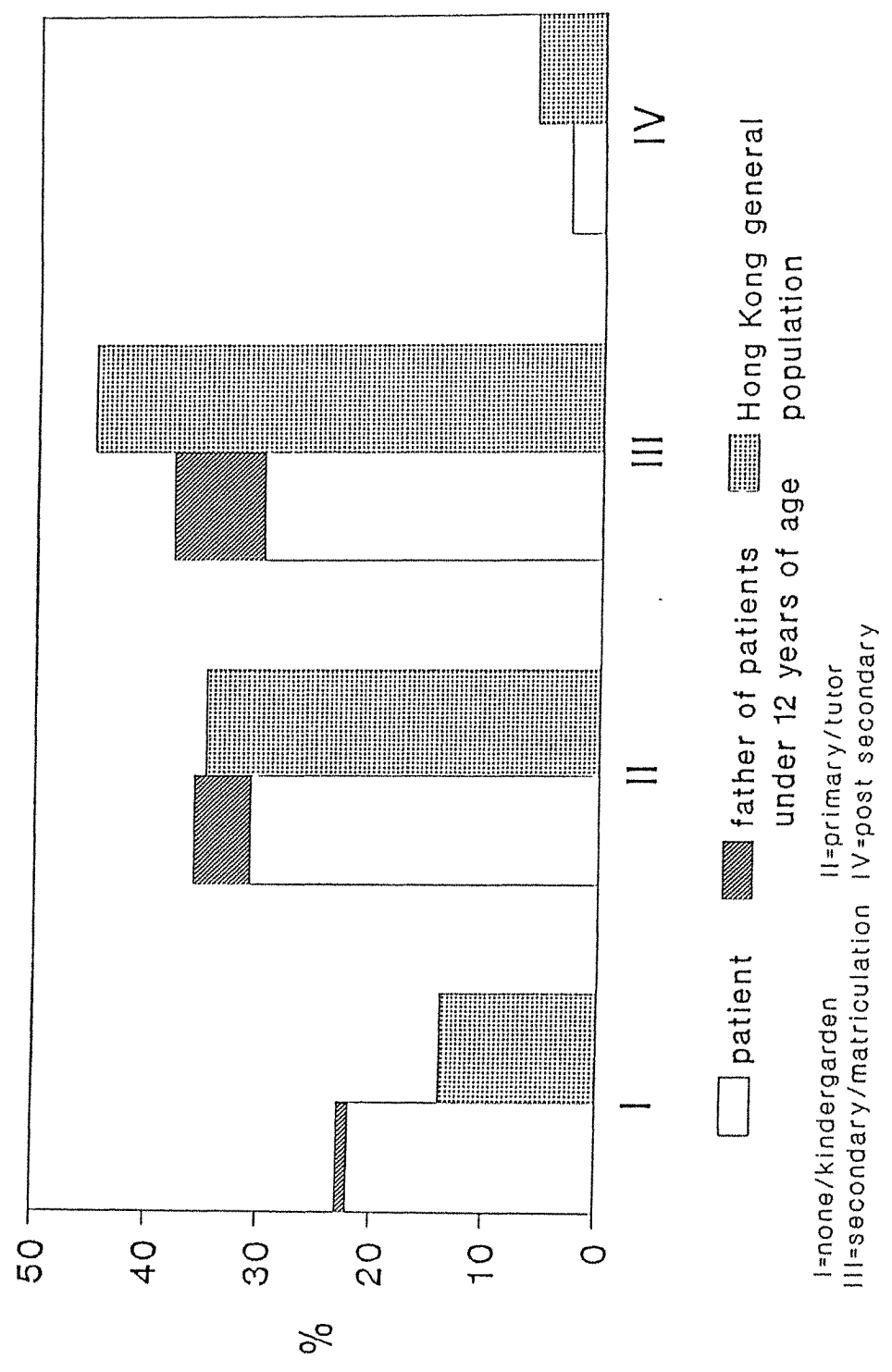


Figure 3.3: Type of employment of GOPD survey respondents

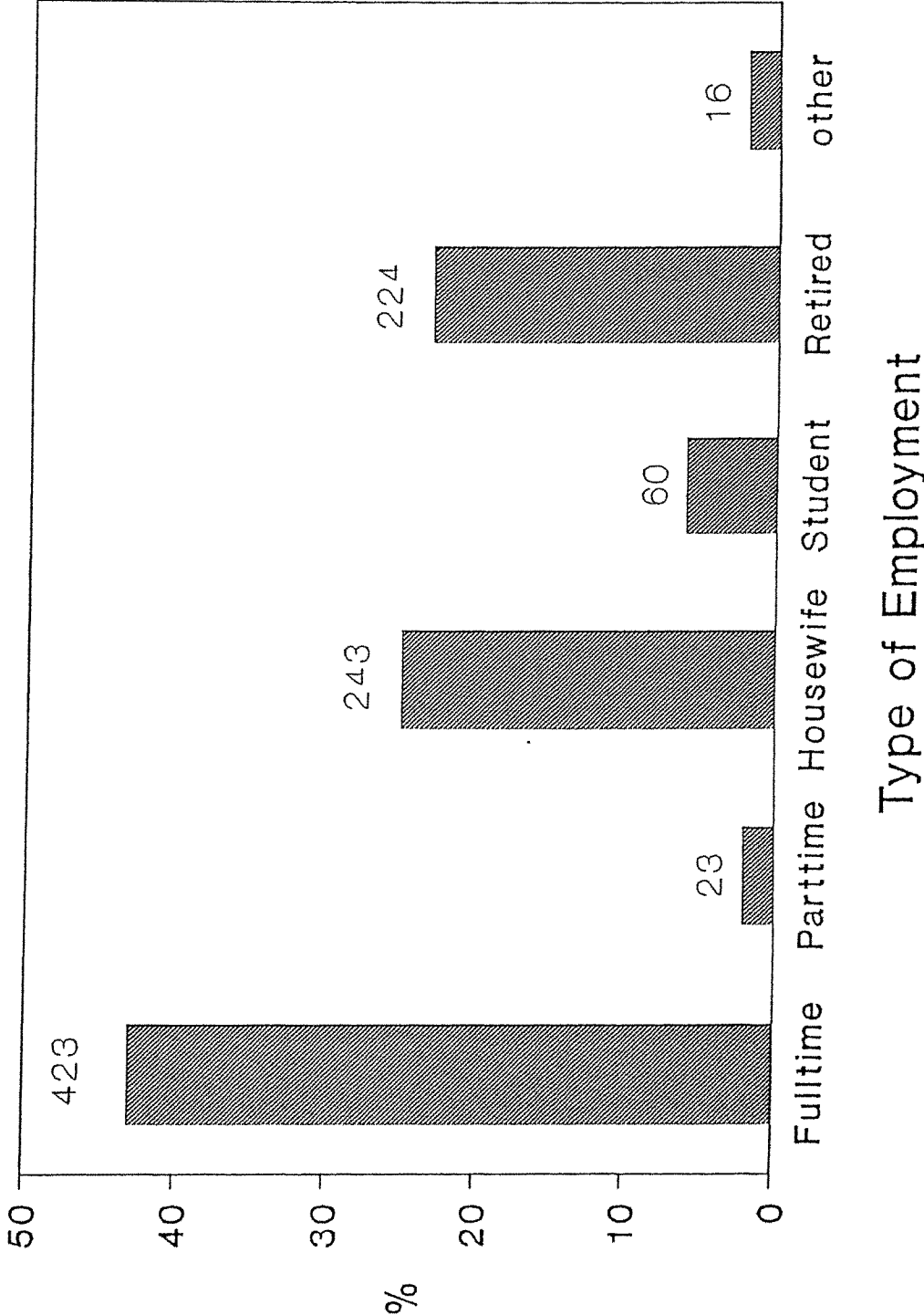


Table 4.1: Proportion and gender of GOPD attenders who smoke

Count Column %	Gender		Total
	Male	Female	
Non-smoker	193 (71%)	345 (94%)	538 (84%)
Smoker	80 (29%)	21 (5%)	101 (15%)
	273 (43%)	366 (57%)	639 (100%)

$\chi^2 = 63.50$
 $df = 1$
 $p = 0.0000$

Table 4.2: Proportions of smokers and non-smokers in different age groups

Count Column %	13-20	21-40	41-60	61-70	71+	total
Non-smoker	43 (90%)	134 (83%)	156 (84%)	114 (80%)	91 (89%)	538 (84%)
Smoker	5 (10%)	28 (17%)	29 (16%)	29 (20%)	11 (11%)	102 (16%)
	48 (8%)	162 (25%)	185 (29%)	143 (22%)	102 (16%)	640 (100%)

$\chi^2 = 5.35$
 $df = 4$
 $p = 0.2528$

Table 4.3: Proportions of smokers and non-smokers hospitalized or not hospitalized within the past year

Count Column %	Hospitalized ?		Total
	No	Yes	
Non smoker	480 (85%)	56 (81%)	536 (84%)
Smoker	86 (15%)	13 (19%)	99 (16%)
	566 (89%)	69 (11%)	635 (100%)

$\chi^2 = 0.38$
 $df = 1$
 $p = 0.5402$

Table 4.4: Range of health care expenditure of smokers and non-smokers

Count Column %	\$0	1-100	101-250	251-500	501-750	>750	Refused	Total
Non-Smoker	93 (85%)	276 (85%)	73 (84%)	42 (72%)	16 (94%)	29 (91%)	7 (78%)	536 (84%)
Smoker	16 (15%)	50 (15%)	14 (16%)	16 (28%)	1 (6%)	3 (9%)	2 (22%)	102 (16%)
	109 (17%)	326 (51%)	87 (14%)	58 (9%)	17 (3%)	32 (5%)	9 (1%)	638 (100%)

$X^2 = 8.65$
 $df = 6$
 $p = 0.1945$

Figure 4.1: Number of packs of cigarettes/day smoked by GOPD attenders

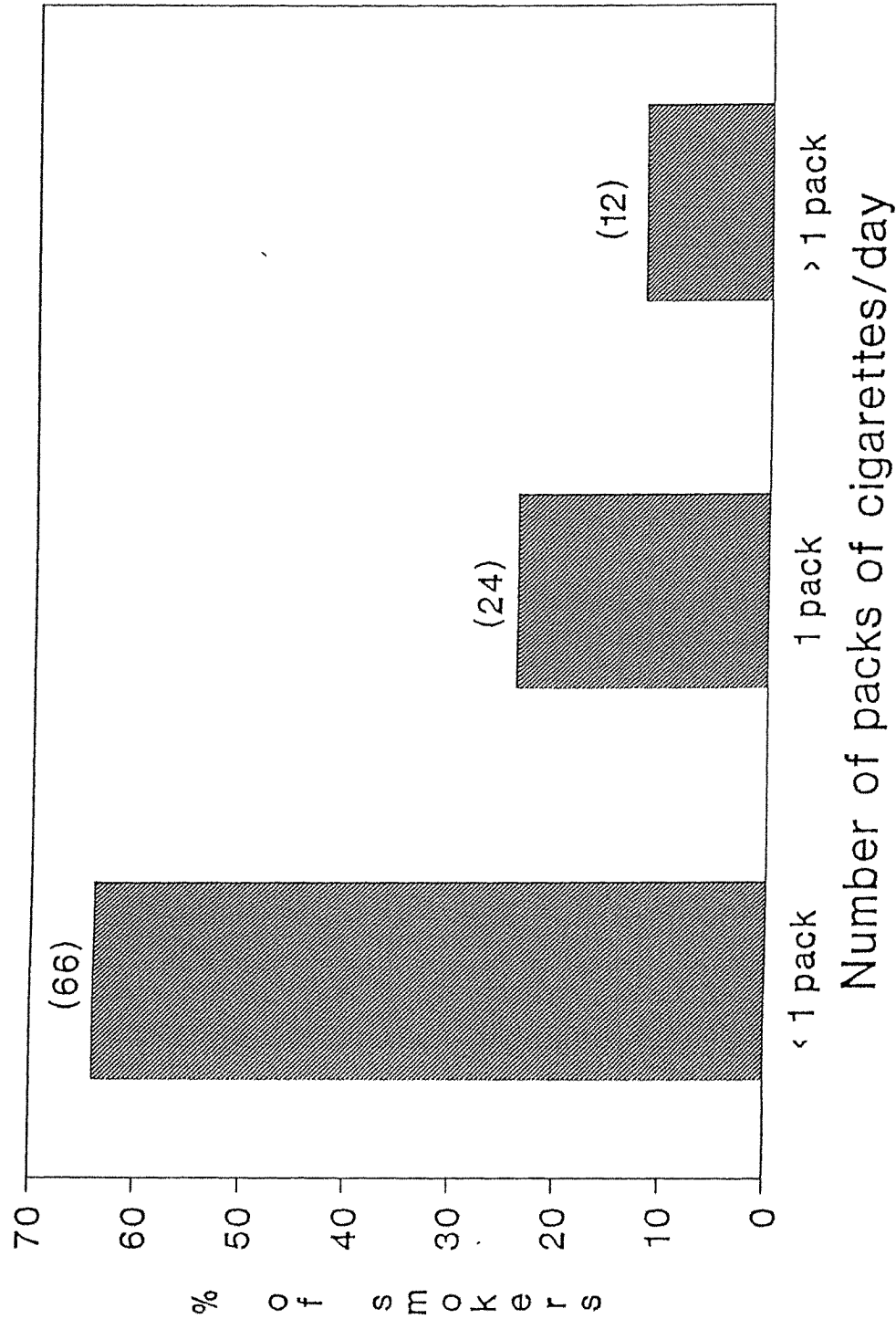


Table 5.1: Self-ratings of current condition

Rating	Frequency	%
Poor or very poor	185	21
Fair	532	61
Good	153	18
	870	100

Missing value = 1

Table 5.2: Self-ratings by different age-groups

Count Column %	Age in years						Total
	0 - 12	13 - 19	20 - 39	40 - 59	> 60		
Rating							
Poor or very poor	45 (20%)	11 (30%)	36 (22%)	49 (26%)	44 (17%)	185 (21%)	
Fair	151 (68%)	22 (60%)	116 (71%)	98 (52%)	145 (55%)	532 (61%)	
Good	25 (11%)	4 (11%)	11 (7%)	40 (21%)	73 (28%)	153 (18%)	
	221 (25%)	37 (4%)	163 (19%)	187 (22%)	262 (30%)	870 (100%)	

Table 5.3: Self-ratings by gender

Count Column %	Gender		Total
	Male	Female	
Rating			
Poor or very poor	82 (20%)	103 (22%)	185 (21%)
Fair	264 (66%)	268 (57%)	532 (61%)
good	57 (14%)	96 (21%)	153 (18%)
	403 (46%)	467 (54%)	870 (100%)

Missing value = 1
 $X^2 = 8.69$
 $df = 2$
 $P = 0.0214$

Table 5.4: Self-ratings and hospitalization

Count Column %	Hospitalized within past year?		Total
	No	Yes	
Rating			
Poor or very poor	152 (20%)	30 (29%)	182 (21%)
Fair	470 (62%)	57 (55%)	527 (61%)
good	133 (18%)	17 (16%)	150 (18%)
	755 (88%)	104 (12%)	859 (100%)

Missing values = 12
 $X^2 = 4.19$
 $df = 2$
 $P = 0.1233$

Table 5.5: Self-ratings and health care expenditures over the past 3 months

Count Column %	\$ 0-100	\$ 101-500	\$ >500	Total
Rating				
Poor or very poor	105 (18%)	56 (26%)	22 (34%)	183 (21%)
Fair	356 (62%)	135 (62%)	34 (53%)	525 (61%)
good	113 (20%)	27 (12%)	8 (13%)	148 (17%)
	574 (67%)	218 (25%)	64 (7%)	856 (100%)

Table 5.6: Self-ratings by illness profile

Count Column %	New Problem	Old Problem	Diabetes	Hypertension	Combination	Total
Rating						
Poor or very poor	108 (20%)	41 (39%)	6 (26%)	14 (9%)	16 (29%)	185 (21%)
Fair	367 (69%)	44 (42%)	12 (52%)	78 (50%)	31 (56%)	532 (61%)
good	57 (11%)	19 (18%)	5 (22%)	64 (41%)	8 (15%)	153 (18%)
	532 (61%)	104 (12%)	23 (3%)	156 (18%)	55 (6%)	870 (100%)

$\chi^2 = 107.9$
 $df = 8$
 $P = 0.0000$

Table 5.7: Number of consultations over the past 3 months by age-groups

Count Column %	Age in Years					Total
	0 - 12	13 - 19	20 - 39	40 - 59	> 60	
Number of consults						
0 - 2 consults	125 (59%)	31 (82%)	97 (60%)	81 (44%)	102 (39%)	463 (51%)
3 - 4 consults	59 (28%)	3 (8%)	42 (26%)	64 (34%)	114 (44%)	282 (33%)
5 or more	29 (14%)	4 (11%)	24 (15%)	41 (22%)	46 (18%)	144 (17%)
	213 (25%)	38 (4%)	163 (19%)	186 (22%)	262 (30%)	862 (100%)

$\chi^2 = 47.85$
 $df = 8$
 $P = 0.0000$

Table 5.8: Number of consultation during the past 3 months by gender

Count Column %	Gender		Total
	Male	Female	
Number of consults			
0 - 2	204 (51%)	232 (50%)	436 (51%)
3 - 4	137 (34%)	145 (31%)	282 (33%)
5 or more	59 (15%)	85 (18%)	144 (17%)
	400 (46%)	462 (54%)	862 (100%)

$\chi^2 = 2.27$
 $df = 2$
 $P = 0.3211$

Table 5.9: Number of consultations over the past 3 months by illness profile

Count Column %	New Problem	Old Problem	Diabetes	Hypertension	Combination	Total
Number of consults						
0 - 2	321 (61%)	39 (38%)	5 (22%)	53 (34%)	18 (33%)	436 (51%)
3 - 4	126 (24%)	40 (38%)	13 (57%)	80 (51%)	23 (43%)	282 (33%)
≥ 5	78 (15%)	25 (24%)	5 (22%)	23 (15%)	13 (24%)	144 (17%)
	525 (61%)	104 (12%)	23 (3%)	156 (18%)	54 (6%)	862 (100%)

$\chi^2 = 72.72$
 $df = 8$
 $P = 0.0000$

Table 5.10: Number of consultations over the past 3 months and hospitalization

Count Column %	Hospitalized over the past year?		Total
	No	Yes	
Number of consults			
0 - 2	396 (53%)	33 (32%)	429 (50%)
3 - 4	238 (32%)	43 (42%)	281 (33%)
≥ 5	116 (15%)	27 (26%)	143 (17%)
	750 (88%)	103 (12%)	853 (100%)

Missing values = 18
 $\chi^2 = 16.76$
df = 2
P = 0.0002

Table 5.11: Hospitalization by age-groups

Count Column %	Age in Years					Total
	0 - 12	13 - 19	20 - 39	40 - 59	> 60	
Hospitalised?						
No	181 (84%)	37 (97%)	150 (94%)	161 (86%)	228 (87%)	757 (88%)
Yes	34 (16%)	1 (3%)	10 (6%)	26 (14%)	34 (13%)	105 (12%)
	215 (25%)	38 (4%)	160 (19%)	187 (22%)	262 (30%)	862 (100%)

Missing values = 9
 $\chi^2 = 11.83$
 $df = 4$
 $P = 0.0187$

Table 5.12: Hospitalization by Gender

Count Column %	Gender		Total
	Male	Female	
Hospitalised?			
No	348 (86%)	409 (89%)	757 (88%)
Yes	55 (14%)	50 (11%)	105 (12%)
	403 (47%)	459 (53%)	862 (100%)

$$\chi^2 = 1.28$$

$$df = 1$$

$$p = 0.2588 \text{ (after Yates correction)}$$

Table 5.13: Hospitalization by illness profile

Count Column %	New Problem	Old Problem	Diabetes	Hypertension	Combination	Total
Hospitalised?						
No	467 (89%)	82 (85%)	17 (74%)	134 (86%)	52 (95%)	757 (88%)
Yes	58 (11%)	16 (16%)	6 (26%)	22 (14%)	3 (6%)	105 (12%)
	525 (61%)	103 (12%)	23 (3%)	156 (18%)	55 (6%)	862 (100%)

$\chi^2 = 9.18$
 $df = 4$
 $P = 0.0568$

Table 5.14: Persons accompanying patients to GOPD

Person	Frequency	%
Mother	18	17
Daughter	17	17
Son	10	10
Relatives	14	14
Friends	10	10
Others	2	2
Spouse	32	31

Table 5.15: Proportion and gender of GOPD survey respondents with impaired vision, hearing or lack of teeth

	%	% female
Impaired Vision with/without Glasses	12	72
Impaired Hearing with/without Aids	9	53
No Natural Teeth with/without Dentures	11	65

Data not controlled for age

Table 5.16: Proportion of GOPD survey respondents in different age-groups with impaired or unimpaired vision

Count Column %	Age in years				Total
	11 - 20	21 - 40	41 - 60	61+	
Vision impaired?					
No	47 (98%)	155 (95%)	173 (89%)	197 (80%)	572 (88%)
Yes	1 (2%)	9 (5%)	21 (11%)	50 (20%)	81 (12%)
	48 (7%)	164 (25%)	194 (30%)	247 (38%)	653 (100%)

$\chi^2 = 28.45$
 $df = 3$
 $P = 0.0000$

Table 5.17: Proportion of GOPD survey respondents in different age-groups with impaired or unimpaired hearing

Count Column %	Age in years				Total
	11 - 20	21 - 40	41 - 60	61+	
Hearing impaired?					
No	47 (98%)	158 (96%)	183 (94%)	207 (84%)	595 (91%)
Yes	1 (2%)	6 (4%)	11 (6%)	40 (16%)	58 (9%)
	48 (7%)	164 (25%)	194 (30%)	247 (38%)	653 (100%)

$\chi^2 = 27.06$
 $df = 3$
 $P = 0.0000$

Table 5.18: Proportion of GOPD survey respondents with natural teeth, dentures or no teeth

Count Column %	Age in years				Total
	11 - 20	21 - 40	41 - 60	61+	
Status of definition					
All own teeth	47 (98%)	130 (80%)	110 (56%)	88 (36%)	375 (57%)
Partial dentures	1 (2%)	34 (20%)	72 (37%)	100 (40%)	207 (32%)
Full dentures	0 (0%)	0 (0%)	12 (6%)	50 (20%)	62 (9%)
No teeth	0 (0%)	0 (0%)	0 (0%)	9 (4%)	9 (1%)
	48 (7%)	164 (25%)	194 (30%)	247 (38%)	653 (100%)

$X^2 = 142.31$
 $df = 9$
 $P = 0.0000$

Table 5.19: Gender of patients with all natural teeth, dentures or no teeth

Count Column %	Gender		Total
	Male	Female	
Status of definition			
All own teeth	181 (64%)	194 (52%)	375 (57%)
Partial dentures	75 (27%)	132 (35%)	207 (32%)
Full dentures	21 (7%)	41 (11%)	62 (9%)
No teeth	4 (1%)	5 (1%)	9 (1%)
	281 (43%)	372 (57%)	653 (100%)

$\chi^2 = 10.23$
 $df = 3$
 $P = 0.0167$

Figure 5.1: Number of consultations over the past 3 months (n=862)

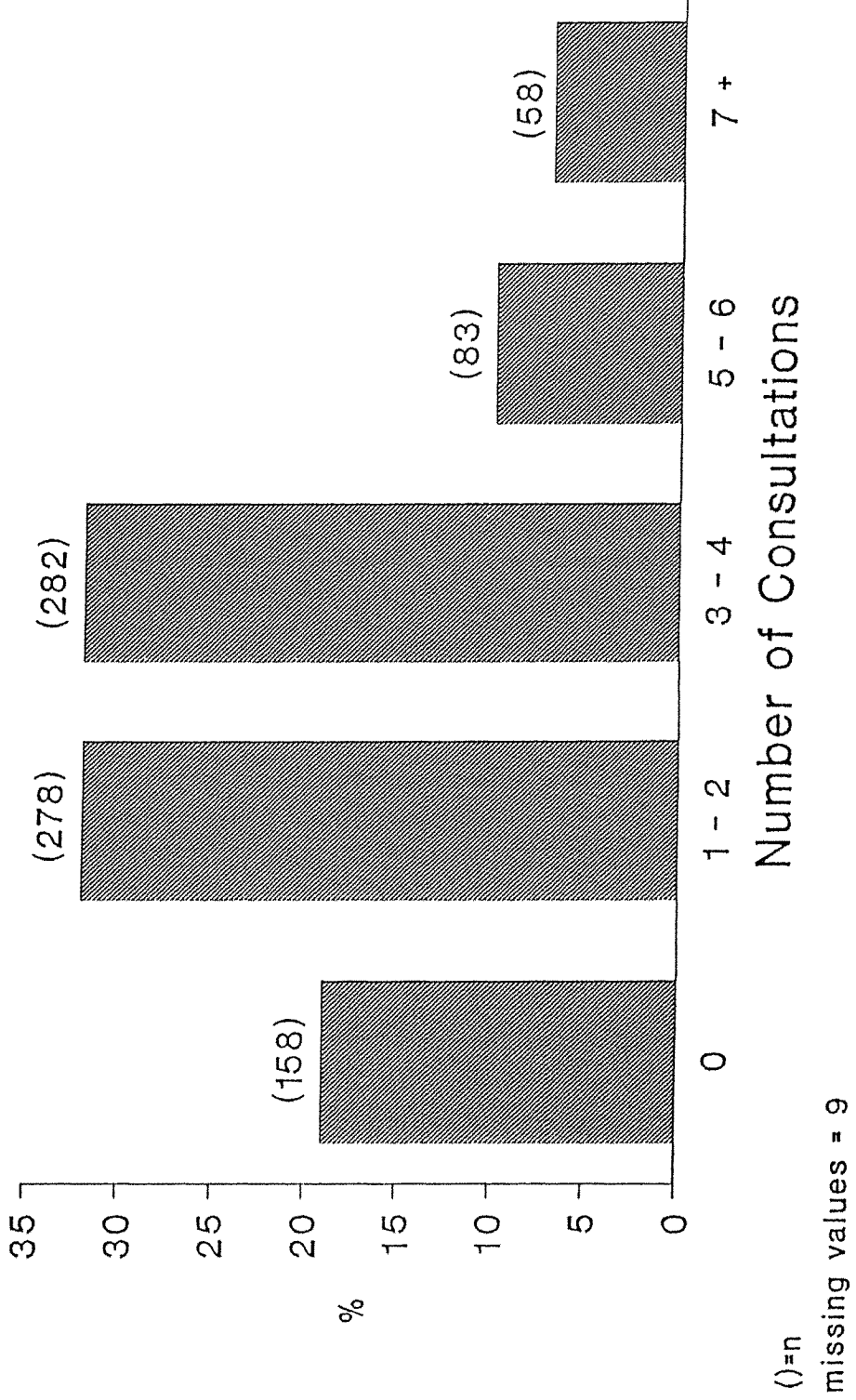


Figure 5.2: Where GOPD survey respondents were hospitalized over the past year

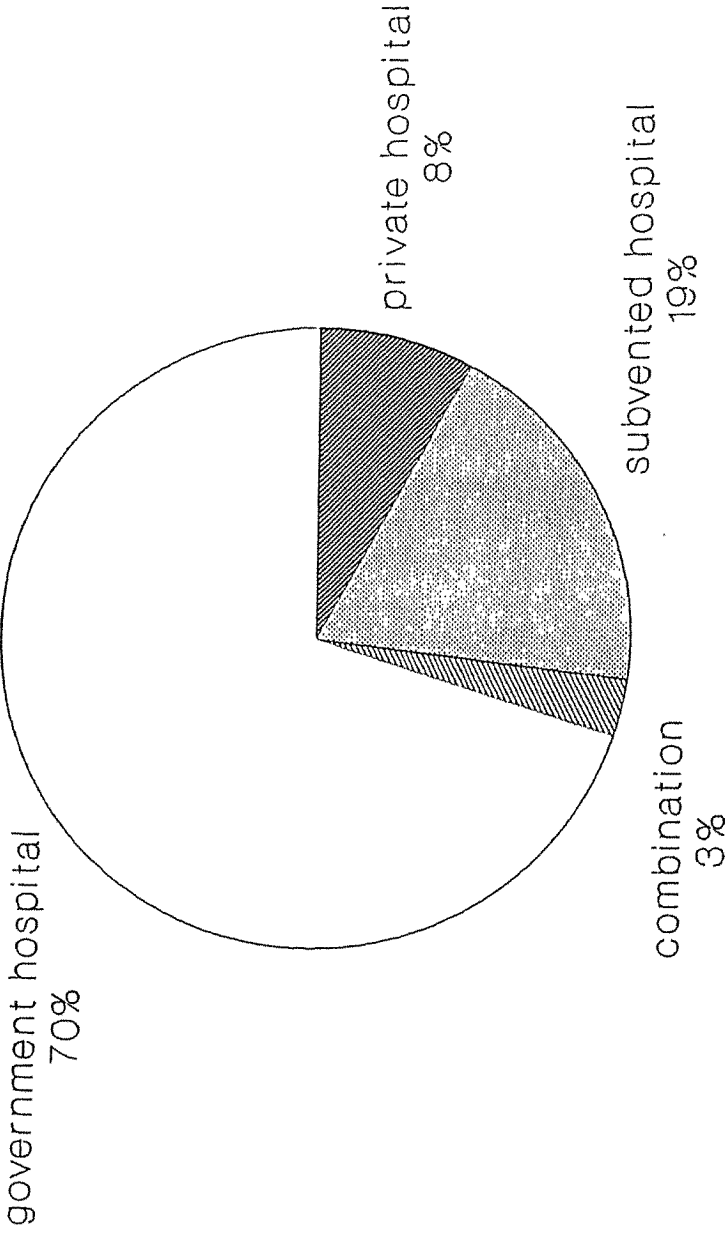


Figure 5.3: Percentage of patients in different age groups accompanied to GOPD

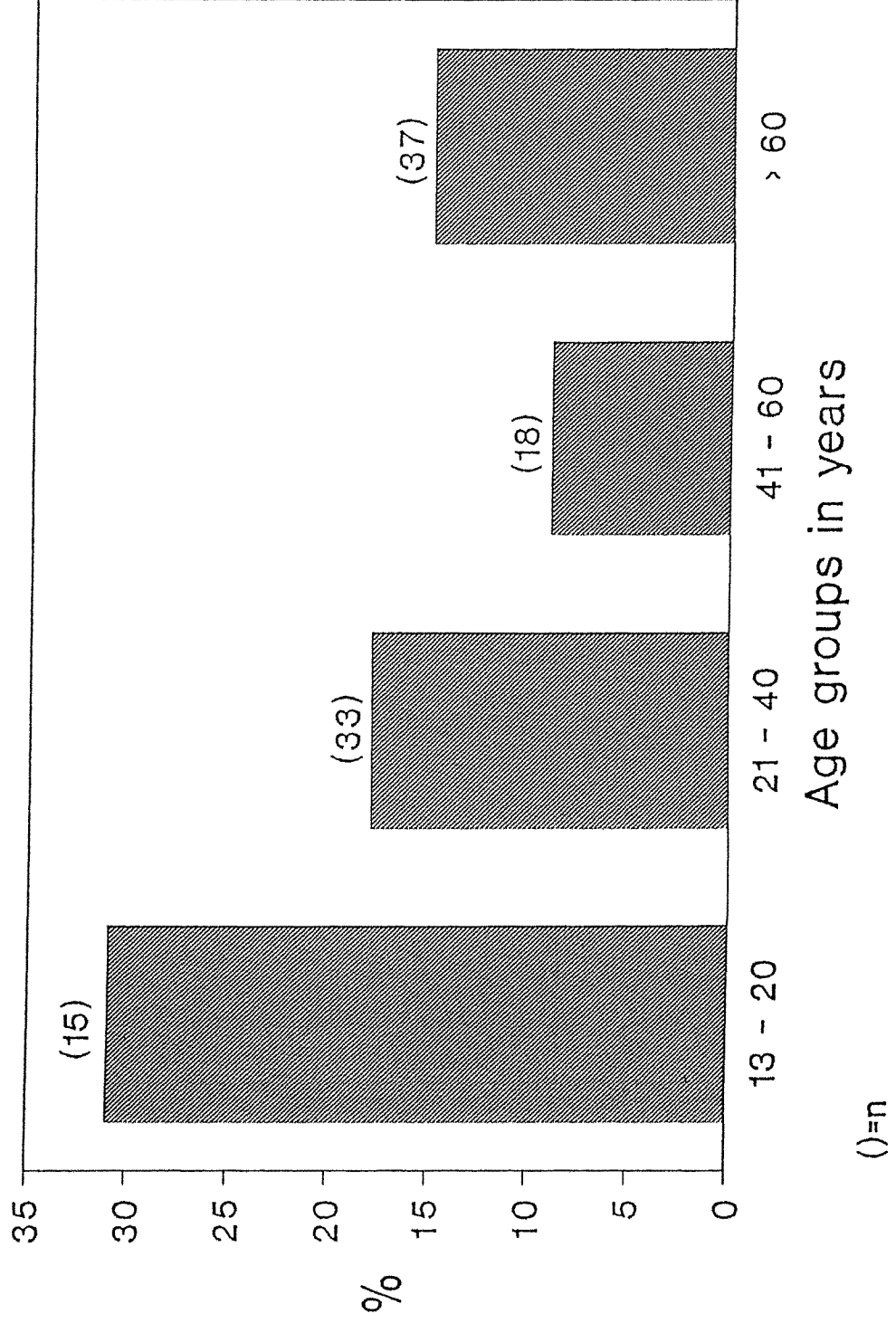


Table 6.1: Self-medication without seeking professional advice

Self-medication	N	%
Never	477	55
<50% of the time when unwell	294	34
>50% of the time when unwell	68	8
Every time when unwell	31	3
Total	870	100

Table 6.2: Types of self-medication

What self-medication?	N	%
Western medication	274	70
Chinese medication	74	19
Both	43	11
Total	391	100

Table 6.3: Relationship between self-medication and age, controlling for education (secondary or above)

Count Column %	Age		Total
	20-39	Other age Groups	
Self-medicate?			
No	40 (30%)	117 (52%)	157 (44%)
Yes	91 (70%)	108 (48%)	199 (56%)
Total	131 (37%)	225 (63%)	356 (100%)

$\chi^2=15.48$
 d.f.=1
 p=.0001

Table 6.4: Belief in hot/cold distinction

Belief in hot/cold	N	%
Not at all	51	8
Fairly strongly	81	13
Strongly	211	32
Very strongly	288	44
Not heard of it	20	3
Total	651	100

Table 6.5: Effects of the belief* in hot/cold on diet

Hot/cold affecting diet	N	%
Not at all	182	31
Fairly strongly	149	26
Strongly	168	29
Very strongly	81	14
Total	580	100

* of patients whose belief in hot/cold was either fairly strong, strong or very strong

Table 6.6: Practice of diet restriction without seeking professional medical advice

Practice of diet restriction	N	%
Never	415	64
<50% of the time when unwell	121	19
>50% of the time when unwell	45	7
Every time when unwell	64	10
Total	645	100

Table 6.7: Practice of diet restriction together with prescribed medication

Diet restriction with prescribed medication	N	%
Never	229	35
<50% of the time when unwell	108	17
>50% of the time when unwell	94	15
Every time when unwell	214	33
Total	645	100

Table 6.8: Discussion with doctor about diet restriction

Diet restriction discussed?	N	%
No	260	64
Yes	156	36
Total	416	100

Table 6.9: The use of special foods and tonics

Taking of tonics	N	%
None	468	76
Less than once / month	32	5
Once to twice / month	31	5
2-4 times / month	24	4
4-15 times / month	23	4
More than 15 times / month	35	6
Total	613	100

Table 6.10: Doctor-shopping

Doctor-shopping	N	%
Never	514	59
<50% of the time	312	36
>50% of the time	37	4
Every time	6	1
Total	869	100

Table 6.11: Previous consultations with private doctors

Consulted private doctors?	N	%
No	112	17
Yes	536	83
Total	648	100

Table 6.12: Relationship between consultations with private doctors and doctor-shopping

Count Column %	Consulted private doctors?		Total
	No	Yes	
Doctor-shop?			
No	42 (98%)	154 (57%)	196 (63%)
Yes	1 (2%)	115 (43%)	116 (37%)
Total	43 (14%)	269 (86%)	312 (100%)

$\chi^2=25.94$
 d.f.=1
 p=.0000

Table 6.13: Previous consultations with both western and chinese medical practitioners

Consulted western and chinese doctors	N	%
Never	682	78
<50% of the time when unwell	175	21
>50% of the time when unwell	12	1
Total	869	100

Table 6.14: Relationship between consulting both western and chinese medical practitioners and doctor-shopping

Count Column %	Consulted both western and chinese doctors?		Total
	No	Yes	
Doctor-shop?			
No	492 (60%)	22 (41%)	514 (59%)
Yes	323 (40%)	31 (59%)	354 (41%)
Total	815 (94%)	53 (6%)	868 (100%)

$\chi^2=7.33$
d.f.=1
p=.0068

Table 6.15: Relationship between doctor-shopping and age

Count Column %	Age		Total
	0-39	40+	
Doctor-shop?			
No	216 (48%)	298 (70%)	514 (59%)
Yes	230 (52%)	125 (30%)	355 (41%)
Total	446 (51%)	423 (49%)	869 (100%)

$\chi^2=43.56$
d.f.=1
p=.0000

Table 6.16: Relationship between doctor-shopping and education

Count Column %	Educational level			Total
	Primary or below	Secondary & matric.	Post- secondary	
Doctor-shop?				
No	291 (65%)	170 (51%)	19 (73%)	480 (60%)
Yes	160 (35%)	160 (49%)	7 (27%)	327 (40%)
Total	451 (56%)	330 (41%)	26 (3%)	807 (100%)

$\chi^2 =15.44$
d.f.=2
p=.0004

Table 6.17: Results of logistic regression analysis on the relationship between doctor-shopping* and some determining factors

Determining factors	Odds ratio (p<0.05)
Age (1=60+, 0=others)	0.38 (0.17,0.81)
Illness profile (1=DM/HT patients, 0=others)	0.44 (0.28,0.70)
Site of majority of health care (1=GOPD, 0=other sites)	0.43 (0.28,0.67)

* (0=never shopped)

The odds ratios of these variables are adjusted for age, sex, monthly domestic income and marital status.

Table 6.18: Belief in predestined medical affinity

Belief	N	%
Not at all	115	18
Fairly strongly	100	15
Strongly	168	26
Very strongly	156	24
Never heard of it	113	17
Total	652	100

Table 6.19: Frequencies of making requests for a specific doctor in GOPD clinics

Making requests?	N	%
Never	550	66
<50% of the time	63	8
>50% of the time	38	5
Every time	180	21
Total	831	100

Table 6.20: Relationship between belief in predestined medical affinity and the frequency of making requests for specific doctors in GOPD clinics

Count Column %	Making requests?		Total
	No	Yes	
Belief in affinity			
Very strongly/ Strongly	149 (42%)	51 (33%)	200 (39%)
Fairly strongly/ Not at all	207 (58%)	105 (67%)	312 (61%)
Total	356 (70%)	156 (30%)	512 (100%)

$\chi^2=3.82$
d.f.=1
p=.0505

Table 6.21: Relationship between making requests and gender

Count Column %	Sex		Total
	Male	Female	
Making requests?			
No	258 (70%)	292 (63%)	550 (66%)
Yes	111 (30%)	170 (37%)	281 (34%)
Total	369 (44%)	462 (56%)	831 (100%)

$\chi^2=4.13$
d.f.=1
p=.0420

Table 6.22: Relationship between making requests and education

Count Column %	Educational level		Total
	Primary or below	Secondary or above	
Making requests?			
No	273 (64%)	243 (71%)	516 (67%)
Yes	152 (36%)	101 (29%)	253 (33%)
Total	425 (55%)	344 (45%)	769 (100%)

$\chi^2=3.53$
d.f.=1
p=.0602

Table 6.23: Relationship between patients making requests and previous clinic attendance

Count Column %	Been to any GOPD?		Total
	No	Yes	
Making requests?			
No	30 (91%)	520 (35%)	550 (66%)
Yes	3 (9%)	278 (35%)	281 (34%)
Total	33 (4%)	798 (96%)	831 (100%)

$\chi^2=9.39$
d.f.=1
p=.0022

Figure 6.1: Reasons for self-medication

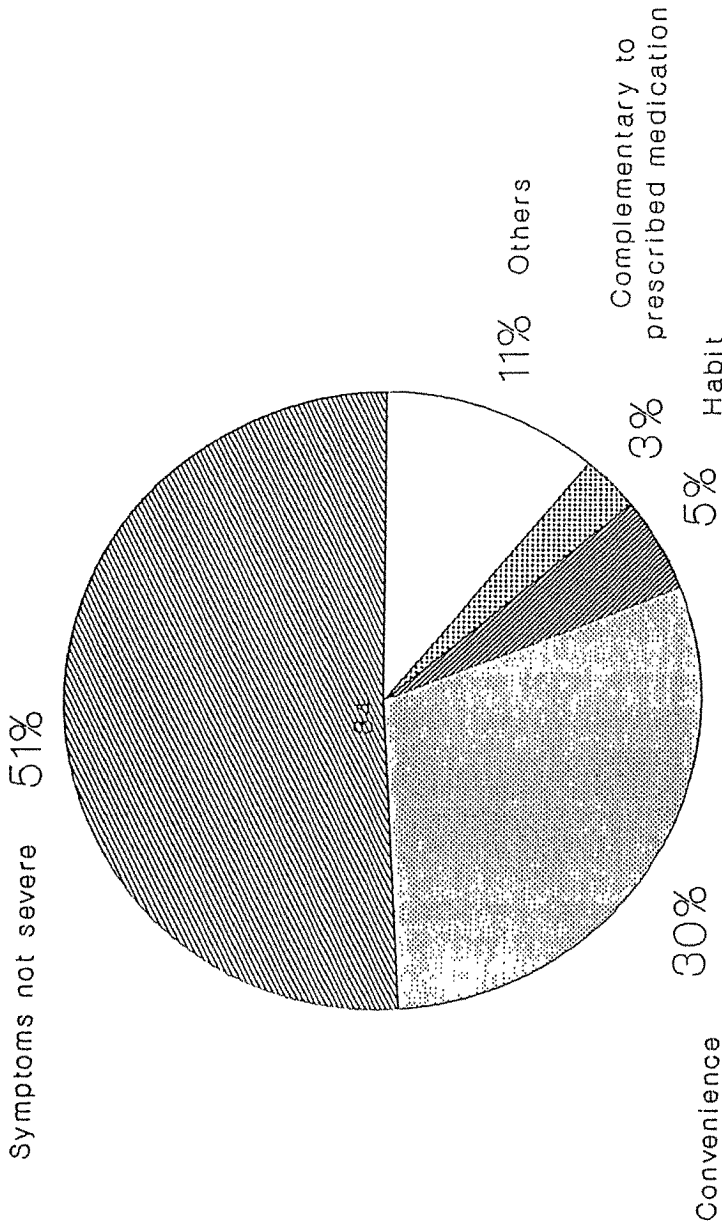


Figure 6.2: Factors influencing practice of self-medication

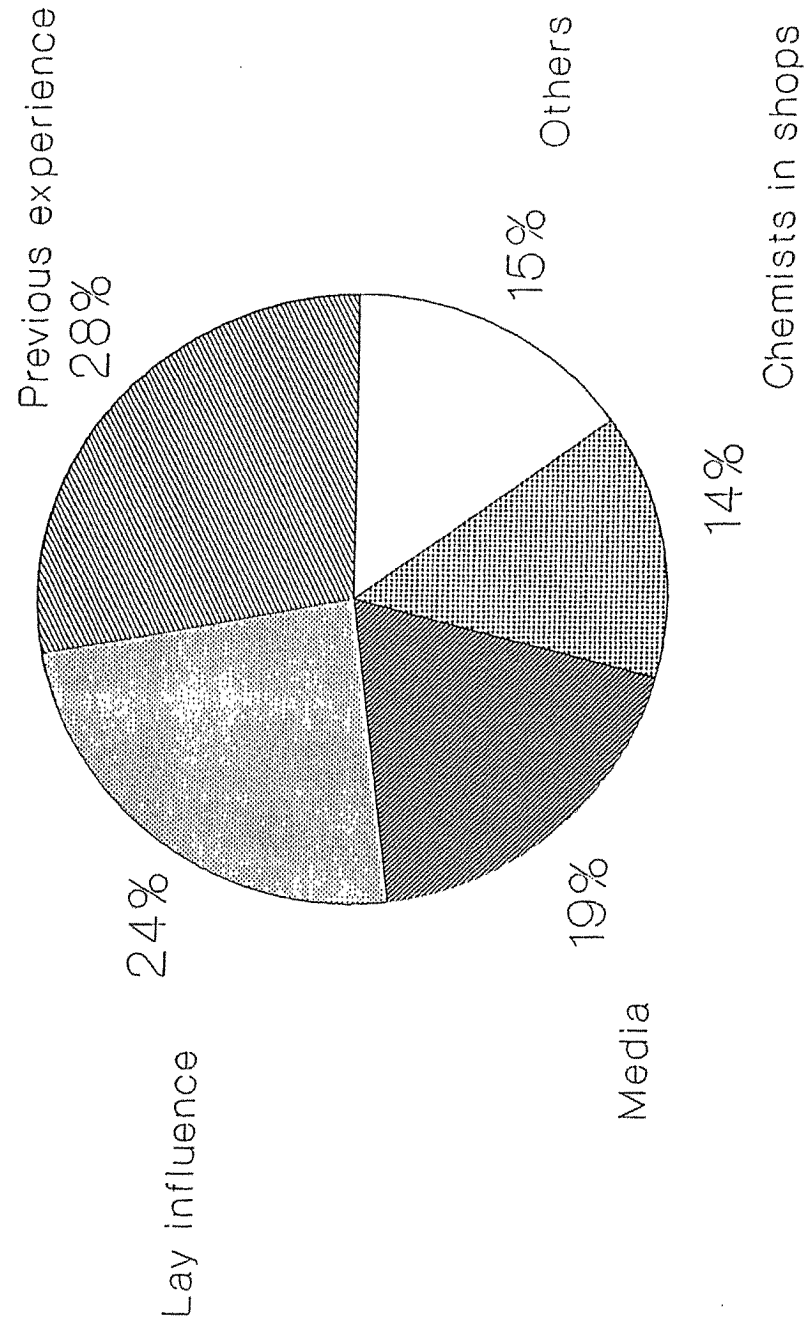


Figure 6.3: Reasons for not discussing diet restriction with doctor

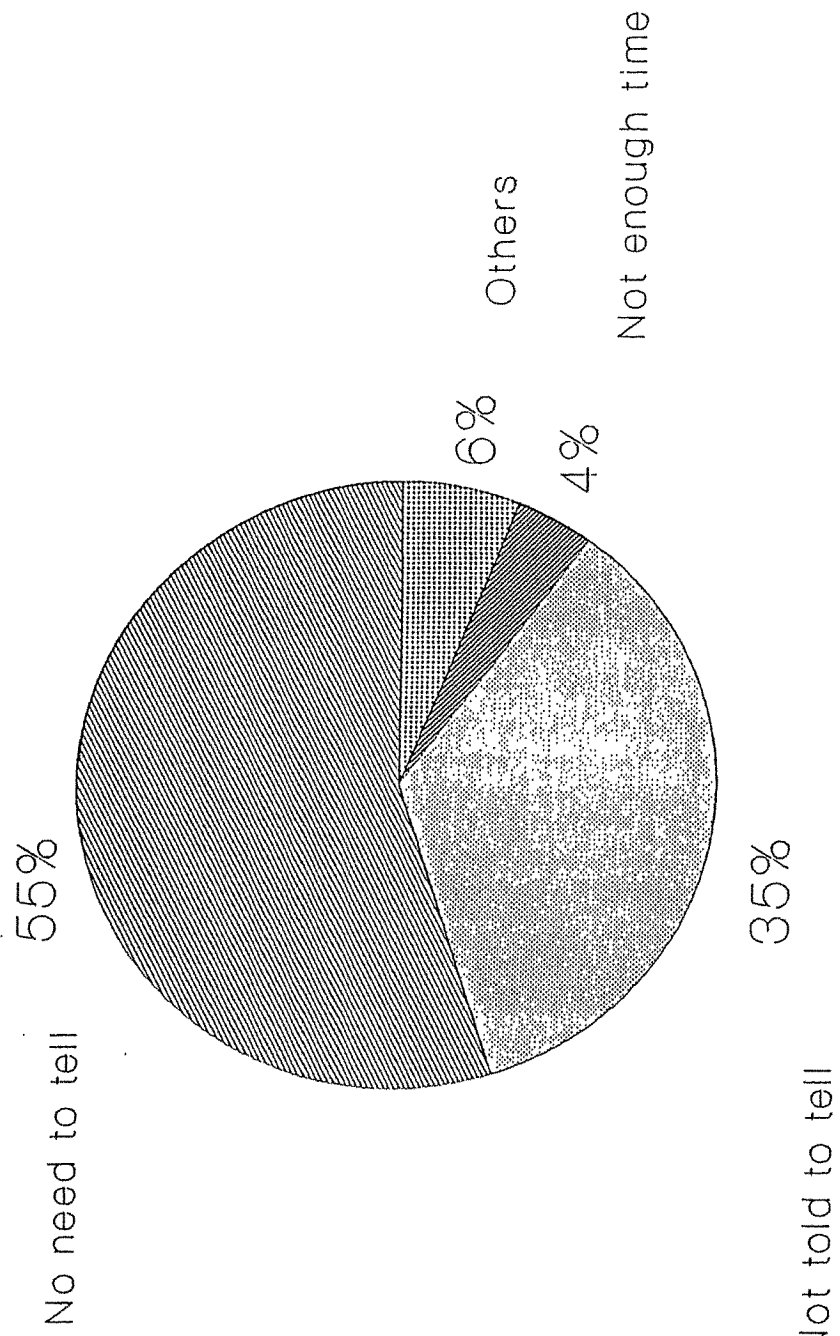


Figure 6.4: Choice of doctors in doctor-shopping

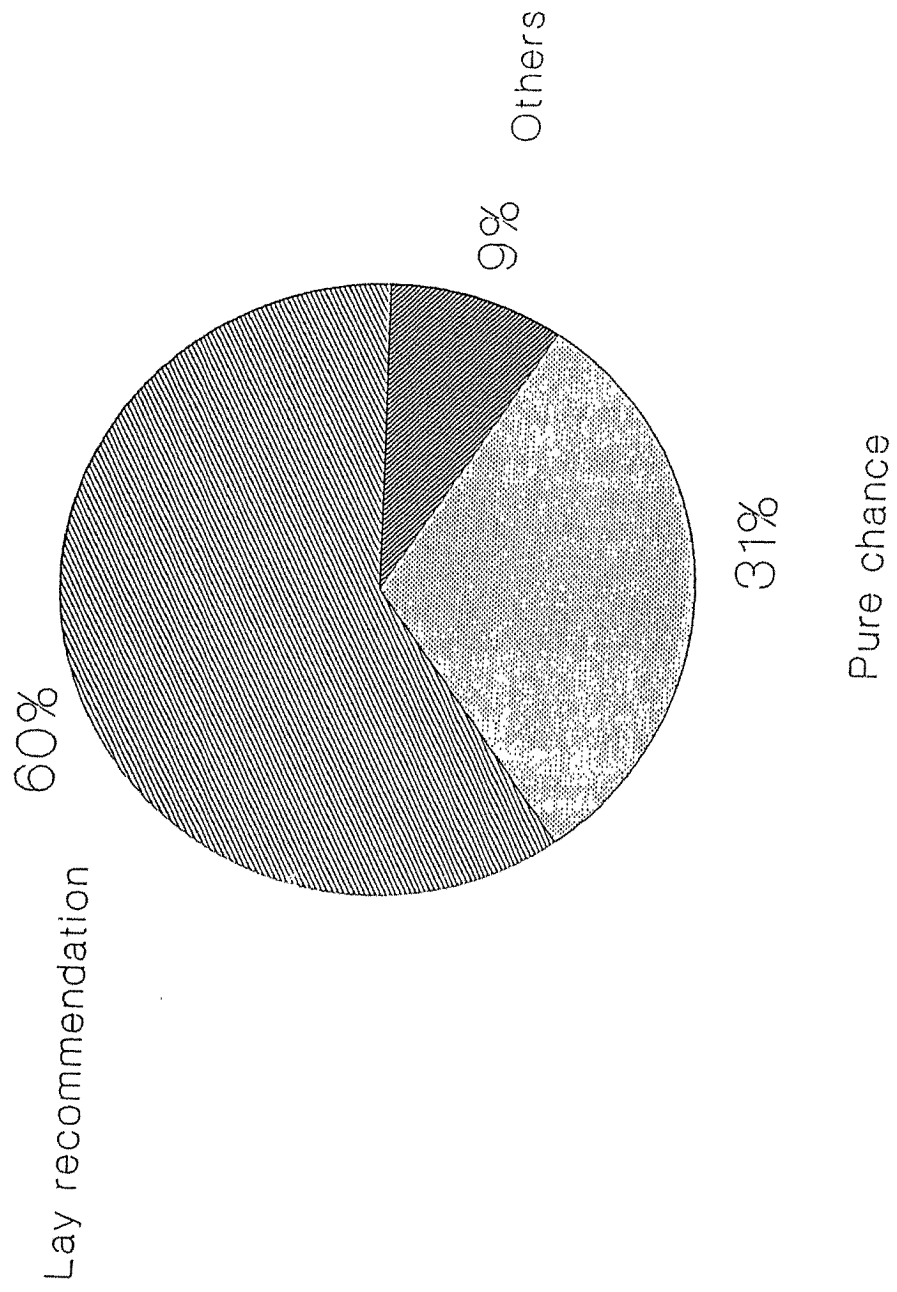


Figure 6.5: Reasons for doctor-shopping

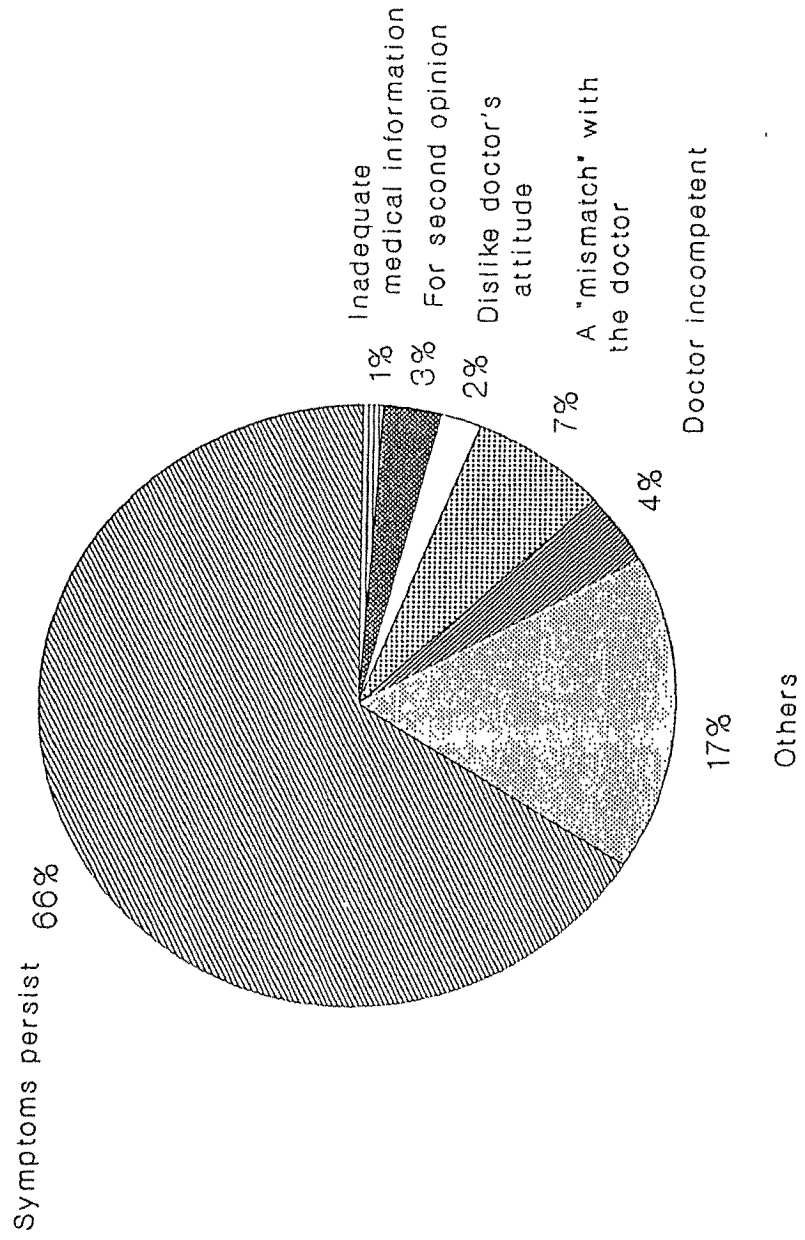
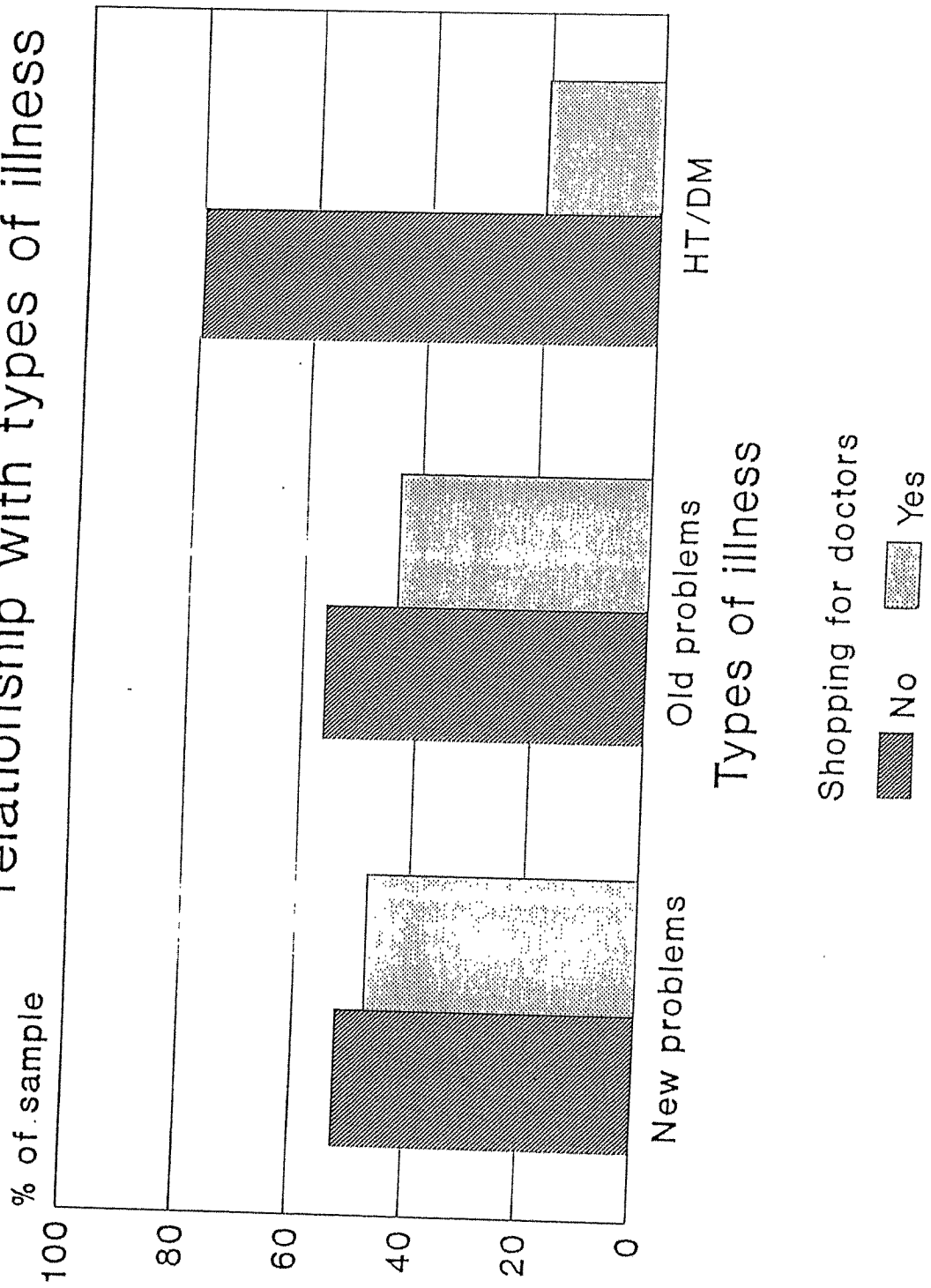
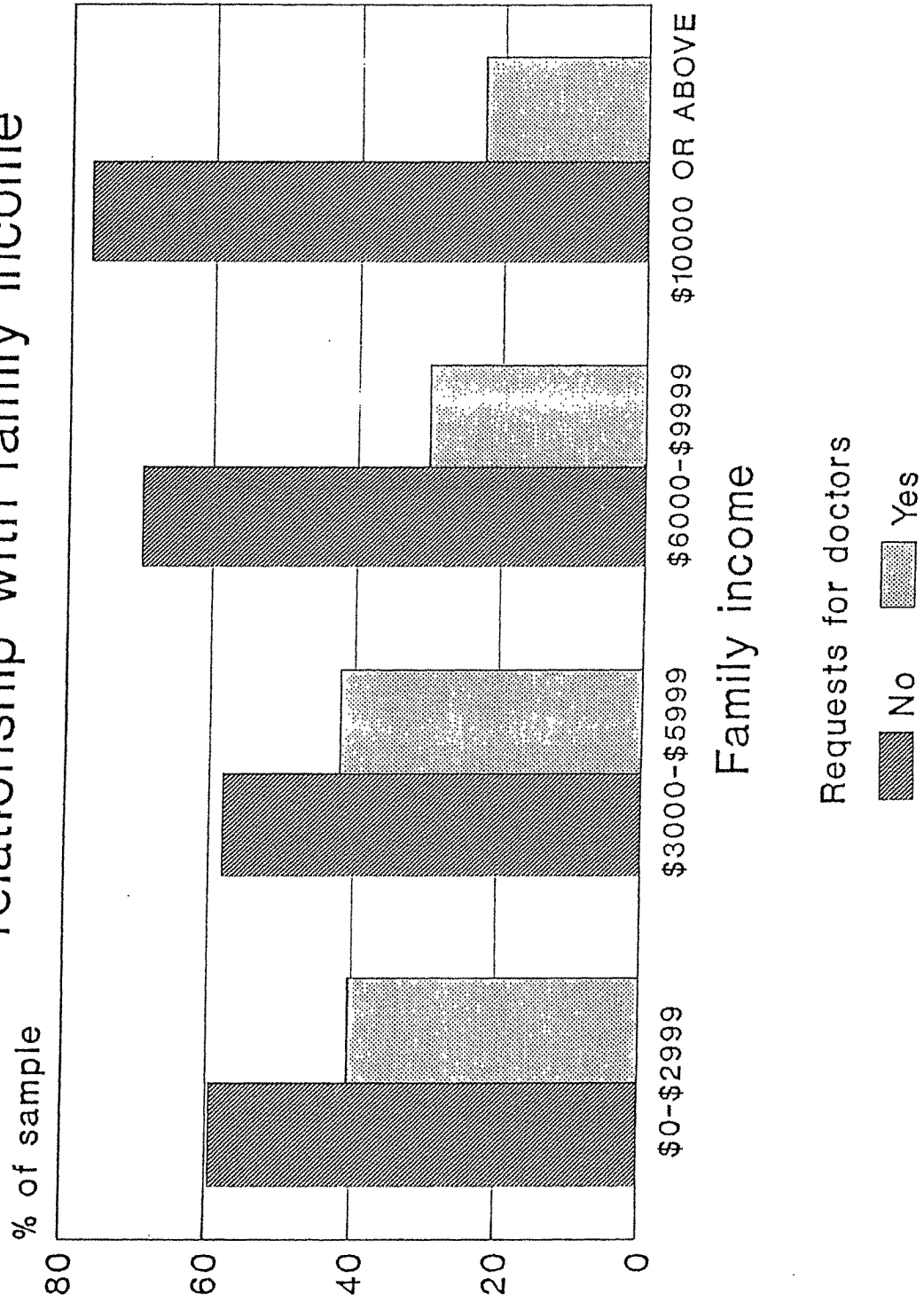


Figure 6.6: Doctor-shopping: relationship with types of illness



Missing Pages

Figure 6.8: Requests for specific doctor : relationship with family income



GOPD Statistics, 1989

	a) Cases seen by doctors	b) # GOPD consulting rooms available	c) # GOPD doctors available/session	Clinics with facilities	
				d) X-ray facilities	e) Laboratory facilities
<u>Day Clinics:</u>					
Sai Ying Pun Jockey Club Polyclinic	128799	8	8		
Violet Peel Health Centre	97561	6 (2 for UMU)	6 (2 from HKU doctors)		X
Ngau Tau Kok Jockey Club Clinic	73651	6*	3*		
Sham Shui Po Public Dispensary	26689	1*	1*		
North Kwai Chung Clinic	63814	3	3		
Shatin Clinic	73316	3	3		
Lady Trench Polyclinic	104227	5	5		
St. John Hospital	46203	2	2	X	
<u>Evening Clinics:</u>					
Kwun Tong Jockey Club Health Centre	68924	4*	4*		
Yau Ma Tei Jockey Club Clinic	58944	5*	5*		
Lek Yuen Health Centre	36819	2	2		X
<u>Sunday/Public Holiday Clinics:</u>					
Lady Trench Polyclinic	18663	4	3		
Violet Peel Health Centre	11885	3	3		
Robert Black Health Centre	12488	3*	3*		

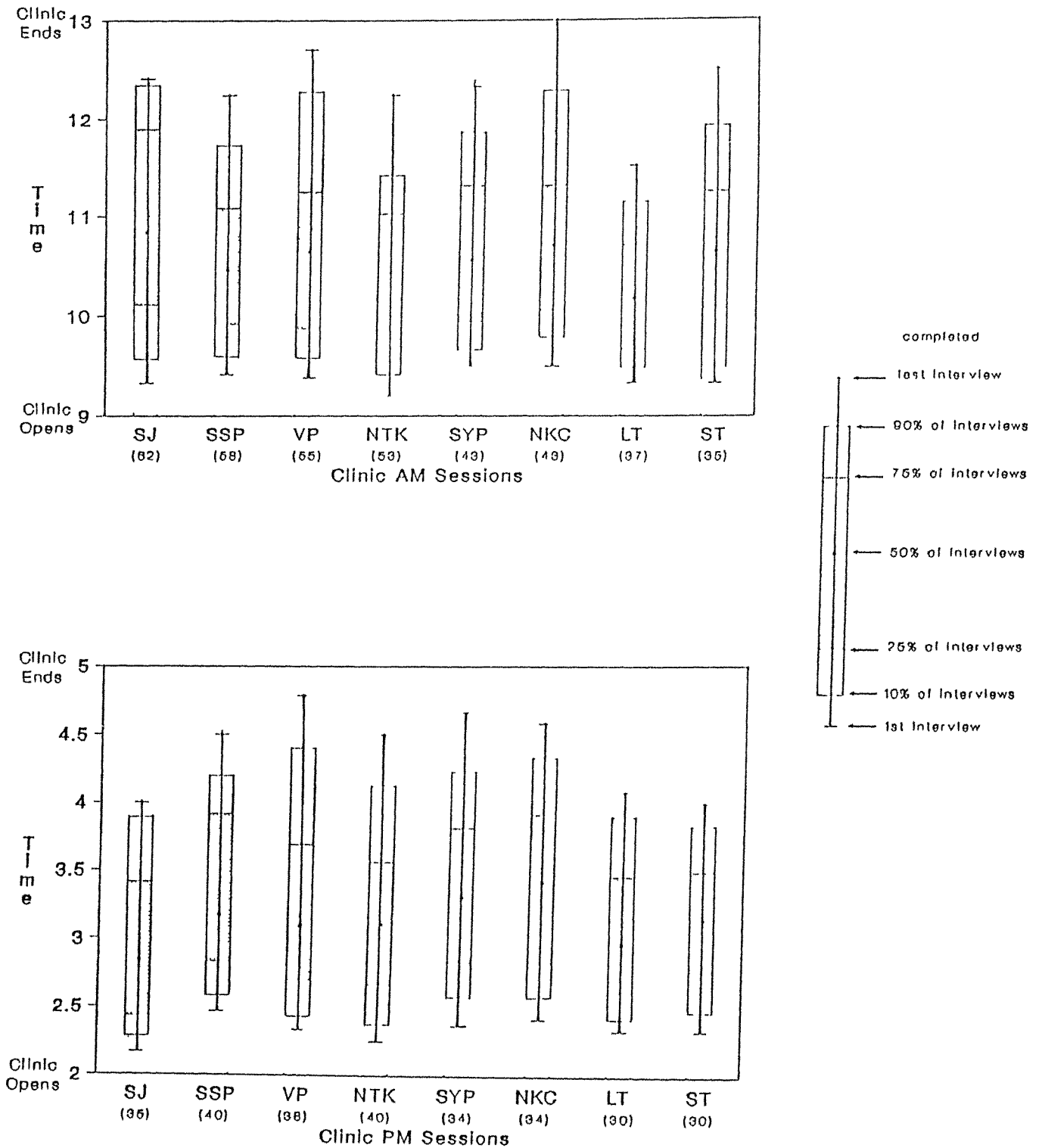
Figures are based on clinic returns in January 1990.

*Figures are based on the return in January 1989.

Table 7.2: Clinic Work-loads

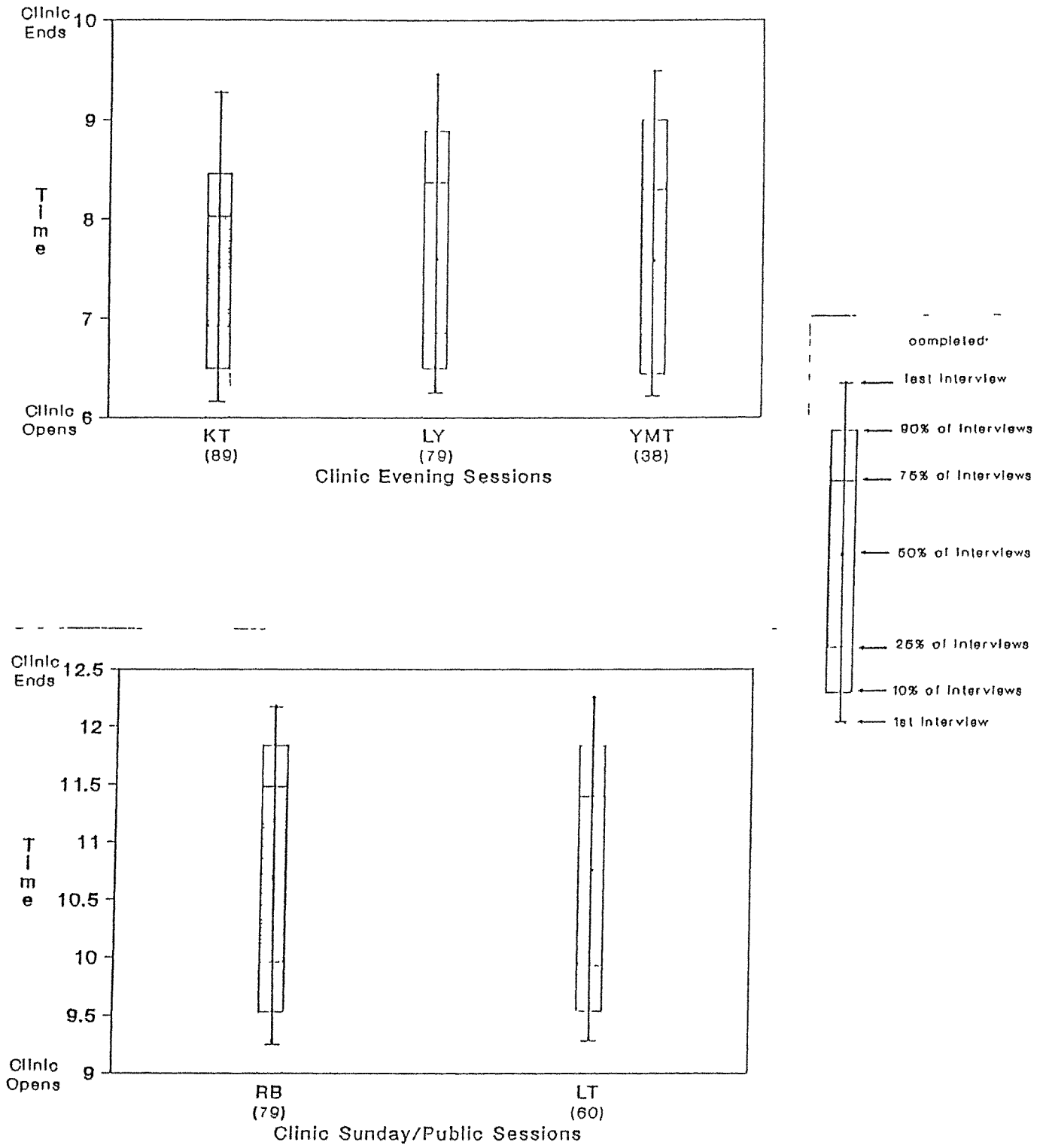
	(a) Room session	(b) Total # pts seen in clinic	(c) Total # pts in sampled vm	(d) Work-load index (c)/(a)
<u>AM clinics</u>				
VP	15	825	825	55
SYP	16	918	680	43
NTK	15	800	800	53
LT	16	823	584	37
NKC	9	391	391	43
ST	14	566	487	35
SSP	2	116	116	58
SJ	6	374	374	62
<u>PM clinics</u>				
VP	12	451	451	38
SYP	15	616	503	34
NTK	12	474	474	40
LT	16	665	482	30
NKC	8	272	272	34
ST	13	408	386	30
SSP	1	40	40	40
SJ	6	210	210	35
<u>Evening</u>				
YMT	20	1187	767	38
LY	6	476	476	79
KT	8	1736	1293	81
<u>Sunday</u>				
LT	12	960	720	60
RB	9	715	715	79

Figure 7.1 Estimation of clinic session throughput:
Ending time of survey interviews



() = workload index

Figure 7.2 Estimation of clinic session throughput:
Ending time of survey interviews



() = workload index

Table 8.1: Coping strategies of GOPD attenders presenting with only new problems who did not seek attention immediately after onset of symptoms
 • (n=578)

Coping strategies	%
rested	24
modified diet	31
used over-the-counter drugs	25
used Chinese herbs	10
used leftover medication from previous episode	14
sought professional advice	39
sought lay advice	22

more than one coping strategy could be used by a patient

Table 8.2: Spectrum of health related problem declared by GOPD attenders

First new problem	n	%
RESPIRATORY	523	66
DIGESTIVE	66	8
MUSCULO-SKELETAL	88	11
NERVOUS SYSTEM/MENTAL ILLNESS	33	4
HEADACHE/FEVER/TIRED	54	7
CIRCULATORY	14	2
COAD	2	-
URO-GENITAL	9	1
OTHERS	9	1
	798	100

Second new problem	n	%
RESPIRATORY	60	45
DIGESTIVE	18	13
MUSCULO-SKELETAL	21	16
NERVOUS SYSTEM/MENTAL ILLNESS	14	10
HEADACHE/FEVER/TIRED	17	13
CIRCULATORY	2	2
URO-GENITAL	2	2
	134	100

Table 8.2: Spectrum of health related problem declared by GOPD attenders

First old problem	n	%
RESPIRATORY	24	9
DIGESTIVE	26	10
MUSCULO-SKELETAL	87	33
NERVOUS SYSTEM/MENTAL ILLNESS	25	10
HEADACHE/FEVER/TIRED	12	5
CIRCULATORY	35	13
COAD	36	14
URO-GENITAL	10	4
OTHERS	6	2
	261	100

Second old problem	n	%
RESPIRATORY	5	14
DIGESTIVE	4	11
MUSCULO-SKELETAL	18	49
NERVOUS SYSTEM/MENTAL ILLNESS	3	8
CIRCULATORY	2	5
COAD	2	5
URO-GENITAL	1	3
OTHERS	2	5
	37	100

Table 8.3: Number of medications given during current GOPD consultation

NUMBER OF MEDICATIONS	n	%
0	29	2
1	112	9
2	341	28
3	391	32
4	222	18
5	81	7
6	23	2
7	3	-
8	2	-
9	1	-

missing values=9

Table 8.4: Effects of increases in follow-up intervals on clinic resources

Follow-up interval Increase (%)	Months	Additional 15-minute appointments	Mean duration of consultations (min)
Current position	6.7	0	15.0
+ 10	7.3	443	16.8
+ 20	8.0	666	18.0
+ 30	8.7	928	19.5
+ 40	9.4	1148	21.0
+ 50	10.0	1339	22.5

from Jones RB, Hedley AJ. Adjusting follow-up intervals in an outpatient clinic. *Journal of the Royal College of Physicians.* (London) 20 36-39 1986.

Figure 8.1: GOPD ATTENDANCES, ACTIONS & OUTCOMES

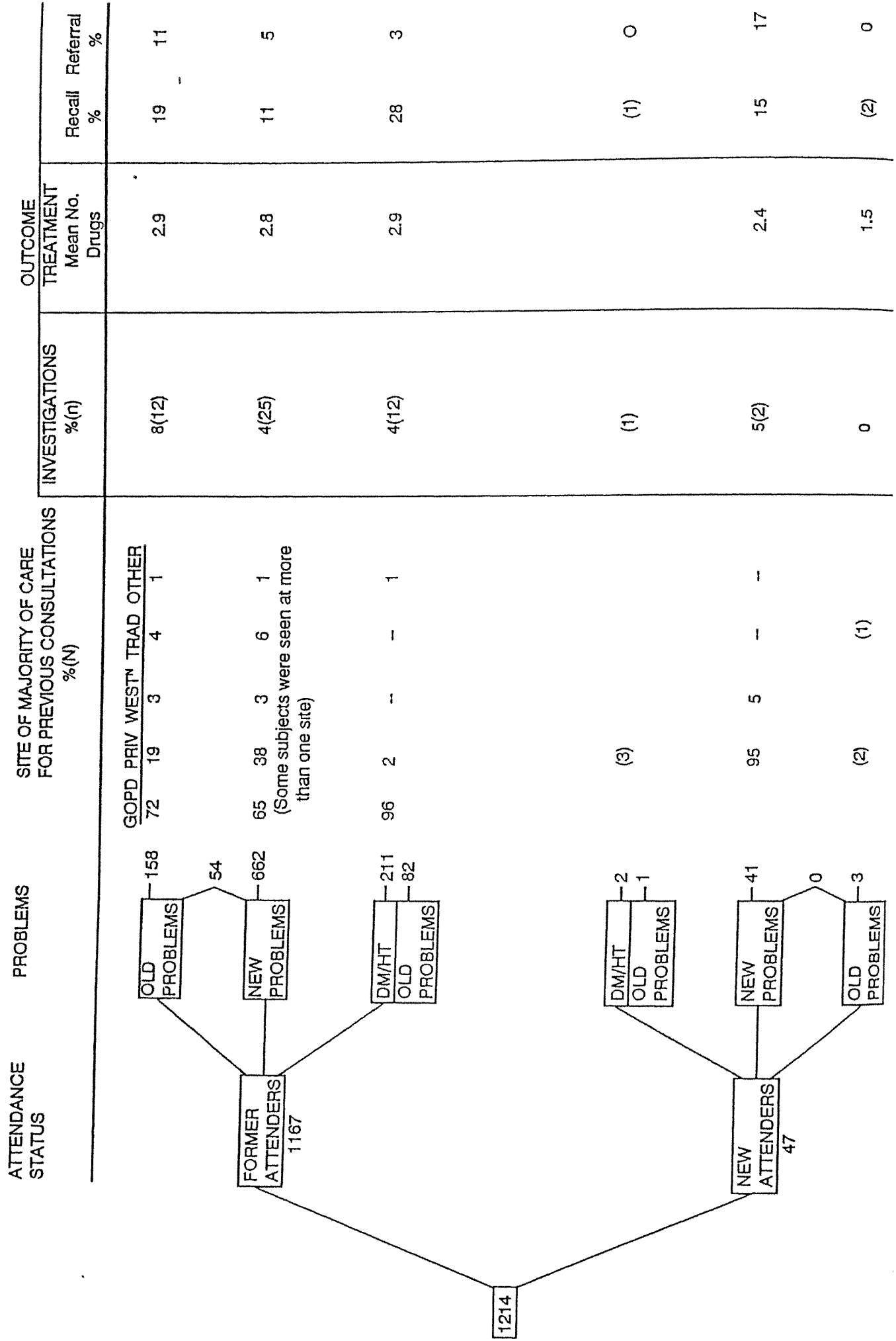


Table 9.1: Site for majority of care for diabetes

Site	n	%
THIS GOPD	66	76
ANOTHER GOPD	8	9
PRIVATE DOCTOR	2	2
OTHER WESTERN DOCTOR	6	7
HERBALIST	2	2
OTHERS	3	3

missing value=1

Table 9.2: When diabetes was first diagnosed

	n	%
0-1 YEAR AGO	19	22
0-2 YEARS AGO	12	14
2-5 YEARS AGO	26	30
5-10 YEARS AGO	17	20
OVER 10 YEARS AGO	13	15

missing value=1

Table 9.3: Treatment for diabetes

	n	%
INSULIN INJECTION	5	6
ORAL MEDICATION	78	90
DIET CONTROL ONLY	2	2
OTHERS	2	2
missing value=1		

Table 9.4: Investigation for diabetes

Characteristic	% yes	N on which % based
fundoscopic examination within past year	10	86
feet examination within past year	8	87
weight measured within past year	10	87
blood test within past year	55	87
blood test for glucose within past year	34	87
blood glucose monitored at home	1	88
urine glucose monitored at home	82	88

Table 9.5: Site for majority of care for hypertension

Site	n	%
THIS GOPD	258	88
ANOTHER GOPD	12	4
PRIVATE DOCTOR	1	-
OTHER WESTERN DOCTOR	15	5
HERBALIST	4	1
OTHERS	5	2

missing value=1

Table 9.6: When hypertension was first diagnosed

	n	%
0-1 YEAR AGO	27	9
0-2 YEARS AGO	41	14
2-5 YEARS AGO	101	34
5-10 YEARS AGO	64	22
OVER 10 YEARS AGO	63	21

Table 9.7: Investigations for hypertension

Characteristic	% yes	N on which % based
BP measured at each clinic visit	99	292
fundoscopic examination within past year	8	292
blood test within past year	14	292
urine test within past year	18	292
blood pressure monitored at home	10	296

Table 10.1: Counselling about smoking in patients with different illness categories

Count Column %	Illness					Total
	New Problems	Old Problem	Diabetes	Hypertension	Combination	
No counselled?	272 (85%)	61 (63%)	17 (77%)	119 (76%)	43 (81%)	517 (80%)
Yes	43 (15%)	36 (37%)	5 (23%)	38 (24%)	10 (19%)	132 (20%)
	320 (49%)	97 (15%)	22 (3%)	157 (24%)	53 (8%)	649 (100%)

$\chi^2 = 26.97$
d.f. = 4
p = 0.0000

Table 10.2: Counselling about smoking in patients with respiratory infection

		Respiratory infection?		
Count Column %		No	Yes	Total
Counselled?	No	247 (79%)	198 (84%)	445 (81%)
	Yes	64 (21%)	39 (16%)	103 (19%)
		311 (57%)	237 (43%)	548 (100%)

$\chi^2 = 1.24$
d.f. = 1
p = 0.2654

Table 10.3: Counselling about smoking in patients with chronic obstructive airway disease

		COAD?		
Count Column %		No	Yes	Total
Counselled?	No	433 (82%)	12 (52%)	445 (81%)
	Yes	92 (18%)	11 (48%)	103 (19%)
		525 (96%)	23 (4%)	548 (100%)

$\chi^2 = 11.35$
d.f. = 1
p = 0.0008

Table 10.4: Individuals who have advised smokers to quit

Person	Frequency cited
Non GOPD doctors	79
Family	56
GOPD doctors	52
Friends	23
Others	2
Other health professionals	1

Table 10.5: Source of greatest influence to quit smoking

Source	%
Own initiative	56
Family	21
Doctors	11
Others	8
Friends	5

Table 10.6 **Counselling about alcohol in patients**
with different illness categories

Count Column %	New problem	Old problem	Diabetes	Hypertension	Combination	Total
No	292 (91%)	69 (71%)	17 (77%)	121 (77%)	43 (81%)	542 (84%)
Counselled?						
Yes	28 (9%)	28 (29%)	5 (23%)	36 (23%)	10 (19%)	107 (16%)
	320 (49%)	97 (15%)	22 (3%)	157 (24%)	53 (8%)	649 (100%)

$X^2 = 30.28$
d.f. = 4
p = 0.0000

Table 10.7: Percentage of surveyed GOPD patients counselled about diet, weight or cholesterol

	<u>%</u>
Diet	20
Weight	8
Choesterol	6

Table 10.8: Counselling about diet, weight or cholesterol in patient gender

Patient gender	% Counselled		
	About diet	About weight	about cholesterol
Male	18	9	5
Female	21	8	6

Tables 10.9: Counselling about diet in patients with different illness categories

Count Column %	New problem	Old problem	Diabetes	Hypertension	Combination	Total
No	282 (88%)	79 (81%)	10 (45%)	113 (72%)	38 (72%)	522 (85%)
Counselled?						
Yes	38 (12%)	18 (19%)	12 (55%)	44 (28%)	15 (28%)	127 (20%)
	320 (49%)	97 (15%)	22 (3%)	157 (24%)	53 (8%)	649 (100%)

$\chi^2 = 38.90$
d.f. = 4
P = 0.0000

Table 10.10: Counselling about weight in patients with different illness categories

Count Column %	New problem	Old problem	Diabetes	Hypertension	Combination	Total
No	306 (96%)	89 (92%)	16 (73%)	139 (89%)	47 (89%)	597 (92%)
Counselled?						
Yes	14 (4%)	8 (8%)	6 (27%)	18 (11%)	6 (11%)	52 (8%)
	320 (49%)	97 (15%)	22 (3%)	157 (24%)	53 (8%)	649 (100%)

$\chi^2 = 20.15$
d.f. = 4
p = 0.0005

Table 10.11: Counselling about cholesterol in patients with different illness categories

Count Column %	New problem	Old problem	Diabetes	Hypertension	Combination	Total
No Counselled?	314 (98%)	92 (95%)	19 (86%)	137 (87%)	51 (96%)	613 (94%)
Yes	6 (2%)	5 (5%)	3 (14%)	20 (13%)	2 (4%)	36 (6%)
	320 (49%)	97 (15%)	22 (3%)	157 (24%)	53 (8%)	649 (100%)

$\chi^2 = 26.83$
d.f. = 4
p = 0.0000

Table 10.12: Counselling about diet in patients with cardiovascular disease

Count Column %	Cardiovascular disease		
	No	Yes	Total
No Counselled?	426 (83%)	27 (79%)	453 (83%)
Yes	88 (17%)	7 (21%)	95 (17%)
	514 (94%)	34 (6%)	548 (100%)

$\chi^2 = 0.08$
d.f. = 1
p = 0.7769

Table 10.13: Counselling about weight in patients with cardiovascular disease

Count Column %	Cardiovascular disease?		
	No	Yes	Total
No Counselled?	481 (94%)	29 (85%)	510 (93%)
Yes	33 (6%)	5 (15%)	38 (7%)
	514 (94%)	34 (6%)	548 (100%)

$\chi^2 = 2.23$
d.f. = 1
p = 0.1353

Table 10.14: Counselling about cholesterol in patients with cardiovascular disease

		Cardiovascular disease?		
Count	Column %	No	Yes	Total
No		498 (97%)	32 (94%)	530 (97%)
Counselled?				
Yes		16 (3%)	2 (6%)	18 (3%)
		514 (94%)	34 (6%)	548 (100%)

$\chi^2 = 0.14$
 d.f. = 1
 p = 0.7034

Table 10.15: Cervical pap smear screening: Time of last test

When last smear performed	Frequency	%
Less than 1 year ago	49	86
More than 1 year, but less than 3 years ago	7	12
More than 3 years ago	1	2
	57	

Table 10.16: Site where last cervical pap smear was performed

Facility	Frequency	%
Private doctor	13	22
Family Planning Association Clinics	18	31
Maternal and child health centres	2	3
GOPD	4	7
Specialist OPD	10	17
Others	11	19

Figure 10.1: Age group proportions of
GOPD survey respondents who have
received counselling about smoking
(n=649)

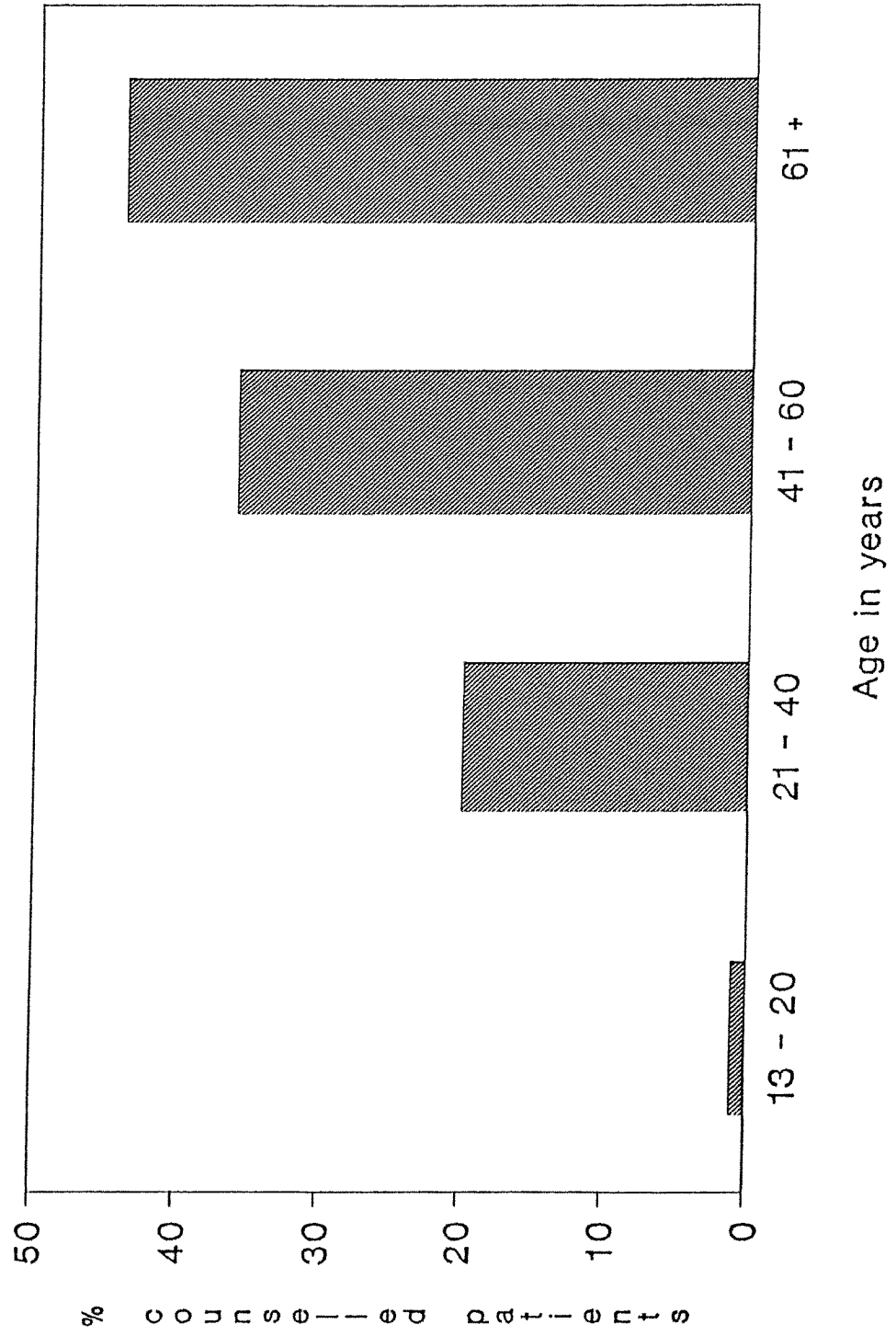


Figure 10.2: Proportion of surveyed GOPD females over the age of twenty who have had cervical pap smear screening

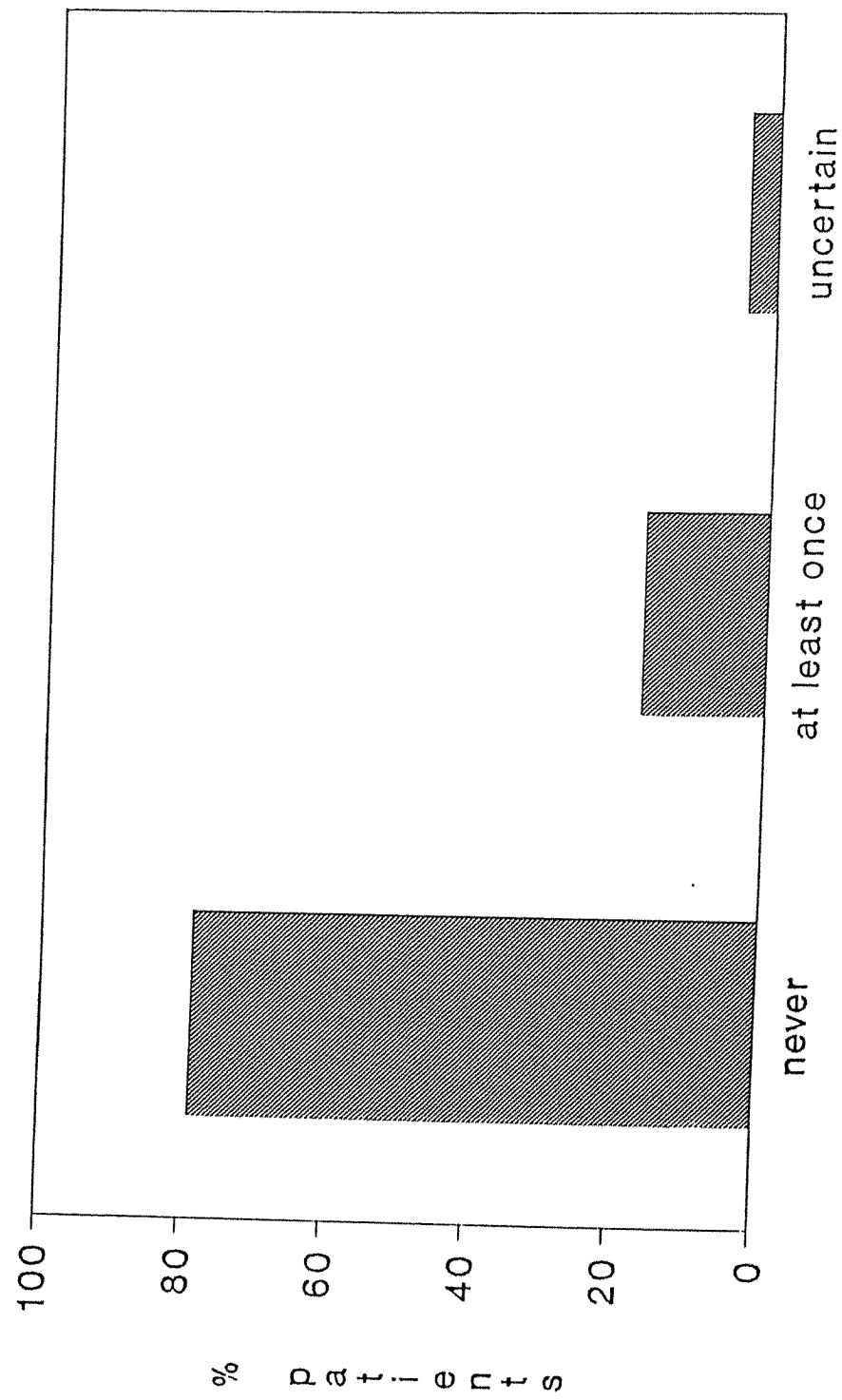


Figure 10.3: Age distribution of women who have had cervical pap smear screening

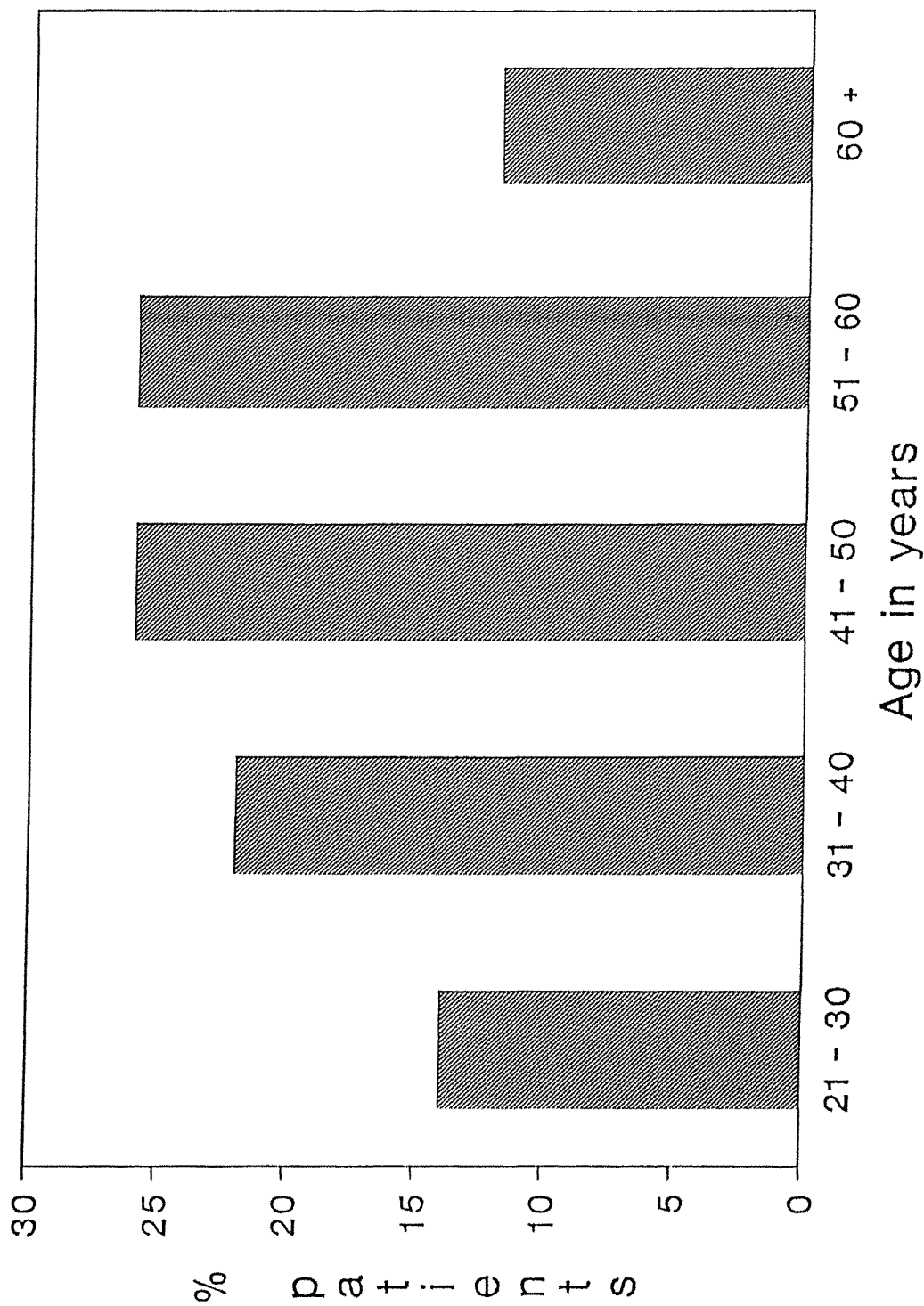


Table 11.1: Amount spent on health care in past months

Amount	N	%
\$0	146	17
\$1-\$100	428	49
\$101-\$250	130	15
\$251-\$500	89	10
\$501-\$750	24	3
\$750 and over	40	5

Missing values = 12

Table 11.2: Relationship between health care expenditure and gender

Count row %	\$0	\$1-100	\$101-250	\$251-500	\$501-750	>\$750	Total
Gender							
Male	68 (17%)	203 (51%)	55 (14%)	46 (12%)	7 (2%)	19 (5%)	398 (46%)
Female	78 (17%)	225 (49%)	75 (16%)	43 (9%)	17 (4%)	21 (5%)	459 (54%)
	146 (17%)	428 (50%)	130 (15%)	89 (10%)	24 (3%)	40 (5%)	857 (100%)

() = row percentage

Table 11.3: Relationship between health care expenditure and age

Count row %	\$0	\$1-100	\$101-250	\$251-500	\$501-750	>\$750	Total
Age in years							
0-12	36 (17%)	95 (44%)	39 (18%)	31 (14%)	7 (3%)	8 (4%)	216 (25%)
13-19	9 (24%)	21 (57%)	5 (14%)	1 (8%)	-	1 (5%)	37 (4%)
20-39	40 (25%)	63 (39%)	30 (18%)	14 (9%)	8 (5%)	8 (5%)	163 (19%)
40-59	32 (17%)	85 (46%)	26 (14%)	26 (14%)	3 (2%)	15 (8%)	187 (22%)
60+	29 (11%)	164 (65%)	30 (12%)	17 (7%)	6 (2%)	8 (3%)	254 (30%)
	146 (17%)	428 (50%)	130 (15%)	89 (10%)	24 (3%)	40 (5%)	857 (100%)

Table 11.4: Relationship between health care expenditure and employment status

Count row %	\$0	\$1-100	\$101-250	\$251-500	\$501-750	>\$750	Total
Employment status							
Employed	67 (22%)	128 (42%)	49 (16%)	30 (10%)	10 (3%)	20 (7%)	304 (48%)
Housewife	20 (14%)	87 (60%)	19 (13%)	9 (6%)	4 (3%)	6 (4%)	145 (23%)
Student/below school age	7 (22%)	20 (63%)	3 (9%)	2 (6%)	-	-	32 (5%)
Retired	16 (11%)	89 (60%)	18 (12%)	16 (11%)	3 (2%)	6 (4%)	148 (24%)
	110 (17%)	324 (52%)	89 (14%)	57 (9%)	17 (3%)	32 (5%)	629 (100%)

Table 11.5: Relationship between health care expenditure and monthly household income

Count row %	\$0	\$1-100	\$101-250	\$251-500	\$501-750	>\$750	Total
Monthly household income							
<\$1000	7 (21%)	19 (56%)	3 (9%)	4 (12%)	-	1 (3%)	34 (6%)
\$1000 - \$2999	1 (2%)	28 (64%)	7 (16%)	6 (14%)	1 (2%)	1 (2%)	44 (7%)
\$3000 - \$5999	32 (15%)	115 (53%)	32 (15%)	20 (9%)	7 (3%)	10 (5%)	216 (36%)
\$6000 - \$9999	31 (19%)	68 (41%)	28 (17%)	22 (13%)	4 (2%)	12 (7%)	165 (28%)
over \$10000	36 (22%)	53 (39%)	20 (15%)	14 (10%)	3 (2%)	10 (7%)	136 (23%)
	107 (18%)	283 (48%)	90 (15%)	66 (11%)	15 (3%)	34 (6%)	595 (100%)

Table 11.6: Relationship between health care expenditure and site of majority of health care in the past year

Count row %	\$0	\$1-100	\$101-250	\$251-500	\$501-750	>\$750	Total
Site							
GOPD	133 (15%)	394 (55%)	97 (14%)	59 (8%)	16 (2%)	21 (3%)	720 (87%)
Private doctor	6 (7%)	13 (16%)	19 (23%)	24 (29%)	5 (6%)	16 (19%)	83 (10%)
Chinese doctor	-	1 (11%)	4 (44%)	2 (22%)	1 (11%)	1 (11%)	9 (1%)
Others	3 (21%)	5 (36%)	3 (21%)	1 (7%)	-	2 (14%)	14 (2%)
	142 (17%)	413 (50%)	123 (15%)	86 (10%)	22 (3%)	40 (5%)	826 (100%)

Table 11.7: Results of logistic regression analysis on the relationship between amount spent on the past three months on health care (0=spent not more than \$100, 1=spent more than \$100) and some determining factors

Social/Demographic and medical characteristics	Odds ratio (95% CI)
No. of consultations in the past three months (excl. the present one) (0=nil)	
1-2 times	15.97(4.80,53.21)
3-4 times	34.08(10.19,113.98)
5 times or more	209.48(59.51,737.45)
Age (1=60 and above, 0=other ages)	0.40(0.17,0.95)
Site of majority of health care (1=GOPD, 0=other sites)	0.19(0.11,0.35)
Problem for the present consultation (1=DM/HT, 0=new/other problems)	0.51(0.29,0.89)

The odds ratios (ORs) of these variables are adjusted for sex, employment status, educational attainment and monthly domestic income as well as for each other.

Table 12.1: Disc waiting time

Waiting time	N	%
Too long	275	32
Acceptable	597	68
Total	872	100

Table 12.2: Relationship between satisfaction with disc waiting time and age

Count Column %	Age				Total
	0 - 19	20 - 39	40 - 59	60 +	
Waiting time					
Too long	107 (41%)	49 (30%)	54 (29%)	65 (25%)	275 (31%)
Acceptable	152 (59%)	114 (70%)	132 (71%)	199 (75%)	597 (69%)
Total	259 (30%)	163 (19%)	186 (21%)	264 (30%)	872 (100%)

$\chi^2=18.02$
d.f.=3
p=.0004

Table 12.3: Awareness of the block appointment system

Aware of block appointment system?	N	%
No	751	86
Yes	121	14
Total	872	100

Table 12.4: Expectation of medication after a consultation

Medication expected?	N	%
No	169	19
Yes	701	81
Total	870	100

Table 12.5: Relationship between expectation of medication and age

Count Column %	Age		Total
	20 - 39	Other age groups	
Expect drug?			
No	57 (31%)	112 (16%)	169 (19%)
Yes	126 (69%)	575 (84%)	701 (81%)
Total	183 (21%)	687 (79%)	870 (100%)

$\chi^2=19.41$
d.f.=1
p=.0000

Table 12.6: Patients' recall of medication dispensed for their visits to GOPDs

Medication given	N	%
At every visit	820	95
>50% of all visits	36	4
<50% of all visits	7	1
Total	863	100

Table 12.7: Attitude of GOPD doctor

Attitude of doctor	N	%
Disliked	136	15
Liked	732	85
Total	868	100

Table 12.8: Relationship between satisfaction with attitude of GOPD doctor and education, controlling for age group (60+)

Count Column %	Educational level		Total
	Primary or below	Secondary or above	
Doctor's attitude			
Disliked	35 (10%)	15 (19%)	50 (11%)
Liked	330 (90%)	65 (81%)	395 (89%)
Total	365 (82%)	80 (18%)	445 (100%)

$\chi^2=5.52$
 d.f.=1
 p=.0188

Table 12.9: Relationship between satisfaction with doctor's attitude and self-rating of current condition

Count Column %	Doctor's attitude		Total
	Disliked	Liked	
<hr/>			
Self-rating of current condition			
Very poor/Poor	38 (28%)	147 (20%)	185 (21%)
Fair/Good	97 (72%)	584 (80%)	681 (79%)
<hr/>			
Total	135 (16%)	731 (84%)	866 (100%)

$X^2=4.38$
d.f.=1
p=.0363

Table 12.10: Patients' satisfaction with consultation time

Consultation time	N	%
As long as expected	631	73
Less than expected	197	23
Not long enough at all	37	4
<hr/>		
Total	865	100

Table 12.11: Doctors should attend to emotional issues

Doctors should attend to emotional issues	N	%
Strongly agree	215	33
Agree	348	54
Disagree	76	12
Strongly disagree	10	1
<hr/>		
Total	649	100

Table 12.12: Reassurance

Doctor reassuring?	N	%
As much as expected	470	73
Less than expected	118	18
Not at all reassuring	60	9
Total	648	100

Table 12.13: Relationship between satisfaction with doctor's attitude and preference of services

Count Column %	Doctor's attitude		Total
	Disliked	Liked	
Preference			
Private better	13 (14%)	151 (34%)	164 (31%)
GOPD better/Same	78 (86%)	293 (66%)	371 (69%)
Total	91 (17%)	444 (83%)	535 (100%)

$\chi^2=13.82$
d.f.=1
p=.0002

Table 12.14: Patients' own understanding of condition

Understanding of condition	N	%
As much as I would wish	541	63
Less than I would wish	255	29
No understanding at all	67	8
Total	863	100

Table 12.15: Relationship between satisfaction with patients' own understanding of condition and age

Count Column %	Age		Total
	60 +	Other age groups	
Understanding of condition			
As much as I would like	191 (73%)	350 (58%)	541 (63%)
Less than I would like/ Not at all	71 (27%)	251 (42%)	322 (37%)
Total	262 (30%)	601 (70%)	863 (100%)

$X^2=16.15$
d.f.=1
p=.0001

Table 12.16: Relationship between own understanding of condition and self-rating of current condition

Count Column %	Own understanding of condition		Total
	As much as expected	Less than expected/ No understanding	
Self-rating of current condition			
Very poor/Poor	85 (16%)	96 (30%)	181 (21%)
Fair/Good	455 (84%)	225 (70%)	680 (79%)
Total	540 (63%)	321 (37%)	861 (100%)

$X^2=24.33$
d.f.=1
p=.0000

Table 12.17: Relationship between own understanding of condition and preference of services

Count Column %	Own understanding of condition		Total
	As much as expected	Less than expected/ No understanding	
Preference			
Private better	114 (36%)	50 (23%)	164 (31%)
GOPD better/Same	206 (64%)	165 (77%)	371 (69%)
Total	320 (60%)	215 (40%)	535 (100%)

$\chi^2 = 9.26$
d.f.=1
p=.0023

Table 12.18: Perceived technical competence of GOPD doctors

Perceived competence	N	%
Very satisfied	106	12
Satisfied	437	51
Dissatisfied	58	7
Very dissatisfied	12	1
No comment (no exam)	254	29
Total	867	100

Table 12.19: Relationship between satisfaction with doctor's technical competence and preference of services

Count Column %.	Doctor's technical competence		Total
	Satisfied	Dissatisfied	
Preference			
Private better	114 (38%)	6 (19%)	120 (36%)
GOPD better/Same	184 (62%)	26 (81%)	210 (64%)
Total	298 (90%)	32 (10%)	330 (100%)

$\chi^2 = 4.75$
d.f.=1
p=.0293

Table 12.20: Satisfaction with the work of the nurses

Work of the nurses	N	%
Very satisfied	128	15
Satisfied	380	44
Dissatisfied	20	2
Very dissatisfied	0	0
No comment	338	39
Total	866	100

Table 12.21: Satisfaction with the work of minor staff

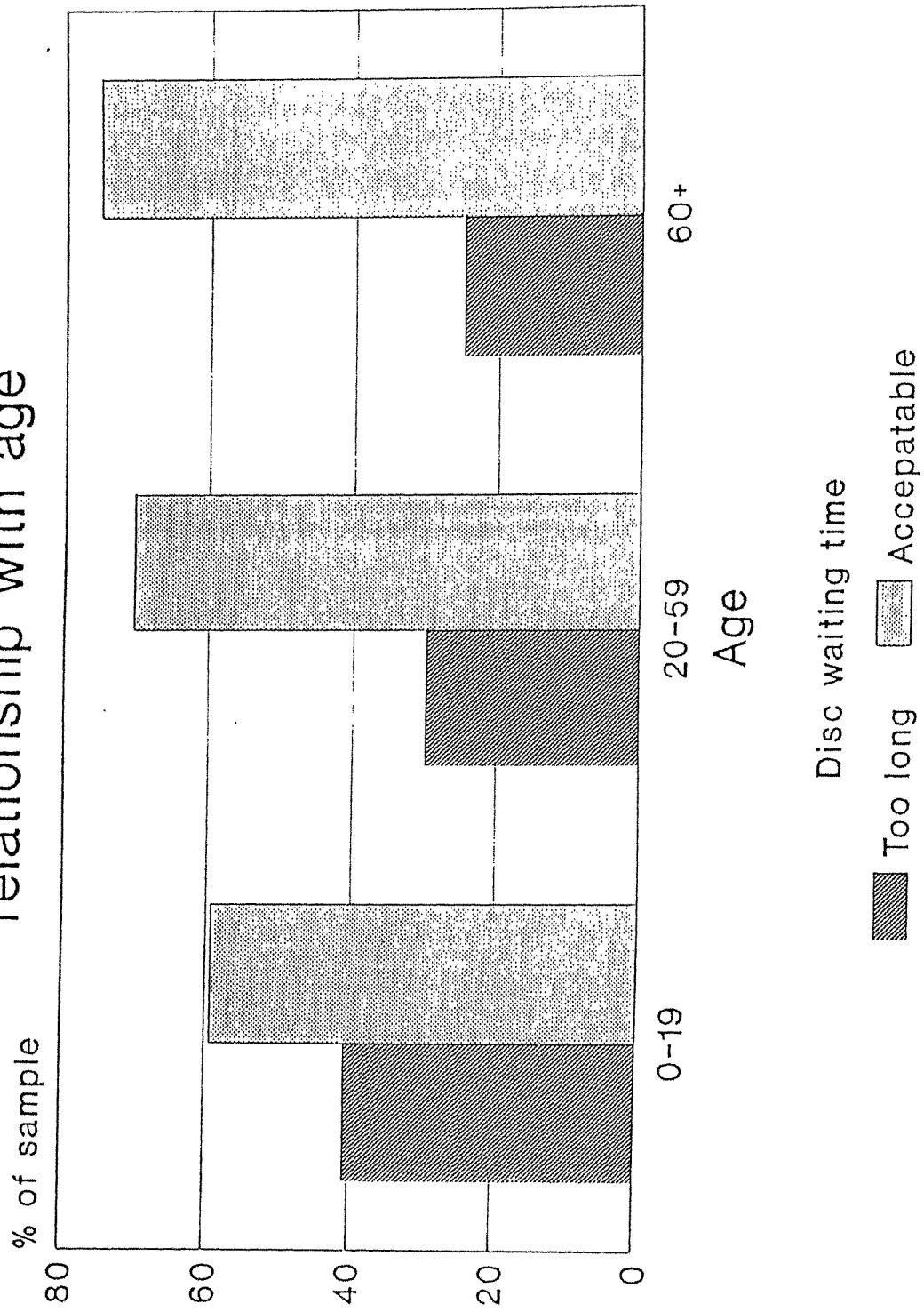
Work of minor staff	N	%
Very satisfied	143	16.5
Satisfied	558	64.0
Dissatisfied	26	3.0
Very dissatisfied	3	0.5
No comment	137	16.0
Total	867	100.0

Table 12.22: Relationship between satisfaction with minor staff and age, controlling for previous clinic attendance

Count Column %	Age			Total
	0 - 19	20 - 59	60 +	
<hr/>				
Work of minor staff				
Satisfied	186 (91%)	276 (97%)	214 (98%)	676 (96%)
Dissatisfied	18 (9%)	7 (3%)	4 (2%)	29 (4%)
<hr/>				
Total	204 (29%)	283 (40%)	218 (31%)	705 (100%)

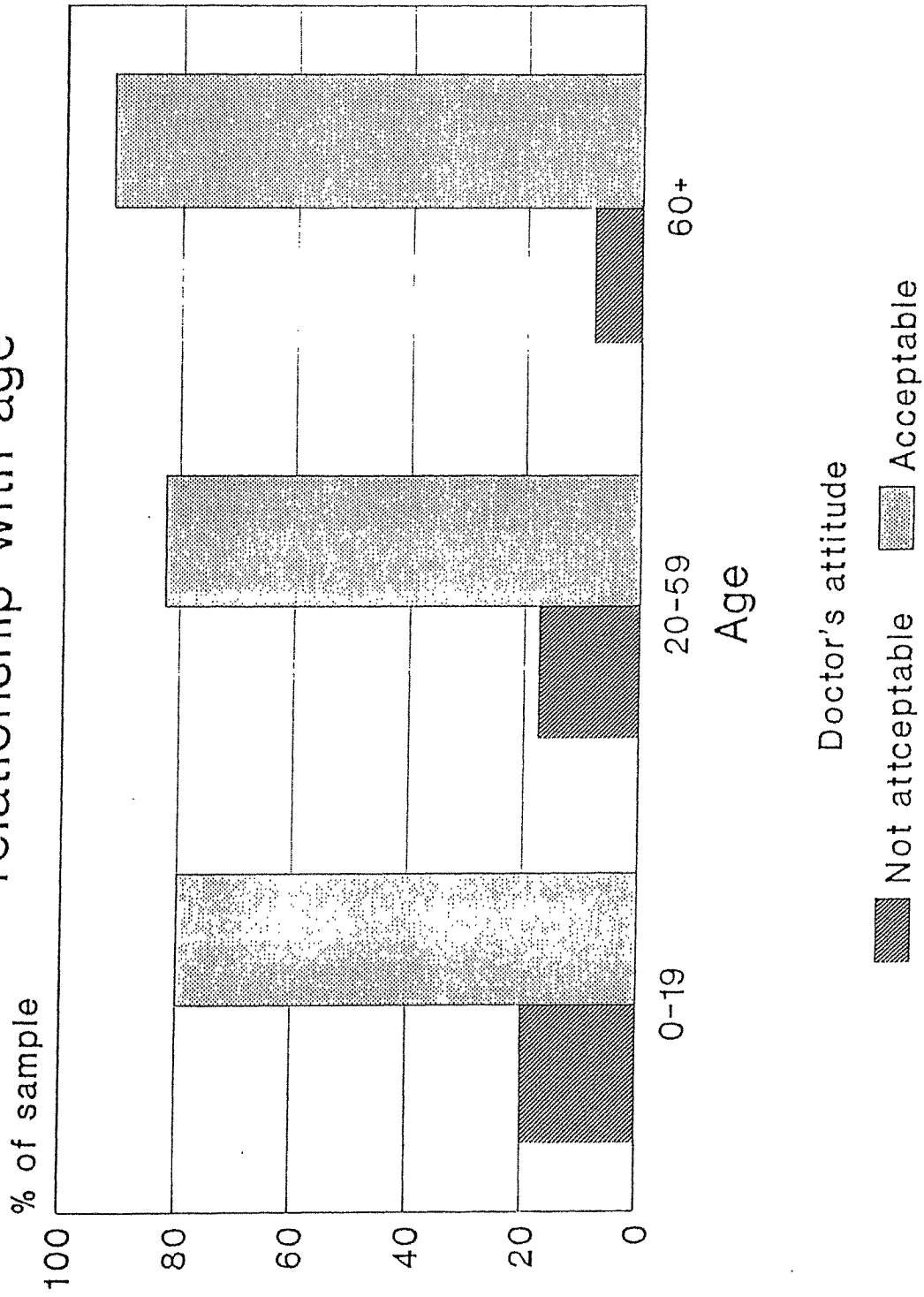
$\chi^2=16.27$
d.f.=2
p=.0003

Figure 12.1: Satisfaction with disc waiting time:
relationship with age



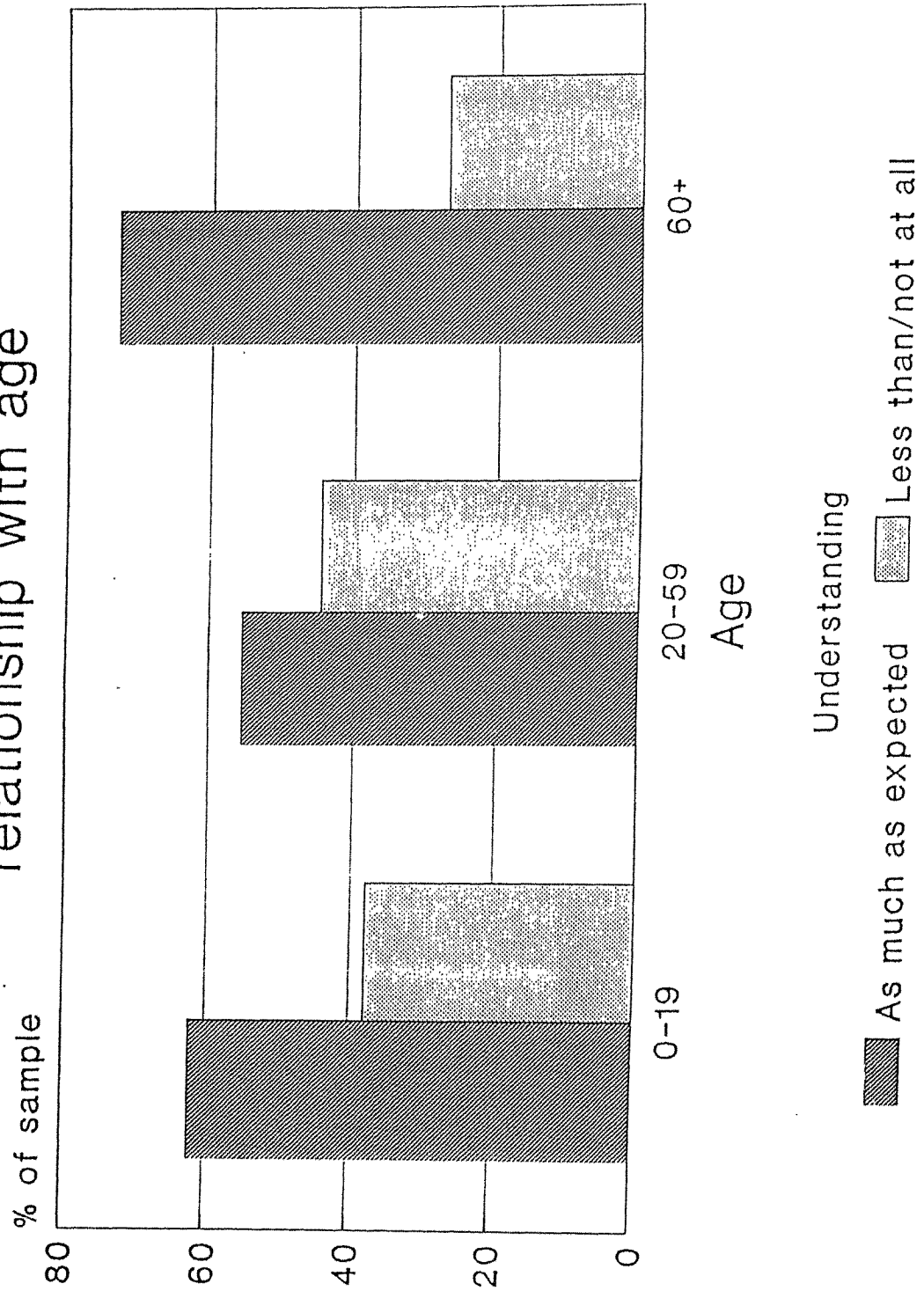
Adjusted for clinic attendance

Figure 12.2: Satisfaction with doctor's attitude:
relationship with age



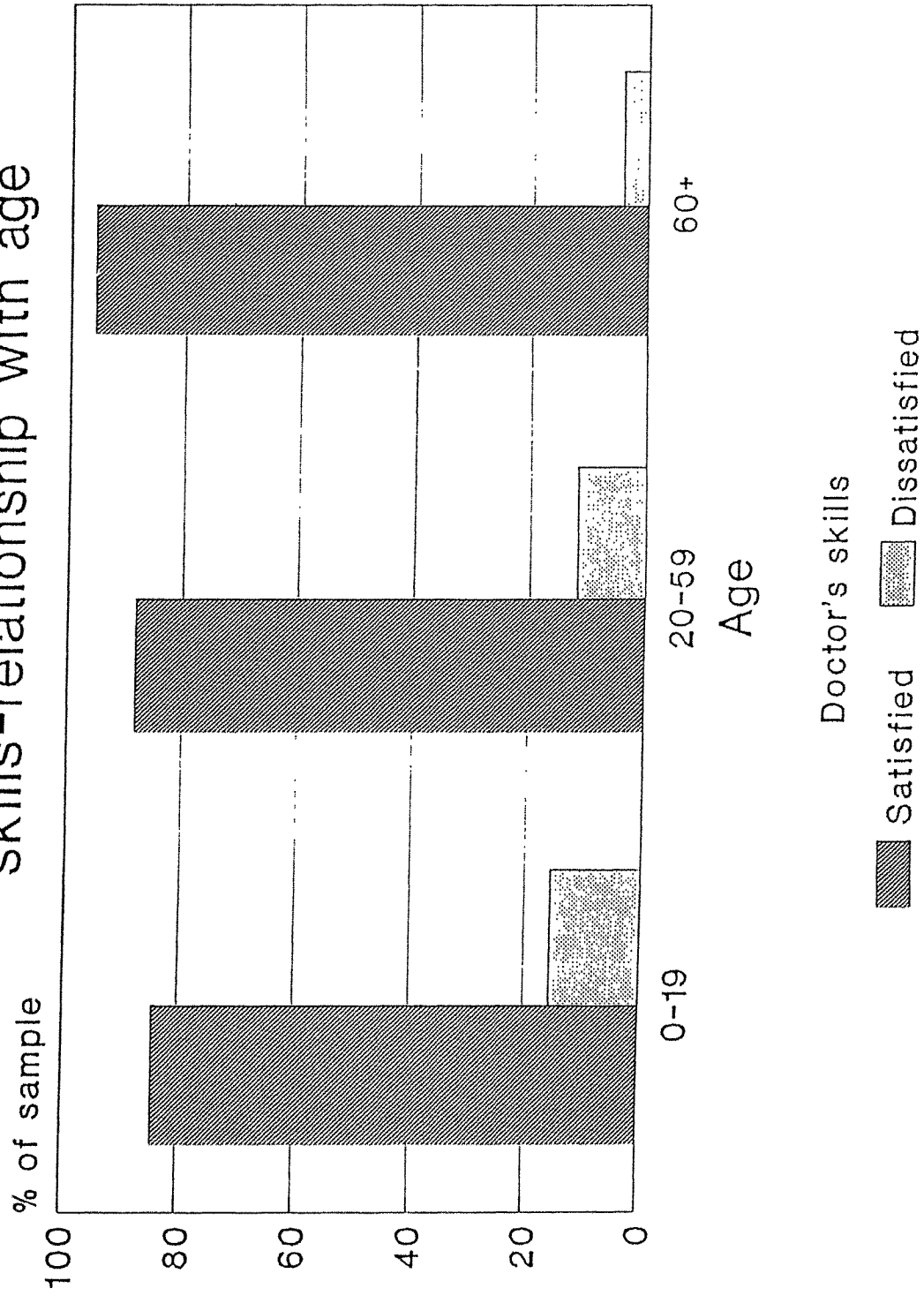
Adjusted for clinic attendance

Figure 12.3: Understanding of current condition:
relationship with age



Adjusted for clinic attendance

Figure 12.4: Satisfaction with doctor's clinical skills-relationship with age



Adjusted for clinic attendance

Appendix 1 : Survey instrument - English version.

Patient Interview Schedule

Government Outpatient Department Study

Clinic _____

Room no. _____ Disc no. _____

Date _____

1. am session 2. pm session 3. evening session
4. sunday session 5. public holiday

Time of Interview : from _____ to _____

Name of interviewer : _____

Was proxy respondent interviewed?

1. no
2. yes (specify) name _____

age _____

sex M F

relationship with patient _____

(Rules for interviewing proxy respondent:

1. If the patient is less than 12 years old and accompanied by an adult, direct the questions in sections A, B, C, D and E and special section P to the adult and complete section O.
2. If the patient is less than 12 years old and not accompanied, complete sections A, B and O only and obtain his/her address and telephone number.
3. If the patient is elderly and accompanied by another person, ask the patient whether he/she would mind your asking questions in the presence of the other person before beginning, and direct the questions to the patient. If the accompanying person indicates that the patient is not mentally capable of providing meaningful answers, please direct the questions to the proxy.)

If there are any special problems, please note them in section O.

A. Personal particulars

A1. Name _____

A2. Date of birth _____

A3. Sex M F

A4. Race 1. Chinese
2. non-Chinese (specify) _____

B. Experience with GOPD and reason of present visit

- B1. Have you been a patient in any GOPD previously?
1. no (go to B4)
2. yes
- B2. Have you been a patient in this GOPD previously?
1. no (go to B4)
2. yes
- B3. When did you first visit this GOPD as a patient?
_____ days/weeks/months/years ago
- B4. Why did you come to this GOPD today? (may have more than one reason)
1. new problems of less than three months' duration
(record the two most important problems if there are more than two)
 1. _____
 2. _____ (answer section C)
 2. other problems
(record the two most important problems if there are more than two)
 1. _____
 2. _____ (answer section D)
 3. continuing care for diabetes mellitus (DM)
(answer section F)
 4. continuing care for hypertension (HT)
(answer section G)

(ask only if more than one problem is listed in B4)

- B5. Which of the above problems is bothering you the most today? _____
- B6. Were any lab tests done?
1. no
2. yes
- B7. How many medications were given? _____
(question refers to how many types)
- (for 1 & 2 in B4 only)
- B8. Was a diagnosis given for your problem?
1. no
2. yes
- B9. Were you asked to return for follow-up?
1. no
2. yes. Specify: 1. review lab results
2. check for symptom improvement
3. other (specify) _____
when? 1. didn't say
2. _____ days/weeks/months later
- B10. Were you referred to another doctor?
1. no
2. yes. where? _____

C. If the patient is seen for new problem(s) as defined in B4

(If there are more than one unrelated problems in this category, direct the questions in this section to the problem which the patient finds to be most important.)

- C1. If you are seeking help for a new problem, when did you first notice it?
(if come immediately after noted symptom, response=0 and go to C4)

----- days/weeks ago

- C2. How have you coped thus far? (go through items in the following list)

1. done nothing (excluding this consultation) yes/no
2. rest yes/no
3. modified diet yes/no
4. used Chinese herbs yes/no
5. used medications obtained over-the-counter yes/no
6. used medication that was left over from the last time I was sick yes/no
7. sought the advice of lay persons (friends, family, relatives) yes/no
8. sought the advice of professionals (chinese or western) yes/no (if yes, go to C4)
(if no, ask C3 only)

- C3. If you have not sought professional advice for this new problem already, why did you come today?
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. time available today
2. feels worse today
3. friends or family worried
4. transportation available today
5. escort available today
6. disc was available
7. other reasons (specify) _____

- C4. Have you had this problem before?

1. no
2. yes

C5. If you have already consulted doctors regarding this problem, please provide some details regarding your consultations. (if there are more than three, record the last three in the following table and answer C6)

	Last consultation	Second last consultation	Third last consultation
The site for consultation* (if patient indicates 4=other western doctors or 8=others, specify in the space provided)	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8
Were you given a diagnosis?	1. no 2. yes	1. no 2. yes	1. no 2. yes
Were any lab tests done? (eg, X-ray, blood/urine tests)	1. no 2. yes	1. no 2. yes	1. no 2. yes
Was an injection given?	1. no 2. yes	1. no 2. yes	1. no 2. yes
Number of medication given	_____	_____	_____
How much was the fee? (including X-ray/lab tests)	\$ _____	\$ _____	\$ _____
Were you asked to return for FU?	1. no 2. yes	1. no 2. yes	1. no 2. yes
If yes, did you go?	1. no 2. yes	1. no 2. yes	1. no 2. yes
Did you get better after seen?	1. better 2. no change 3. worse 4. other (specify) _____	1. better 2. no change 3. worse 4. other (specify) _____	1. better 2. no change 3. worse 4. other (specify) _____
Why did you seek another consultation?	_____	_____	_____

C6. If there have been more than three consultations, how many consultations were there in total? _____
 site of consultation* 1 2 3 4 5 6 7 8 (may circle more than one)
 (if patient indicates 4=other western doctors or 8=others, specify in the space provided) _____

D. If the patient is seen for 'other problems' as defined in B4

(If there are more than one unrelated problems in this category, direct the questions in this section to the problem which the patient finds to be most important.)

D1. When did you first have the problem?
----- months/years ago

D2. What have you done for the problem? (go through items in the following list)

1. done nothing (excluding this consultation) yes/no
2. rest yes/no
3. modified diet yes/no
4. used Chinese herbs yes/no
5. used medications obtained over-the-counter yes/no
6. used medication that was left over from the last time I was sick yes/no
7. sought the advice of lay persons (friends, family, relatives) yes/no
8. sought the advice of professionals (chinese or western) yes/no

D3. If professional advice has been sought, where have you been seen for the problem? (may circle more than one)

1. this GOPD
2. another GOPD
3. private doctor
4. other western doctors (specify) -----
5. herbalist
6. acupuncturist
7. bone-setter
8. others (specify) -----

D4. Where did you receive the majority of care for the problem?

1. this GOPD
2. another GOPD
3. private doctor
4. other western doctors (specify) -----
5. herbalist
6. acupuncturist
7. bone-setter
8. others (specify) -----

E. Other health problems

(If patient notes a problem, indicate the problem in the space provided, then go through the list of actions as in C2 and D2. Circle the appropriate number (+ options 1-8) if the response is yes.)

(If patient sought the advice of professionals (option 8), note where by circling the corresponding number (* options 1-8). If patient sought advice from 4=other western doctors or 8=others, specify in the space provided.)

E1. Over the past one month, have you had any other health-related problems?

1. no

2. yes.

Problem

Action

1. _____

+ 1 2 3 4 5 6 7 8

for 8, where?

* 1 2 3 4 5 6 7 8

4/8 (specify)=_____

2. _____

+ 1 2 3 4 5 6 7 8

for 8, where?

* 1 2 3 4 5 6 7 8

4/8 (specify)=_____

3. _____

+ 1 2 3 4 5 6 7 8

for 8, where?

* 1 2 3 4 5 6 7 8

4/8 (specify)=_____

+ 1. done nothing (excluding this consultation)

yes/no

2. rest

yes/no

3. modified diet

yes/no

4. used Chinese herbs

yes/no

5. used medications obtained over-the-counter

yes/no

6. used medication that was left over from the last time I was sick

yes/no

7. sought the advice of lay persons (friends, family, relatives)

yes/no

8. sought the advice of professionals (chinese or western)

yes/no

* 1. this GPD

2. another GPD

3. private doctor

4. other western doctors (specify) _____

5. herbalist

6. acupuncturist

7. bone-setter

8. others (specify) _____

(If the patient has not come for the continuing care of HT or DM)

E2. Have you ever been diagnosed to have DM?

1. no

2. yes (go to section F)

E3. Have you ever been diagnosed to have HT?

1. no

2. yes (go to section G)

E4. Please list any other health-related problems you have but which have not been mentioned above?

F. Care of DM

F1. When were you first diagnosed to have DM?

1. less than a year ago
2. 1-2 years ago
3. 2-5 years ago
4. 5-10 years ago
5. over 10 years ago

F2. Where have you received care for your DM since diagnosis?

(may circle more than one)

1. this GOPD
2. another GOPD
3. specialist GOPD (Government or subvented)
4. private doctor
5. other western doctors (specify) _____
6. herbalist
7. acupuncturist
8. others (specify) _____

F3. Where did you receive the majority of care for your DM in the past year?

(see responses in F2 and circle the corresponding number. code "8" if care received from combined sites or patient cannot decide)

1 2 3 4 5 6 7 8 (specify) _____

F4. In the past year, how often did you have the following examinations or investigations in the clinic where you received the majority of care?

a. examination of the eyes with an ophthalmoscope

1. nil
2. once
3. more than once

b. examination of the feet (with shoes and socks off)

1. nil
2. once
3. more than once

c. body weight measurement

1. nil
2. once
3. more than once

d. how often did you have a blood test?

1. nil (go to F5)
2. once
3. more than once

e. If blood tests have been done, were they testing for blood sugar?

1. no (go to F5)
2. do not know (go to F5)
3. yes

f. If blood sugar has been tested, what was the result of the last one?

1. too high
2. satisfactory
3. too low
4. has been told but do not remember
5. has not been told

F5. What medication are you taking for your diabetes?

1. insulin injection
2. oral medication
3. has been informed by doctor that diet control alone is sufficient
4. others (specify) _____

F6. How often have you been monitoring your own blood glucose at home in the past month? (if not monitoring own blood glucose, response=0)

_____ day / week / month

usually by whom? 1. self
2. family, relatives or friends
3. others _____

F7. How often have you been monitoring your urine for sugar at home in the past month? (if not monitoring urine for sugar, response=0)

_____ day / week / month

usually by whom? 1. self
2. family, relatives or friends
3. others _____

F8. If you have not been monitoring your urine for sugar at home, why?

1. monitoring blood sugar at home
2. has not been taught the method
3. has been taught the method but still do not know how to do it
4. knows how but too much trouble
5. cannot afford

F9. Have you been advised about foot care since your diabetes was diagnosed?

1. no
2. yes

F10. Have you modified your diet after you were found to have diabetes?

1. no
2. yes

F11. Has your weight changed since your diabetes was diagnosed?

1. gained more than 10%
2. no change greater than 10%
3. lost more than 10%

F12. If you are without symptoms and doing well, would you be prepared to be helped by another trained health personnel rather than the doctor for your DM follow-up care?

1. no
2. yes

G. Care of HT

G1. When were you first diagnosed to have HT?

1. less than a year ago
2. 1-2 years ago
3. 2-5 years ago
4. 5-10 years ago
5. over 10 years ago

G2. Where have you received care for your HT since diagnosis?

(may circle more than one)

1. this GOPD
2. another GOPD
3. specialist GOPD (Government or subvented)
4. private doctor
5. other western doctors (specify) _____
6. herbalist
7. acupuncturist
8. others (specify) _____

G3. Where did you receive the majority of care for your HT in the past year?

(see responses in G2 and circle the corresponding number. code "8" if care received from combined sites or patient cannot decide)

1 2 3 4 5 6 7 8 (specify) _____

G4. In the past year, how often did you have the following examinations or investigations in the clinic where you received the majority of care?

a. blood pressure measurement

1. every time or almost every time when you return for continuing care of HT
2. other than 1

b. examination of the eyes with an ophthalmoscope

1. nil
2. once
3. more than once

c. blood test

1. nil
2. once
3. more than once

d. urine examination

1. nil
2. once
3. more than once

G5. How often have you been monitoring your blood pressure at home in the past month? (if not monitoring own blood pressure, response=0)

_____ day / week / month

usually by whom?

1. self
2. family, relatives or friends
3. others _____

- G6. Do you know your usual blood pressure?
1. no
 2. yes. About _____/_____ mmHg
- G7. Has your weight changed since your HT was diagnosed?
1. gained more than 10%
 2. no change greater than 10%
 3. lost more than 10%
- G8. If you are without symptoms and doing well, would you be prepared to be helped by another trained personnel rather than the doctor for your HT follow-up care?
1. no
 2. yes

II. General health

- II1. Were you accompanied by anyone?
1. no
2. yes (specify who) _____
- II2. How is your eyesight?
1. do not need any glasses to see near and far objects clearly
2. need glasses to see near and/or far objects clearly
3. cannot see objects near and/or far clearly even with glasses
4. have problems seeing, but don't know if glasses would help/no glasses available
- II3. How is your hearing?
1. can hear very well without hearing aid
2. can hear very well with hearing aid
3. have problems hearing even with hearing aid
4. have problems hearing but don't know if hearing aid would help/no hearing aid available
- II4. How are your teeth?
1. have my own teeth
2. use partial denture
3. use full denture
4. have no/almost no natural or false teeth
- II5. Have you smoked in the past month?
(If no, reponse=0 and go to II9)
_____/day/week/month
- II6. If you smoke, has anybody advised you to quit?
1. no
2. yes . by whom? (may circle more than one)
1. GP/doctor
2. other doctor
3. other health professional
4. family
5. friends
6. others (specify) _____
- II7. Have you ever tried to quit smoking?
1. no (go to II9)
2. yes
- II8. If you have tried to quit, what has been the greatest influence?
1. my own initiative
2. advice of family
3. advice of friends
4. advice of news media
5. advice of doctor
6. others (specify) _____

H9. Have you consumed any drinks containing alcohol in the past month?
(if no, response=0)
(if yes) what do you usually drink? _____

how much do you drink?

_____/day/week/month

H10. Please indicate which of the following a GOPD doctor has discussed with you:

(go through items in the following list)

- | | |
|-----------------------|--------|
| 1. diet | yes/no |
| 2. weight | yes/no |
| 3. cholesterol | yes/no |
| 4. smoking | yes/no |
| 5. alcohol / drinking | yes/no |
| 6. drug abuse | yes/no |
| 7. sexual habits | yes/no |

H11. Have you ever asked a GOPD doctor for advice regarding a sexual matter?

1. no
2. yes

H12. (female patients only)

Have you ever had a Pap smear?

1. definitely not
2. do not know
3. yes. about _____ times

when was the last Pap smear?

_____ weeks/months/years ago

where was it done?

1. private doctors
2. family planning association
3. MCH
4. GOPD
5. specialist OPD
(government or subvented)
6. others (specify) _____

H13. How would you rate your current condition? (prompt by going through list)

1. very poor
2. poor
3. fair
4. good

H14. How much money have you spent, on health care (including professional consultations, western or traditional, hospital charges, A/E costs, all medications, vitamins, tonics, hospitalizations and excluding foods, eyeglasses and dentures) over the past three months?

(definition of whether an item is food or tonic according to patient)

1. 0
2. \$1 - \$100
3. \$101 - \$250
4. \$251 - \$500
5. \$501 - \$750
6. >\$750
7. refuse to estimate

#15. How many professional consultations (chinese or western) have you had over the past 3 months?

#16. Have you been hospitalized over the past year?
(if no, response=0)
(if yes) how many times?-----

where? -----

reasons? -----

I. Patient satisfaction

11. What do you think about the waiting time for obtaining a disc at the GOPD clinics?
 1. too long
 2. ok
12. Are you aware of the block appointment system?
 1. no
 2. yes
13. Did you like your doctor's attitude to you during your consultation?
 1. no
 2. yes
14. Did your doctor take as much time to listen to your problems as you would want him to? (prompt by going through list)
 1. as much as I would like
 2. less than I would like
 3. did not take time to listen at all
 4. more than I would like
15. Was your doctor as reassuring on this visit as you would like him to be?
(prompt by going through list)
 1. as much as I would like
 2. less than I would like
 3. was not reassuring or comforting at all
16. Do you think doctors should deal with the emotional aspects of your illness? (if patient appears blank, prompt by saying "such as worries and anxieties")
(prompt by going through list)
 1. strongly agree
 2. agree
 3. disagree
 4. strongly disagree
17. Did your doctor talk about the emotional aspects of your illness with you on this visit?
 1. no
 2. yes

18. Do you think you should have a clear understanding of your health problems?

1. yes
2. no. why not?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. doctors are too busy
2. I wouldn't have understood it anyway
3. I'd be more anxious if I knew
4. I'd feel so ignorant if I asked
5. not for the sum I paid for the service
6. others (specify) _____

19. After this consultation, do you understand your condition as much as you would like?

(prompt by going through list)

1. as much as I would like
2. less than I would like
3. don't understand at all

110. Do you think your doctor has understood your problems as much as you would like? (prompt by going through list)

1. as much as I would like
2. less than I would like
3. don't think he has understood at all

111. How satisfied are you with your doctor's physical examination skills on this visit? (prompt by going through list)

1. very satisfied
2. satisfied
3. dissatisfied
4. very dissatisfied
5. no comment because of no examination

112. How satisfied are you with the nurses today? (prompt by going through list)

1. very satisfied
2. satisfied
3. dissatisfied
4. very dissatisfied
5. no comment because of limited contact

for 3 and 4, details of reasons _____

113. How satisfied are you with the minor staff today? (prompt by going through list)

1. very satisfied
2. satisfied
3. dissatisfied
4. very dissatisfied
5. no comment because of limited contact

for 3 and 4, details of reasons _____

114. Have you had any experiences with private doctors?
1. no (go to section J)
2. yes
115. Overall, apart from differences in cost, how would you compare the standard of care in the GOPD to that in the private sector?
1. GOPD better
2. GOPD same
3. GOPD worse

J. Utilization of services

- J1. Why have you chosen this clinic to visit?
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")
1. more convenient
 2. service cheaper
 3. symptoms severe
 4. have always been a patient in this clinic
 5. doctor more competent
 6. doctor more friendly and caring
 7. understand medical information better
 8. recommendation of friends/relatives
 9. have a predestined medical affinity with doctor
 10. others (specify) _____

- J2. How did you get to this clinic?
1. on foot
 2. public transportation
 3. private car
 4. ambulance
 5. combination of above (specify) _____

- J3. How much time did you spend travelling to clinic?

K. Predestined medical affinity and "doctor-shopping"

K1. Did you ask to see a specific doctor on duty today?

1. no. is there a reason why not?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. never knew it is possible (go to K4)
2. don't know any doctors from this clinic
3. don't feel there is a need to request
4. don't want to be a nuisance
5. others (specify) _____

2. yes. why?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. doctor's competence
2. doctor's friendly and caring attitude
3. understand medical information he offers
4. recommended by relatives or friends
5. have a predestined medical affinity with doctor
6. others (specify) _____

K2. How often do you request to see a specific doctor on duty?

1. never (go to K4)
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

K3. Have your requests been granted?

1. never
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

K4. How strongly do you believe in the concept of predestined medical affinity?

(prompt by going through list)

1. not at all
2. fairly strongly
3. strongly
4. very strongly
5. never heard of it (go to K6)

- K5. Where did you learn about this concept of predestined medical affinity?
 (do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")
1. own previous experience/knowledge
 2. family influence
 3. relatives/peer influence
 4. media messages
(eg, newspapers, megazines, tv, radio, etc.)
 5. others (specify) _____
- K6. How often do you "shop" around for doctors, ie, change doctors without referral during the same illness episode, when you are unwell?
1. never (go to K10)
 2. less than 20% of the time
 3. 20% to 50% of the time
 4. 50% to 80% of the time
 5. more than 80% of the time
 6. every time
- K7. Why do you shop around for doctors?
 (do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")
1. symptoms persist
 2. dissatisfied with doctor's technical competence
 3. dissatisfied with doctor's attitude
 4. dissatisfied with medical information offered
 5. in seeking for a second opinion
 6. doctor is not virtuous in his medical behaviour
(mo yee dug)
 7. a predestined medical affinity does not exist with present doctor
 8. others (specify) _____
- K8. How do you choose which doctors to shop for?
 (do not go through list. let the patient talk. ascertain the most important reason if more than one is mentioned)
1. recommendation from relatives or friends
 2. pure chance
 3. others (specify) _____
- K9. How often do you consult traditional chinese practitioners for advice as well as western medical doctors during the same illness episode when you are unwell?
1. never
 2. less than 20% of the time
 3. 20% to 50% of the time
 4. 50% to 80% of the time
 5. more than 80% of the time
 6. every time

practitioners for advice when you are unwell?

1. never
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

L. Medication and self-medication

L1. Do you believe that medication should be given whenever you are seen by a doctor during an illness?

1. no
2. yes

L2. How often are you given medications when you are seen in the GOPD?

1. at every visit
2. at least half of the time but not every time
3. less than half of the time

L3. How often do you take instant processed medication (western eg, panadol from Watsons or Mannings or chinese eg, ngun kiu, ngou wong) without seeking professional help from a doctor when you are unwell?

1. never (go to L5)
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

L4. Has it usually been western or chinese medication which you have taken?

1. western medication more frequently
2. chinese medication more frequently
3. western or chinese both as frequently

L5. Apart from instant medication, how often do you take chinese herbal soups without seeking professional help from a doctor when you are unwell?

1. never
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

(skip L6-L10 only if responding to L3.1 and L5.1)

L6. Why do you use self-medication?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. no need as symptoms not too severe
2. convenience / easy access
3. too busy to seek for professional help
4. as a complement to doctor's prescription
5. habitual
6. others (specify) -----

L7. Where did you learn how to self-medicate?
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. own previous experience/prescriptions
2. own knowledge
3. family influence
4. relatives/peer influence
5. media messages
(eg, newspapers, magazines, tv, radio, etc.)
6. advice from chemists in shops
7. others (specify) _____

L8. How often do you take both the medicine which you have bought over the counter and the prescription obtained from a doctor when you are unwell?

1. never (go to section M)
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

L9. Has it usually been western or chinese medication which you have taken in conjunction with your doctor's prescription?

1. western medication more frequently
2. chinese medication or tonics more frequently
3. western or chinese both as frequently

L10. Do you think that you should discuss with your doctor about the self-medication you are/have been taking?

1. yes
2. no. why not?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. it is the norm!
2. no need to tell him
3. he may get angry
4. he may not give me medication if I do
5. no time to discuss this in consultation
6. others (specify) _____

H. Dietary practices

M1. How strongly do you believe in the traditional concept of diet restriction (gai hou, eg, prawns/crabs are "dook", mangoes are "sup yeet", no chicken if flu, etc.) when you are unwell? (NOT what has been advised by doctors or dietitians)

(prompt by going through list)

1. not at all
2. fairly strongly
3. strongly
4. very strongly
5. never heard of it

- M2. How often do you restrict your diet (gai hou) on your own without seeking the help of a professional doctor when you are unwell?
1. never (go to M4)
 2. less than 20% of the time
 3. 20% to 50% of the time
 4. 50% to 80% of the time
 5. more than 80% of the time
 6. every time
- M3. Why do you restrict your diet?
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". If only one is mentioned, prompt by saying "any other reasons?")
1. as a complement to prescription
 2. faster recovery
 3. severity/nature of symptoms
 4. habitual
 5. others (specify) _____
- M4. How often do you restrict your diet as well as taking the doctor's prescription when you are unwell?
1. never (go to M6)
 2. less than 20% of the time
 3. 20% to 50% of the time
 4. 50% to 80% of the time
 5. more than 80% of the time
 6. every time
- M5. Do you think you should inform your doctor that you have been restricting your diet?
1. yes
 2. no. why not?
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". If only one is mentioned, prompt by saying "any other reasons?")
1. no need to tell him
 2. he has not told me to do so
 3. he may get angry
 4. he may not give me medication if I do
 5. no time to discuss this in consultation
 6. others (specify) _____
- M6. Do you take any medication/tonics/vitamins even when you are NOT ill? (if no, response=0, go to M8)
_____ day/week/month/year
- M7. Has it usually been western or chinese medication/tonics which you have taken even when you are NOT unwell?
1. western medication more frequently
 2. chinese medication or tonics more frequently
 3. western or chinese both as frequently

M8. How strong is your belief in hot/cold distinction?

(prompt by going through list)

1. not at all
2. fairly strongly
3. strongly
4. very strongly
5. never heard of it

M9. Does your belief in the concept of hot/cold affect your diet?

(prompt by going through list)

1. not at all
2. fairly strongly
3. strongly
4. very strongly

M10. Where did you learn the above chinese traditional dietary/health concepts eg, gai hou, hot-cold distinction etc.?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". If only one is mentioned, prompt by saying "any other reasons?")

1. own previous experience/knowledge
2. family influence
3. relatives/peer influence
4. media messages
(eg, newspapers, megazines, tv, radio, etc.)
5. others (specify) _____

N. Socioeconomic variables

You have answered all the questions about your health. But before you go, may I ask several questions about your personal particulars.

N1. Marital status

1. single 2. married 3. divorced
4. widowed 5. separated 6. cohabitant

N2. What is the highest level of education you attained?

1. none
2. kindergarten
3. traditional tutor
4. primary school
5. secondary school
6. matriculation
7. post-secondary - non-degree
8. post-secondary - degree

N3. Do you have a full-time job?

(working at least 15 hours in the last seven days)

1. full-time work. job and nature of work:-----
2. part-time work. job and nature of work:-----
3. housewife/household work (not earning wages)
4. still a full-time student
5. below school age
6. retired
7. others (details) -----

N4. Did you pay for the consultation?

1. No. a. waived by social workers
 b. waived by M.O.
 c. GS/DGS
2. Yes. a. major difficulty with fee
 b. some difficulty with fee
 c. no difficulty with fee

(if responding to either N3.1 or N3.2)

N5. What is your average monthly income from your main employment?

1. less than \$1000 2. \$1000-\$2999
3. \$3000-\$5999 4. \$6000-\$9999
5. \$10000 or over 6. refused to answer/don't know

N6. What is the average monthly income of your household? ('household' includes all family members who usually share meals with the subject and/or share the same living quarter)

1. less than \$1000 2. \$1000-\$2999
3. \$3000-\$5999 4. \$6000-\$9999
5. \$10000 or over 6. refused to answer/don't know

N7. Would you like to have possession of a record with a summary of your health problems?

1. no
2. yes

N8. Would you be in favour of a mechanism by which patients with non-serious medical problems could be seen by a specially trained nurse?

1. no
2. yes

Thank you for your helpful information. If we need further assistance, may we contact you by post or telephone?

1. no
2. yes

What is your address?
(please try to get at least the street name and district)

What is your phone number?

----- (office)

----- (home)

0. Interviewer observation

1. Was the respondent cooperative?
 1. no
 2. yes

2. How ambulatory was the patient?
 1. can walk without support
 2. walk with aid
 3. wheelchair bound

3. What was the language used in the interview?
 1. cantonese
 2. other (specify) -----

(for DM or HT patients, hand chit and remind them to have their weight and height measured by nurses. chit is to be collected from nurse at the end of the day and reattached to set)

(for DM and HT patients only)

Please hand this chart to the nurse for the measurement of your weight and height.
Thank you.

(write down name of patient. tear down chart from set)

Name _____

(Instruction to nurse:

Please weigh and measure height without shoes to the nearest 0.1 kg and to the nearest 0.5 cm respectively.)

Weight _____ kg

Height _____ cm

P. Special section

- P1. How would you rate your child's current condition?
(prompt by going through list)
1. very poor
 2. poor
 3. fair
 4. good
- P2. How much money has been spent on your child's health care (including professional consultations, western or traditional, hospital charges, A/E costs, all medications, vitamins, tonics, hospitalizations and excluding foods, eyeglasses and dentures) over the past three months?
(definition of whether an item is food or tonic according to respondent)
1. 0
 2. \$1 - \$100
 3. \$101 - \$250
 4. \$251 - \$500
 5. \$501 - \$750
 6. >\$750
 7. refuse to estimate
- P3. How many professional consultations (chinese or western) has the patient had over the past 3 months?

- P4. Have your child been hospitalized over the past year?
(if no, response=0)
(if yes) how many times? -----
Where? -----
reasons? -----
- P5. What do you think about the waiting time for obtaining a disc at the GOPD clinics?
1. too long
 2. ok
- P6. Are you aware of the block appointment system?
1. no
 2. yes
- P7. Did you like the doctor's attitude toward your child during the consultation?
1. no
 2. yes

- P8. Did your doctor take as much time to listen to your child's problems as you would want him to? (prompt by going through list)
1. as much as I would like
 2. less than I would like
 3. did not take time to listen at all
 4. more than I would like
- P9. Do you think you should have a clear understanding of your child's health problems?
1. yes
 2. no. why not?
- (do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")
1. doctors are too busy
 2. I wouldn't have understood it anyway
 3. I'd be more anxious if I knew
 4. I'd feel so ignorant if I asked
 5. not for the sum I paid for the service
 6. others (specify) _____
- P10. After this consultation, do you understand your child's condition as much as you would like? (prompt by going through list)
1. as much as I would like
 2. less than I would like
- P11. Do you think your doctor has understood your child's problems as much as you would like? (prompt by going through list)
1. as much as I would like
 2. less than I would like
 3. don't think he has understood at all
- P12. How satisfied are you with the doctor's physical examination skills on this visit? (prompt by going through list)
1. very satisfied
 2. satisfied
 3. dissatisfied
 4. very dissatisfied
 5. no comment because of no examination
- P13. How satisfied are you with the nurses today? (prompt by going through list)
1. very satisfied
 2. satisfied
 3. dissatisfied
 4. very dissatisfied
 5. no comment because of limited contact
- for 3 and 4, details of reasons _____

P14. How satisfied are you with the minor staff today?
(prompt by going through list)

1. very satisfied
2. satisfied
3. dissatisfied
4. very dissatisfied
5. no comment because of limited contact

for 3 and 4, details of reasons _____

P15. Why have you chosen this clinic to visit?
(do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. more convenient
2. service cheaper
3. symptoms severe
4. have always been a patient in this clinic
5. doctor more competent
6. doctor more friendly and caring
7. understand medical information better
8. recommendation of friends/relatives
9. have a predestined medical affinity with doctor
10. others (specify) _____

P16. How did you get to this clinic?

1. on foot
2. public transportation
3. private car
4. ambulance
5. combination of above (specify) _____

P17. How much time did you spend travelling to clinic?

P18. Did you ask to see a specific doctor on duty today?

1. no. is there a reason why not?

(do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. never knew it is possible
2. don't know any doctors from this clinic
3. don't feel there is a need to request
4. don't want to be a nuisance
5. others (specify) _____

2. yes. why?

(do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. doctor's competence
2. doctor's friendly and caring attitude
3. understand medical information he offers
4. recommended by relatives or friends
5. have a predestined medical affinity with doctor
6. others (specify) _____

p19. How often do you request to see a specific doctor on duty?

1. never (go to P21)
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

p20. Have your requests been granted?

1. never
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

P21. How often do you "shop" around for doctors, ie, change doctors without referral during the same illness episode, when your child is unwell?

1. never (go to P23)
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

P22. Why do you shop around for doctors?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two answers are mentioned by saying "which two are the most important reasons?". if only one is mentioned, prompt by saying "any other reasons?")

1. symptoms persist
2. dissatisfied with doctor's technical competence
3. dissatisfied with doctor's attitude
4. dissatisfied with medical information offered
5. in seeking for a second opinion
6. doctor is not virtuous in his medical behaviour (mo yee dug)
7. a predestined medical affinity does not exist with present doctor
8. others (specify) _____

P23. How often do you consult traditional chinese practitioners for advice as well as western medical doctors during the same illness episode when your child is unwell?

1. never
2. less than 20% of the time
3. 20% to 50% of the time
4. 50% to 80% of the time
5. more than 80% of the time
6. every time

- P24. Do you believe that medication should be given whenever your child is seen by a doctor during an illness?
1. no
 2. yes
- P25. How often is your child given medications when you are seen in the GOPD?
1. at every visit
 2. at least half of the time but not every time
 3. less than half of the time
- P26. How often do you give your child instant processed medication (western eg, panadol from Watsons or Mannings or chinese eg, ngun kiu, ngou hong) without seeking professional help from a doctor when he/she is unwell?
1. never (skip P27)
 2. less than 20% of the time
 3. 20% to 50% of the time
 4. 50% to 80% of the time
 5. more than 80% of the time
 6. every time
- P27. Has it usually been western or chinese medication which your child has taken?
1. western medication more frequently
 2. chinese medication more frequently
 3. western or chinese both as frequently

Thank you for your helpful information. If we need further assistance, may we contact you by post or telephone?

1. no
2. yes

What is your address?

(please try to get at least the street name and district)

What is your phone number?

----- (office)

----- (home)

Appendix 2 : Survey instrument - Chinese version.

Government Outpatient Department Study

Clinic _____

Room no. _____ Disc no. _____

Date _____

1. am session 2. pm session 3. evening session
 4. sunday session 5. public holiday

Time of interview : from _____ to _____

Name of interviewer : _____

Was proxy respondent interviewed?

1. no

2. yes (specify) name _____
 age _____
 sex M F
 relationship with patient _____

(Rules for interviewing proxy respondent:

1. If the patient is less than 12 years old and accompanied by an adult, direct the questions in sections A, B, C, D and E and special section P to the adult and complete section O.
2. If the patient is less than 12 years old and not accompanied, complete sections A, B and O only and obtain his/her address and telephone number.
3. If the patient is elderly and accompanied by another person, ask the patient whether he/she would mind your asking questions in the presence of the other person before beginning, and direct the questions to the patient. If the accompanying person indicates that the patient is not mentally capable of providing meaningful answers, please direct the questions to the proxy.)

If there are any special problems, please note them in section O.

A. Personal particulars

A1. Name _____

A2. Date of birth _____ []
 (dd) (mm) (yy)

A3. Sex M F

A4. Race 1. Chinese
 2. non-Chinese (specify) _____

B. Experience with GOPD and reason of present visit

- B1. 你以前有冇去過任何一間政府門診部睇病？
1. 冇 (go to B4)
2. 有
- B2. 你以前有冇嚟過呢間政府門診部睇病？
1. 冇 (go to B4)
2. 有
- B3. 你第一次係幾時嚟呢度睇病？
_____日 / 星期 / 月 / 年前
- B4. 你今日因為乜嘢嘢釘服嚟呢度睇？
(may have more than one reason)
1. New problems of less than three months' duration
(record the two most important problems if there
are more than two)
1. _____
2. _____ (answer section C)
2. Other problems (record the two most important
problems if there are more than two)
1. _____
2. _____ (answer section D)
3. 糖尿病覆診 (answer section F)
4. 血壓高覆診 (answer section G)
- B5. (ask only if more than one problem is listed in B4)
上面講嘅問題，今日最煩住你嘅係咩呀？ _____
- B6. 今次有冇做乜嘢化驗或者照x光？
1. 冇
2. 有
- B7. 今次俾咗幾多種藥你？ _____

(for 1 & 2 in B1 only)

B8. 今次醫生有冇話你係乜嘢病?

- 1. 冇
- 2. 有

B9. 有冇叫你返嚟覆診?

- 1. 冇
- 2. 有

- 原因:
- 1. 返嚟陪報告
 - 2. 睇吓病好唔好
 - 3. 其他 (specify) _____
- 幾時:
- 1. 冇講
 - 2. _____ 日 / 星期 / 月後

B10. 有冇介紹你去第二度睇?

- 1. 冇
- 2. 有

處方 _____

C. (If the patient is seen for new problem(s) as defined in B4)
 (If there are more than one unrelated problems in this category, direct the questions in this section to the problem which the patient finds to be most important.)

C1. 你幾時發覺唔好眼嘅?

(if come immediately after noted symptom, response=0 & go to C4)

_____ 日 / 星期前

C2. 發覺後你點做?

(go through items in the following list)

- 1. 完全冇理 (excluding this consultation)
- 2. 休息
- 3. 改變飲食習慣
- 4. 食中藥
- 5. 去藥房買藥食 (服食成藥)
- 6. 食上次病嘅時候食剩嘅藥
- 7. 問屋企人、親戚朋友嘅意見
- 8. 睇醫生 (中醫或西醫)

- 係 / 唔係
- 有 / 冇
- 有 / 冇
- 有 / 冇
- 有 / 冇
- 有 / 冇
- 有 / 冇

冇 / 冇 (if yes, answer C4 to C6.
if no, answer C3 to 4 only)

C3. 如果你冇睇過醫生, 點解你今日又會嚟呢度睇呢?

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要?」. if only one is mentioned, prompt by saying 「仲有冇其他原因?」)

- 1. 今日冇時間
- 2. 今日覺得差啲
- 3. 屋企人或朋友擔心
- 4. 今日有交通工具送我嚟
- 5. 今日冇人陪我嚟
- 6. 今日擺到籐
- 7. 其他原因 (specify) _____

C4. 你以前有冇試過有呢個問題?

- 1. 冇
- 2. 有

C5. 嗰呢個病你睇過醫生嘞，請你講吓有關你睇病嘅詳情。
 (if there are more than three, record the last three in the following table and answer C6)

	上一次睇	對上一次睇	再對上一次睇
睇邊度睇*	1 2 3 4 5 6 7 8 <input type="checkbox"/>	1 2 3 4 5 6 7 8 <input type="checkbox"/>	1 2 3 4 5 6 7 8 <input type="checkbox"/>
(if patient indicates 4=other western doctors or 8=others, specify in the space provided)			
有冇話你乜嘢病?	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>
有冇做乜嘢化驗? (例如: x光, 驗血 驗尿等)	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>
有冇打針?	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>
仲幾多種藥你?	_____ <input type="checkbox"/>	_____ <input type="checkbox"/>	_____ <input type="checkbox"/>
收幾多錢? (包括 x光/化驗費用)	\$ _____ □□□□	\$ _____ □□□□	\$ _____ □□□□
有冇叫你返去覆診?	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>
如果有, 你有冇去?	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>	1. 有 2. 冇 <input type="checkbox"/>
睇過後, 你有冇 好啱?	1. 好啱 <input type="checkbox"/> 2. 冇分別 3. 差啱 4. 其他 _____ (specify)	1. 好啱 <input type="checkbox"/> 2. 冇分別 3. 差啱 4. 其他 _____ (specify)	1. 好啱 <input type="checkbox"/> 2. 冇分別 3. 差啱 4. 其他 _____ (specify)
你點解可要睇醫生?	_____ <input type="checkbox"/>	_____ <input type="checkbox"/>	_____ <input type="checkbox"/>

C6. (if there have been more than three consultations)
 總共睇咗幾次? _____
 (excluding this consultation)

睇邊度睇*? 1 2 3 4 5 6 7 8 (may circle more than one)
 (if patient indicates 4=other western doctors or 8=others, specify in the space provided)

- | | |
|--------------|-------------------------|
| * 1. 呢間政府門診部 | 2. 另一間政府門診部 |
| 3. 私家西醫診所 | 4. 其他西醫 (specify) _____ |
| 5. 中醫 | 6. 針灸師 |
| 7. 跌打醫生 | 8. 其他 (specify) _____ |

D. If the patient is seen for 'other problem' as defined in B4
 (If there are more than one unrelated problems in this category; direct the questions in this section to the problem which the patient finds to be most important.)

D1. 你幾時開始有呢個病?
 _____ 月/年前

D2. 開始覺得唔妥之後你有冇做過啲乜嘢呀?
 (go through items in the following list)

1. 完全冇理 (excluding this consultation)	係 / 唔係	<input type="checkbox"/>
2. 休息	有 / 冇	<input type="checkbox"/>
3. 改變飲食習慣	有 / 冇	<input type="checkbox"/>
4. 食中藥	有 / 冇	<input type="checkbox"/>
5. 去藥房買藥食 (服食成藥)	有 / 冇	<input type="checkbox"/>
6. 食上次病嘅時候食剩嘅藥	有 / 冇	<input type="checkbox"/>
7. 問屋企人、親戚朋友嘅意見	有 / 冇	<input type="checkbox"/>
8. 睇醫生 (中醫或西醫)	有 / 冇	<input type="checkbox"/>

(If no, go to Section E.
If yes, answer D3 & D4)

D3. 如果有睇過醫生, 你去過邊度睇呢?
 (may circle more than one)

1. 呢間政府門診部
2. 另一間政府門診部
3. 私家西醫診所
4. 其他西醫 (specify) _____
5. 中醫
6. 針灸師
7. 跌打醫生
8. 其他 (specify) _____

D4. 你呢次呢個病主要睇邊度睇?

1. 呢間政府門診部
2. 另一間政府門診部
3. 私家西醫診所
4. 其他西醫 (specify) _____
5. 中醫
6. 針灸師
7. 跌打醫生
8. 其他 (specify) _____

E. Other health problems
 (If patient notes a problem, indicate the problem in the space provided, then go through the list of actions as in C2 and D2. Circle the appropriate number (options 1-8) if the response is yes.)

(If patient sought the advice of professionals (option 8), note where by circling the corresponding number (* options 1-8). If patient sought advice from 4=other western doctors or 8=others, specify in the space provided.)

E1. 過去一個月內，你有冇其他唔舒服？

1. 有
 2. 有 問題 行動

1. _____ + 1 2 3 4 5 6 7 8
 for 8, 邊度? *1 2 3 4 5 6 7 8
 4/8=(specify) _____

2. _____ + 1 2 3 4 5 6 7 8
 for 8, 邊度? *1 2 3 4 5 6 7 8
 4/8=(specify) _____

3. _____ + 1 2 3 4 5 6 7 8
 for 8, 邊度? *1 2 3 4 5 6 7 8
 4/8=(specify) _____

- | | | |
|------|------------------------------------|--------|
| + 1. | 完全冇理 (excluding this consultation) | 係 / 唔係 |
| 2. | 休息 | 有 / 冇 |
| 3. | 改變飲食習慣 | 有 / 冇 |
| 4. | 食中藥 | 有 / 冇 |
| 5. | 去藥房買藥食 (服食成藥) | 有 / 冇 |
| 6. | 食上次病嘅時候食剩嘅藥 | 有 / 冇 |
| 7. | 問屋企人、親戚朋友嘅意見 | 有 / 冇 |
| 8. | 睇醫生 (中醫或西醫) | 有 / 冇 |

- * 1. 呢間政府門診部
 2. 另一間政府門診部
 3. 私家西醫診所
 4. 其他西醫 (specify) _____
 5. 中醫
 6. 針灸師
 7. 跌打醫生
 8. 其他 (specify) _____

(if the patient has not come for the continuing care of IIT or DM)

E2. 有冇西醫話過你有糖尿病？

1. 有
2. 有 (go to section F)

E3. 有冇西醫話過你有血壓高？

1. 有
2. 有 (go to section G)

E4. 除咗上面講過嘅問題，仲有冇第二樣唔舒服？

F. Care of DM

F1. 你最先被診斷患上糖尿病係幾時？

1. 唔夠一年
2. 一至兩年前
3. 兩至五年前
4. 五至十年前
5. 超過十年前

F2. 叫你去過邊度睇？ (may circle more than one)

1. 呢間政府門診部
2. 另一間政府門診部
3. 政府門診部專科 (政府或津貼)
4. 私家西醫診所
5. 其他西醫 (specify) _____
6. 中醫
7. 針灸師
8. 其他 (specify) _____

F3. 過去一年內，你嘅糖尿病主要係邊度睇？

(see responses in F2 and circle the corresponding number.
code '8' if care received from combined sites or patient
cannot decide)

1 2 3 4 5 6 7 8 (specify) _____

F4. 過去一年內，喺你睇得最多嘅診所裏面，你做過幾次以下嘅檢驗？

a. 用驗眼鏡驗眼

1. 冇
2. 一次
3. 多過一次

- b. 除咗鞋襪嗰檢驗雙腳
1. 冇
 2. 一次
 3. 多過一次
- c. 肌度體重
1. 冇
 2. 一次
 3. 多過一次
- d. 你驗過幾多次血？
1. 冇 (go to r5)
 2. 一次
 3. 多過一次
- e. 如果有驗血，係唔係驗血糖？
1. 唔係 (go to r5)
 2. 唔知道 (go to r5)
 3. 係
- f. 如果有驗血糖，上啲次結果點樣？
1. 太高
 2. 滿意
 3. 太低
 4. 有講過，但唔記得
 5. 冇講過
- r5. 你用緊乜嘢藥嚟醫你嘅糖尿病？
1. 注射胰島素
 2. 食藥
 3. 醫生話淨係控制飲食已經足夠
 4. 其他 (specify) _____
- r6. 過去一個月內，你自己喺屋企驗過幾多次血糖？
(if not monitoring own blood glucose, response=0)
每日/星期/月 _____次
- 通常邊個幫你驗？
1. 自己
 2. 屋企人、親戚、朋友
 3. 其他 (specify) _____
- r7. 過去一個月內，你自己喺屋企驗過幾多次尿糖？
(if not monitoring urine for sugar, response=0)
每日/星期/月 _____次
- 通常邊個幫你驗？
1. 自己
 2. 屋企人、親戚、朋友
 3. 其他 (specify) _____
- r8. 如果你有喺屋企驗尿糖，點解？
1. 喺屋企驗血糖
 2. 冇人教過點驗
 3. 冇人教過點驗，但仍然唔識點驗
 4. 知道點驗，但太麻煩
 5. 負擔唔起

F9. 你發覺患有糖尿病後，有冇人教過你點樣料理雙腳？

1. 冇
2. 有

F10. 你發覺患有糖尿病後，有冇改變你嘅飲食習慣？

1. 冇
2. 有

F11. 你嘅體重有冇改變？

1. 重咗多過一成
2. 改變唔夠一成
3. 輕咗多過一成

F12. 如果你冇乜嘢釘服或者特別嘅問題，你介唔介意番嚟覆診嘅時候有時由一啲受過特別訓練嘅護士睇你？

1. 介意
2. 唔介意 / 冇所謂

G. Care of HT

G1. 你最先被診斷有血壓高係幾時？

1. 唔夠一年
2. 一至兩年前
3. 兩至五年前
4. 五至十年前
5. 超過十年前

G2. 叫你去過邊度睇？ (may circle more than one)

1. 呢間政府門診部
2. 另一間政府門診部
3. 政府門診部專科 (政府或津貼)
4. 私家西醫診所
5. 其他西醫 (specify) _____
6. 中醫
7. 針灸師
8. 其他 (specify) _____

G3. 過去一年內，你嘅血壓高主要係邊度睇？

(see responses in G2 and circle the corresponding number code '8' if care received from combined sites or patient cannot decide)

1 2 3 4 5 6 7 8 (specify) _____

G4. 過去一年內，嚟你睇得最多嘅診所裏面，你做過幾多次以下嘅檢驗？

a. 量度血壓

1. 每次或差不多每次覆診血壓高時
2. 其他答案

b. 用驗眼鏡驗眼

1. 冇
2. 一次
3. 多過一次

c. 驗血

1. 冇
2. 一次
3. 多過一次

d. 驗尿

1. 冇
2. 一次
3. 多過一次

G5. 過去一個月內，你自己嗰屋企量過幾多次血壓？

(if not monitoring own blood pressure, response=0)
每日 / 星期 / 月 _____ 次

通常邊個幫你量度？

1. 自己
2. 屋企人、親戚、朋友
3. 其他 (specify) _____

G6. 你知唔知道你通常嘅血壓係幾多？

1. 唔知道
2. 知道. 大概 _____ / _____ mmHg

G7. 你有咗血壓高之後，你嘅體重有冇改變？

1. 重咗多過一成
2. 改變唔夠一成
3. 輕咗多過一成

G8. 如果你冇乜唔舒服或者特別嘅問題，你介唔介意番啱覆診嘅時候有時由一啲受過特別訓練嘅護士陪你？

1. 介意
2. 唔介意 / 冇所謂

II. General health

- H11. 有冇人陪你㗎？
1. 有
2. 有 (specify who) _____
- H12. 你嘅視力點樣？
1. 唔需要戴眼鏡都清楚睇到近和遠嘅嘢
2. 需要戴眼鏡先至睇到近和/或遠嘅嘢
3. 即使戴眼鏡都睇唔到近和/或遠嘅嘢
4. 睇嘢有問題，但唔知道戴眼鏡有冇幫助/冇眼鏡
- H13. 你聽嘢有冇問題？
1. 唔駛助聽器都聽得很清楚
2. 用助聽器聽得很清楚
3. 即使用助聽器，聽嘢都有問題
4. 聽嘢有問題，但唔知道助聽器有冇幫助/冇助聽器
- H14. 你要唔要戴假牙？
1. 全部自己牙
2. 部份假牙
3. 全部假牙
4. 冇/差不多冇天生和假牙
- H15. 過去一個月內，你有冇食過煙仔？
(if no, response=0 and go to H19)
每日/星期/月 _____ 支
- H16. 如果你有食煙，有冇人勸過你戒煙？
1. 冇
2. 有。 邊個勸你？ (may circle more than one)
1. 政府門診部醫生
2. 其他醫生
3. 其他健康專業人士
4. 屋企人
5. 朋友
6. 其他 (specify) _____
- H17. 你有冇試過戒煙？
1. 冇 (go to H19)
2. 有
- H18. 如果你試過戒煙，係乜嘢影響你最大？
1. 自己主動
2. 屋企人嘅勸告
3. 朋友嘅勸告
4. 傳播媒介 (如報章，雜誌，電視，電台等) 嘅勸告
5. 醫生嘅勸告
6. 其他 (specify) _____

H9. 過去一個月內，你有冇飲過酒？
 (if no, response=0)
 (if yes)
 你通常飲乜嘢？ _____
 你飲幾多？ 每日 / 星期 / 月飲 _____

H10. 政府門診部醫生有冇同你討論過你嘅：
 (go through items in the following list)

1. 飲食	有 / 冇	<input type="checkbox"/>
2. 體重	有 / 冇	<input type="checkbox"/>
3. 膽固醇	有 / 冇	<input type="checkbox"/>
4. 食煙	有 / 冇	<input type="checkbox"/>
5. 酒精 / 飲酒	有 / 冇	<input type="checkbox"/>
6. 濫用藥物 / 亂食藥	有 / 冇	<input type="checkbox"/>
7. 性習慣	有 / 冇	<input type="checkbox"/>

H11. 你有冇向政府門診部醫生問及以下嘅問題？
 1. 冇
 2. 有

H12. (female patients only)
 你有冇試過做子宮頸細胞檢查？

1. 肯定有	<input type="checkbox"/>
2. 唔知道	<input type="checkbox"/>
3. 有. 大概 _____ 次	<input type="checkbox"/>

最後啲次係幾時嘅事？ _____ 星期 / 月 / 年前
 喺邊度做？

1. 私家醫生	
2. 家庭計劃指導會	
3. 同環健康院	
4. 政府門診部	
5. 政府門診部專日 (政府或津貼)	
6. 其他 (specify) _____	<input type="checkbox"/>

H13. 你認為你目前嘅病情點樣？ (prompt by going through list)

1. 病情很嚴重	
2. 病情幾重	
3. 病情輕微	
4. 冇病 / 好	<input type="checkbox"/>

H14. 過去三個月內，你用咗幾多錢嘅醫病，住醫院，買藥 (好似成藥、維他命、補品)。呢啲費用唔包括食物、假身、配眼鏡 (definition of whether an item is food or tonic according to patient)

1. 0	
2. \$ 0-\$ 100	
3. \$ 101-\$ 250	
4. \$ 251-\$ 500	
5. \$ 501-\$ 750	
6. >\$ 750	
7. 完全冇辦法估計	<input type="checkbox"/>

115. 過去三個月內你睇過幾次醫生 (中醫或西醫)? _____次
(excluding this consultation)

116. 過去一年內, 你有冇住過醫院?
(if no, response=0)
(if yes) 住過 _____ 次

選間醫院? _____

乜嘢原因? _____

I. Patient satisfaction

11. 你覺得等攤籌嘅時間長唔長?

1. 太長
2. 冇問題

12. 你知唔知道有個分批應診制度?

1. 唔知道
2. 知道

13. 你鐘唔鐘意頭先醫生睇病時對你嘅態度?

1. 唔鐘意
2. 鐘意

14. 頭先醫生用嚟聽你講你個病嘅時間, 係咪好似你所想嘅咁多呢?

(prompt by going through list)

1. 都有我想嘅咁多
2. 少過我所想
3. 完全冇俾時間聽
4. 多過我所想

15. 今次睇病, 醫生係咪好似你所希望嘅咁能夠使你安心一啲, 冇咁擔心?

(prompt by going through list)

1. 算係有我想嘅咁多
2. 少過我所想咁多
3. 完全唔能夠使我安心

16. 你同唔同意醫生應該處理你因為個病而引起嘅情緒問題?

(if patient appears blank, prompt by saying '比如擔心、憂慮呀咁'.)

(prompt by going through list)

1. 十分同意
2. 同意
3. 唔同意
4. 十分唔同意

- I7. 今次睇病，醫生有冇同你講及你個病引起嘅情緒問題？
1. 冇
 2. 有
-
- I8. 你認為你係咪應該清楚了解你嘅健康情況？
1. 係
 2. 唔應該知。點解？
- (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」)
1. 醫生太忙，冇時間
 2. 我反正唔會明白
 3. 如果我知道咗，我會更加擔心
 4. 如果我問，我會感到很無知
 5. 以我付出嘅錢，唔應該有咁嘅服務
 6. 其他 (specify) _____
-
- I9. 睇完醫生之後，叫你而家對自己情況算唔算了解？
- (prompt by going through list)
1. 都算了解
 2. 比我想了解嘅少
 3. 完全唔了解
-
- I10. 你認為醫生對你問題嘅了解係咪足夠？
- (prompt by going through list)
1. 都算足夠
 2. 比我想嘅少
 3. 我認為佢完全唔了解
-
- I11. 今次睇病，你對醫生檢查身體嘅手勢係咪滿意？
- (prompt by going through list)
1. 十分滿意
 2. 滿意
 3. 唔滿意
 4. 十分唔滿意
 5. 冇檢查，所以冇意見
-
- I12. 你今日對呢間診所嘅護士滿唔滿意？
- (prompt by going through list)
1. 十分滿意
 2. 滿意
 3. 唔滿意
 4. 十分唔滿意
 5. 接觸有限，所以冇意見
- for 3 and 4, details of reasons _____
-

- I13. 你今日對的阿叔阿嬸滿唔滿意？
1. 十分滿意
 2. 滿意
 3. 唔滿意
 4. 十分唔滿意
 5. 接觸有限，所以冇意見
- for 3 and 4, details of reasons _____

- I14. 你有冇睇過私家醫生？
1. 有 (go to section J)
 2. 冇

- I15. 如果唔計收得平定貴，總括嚟講，你覺得政府街症定係私家醫生睇得好啲呢？
1. 政府街症好啲
 2. 冇分別
 3. 政府街症差啲

J. Utilization of services

- J1. 你點解揀嚟呢間診所睇病？
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)

1. 比較方便
2. 比較便宜
3. 症狀嚴重
4. 一向睇呢間診所睇開病
5. 醫生比較能幹
6. 醫生比較友善和關心
7. 比較了解醫療資料
8. 朋友/親戚介紹
9. 同醫生"夾"
10. 其他 (specify) _____

- J2. 你點樣嚟呢間診所？
1. 行路
 2. 公共交通工具
 3. 私家車
 4. 救傷車
 5. 上面組合 (specify) _____

- J3. 你用咗幾多時間嚟？ _____

K. Predestined medical affinity and "doctor-shopping"

K1. 你今日有冇要求見某一個當值醫生?

1. 有 點解?

- (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying '邊兩個原因最重要?' if only one is mentioned, prompt by saying '仲有冇其他原因?'.)

1. 從來唔知道可以叫做 (go to K4)
2. 唔識呢間診所裏面有任何一個醫生
3. 唔覺得有咁嘅需要
4. 唔想麻煩人
5. 其他 (specify) _____

2. 有 點解?

- (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying '邊兩個原因最重要?'. if only one is mentioned, prompt by saying '仲有冇其他原因?'.)

1. 因為醫生能管
2. 因為醫生友善和關心病人
3. 明白佢所提供嘅服務資料
4. 朋友/親戚介紹
5. 同醫生"夾"
6. 其他 (specify) _____

K2. 你有冇經常要求見某一個當值醫生?

1. 未試過 (go to K4)
2. 非常少, 少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 次次都有

K3. 你嘅要求有冇被接納?

1. 未試過
2. 非常少, 少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 次次都有

K4. 你信唔信有啲病人會同一個醫生「夾」, 但係同第二個醫生又唔「夾」㗎? (prompt by going through list)

1. 完全唔信
2. 麻麻地相信
3. 相信
4. 信到十足
5. 從來未聽過呢啲嘢 (go to K6)

- K5. 你喺邊度知道關於同醫生「夾唔夾」呢樣嘢？
 (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)
1. 自己以往經驗 / 知識
 2. 屢企人影響
 3. 其他親戚 / 朋友影響
 4. 傳播媒介 (如報章, 雜誌, 電視, 電台等)
 5. 其他 (specify) _____
- K6. 你有冇試過喺同一次病, 冇醫生介紹就自己轉醫生?
1. 未試過 (go to K9)
 2. 非常少, 少過兩成
 3. 大約兩成至一半
 4. 大約一半至八成
 5. 多過八成
 6. 每次唔舒服都有
- K7. 你點解要四圍轉醫生?
- (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)
1. 症狀持續
 2. 唔滿意醫生嘅技術能力
 3. 唔滿意醫生嘅態度
 4. 唔滿意所得到嘅醫療資料
 5. 想多一個人鑒定
 6. 醫生冇醫德
 7. 同個醫生唔 "夾"
 8. 其他 (specify) _____
- K8. 你點樣去揀搵邊個醫生? (do not go through list. let the patient talk. ascertain the most important reason if more than one is mentioned.)
1. 朋友 / 親戚介紹
 2. 純屬偶然
 3. 其他 (specify) _____
- K9. 你有冇經常同一次病嘅時候又睇中醫又睇西醫?
1. 未試過
 2. 非常少, 少過兩成
 3. 大約兩成至一半
 4. 大約一半至八成
 5. 多過八成
 6. 每次唔舒服都有

K10. 你有病嘅時候，冇冇經常唔開？

1. 未試過
2. 非常少，少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔舒服都有

L. Medication and self-medication

L1. 你認唔認為每次唔舒服醫生都應該冇藥食？

1. 唔認為/唔係
2. 認為/係

L2. 你去政府門診部陪病，係咪經常冇開藥俾你？

1. 每次都有
2. 至少一半嘅次數，但唔係每次都有
3. 少過一半次數有

L3. 你有病嘅時候，係咪經常唔睇醫生而自己食成藥（西藥如必利痛、或中藥如銀膠、牛黃）？

1. 未試過 (go to L5)
2. 非常少，少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔舒服都有

L4. 你通常食嘅係西藥抑或中藥？

1. 比較經常食西藥
2. 比較經常食中藥
3. 中、西藥都一樣叫經常食

L5. 除咗成藥之外，你有病嘅時候，係咪經常唔睇醫生而自己煲中藥飲？

1. 未試過 (go to section M if patient answer 未試過 in L3)
2. 非常少，少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔舒服都有

L6. 你點解自己搵藥食？

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「選兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)

1. 有需要睇醫生，因為症狀唔大嚴重
2. 方便/容易得到
3. 太忙，冇時間睇醫生
4. 補充醫生處方嘅不足
5. 習慣性
6. 其他 (specify) _____

- L7. 你喺邊度學識自己搵藥食？
 (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)
1. 自己以往經驗 / 處方
 2. 自己知識
 3. 屋企人影響
 4. 其他親戚 / 朋友影響
 5. 傳播媒介 (如報章, 雜誌, 電視, 電台等)
 6. 藥房藥劑師指點
 7. 其他 (specify) _____
- □

- L8. 你有病嘅時候, 係咪經常又食自己嘅藥, 又食醫生開俾你嘅藥?
1. 未試過 (go to section M)
 2. 非常少, 少過兩成
 3. 大約兩成至一半
 4. 大約一半至八成
 5. 多過八成
 6. 每次唔舒服都有
-

- L9. 如果試過, 通常食嘅係西藥抑或中藥?
1. 通常係西藥
 2. 通常係中藥或補藥
 3. 中、西藥都一樣叫經常食
-

- L10. 你認為係咪應該同醫生商量有關你自己買嚟食嘅藥?
1. 應該
 2. 唔應該. 點解唔應該?
- (do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)
1. 叫係好正常、一般!
 2. 有需要請俾佢知
 3. 佢或者會勞氣 / 憊
 4. 如果我講咗, 佢或者唔開藥俾我
 5. 睇病嘅時候, 冇時間商量這些
 6. 其他 (specify) _____
- □

M. Dietary practices

- M1. 中國人話有病嘅時候要戒口, 你信唔信呀?
 (例如: 蝦蟹 "毒", 芒果 "濕熱", 感冒唔食得雞等)
 (NOT what has been advised by doctors or dietitians)
 (prompt by going through list)
1. 完全唔信
 2. 麻麻地相信
 3. 相信
 4. 信到十足
 5. 從來未聽過呢樣嘢
-

M2. 你有病嘅時候，係咪經常唔睇醫生而自己戒口？

1. 未試過 (go to M4)
2. 非常少，少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔釘服都有

M3. 你點解戒口？

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)

1. 補充處方嘅不足
2. 復原快些
3. 症狀嘅性質 / 嚴重性
4. 習慣性
5. 其他 (specify) _____

M4. 你有病嘅時候，係咪經常又戒口又食醫生開嘅藥？

1. 未試過 (go to M6)
2. 非常少，少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔釘服都有

M5. 你認為係咪應該請佢醫生聽你有戒口？

1. 應該
2. 唔應該. 點解唔應該？

(do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)

1. 有需要講俾佢知
2. 佢冇叫我講
3. 佢或者會勞氣 / 惱
4. 如果我講咗，佢或者唔開藥俾我
5. 睇病嘅時候，冇時間商量這些
6. 其他 (specify) _____

M6. 你有病嘅時候，有冇食補藥，包括維他命丸？

(if no, response=0 and go to M8)
每日 / 星期 / 月 / 年 _____ 次

- M7. 你通常喺有病時候食嘅補藥係西藥抑或中藥？
1. 比較經常係西藥
 2. 比較經常係中藥
 3. 中、西藥都一樣叫經常食
-
- M8. 你信唔信有熱氣/寒涼？ (prompt by going through list)
1. 完全唔信
 2. 麻麻地相信
 3. 相信
 4. 信到十足
 5. 從來未聽過呢樣嘢
-
- M9. 熱氣/寒涼嘅概念有冇影響你嘅飲食習慣？
(prompt by going through list)
1. 完全冇
 2. 麻麻地有影響
 3. 有影響
 4. 影響非常大
-
- M10. 你喺邊度知道戒口、熱氣/寒涼嘅傳統概念？
(do not go through list. let the patient talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」.)
1. 自己以往經驗/知識
 2. 屋企人影響
 3. 其他親戚/朋友影響
 4. 傳播媒介 (如報章, 雜誌, 電視, 電台等)
 5. 其他 (specify) _____
-

N. Socioeconomic Variables

你已經答晒所有關於你健康嘅問題。但嚟你走之前，我可唔可以問你幾條有關你個人資料嘅問題？

N1. 婚姻狀況

- | | | | |
|-------|-------|-------|--------------------------|
| 1. 未婚 | 2. 已婚 | 3. 離婚 | |
| 4. 喪偶 | 5. 分居 | 6. 同居 | <input type="checkbox"/> |

N2. 你讀書讀到乜嘢程度？

1. 冇讀過書
 2. 幼稚園
 3. 私塾
 4. 小學
 5. 中學
 6. 預科
 7. 大專 ---- 非學位
 8. 大專 ---- 學位
-

N3. 你有冇全職工作？

(working at least 15 hours in the last seven days)

1. 全職工作. 職業及工作性質: _____
2. 兼職工作. 職業及工作性質: _____
3. 家庭主婦/料理家務 (不支薪)
4. 學生
5. 未到入學年齡
6. 退休
7. 其他 (details) _____

N4. 你要唔要俾錢睇病？

1. 唔駛. 點解?
 - a. 社工協助豁免
 - b. 醫生協助豁免
 - c. 公務員/公務員家屬
 2. 要. 叫你冇冇困難?
 - a. 支付費用有很大困難
 - b. 支付費用有一些困難
 - c. 支付費用冇困難
-

(if responding to either N3.1 or N3.2)

N5. 你嘅主要職業每月平均收入係幾多？

- | | | |
|--------------------|--------------------|--------------------------|
| 1. 少過 \$ 1000 | 2. \$ 1000-\$ 2999 | |
| 3. \$ 3000-\$ 5999 | 4. \$ 6000-\$ 9999 | |
| 5. \$ 10000或以上 | 6. 唔想答/唔知 | <input type="checkbox"/> |

N6. 你一家人嘅每月平均收入係幾多？

(一家人 includes all family members who usually share meals with the subject and/or share the same living quarter)

- | | | |
|--------------------|--------------------|--------------------------|
| 1. 少過 \$ 1000 | 2. \$ 1000-\$ 2999 | |
| 3. \$ 3000-\$ 5999 | 4. \$ 6000-\$ 9999 | |
| 5. \$ 10000或以上 | 6. 唔想答/唔知 | <input type="checkbox"/> |

N7. 你想唔想擁有一份扼要講及你健康問題嘅紀錄?

1. 唔想
2. 想

N8. 你贊唔贊成有啲輕微嘅病或者簡單嘅問題可以由受過特別訓練嘅護士處理?

1. 唔贊成
2. 贊成

多謝你提供嘅有用資料. 如果我哋需要你進一步嘅幫忙, 我哋可唔可以用信件或電話同你聯絡?

1. 唔可以
2. 可以

你嘅地址係?

(please try to get at least the street name and district)

你嘅電話號碼係?

_____ (辦公室)

_____ (住宅)

0. Interviewer Observation

01. Was the respondent cooperative?

1. no
2. yes

02. How ambulatory was the patient?

1. can walk without support
2. walk with aid
3. wheelchair bound

03. What was the language used in the interview?

1. cantonese
2. other (specify) _____

(for DM or HT patients, hand chit and remind them to have their weight and height measured by nurses. chit is to be collected from nurse at the end of the day and reattached to set)

(for DM and HT patients only)

請交此便條與護士，以便量度閣下之體重及身高。多謝合作。

(Write down the name of patient. Tear down chit from set.)

Name _____

(Instruction to nurse:

Please weigh and measure height without shoes to the nearest
0.1 kg and to the nearest 0.5 cm respectively.)

Weight _____ . _____ kg

□□□□

Height _____ . _____ cm

□□□□

Section P

- P1. 你認為佢目前嘅病情點樣? (prompt by going through list)
1. 病情很嚴重
 2. 病情幾重
 3. 病情輕微
 4. 冇病/好
-
- P2. 過去三個月內, 你用咗幾多錢俾佢嚟睇病, 住醫院, 買藥 (好似成藥、維他命、補品)? 呢啲費用唔包括食物、假牙、配眼鏡 (definition of whether an item is food or tonic according to respondent)
1. 0
 2. \$ 0-\$ 100
 3. \$ 101-\$ 250
 4. \$ 251-\$ 500
 5. \$ 501-\$ 750
 6. >\$ 750
 7. 完全冇辦法估計
-
- P3. 過去三個月內佢睇過幾多次醫生 (中醫或西醫)? _____次
- P4. 過去一年內, 佢有冇住過醫院?
(if no, response=0)
(if yes) 住過 _____ 次
邊間醫院? _____
乜嘢原因? _____
- P5. 你覺得等攤籌嘅時間長唔長?
1. 太長
2. 冇問題
- P6. 你知唔知道有個分批應診制度?
1. 唔知道
2. 知道
- P7. 你鐘唔鐘意頭先醫生睇病時對你同佢嘅態度?
1. 唔鐘意
2. 鐘意

- P8. 頭先醫生用嚟聽你講佢個病嘅時間，係咪好似你所想嘅咁多呢？
(prompt by going through list)
1. 都有我想嘅咁多
 2. 少過我所想
 3. 完全冇俾時間聽
 4. 多過我所想
-
- P9. 你認為你係咪應該清楚了解佢嘅健康情況？
1. 係
 2. 唔應該知。點解？
(do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. If only one is mentioned, prompt by saying 「仲有冇其他原因？」)
 1. 醫生太忙，冇時間
 2. 我反正唔會明白
 3. 如果我知道啱，我會更加擔心
 4. 如果我問，我會感到很無知
 5. 以我付出嘅錢，唔應該有咁嘅服務
 6. 其他 (specify) _____
-
- P10. 睇完醫生之後，叫你而家對佢嘅情況算唔算了解？
(prompt by going through list)
1. 都算了解
 2. 比我想了解嘅少
-
- P11. 你認為醫生對佢嘅問題嘅了解係咪足夠？
(prompt by going through list)
1. 都算足夠
 2. 比我想嘅少
 3. 我認為佢完全唔了解
-
- P12. 今次睇病，你對醫生檢查身體嘅手勢係咪滿意？
(prompt by going through list)
1. 十分滿意
 2. 滿意
 3. 唔滿意
 4. 十分唔滿意
 5. 冇檢查，所以冇意見
-
- P13. 你今日對呢間診所嘅護士滿唔滿意？
(prompt by going through list)
1. 十分滿意
 2. 滿意
 3. 唔滿意
 4. 十分唔滿意
 5. 接觸有限，所以冇意見
-
- for 3 and 4, details of reasons _____

P14. 你今日對啲阿叔阿嬸滿意唔滿意？

(prompt by going through list)

1. 十分滿意
2. 滿意
3. 唔滿意
4. 十分唔滿意
5. 接觸有限，所以冇意見

for 3 and 4, details of reasons _____

P15. 你哋點解揀嗰呢間診所呀病？

(do not go through the list. let the proxy respondent talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」)

1. 比較方便
2. 比較便宜
3. 症狀嚴重
4. 一向嗰呢間診所隔開病
5. 醫生比較能幹
6. 醫生比較友善和關心
7. 比較了解醫療資料
8. 朋友/親戚介紹
9. 同醫生“夾”
10. 其他 (specify) _____

P16. 你哋點樣嗰呢間診所？

1. 行路
2. 公共交通工具
3. 私家車
4. 救傷車
5. 上面組合 (specify) _____

P17. 你哋用咗幾多時間呀？ _____

P18. 你今日有冇要求見某一個當值嘅醫生？

1. 有 點解有？

(do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. If only one is mentioned, prompt by saying 「仲有冇其他原因？」)

1. 從來唔知道可以咁做
2. 唔識呢間診所裏面任何一個醫生
3. 唔覺得有咁嘅需要
4. 唔想麻煩人
5. 其他 (specify) _____

2. 有 點解？

(do not go through list. let the proxy respondent talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. If only one is mentioned, prompt by saying 「仲有冇其他原因？」)

1. 因為醫生能幹
2. 因為醫生友善和關心病人
3. 明白佢所提供嘅醫療資料
4. 朋友/親戚介紹
5. 同醫生“夾”
6. 其他 (specify) _____

P19. 你同佢嗰陣嘅時候有冇經常要求見某一個當值醫生？

1. 未試過 (go to P21)
2. 非常少, 少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 次次都有

P20. 你嘅要求有冇被接納？

1. 未試過
2. 非常少, 少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 次次都有

P21. 佢有冇試過睇同一次病, 冇醫生介紹你就同佢轉醫生？

1. 未試過 (go to K10)
2. 非常少, 少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔舒服都有

P22. 你點解要四圍轉醫生？

(do not go through the list. let the proxy respondent talk. ascertain the two most important reasons if more than two are mentioned by saying 「邊兩個原因最重要？」. if only one is mentioned, prompt by saying 「仲有冇其他原因？」)

1. 症狀持續
2. 唔滿意醫生嘅技術能力
3. 唔滿意醫生嘅態度
4. 唔滿意所得到嘅醫療資料
5. 想多一個人鑑定
6. 醫生冇醫德
7. 同個醫生唔 "夾"
8. 其他 (specify) _____

P23. 佢有冇經常同一次病嘅時候又睇中醫又睇西醫？

1. 未試過
2. 非常少, 少過兩成
3. 大約兩成至一半
4. 大約一半至八成
5. 多過八成
6. 每次唔舒服都有

P24. 你認唔認為佢每次唔舒服睇醫生都應該有藥食？

1. 唔認為/唔係
2. 認為/係

P25. 佢去政府門診部睇病, 係咪經常冇開藥俾佢？

1. 每次都有
2. 至少一半嘅次數, 但唔係每次都有
3. 少過一半次數有

P26. 佢有病嘅時候，係咪經常唔聽醫生而你自己仲成藥佢食
(西藥如必利痛、或中藥如銀翹、牛黃)？

- 1. 未試過 (skip P27)
- 2. 非常少，少過兩成
- 3. 大約兩成至一半
- 4. 大約一半至八成
- 5. 多過八成
- 6. 每次唔舒服都有

P27. 如果佢有食成藥，佢通常食嘅係西藥抑或中藥？

- 1. 比較經常食西藥
- 2. 比較經常食中藥
- 3. 中、西藥都一樣叫經常食

多謝你提供嘅有用資料，如果我哋需要你進一步嘅幫忙，我哋
可唔可以用信件或電話同你聯絡？

- 1. 唔可以
- 2. 可以

你嘅地址係？

(please try to get at least the street name and district)

你嘅電話號碼係？

_____ (辦公室)

_____ (住宅)

Appendix 3: Quality assessment

Appendix 3: Quality assessment

1.0 Procedure of quality assessment (QA)

A member of staff, given a set of responses to a sample of the questions, was brought into the clinic as a "dummy" patient so that variations in the posing of questions by the interviewers were checked.

For ease of control, three individuals were involved in the QA sessions. Each attended three clinic sessions so as to be interviewed by the different teams; in a single session each was interviewed three times by three different interviewers.

Since different clinics had different set-ups, there could not be a standardized method of introducing "dummy" patients into the clinics. A general rule, however, was that the identity of the "dummy" patients should not be realized, at least not by the interviewers who had not yet been assessed during the QA session.

In nearly all of the clinics the team members were given an individual room in which to conduct their interviews. However when all the interviewers in a team were stationed in a single room in a clinic, it was impossible for the "dummy" patient to walk into the interviewing room three times unnoticed.

Despite efforts to keep this procedure covert, the identity of the "dummy" patient was recognized by one team in their first assessment. Because the team members were not pleased with the way they were monitored, the second assessment of their work was done by double-interviewing.

2.0 Results of quality assessment

The reliability of the coding for most of the questions was generally high (well above 80% agreement), except for the more complicated questions like C2 and E1 (Table 3.1).

The variations in each interviewer's interpretation, from the standard responses, are summarized in Table 3.2. 100% agreement was scored for three assessments, and most of the reliability coefficients of the interviewers were well above 80%.

Percentages of logical errors and missing values for each interviewer were calculated relative to the number of interviews they conducted (Table 3.3).

The average percentage of each interviewer for logical errors was 4% and that for missing values was 3%. The average percentage of missing values for each interviewer was 2% for the question on the patient's monthly domestic

income.

Each interviewer questioned a similar proportion of patient with diabetes or hypertension, except for two part-time interviewers 10 and 11, who completed a smaller number of interviews than the rest.

.0 Problems noted in the quality assessment of interviewer 05

3.1 Quality assessments by "dummy" interviews

Both of interview 05's reliability coefficients were poor (54% and 43% respectively for the first and second assessments). On checking the coding of the "dummy" patient's responses for her first assessment, the major problem was the coding of questions C2 and E1.

For question C2 ("how have you coped thus far?") the interviewer was supposed to go through a list of eight coping strategies (eg, "done nothing", "rest", "modified diet", "taken chinese herbs", etc.) and record the actions taken by the patient once symptoms were noted.

For question E1 ("over the past one month, have you had any health-related problems?"), the interviewer was supposed to note what the health-related problem was and the actions taken so far. As with question C2, the interviewer was supposed to go through a list of coping strategies while recording responses from patients.

The standard response from the "dummy" patient for question C2 was that she had rested, had modified her diet and had taken some chinese medication bought over-the-counter from chemists. Interviewer 05 coded that the "dummy" patient had done nothing to cope with her present problem.

The standard response from the "dummy" patient for question E1 was that she had been having headaches in the past month, and that she had rested and taken some chinese herbs. Again interviewer 05 coded that the "dummy" patient had done nothing to cope with her headaches.

The way that these questions were coded led to the suspicion that these questions were not asked at all. Had these questions been asked, there might have been mistakes in the coding of whether the "dummy" took processed chinese medication or chinese herbs, (a problem for most other interviewers in the study, see Table 3.1.1), rather than a completely different coded response.

These two questions accounted for more than half of all the coded responses to be checked (18 out of 28), hence a low reliability coefficient for the first assessment of interviewer 05 (54%).

Despite feedback about her performance and further instruction, interviewer 05's skills did not improve. She made similar errors during her second assessment.

Other questions in interviewer 05's second assessment were coded completely different from the standard responses. For example question K4 asks "do you believe in the concept of predestined medical affinity?". The "dummy" patient's standard response was yes. The interviewer would then be expected to ask how strong her belief in the concept was. This way whether the interviewers followed the instructions of how questions should be posed could be checked. Interviewer 05 coded "not at all", suggesting question K4 had not been asked.

Another similar example was question K6 ("how often do you 'shop' around for doctors during the same illness episode when you are unwell?"). The instructions given to the "dummy" was that she should reply "quite often" at first, and should only reply "about more than a half of the time that I was unwell" when prompted by the interviewers. Again interviewer 05 coded the answer for this question as "not at all", which was completely different from the standard responses.

Although other coded responses of interviewer 05 matched with the standard responses given to the "dummy" patients (12 out of 28 responses), her reliability coefficient for the second assessment was even lower than the first.

3.2 Quality assessments by preliminary logic checks

Before the interviewers were assessed by the "dummy" patient method, their completed questionnaires were checked shortly after the study was launched. Special care was taken when going through interviewer 05's questionnaires, as problems were spotted in the way she posed the questions during the training session.

Consistently interviewer 05 had difficulty with question B4 (the reason to seek help from the clinic: whether it was for a recent problem of less than three months duration or for a more chronic problem), and her corresponding coding of either section C (for recent problems) or section D (for chronic problems). Further problems were found in the coding of question K1 ("have you asked to see a specific doctor in the clinic today?" and "why/why not"), where part of the answer (the reasons) was consistently found to be missing.

Attempts were made then to ensure that she paid special attention not to miss any of the questions, and that she understood how the instrument worked and what each question meant in the instrument. Despite these efforts, however, her reliability coefficients did not show any improvement

throughout the study, and indeed she accounted for a greater proportion of the logical errors and missing values in the data than other interviewers (Tables 3.2 and 3.3).

4.0 Comments

The consistently unreliable performance of one interviewer led to her interviews being excluded from the final data analysis.

From the high inter-rater reliability scores one can conclude with some confidence that the responses obtained from the present instrument were reasonably independent of whoever conducted the interviewing.

Subsequent frequency counts of logical errors and missing values of the interviewers also suggest that their tact and skills of interviewing were highly acceptable.

Table 3.1: Standard responses for the "dummy" interviews

3.1.1 Standard responses for the core section (sections A-G)

(A ratio was calculated to check the variations from the standard responses for each of these questions)

B4. Why did you come to this GOPD today? (stomach ache)
17/17, 100%

B6. Were any lab tests done? (no)
17/17, 100%

C1. When did you first notice it? (yesterday)
16/17, 94%

C2. How have you coped thus far? (po chai pills, rest, diet)

done nothing	(no)	15/17, 88%
rest	(yes)	14/17, 82%
modified diet	(yes)	14/17, 82%
herbs	(no)	10/17, 59%
medication over-the-counter	(yes)	11/17, 65%
left-over medication	(no)	15/17, 88%
lay-advice	(no)	16/17, 94%
sought professional help	(no)	16/17, 94%

E1. Over the past one month, have you any other health-related problems? (dizziness, taken medication at home, herbs, rest)

dizziness 16/17, 94%

done nothing	(no)	16/17, 94%
rest	(yes)	15/17, 88%
modified diet	(no)	15/17, 88%
herbs	(no)	12/17, 71%
medication over-the-counter	(yes)	14/17, 82%
left-over medication	(no)	12/17, 71%
lay-advice	(no)	14/17, 82%
sought professional help	(no)	16/17, 94%

E2. Have you ever been diagnosed to have DM? (no)
17/17, 100%

E3. Have you ever been diagnosed to have HT? (no)
17/17, 100%

Reliability coefficient by question
for the core section (A-G): 83% (325/391).

Table 3.1: Standard responses for the "dummy" interviews

3.1.2 Standard responses for sections H, I and J

(A ratio was calculated to check the variations from the standard responses for each of these questions)

H2. How is your eyesight? (need glasses)
11/12, 92%

H13. How would you rate your current health? (so so, fair)
12/12, 100%

I4. Did your doctor take as much time to listen to your problems as you would want him to? (no, less than I would want)
9/12, 75%

I6. Do you think doctors should deal with the emotional aspects of your illness? (no, disagree)
8/12, 67%

I9. After this consultation, do you understand your condition as much as you would like? (no, not at all)
11/12, 92%

Reliability coefficient by question
for sections H-J: 85% (51/60).

for type 2 ie, core + sections H-J: 83% (376/451).

Table 3.1: Standard responses for the "dummy" interviews

3.1.3 Standard responses for sections K, L and M

(A ratio was calculated to check the variations from the standard responses for each of these questions)

K4. How strongly do you believe in the concept of predestined medical affinity? (yes, (only if prompted) fairly strongly)
9/11, 82%

K6. How often do you "shop" around for doctors? (very often, (only if pressed) about 7 in 10 times)
7/11, 64%

K7. Why do you shop around for doctors? (symptoms persist, not "match" with doctor)
7/11, 64%

L1. Do you believe that medication should be given whenever you are seen by a doctor during an illness? (yes)
11/11, 100%

M1. How strongly do you believe in the traditional concept of diet restriction? (yes, very strongly)
9/11, 82%

Reliability coefficient by question

for sections K-M: 79% (43/55);

for type 3 ie, core + sections K-M: 83% (368/446)

for type 1 ie, core + sections H-M: 82% (417/506).

Table 3.2: Summary of inter-rater reliability coefficients

Team 1	Baseline	#1	Type	#2	Type	Intra-rater #1/#2
02	88% (35/40)	82% (23/28)	3	88% (29/33)	1	85% (52/61)
03	90% (36/40)	89% (25/28)	2	93% (26/28)	2	91% (51/56)
04	93% (37/40)	89% (25/28)	3	88% (29/33)	1	88% (54/61)
11	-	82% (23/28)	3	88% (29/33)	1	85% (52/61)
Inter-rater reliability		90% (108/120)		86% (96/112)		89% (113/127)
Team 2	Baseline	#1	Type	#2	Type	Intra-rater #1/#2
01	-	50% (14/28)	3	82% (27/33)	1	67% (41/61)
05	-	54% (15/28)	2	43% (12/28)	3	48% (27/56)
09	-	93% (26/28)	2	100% (28/28)	2	96% (54/56)
Inter-rater reliability		-		65% (55/84)		75% (67/89)
Team 3	Baseline	#1	Type	#2	Type	Intra-rater #1/#2
06	92% (22/24)	100% (33/33)	1	84%* (11/13)	-	-
07	83% (33/40)	97% (32/33)	1	100%* (5/5)	-	-
08	77% (23/30)	86% (24/28)	2	86%* (6/7)	-	-
Inter-rater reliability		83% (78/94)		95% (89/94)		88% (22/25)
Inter-group reliability		Baseline 87% (186/214) teams 1&3	#1 83% (240/290) all teams	#2 84% (202/241) teams 1&2		
Inter-rater reliability (all teams)		84% (628/745)				

Baseline = coefficient obtained during training session

#1 = first assessment

#2 = second assessment

* = assessment by double interviewing

Table 3.3: Summary of supplementary quality assessment measures

Code	Number of int. conducted	% of logical errors	% of missing values	% of missing values for N5	% of missing values for N6	% of DM patients	% of HT patients
01	213	4	2	-	7	13	14
02	125	4	3	-	2	8	8
03	167	3	1	-	1	11	11
04	172	4	2	1	1	11	11
05	173	5	6	-	2	11	11
06	163	3	5	-	1	10	10
07	158	4	5	-	2	10	10
08	157	3	3	-	2	10	10
09	144	5	2	-	1	9	9
10	34	4	5	-	7	2	2
11	37	3	4	-	-	2	1

Appendix 4: List of references

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