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Welch, Kirsten Margaret

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THE EFFECT OF THE QUESTION "IS THERE ANYTHING ELSE?" ASKED AT THE END OF A PATIENT CONSULTATION IN A FAMILY PRACTICE

Kirsten Margaret Welch

A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Family Medicine

Johannesburg, 2010

DECLARATION

I, Kirsten Margaret Welch, declare that this research report is my own work.

It is being submitted for the degree of Master of Family Medicine in the University of the Witwatersrand, Johannesburg.

This work has not been submitted before for any degree or examination at this or any other university.

Signed: _____

Date: _____

ABSTRACT

The effect of asking the question *"Is there anything else?"* toward the end of selected consultations was assessed. A study was conducted using a sample of 200 patients from a Johannesburg general family practice, randomly allocated into intervention and control groups. Details of patient demographics and of the consultations in both groups were recorded. Patients from the study group were asked *"Is there anything else?"* at the transition to closure of the consultation. The responses elicited were recorded and compared to issues raised spontaneously by patients in the control group at the same stage of the consultation. 43% of the patients in the study group used the opportunity to introduce new issues not yet discussed. 26% of the patients in the control group asked questions at the same point in the consultation. The problems raised were similar in each group, as was the time added to the consultation. This would suggest that patients will raise more issues if given the opportunity than they may have raised unprompted. Dealing with these issues may make the consultation longer, but may prevent unnecessary future visits and investigations.

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TABLE OF CONTENTS

DECLARATION ii

ABSTRACT iii

ACKNOWLEDGEMENT iv

TABLE OF CONTENTS v

LIST OF TABLES vii

1 INTRODUCTION 1

2 AIM AND OBJECTIVES 6

2.1 AIM 6

2.2 OBJECTIVES 6

3 LITERATURE REVIEW 7

4 METHODOLOGY 17

4.1 Site of study 17

4.2 Study Design 17

4.3 Pilot Study 18

4.4 Study Population 18

4.5 Selection of Patients to Study 19

4.6 The process utilised 20

4.7 Study Intervention 21

4.8 Recorded data 21

4.9 Legal and Ethical Considerations 23

5 RESULTS 24

5.1 Demographic characteristics of patients and time of consultation 24

5.2 Presenting problems and procedures 25

5.3 Outcomes of the Intervention 28

5.3.1 Patient Response 28

5.3.2 Doctor's response 29

5.3.3 Length of consultation and time added to consultation 29

5.3.4 Further analysis of patient characteristics and response to the question 31

6 DISCUSSION 33

6.1 Demographic Characteristics 33

6.2 Problems presenting at consultation 33

6.3 Length of consultation 35

6.4 Issues raised at conclusion of consultation 36

6.5 Other factors 37

7 CONCLUSION 38

8 ADDENDA 40

8.1 Appendix A: Information and Consent Form 40

8.2 Appendix B: Data Collection Form 41

9 REFERENCES 42

LIST OF TABLES

Table 1: Patient characteristics in intervention and control groups 25

Table 2: Frequency of presenting problems and procedures 26

Table 3: Presenting complaints grouped in ICPC-2 categories 27

Table 4: Issues raised by patients 28

Table 5: Doctor's response to issues raised 29

Table 6: Mean consultation length and time added 30

Table 7: Consultation length and issue raised 30

Table 8: Consultation/patient characteristic and likelihood of raising issues at end of consultation 31

LIST OF FIGURES

Figure 1: Age group and response to question 32

1 INTRODUCTION

The American Academy of Family Practice defines family medicine as

> "*the medical specialty which provides continuing, comprehensive health care for the individual and family. It is a specialty in breadth that integrates the biological, clinical and behavioural sciences. The scope of family medicine encompasses all ages, both sexes, each organ system and every disease entity*."[1]

Much of the current family medicine research has been generated by exploring the ways in which adaptations to local conditions and constraints affect the way this medicine is practiced.[2] In this research project, a group of patients was given the opportunity to ask additional questions at the final stage of the consultation, to see if this could be a useful tool for the family practitioner in meeting the needs of the patient.

The consultation is the most important interaction of family medicine. At this meeting, which usually happens in the doctor's consulting room, patients present the family practitioner with health problems that they feel need attention. The motivations for the visit are many and varied and have been described as the patient's reasons for encounter (RFE).[3] They may not be feeling well, have noticed something they are worried may not be normal, may be feeling depressed or anxious, or have an ongoing medical problem that needs monitoring. These problems are not always clearly defined and discussion may be required to clarify these into specific issues that are

more easily managed. The reasons for encounter (RFE) are often collectively referred to as the patient‘s agenda.[4] These health issues must be discussed and managed, hopefully to the satisfaction of both doctor and patient.

Good communication is essential for a satisfactory outcome to the consultation,[5] and a failure to communicate adequately may result in misunderstanding and incorrect diagnoses.[6] An exploration of the patient’s thoughts and feelings and attitudes around what could be wrong is important in understanding his or her perception of what the problem is, and how it came about. Understanding the patient’s fears and expectations will help the doctor to manage the problem in a way the patient will find useful, especially where the patient is involved in the planning of the treatment and understands why it is necessary.[7] In this way a partnership is formed between the doctor and patient based on trust and understanding.

The consultation follows a recognizable sequence of phases, starting with a greeting and moving towards termination or closure, when both the doctor and patient are satisfied that the issues raised have been dealt with adequately[8]. Closure has been defined as “the final phase of the medical visit, in which the doctor and patient shift perspective to the future, finalize plans and say goodbye.”[9] They move from discussion of current issues, to making plans for the future and ending the consultation. In order to complete this stage successfully, both the doctor and the patient need to feel that the consultation is complete and that most areas of concern have been addressed.

Where this has not occurred, this phase of the consultation may be interrupted by either doctor or patient attempting to reopen the discussion. The interruption may relate to problems already discussed or introduce an entirely new topic.

The doctor may not be sure that the patient has properly understood the problems and their significance, or how they should be managed, or have other areas for concern to discuss. The patient may not feel that the problems have been dealt with to his or her satisfaction, may be confused by the explanation given, or feel uncertain about the treatment suggested. Other unexpected problems may emerge that had not been on the patient's list for discussion,[10] or anticipated by the doctor. This emerging agenda is prompted by the discussions and examination that occur during the consultation.

A completely different issue may be introduced, varying from a minor problem that the patient felt was too insignificant for a doctor's visit on its own (a secondary agenda), to the patient's real reason for the visit that was not presented during the consultation (hidden agenda).[11] This may happen when the problem is embarrassing or uncomfortable. The introduction of a problem at the end of a consultation has been called the "door knob sign" and may give a clue to a hidden issue of much concern to the patient.[12] The doctor should be aware that this is a subtle cue to problems that need future discussion. These non-specific remarks can enclose a special meaning and the exploration of these can help understand the patient's real worries.[13]

The action required by the doctor in response to this interruption depends on the topic that has been brought up, and may be as simple as answering a question or providing information.[14] A patient may ask for a prescription for another health problem or even another family member. The issue may be administrative, such as a letter for work or an account query. Urgent or serious problems must be addressed immediately, whereas a non-urgent matter where the problem appears to need more time than is available, may require the patient to schedule a return visit.

Doctors are concerned about adding unnecessary time to a consultation, especially when working under time constraints and under pressure to see many patients. Even where length of consultation is extremely restricted, such as in a managed health system, acknowledging and noting the problem for future discussion will help the patient feel that they have been heard.[15] Concerns raised will have to be addressed in some measure before closure of the consultation can be attempted again successfully.[8] Failure to acknowledge or explore the problems that the patient has raised may lead to unnecessary further visits, investigations or procedures.

This research was proposed to see how patients would respond if given the opportunity to discuss any topic they wished at the end of a normal consultation. The question “Is there anything else you would like to ask?” was asked at the end of a consultation to test if this could be a useful way for the family practitioner to elicit areas that the patient still wishes to discuss. There might be issues that the patient had forgotten to mention and less assertive patients could take advantage of the opportunity to ask the questions they were hesitating to voice.

Patients in a family practice in Johannesburg attending for a standard medical visit were randomly allocated into two groups of the same size with similar characteristics. One group of patients was asked the question “Is there anything else?” by the doctor as the point of closure was reached. The proportion of patients reacting to the question was measured, and their type of response recorded. The doctor reacted normally to the issues that had been presented for discussion by the patients. The kind of response required by the practitioner and the time added to the original consultation by this response was measured and recorded.

The control group was not asked any question at closure of the consultation, but a record was made of any topics raised at this point and the time and response required to deal with any problems, in a similar fashion to that of the study group. The information obtained from both groups was compared. Each patient was given the opportunity to list any problems they wished to discuss, at the start of the consultation, but a deliberate attempt to obtain the patient’s full agenda by asking the question at any other time during the consultation until closure was avoided.

As a single doctor in one family practice conducted the study, the results obtained are not generalisable to all doctors and patients. In addition, the doctor could have made subconscious alterations to the style of consultation in response to the study. The use of a control group reduces this effect to some extent. The use of a single researcher also standardises the consultation process for this study.

No attempt was made to assess the long term outcome in terms of patient satisfaction, patient health, or changes to the number of subsequent visits.

2 AIM AND OBJECTIVES

2.1 AIM

To determine the effect of asking the question ‘is there anything else’ at the point of transition to closure in a consultation in general practice.

2.2 OBJECTIVES

1. To determine the demographic features of the patients including age, sex and race
2. To determine features related to the consultation including date, day of week, time of consultation, duration, presenting complaint/s and number of complaints, procedures done,
3. To determine whether patients raised additional issues:
    a. In response to the researcher’s prompting

    or

    b. Spontaneously without prompting
4. To determine the nature of the additional or supplementary issue/s raised and the researcher’s response / action and the time taken to deal with the additional issue/s
5. To determine correlations between the above variables.

3 LITERATURE REVIEW

To understand the relevance of this research study, one should understand why the consultation in family medicine is important, how it is structured, the processes and function of the consultation and what one is hoping to achieve.

The consultation and in particular the 'patient-centred consultation' is the basic tool of family practice.[4] With the evolution of Family Medicine as a discipline, the functions and processes of the patient consultation have come under increasing attention. An emphasis on the medical visit is seen as an important difference between the approach of the family practitioner and that of the specialist in other fields of medicine. Family medicine education over the world focuses on teaching medical students and general practitioners skills in the consultation, with an emphasis on teaching effective communication.[16]

Much of the research and observation relating to the consultation has examined what happens during the medical interview, and how the best possible outcome can be obtained. Various models have emerged looking at different aspects, such as the styles, aims and processes of the consultation, communication patterns and others. This literature review will describe some of these models to give a background to the research project and the interventional question asked during the consultation.

In 1956 Szasc and Hollander wrote a book called "A contribution to the philosophy of medicine: the basic models of the doctor-patient relationship."[17] These models

describe the roles of doctor and patient and how they change in different settings, from a parent-child relationship in an emergency situation to one of mutual participation in the management of a chronic disease. An understanding was developing that the style of consultation may change with changes in circumstance, but no real attempt was made to evaluate how effective these different styles may be.

A Working Party of the Royal College of General Practitioners produced a teaching manual in 1972 describing the medical consultation, in which the social and psychological aspects of medicine are emphasised as essential to general or family practice.[18] The manual was designed for trainee general practitioners, and states that the process of the consultation cannot be taught or learned unless it is first analysed and understood. The doctor is encouraged to understand the patient in the context of his or her emotional, family, social and environmental circumstances. The physical aspects of the consultation are expected to have been dealt with during undergraduate training.

Byrne and Long in 1976 examined 500 consultations, looking at the patterns of sequencing and communication.[8] They described six logical phases, each phase not necessarily occurring in every consultation, and not always in the same order.

The consultation was described as following a recognisable pattern:

- The first stage starts with a greeting, and the establishment of a relationship between doctor and patient.

- The doctor then endeavours to establish the patient's reason for attendance.
- The next stage includes further questioning by the doctor to establish related symptoms and assess other possible problems. A physical examination may be performed during this stage, as well as simple side room tests such as urine dipstick examination or finger prick blood tests.
- The doctor and patient move on to consider the condition by discussing likely diagnoses and further management, such as medication and therapy, and the prognosis and ongoing management of the problems.
- Other investigations such as blood tests may be ordered, the patient may be referred for x-ray examination, or to a specialist or allied health professional for assessment or therapy.
- The consultation is ended, usually by the doctor. The interruption "by the way doctor" is described occurring during this phase, with the patient raising new concerns as they are about to leave.

White et al in 1994 describe doctors' behaviour at the conclusion of the consultation including clarifying the plan for management, orientating the patient to the next steps of the visit, providing information and counselling to the patient about the therapeutic regime, and checking for patient understanding.[12] This final phase is the point at which the research question is asked.

The next group of models described the aims and reasons for the consultation, and what might be potentially achieved in the consultation. Heron in 1975 examined the

six possible interventions that a practitioner can use to help the patient, from prescriptive through informative, confronting, cathartic, and catalytic to supportive, depending on the need of the patient, in the patient's best interests.[19]

Stott and Davis in 1979 looked at the potential in each visit to the doctor or primary care worker.[20] Four areas are suggested to be explored at each visit, relating to presenting and ongoing problems, changing of 'help-seeking' behaviours, and making use of opportunistic promotion of health.

Pendleton et al (1984)[3] presented the aims of the consultation as a series of seven tasks to be completed to meet the needs of patient and doctor. These consist of defining the reason for the patient's attendance, including the nature and history of the problems; causes and effects; the patient's ideas, fears and expectations around these problems; involving the patient in the management of the problems; and the appropriate use of time and other resources.

Studies looking at improving the way doctors meet the patient's needs suggest that it is better to allow the patient to complete the list of problems or reasons for encounter before the doctor interrupts and focuses on one problem, thereby ignoring other issues that the patient thought could be discussed.[21,22] This allows for better clarification on the reason for attendance. Visits are likely to be longer where the full agenda has been asked for, because more problems are raised rather than increased time taken with each issue.[23] In a managed consultation where time may be restricted

to 10 minutes, it may be necessary to prioritise issues and leave less urgent or important problems to be dealt with at another time.[14]

A very important step was taken with the development of the patient-centred clinical method. This model was described by McWhinney (1984)[24] as being the most appropriate and necessary for family practice. By this method, the doctor is not only attempting to understand a disease or biological process, but to understand the patient as a person, and how he or she experiences this disturbance in their wellbeing.

This differs from a more traditional model of the consultation, such as is employed by a specialist health practitioner, in which the doctor concentrates only on the illness and its management. This process is passive on the patient's part, active on the part of the doctor, who will feel satisfied with the consultation, that all the correct steps have been followed, even if the problem is untreatable. In family practice, the doctor and patient meet to define and manage problems to the satisfaction of both parties. The needs of the patient in dealing with a health problem are as important as the need for the doctor to understand and resolve the problem.[7, 15]

As set out by Brown et al,[25] there are 5 principle domains of patient-centeredness. These are:

- Exploring the patients' experience of disease and illness: ideas, feelings and expectations around the patients' problem and how it affects them, what they would like from the consultation.

- Understanding the whole person: who they are and how they feel within their personal context, such as their home environment and family, or stage of life.
- Finding common ground: establishing a partnership in which the roles of doctor and patient can be agreed, and problems and goals of treatment established. This appears to be an important factor in the patient's perception of good communication, and correlates with patient satisfaction
- Health promotion: disease screening, health education
- Enhancing the doctor-patient relationship

Understanding the patient's needs, fears and expectations will determine the care the family practitioner is likely to deliver, in the context of ongoing relationships with the patient, the family and the community (Stange, 1998).[26] Patients may report additional unvoiced reasons when questioned before or after the medical interview for their reasons for coming and their expectations of the consultation.[11,27,28] When patients come with embarrassing or uncomfortable problems that they do not find easy to express, or have concerns about the significance of the symptoms, they are hoping the doctor will help them deal with these concerns, and not merely treat the symptoms.[13]

A study looking at the impact of patient-centred care on outcomes of the consultation[29] showed that this type of care improved measures of the patient's health status such as recovery from symptoms of discomfort and concern, and emotional health. Medical care utilisation was also reduced, with fewer diagnostic tests and referrals. Patients in primary care strongly prefer a patient-centred approach, especially those with psychosocial problems or those who are feeling

particularly unwell.[30] Patients with chronic conditions receiving early feedback from their doctors during patient-centred consultations, gain a better understanding of their illness.[31] What patients want most is an explanation of their problem.[32]

There are other models describing the consultation. Cohen-Cole (1991)[33] describes an approach to the medical interview which focuses on three areas: gathering data to understand the patient's problem, developing rapport and responding to the patient's emotions, and patient education and motivation. The Enhanced Calgary-Cambridge Guide to The Medical Interview[34] aims to improve the skills required for doctor-patient communication and combine them with the traditional method of clinical history taking. The patient's problems are explored from both the biomedical and patient's perspective. This guide is used in the training of medical students and family practitioners.

Studies looking at doctor-patient communication show that good communication between patient and doctor will improve outcomes of the consultation such as patient satisfaction, compliance, recall and understanding of information. It may also influence long term outcomes, by improving the doctor-patient relationship. Other outcomes affected are emotional health, resolution of symptoms, function and pain control, as well as physiological measures such as blood pressure and blood glucose control.[4,35,36]

The patterns of communication or verbal behaviours as described by Byrne and Long[8] range from those predominantly doctor-dominated, to those where the patient

spoke almost uninterrupted, with a range of behaviours in between. In another study of communication patterns (Roter et al, 1997)[37], patients were found to prefer a psychosocial discussion of issues to a bio-medically focussed approach.

A failure to communicate adequately may lead even the most experienced practitioner into making errors in diagnosis, or missing problems that the patient has not expressed clearly.[38] Primary care physicians are less likely to face malpractice claims if they spend time asking for the patient's opinion and checking that they have been understood.[39] Patients are also less likely to change doctors if their doctor can be honest when a mistake has been made.[40]

Setting an agenda at the start of the consultation, in collaboration with the patient, may reduce the incidence of last minute concerns.[41] The doctor can also check which of the problems that has been presented is most important to the patient.[27] A qualitative study examining unvoiced patient agendas showed that a failure to reveal these issues can lead to poorer outcomes.[28]

Davidoff (1997)[42] admits that a consultation that allows for better communication may be longer but may result in better satisfaction for doctors and patients. He suggests that patients in the United States may be turning to alternative health practitioners because their doctors fail to spend enough time with them. Quality time between doctors and patients is a valuable resource.[43] The most effective manner to improve time management is probably the improvement of communication skills, especially patient-centred skills.

The process of ending the visit, or closure, is a distinct phase of the consultation, in which the communication between doctor and patient shifts in orientation from the present to the future. It usually involves the doctor giving a summary of problems discussed and suggested management, and some parting comments, usually of a social nature.[4, 8,44]

This process may be interrupted by the patient or the doctor asking a question or introducing a new topic for discussion.[11,45] The interruption may relate to the presenting problem, such as confusion relating to explanations given or treatment suggested; it may be administrative, such as a request for a sick certificate; or may cover an entirely new area. White et al (1994)[12] found that in 23% of closures, new problems arose that had not been mentioned earlier in the visit. Concerns arising late in the consultation are more common when the doctor has not solicited the patient's agenda, or complete reasons for encounter.[22]

This interruption is sometimes called the "doorknob" sign, as the patient makes a comment at the door, as they are about to leave. Where it relates to issues previously discussed, the patient may feel that the problem has not been dealt with to his or her satisfaction, may be confused by the explanations given, or feel uncertain about the treatment suggested. In turn, the doctor may not be sure that the patient has clearly understood the problem and its' significance, or how it should be managed, or may have other areas of concern to discuss.[44]

Other unexpected problems may be raised that had not previously been on the patient's list for discussion, or anticipated by the doctor, and have emerged during the

visit. This emerging agenda is prompted by the discussions and examination that have occurred during the consultation.[27]

This research project looks at an intervention aimed at improving the communication occurring at the conclusion of a consultation, by asking the question "Is there anything else?" Robinson[43] suggests that the most relevant time for doctor or patient to voice additional concerns is the transition from the body of the consultation to closure. If this question is asked too late in closure, it was observed by White et al, [9] that the patient appeared to believe that the question was perfunctory, and the doctor did not expect a reply. Both the patient and doctor are involved in the process of the consultation, but it is usually the doctor who will initiate the conclusion of the consultation, so the timing of the invitation to resolve any outstanding issues lies with the doctor.[43]

The World Health Organization has accepted the International Classification of Primary Care, second edition (ICPC-2)[46] as a classification of the reasons for patient's visit. It was most recently updated in 2003, and enables practitioners to record, classify and code the reasons for the encounter (RFE), as understood by the doctor and is designed to be used in General or Family practice. It also includes a classification of diagnostic and therapeutic processes and clinical diagnoses. ICPC-2 can be used in conjunction with the International Classification of Disease (ICD-10)[47], which focuses on morbidity and mortality coding for national or international statistics measurements. The doctor codes the consultation at closure based on his/her perception of the patient's RFE.

4 METHODOLOGY

4.1 Site of study

The study was performed in a private general practice in the south of Johannesburg, Gauteng, South Africa Patients selected for the study were seen during normal practice hours, including Saturdays, by the researcher, a female general practitioner working in the practice.

The practice was situated in a small shopping area of a middle class residential suburb. It serviced local families and their domestic servants and gardeners, as well as people working in the adjacent shops. Individuals and families consulted the practice with general ambulatory problems as well as occasional emergencies. The doctors in the practice performed procedures such as Pap smears, electrocardiograms, removal of small skin lesions under local anaesthetic and suturing of minor lacerations

4.2 Study Design

This took the form of a randomized controlled intervention study using 200 patients systematically selected from a family practice. Only the researcher interviewed the subjects in order to maintain as uniform a practice style as possible. All of the patients selected were able to speak and understand English (in the view of the researcher). They were divided into two equal groups of 100 by random allocation to intervention and control groups, to eliminate bias and the effect of confounding factors.

The intervention took the form of the question “Is there anything else?” asked by the researcher towards the end of a consultation in one arm of the study. Details of the patients’ responses, the actions required by the doctor and the time added to the consultation were recorded. A second arm or control group was not asked the research question. In this group the number of patients spontaneously raising a topic for discussion was noted.

4.3 Pilot Study

A pilot study was performed using twenty patients randomly divided into two groups of ten to test the design of the study and the data collection sheet. The records of these patients were marked and the patients were excluded from participating in the main study. These results were not included for analysis. No changes were made to the form or methods used in the actual research project,

4.4 Study Population

The study population was selected from patients attending a family practice in the south of Johannesburg, who met the criteria for inclusion in the study. About seven thousand patients were estimated to attend the practice, based on an approximate number of patient files. No accurate numbers existed as there was no requirement for patients attending the practice to be registered in an official manner. Patient files were not archived until the patient had not attended for more than five years, so a number of files may have been inactive.

The inclusion criteria for patients in the study were:

- Patient over the age of eighteen years.
- Patient attending alone: Any patient accompanied by another person was excluded from the study. Where two patients insisted on being seen together, both were excluded from the study and the immediate next qualifying patient was included. Patients attending for a joint consultation such as counselling were also excluded.
- Patient able to understand and answer the question asked (in the view of the researcher). The consultation was conducted in English, so this would exclude patients with a poor understanding of English.
- Patient not presenting with emergency
- Patient had not previously been included in the study or pilot study.
- Patient gave informed consent to be included in the study.

4.5 Selection of Patients to Study

Every third patient that met the inclusion criteria was selected to participate in the study. This spacing was chosen in order not to compromise ‘patient-flow’ in the running of the practice, as consultations included in the study were expected to take longer. An additional question was asked during the visit that might require some intervention, and therefore add extra time to the consultation.

The first patient to be selected to the study was the third patient to meet the criteria for inclusion from the start of the study. Every third patient seen by the practitioner after this patient was included, provided the patient met the criteria for inclusion. If the patient was not suitable, or refused consent, the next appropriate patient from a subsequent consultation would qualify. The process of selection was continuous and not restarted as the researcher began consulting each day. Consultations with patients that did not qualify for the study were not included in the spacing of the study sampling. Patient selection continued until one hundred patients had been selected to each arm of the study.

4.6 The process utilised

Once a patient was selected to the study, written consent was obtained for the use of data recorded from the consultation.

Appendix A)

The date and time of the start of the consultation was noted and a list of problems that the patient wished to discuss was elicited. The consultation then proceeded normally through the required stages. The consultation was judged by the doctor to be moving toward closure when the presenting problems appeared to have been dealt with. This time was recorded and the doctor selected the next card from a pre-marked pack of cards. The patient was not aware of the card, or of its significance.

Two hundred cards were numbered sequentially on one side and the other side marked to indicate whether the patient was allocated to the intervention or control

group of the study. The cards were prepared by a person other than the researcher in such a way that the allocation marking was not apparent until the card was selected, and turned over. The allocation to each group had been made according to a computer generated random number table. Each card was discarded after use.

4.7 Study Intervention

At this point the patients selected to be in the intervention group were asked the question “Is there anything else?”, and the response recorded. No question was asked of the control group but any topics raised spontaneously after this point were recorded. Any action required by the doctor to address these issues was documented and the time of the end of the visit. The patient records in both groups were marked to indicate that the patient had been part of the study and were not eligible to be included again in the study.

Demographic information about the patient and the details of the consultation were transferred from the patient record to the data sheet once the consultation had ended and the patient had left the office. All patients remained anonymous for the purposes of the study.

4.8 Recorded data

Data was recorded anonymously on a standardised data form (Appendix B)

The data recorded on the form was:

- Information relating to the patient and initial consultation: The age, race and gender of the patient, as well as the day of the week and time of the consultation.
- Presenting problems: The patient's given reasons for the visit and any procedures performed were recorded and classified according to ICPC-2. The diagnosis made by the doctor was not recorded separately. Additional procedures performed during the consultation such as urine tests, injections, pap smears and minor surgical procedures such as the excision of moles and suturing of lacerations were recorded.
- Length of consultation: The time at the beginning and the end of the initial consultation was noted and the length of the consultation calculated.
- Response of patients to intervention question: The immediate response of the patients in the study group to the question was recorded as closely as possible to the exact words used by the patient.
- Doctor's response: The processes or actions that the practitioner took to deal with the subjects that had been raised.
- Time added: The extra time taken to ask the additional question and the subsequent responses was recorded, and added to the length of consultation.
- Control group: new topics brought up spontaneously at the end of the consultation by patients in the control group were noted and the response of the practitioner and the time added were also recorded.

4.9 Legal and Ethical Considerations

Permission for the study was obtained from the Postgraduate Committee of the University of the Witwatersrand. The University of Witwatersrand Ethics committee gave consent allowing the study to proceed. The other practitioners working in the family practice agreed to the study taking place at the practise, involving shared patients. All patients involved in the study gave written consent to be included in the study. Information was recorded anonymously on numbered sheets that were not linked to the patients' records. Routine confidentiality relating to the consultation was maintained.

5 RESULTS

Two hundred patients were included in the study. These patients were randomly allocated, according to the protocol, into two groups of one hundred patients each. These groups are known as the control group and the intervention group. All patients were asked for consent before participation in the study, and no patient refused.

5.1 Demographic characteristics of patients and time of consultation

Patient characteristics in the two groups were analysed and compared. The details recorded were gender, age in years, and race (grouped as white or other). The consultations in the groups were also compared according to the time of day that they occurred, and if it was a week or weekend day. There was no statistically significant difference between the control and intervention groups. The characteristics of the two groups are presented in Table 1.

Table 1: Patient characteristics in intervention and control groups

.**Characteristic**		**Intervention group** n=100	**Control group** n=100	**p-value**
Sex	Male	51	38	p = 0.22
	Female	49	52	
Age (years)	Range	19-74	18-72	
	Mean	42.7	38.6	
	Mode	39.5	37	
Race	White	80	90	p = 0.04
	Other	20	10	
Day of week	Weekday	88	91	p=0.49
	Weekend	12	9	
Time of day	Morning	69	61	p=0.24
	Afternoon	31	39	

5.2 Presenting problems and procedures

At the start of each consultation the researcher asked for a list of all the problems the patient wished to discuss. Eighty percent (80/100) of patients in the intervention group and seventy eight percent (78/100) of patients in the control group presented with a single complaint. Twenty percent of patients (20/100) in the intervention group and twenty six percent of patients (26/100) in the control group had two or more complaints.

The total number of presenting problems in the control group was 126, and 120 in the intervention group. Mean number of problems presenting overall was 1.23. (1.26 and

1.21 in each group, no statistical difference, p=0.46). The procedures performed in each group were recorded and found to be similar in type and number. There was no statistical difference in the number of presenting problems or procedures between the two groups. This is illustrated in Table 2.

Table 2: Frequency of presenting problems and procedures

Presenting problems	**Control group**	**Intervention group**
One	78	81
Two	22	19
Three	4	1
Total	126	121
Procedures performed	29	31
Mean number of presenting problems	1.26	1.21 p=0.46

The complaints were classified, and grouped according to the WONCA ICPC-2 coding system by which diseases are classified according to the organ system they affect, with a few broad categories relating to non specific complaints.

In this study, the complaints were scattered over all categories but predominantly in the respiratory group (Chapter R, ICPC-2), relating mostly to upper respiratory illnesses. This is depicted in

Table 3. There were no significant differences between the two groups.

Table 3: Presenting complaints grouped in ICPC-2 categories

Chapters of ICPC-2	Control Group n=100	Study Group n=100
A General	8	7
B Blood and Immune Mechanisms	0	1
D Digestive	8	10
F Eye	1	2
H Hearing	5	1
K Circulatory	8	6
L Musculoskeletal	3	12
N Neurological	3	2
P Psychological	7	11
R Respiratory	50	37
S Skin	8	5
T Endocrine, metabolic, nutrition	7	6
U Urological	3	3
W Pregnancy, childbearing	2	5
X Female genital	13	8
Y Male genital	0	1
Z Social problems	2	3

5.3 Outcomes of the Intervention

5.3.1 Patient Response

Forty three percent (43/100) of the patients in the intervention group responded to the question “Is there anything else?” asked before closure of the consultation. Sixty percent of these responses were new complaints. Twenty six percent (26/100) of the patients in the control group spontaneously interrupted closure, 15 of these with new complaints (57.7%). A few patients returned to discussion of the presenting problems. Other issues raised were requests for prescriptions, especially for ongoing chronic conditions which had not been discussed in the consultation, also issues concerning non-urgent recurrent complaints and administrative queries such as completion of forms, sick notes and referral letters and questions relating to other family members. These are illustrated in Table 4.

Table 4: Issues raised by patients

Issues Raised	**Control group %** **(n=26)**	**Intervention Group %** **(n=43)**
New complaints	57.7 (15)	60.5 (26)
Relating to presenting problem	7.6 (2)	6.9 (3)
Request for script	11.5 (3)	18.6 (8)
Relating to family	15.3 (4)	9.3 (4)
Administrative	7.7 (2)	0

5.3.2 Doctor's response

Each response by the doctor was categorised as depicted in Table 5. Some issues raised required no action, such as instances where the patient was passing on information regarding themselves or a family member. Where the problem appeared to require more than some advice or a quick examination or prescription, the patient was requested to make a further appointment. If necessary the patient was referred for further investigation such as an x-ray or other imaging, or blood testing. A referral for a specialist opinion or to another health care worker such as a physiotherapist was arranged if necessary.

Table 5: Doctor's response to issues raised

Doctor's response	Control group % (n=26)	Intervention group % (n=43)
No action necessary	7.7 (2)	18.6 (8)
Advice	30.8 (8)	27.9 (12)
Examination	11.5 (3)	7.0 (3)
Script only	15.4 (4)	30.2 (13)
Administrative	7.7 (2)	2.3 (1)
All actions occurring within initial consultation	65.4(17)	63.0(29)
Another appointment	11.5 (3)	2.3 (1)
Referral	15.4 (4)	11.6 (5)

5.3.3 Length of consultation and time added to consultation

The mean time taken for the initial consultation was 12.0 (±5.6) minutes for the control group and 13.8 (± 6.6) minutes for the study group (p=0.22). The time added

to the control group by questions asked spontaneously by the patient was 4.5 (± 3.1) minutes, and the time added if the question was asked by the doctor was 4.3 (± 4.3) minutes (p=0.77). Mean length of total consultation in control group was 14 (±6.2) minutes, and 15.7 (±6.95) in the intervention group (p=0.06). This is summarised in

Table 6: **Mean consultation length and time added**.

Table 6: Mean consultation length and time added

Time in minutes	**Control group**	**Intervention group**	**p-value**
Initial consultation	12.0 ±5.6	13.8 ±6.6	0.22
Time added	4.5 ±3.1	4.3 ±4.3	0.77
Length of total consultation	14 ± 6.2	15.7± 6.95	0.06

There appeared to be no significant difference (p=0.30) when analysing the length of the initial consultation and likelihood of an issue being raised. A value of less than or greater than 12 minutes was used to analyse responses (see Table 7: **Consultation length and**).

Table 7: Consultation length and issue raised

Length of consultation	**Issue raised**	**No issue**	**Patients total**
Time > 13 minutes	36	78	113
Time ≤ 12 minutes	34	53	87

5.3.4 Further analysis of patient characteristics and response to the question

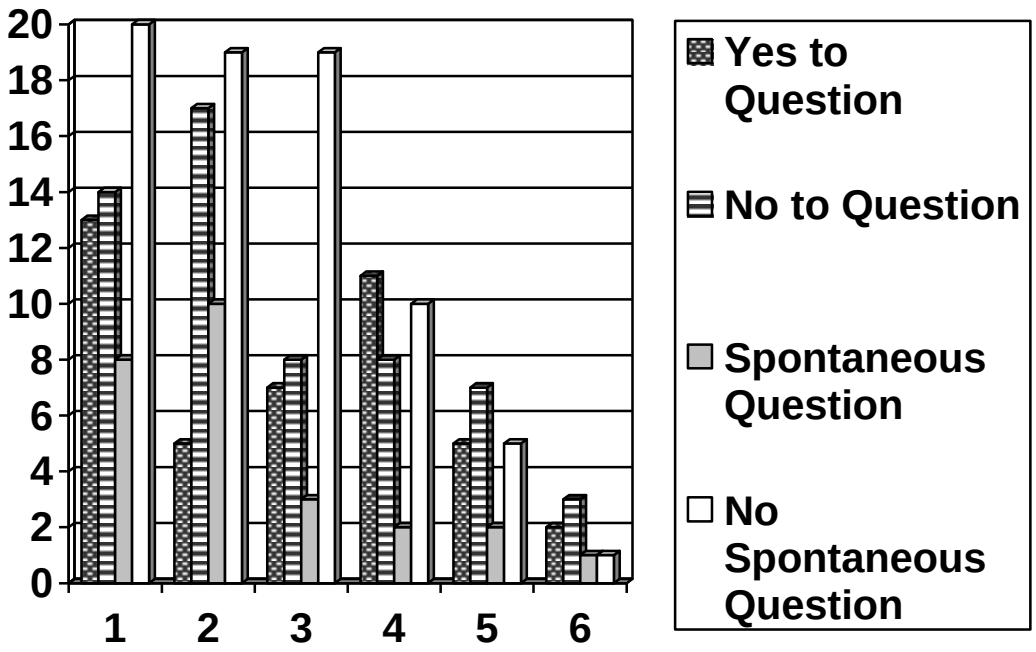
Groups were analysed according to the number of patients raising issues at the end of the consultation (positive response to question or spontaneous issues raised) according to characteristics of patient and consultation. Although the numbers of patients in each subgroup were too small for statistical analysis, the trend was that women were more likely to respond to the question, as were patients attending in the morning. (Table 8)

Table 8: Consultation/patient characteristic and likelihood of raising issues at end of consultation

Characteristic	Issue raised n=69	No issue n=131	p-value
Weekday/weekend	62/7	117/14	0.91
Morning/afternoon	39/30	93/38	0.06
Male/female	22/47	65/66	0.07
White/other	59/10	111/20	0.88
1 Complaint/more than 1 complaint	54/25	78/43	0.38

Figure 1: Age group and response to question illustrates how patients in each age group acted in the intervention and control groups. There appeared to be no significant differences. (See below figure for definition of age group.)

Figure 1: Age group and response to question



Group 1 = 18 - 30

Group 2 = 31 - 40

Group 3 = 41 - 50

Group 4 = 51 - 60

Group 5 = 60 - 70

Group 6 = over 70

6 DISCUSSION

Patients really want to be heard. Despite being encouraged to list their problems at the beginning of the visit, almost half the patients (43%) in the intervention group, who had been asked the research question, raised further issues when encouraged to do so as the consultation was about to end. Twenty six percent of the patients in the control group, who were not asked for a response, wanted to discuss other concerns. A literary review by Mauksch et al[48] suggests that a factor improving communication efficiency is upfront agenda setting, or asking patients to give all their problems as the consultation starts. However, it appears that this does not entirely eliminate the need to discuss other problems that had been forgotten or had developed during the discussion.

6.1 Demographic Characteristics

This study involved 200 patients divided into two randomly selected groups. The intervention group who were asked the research question were not significantly different from the control group in recorded characteristics of age, sex, race, or the time of day or week in which they were seen. The results from these two groups are therefore comparable.

6.2 Problems presenting at consultation

Most patients in both groups presented with one problem (78% in control group, 81% in study group.) In a French study involving teenagers[49] 68% gave only one reason for the visit. The mean number of problems seen per patient in this research sample

was 1.23. In a cross sectional analysis of visits to primary care physicians in Australia, New Zealand and the United States[50], the researchers found that primary care physicians dealt with an average of 1.4 problems at each patient visit. A preliminary study in Leicester, UK, had figures of 1.4 to 1.65 problems identified.[51] Unlike these results, which are all quite similar, a study concentrating on the hypothesis that family physicians often deal with multiple problems at a patient visit but may not record all of them, showed otherwise. In research performed in Wisconsin, the average number of recorded problems at each encounter was 3.05.[52] This is higher than most other studies and the researchers suggest that this may be because the participating physicians were more careful to report each problem they managed, knowing they were part of a study, and aware of the hypothesis.

The reasons for encounter recorded in this research project according to ICPC-2[46], showed problems in all categories, with a strong representation in the category of respiratory illness (R), 50% and 36% in the two groups, or 43% over the full research sample. This would not be unexpected, as much of the work of the family practitioner deals with the daily sick, and acute respiratory illnesses are common. 25% of teenagers in a French study presented[49] with respiratory symptoms. The average age in both groups in this research is relatively young (42.3 and 38.6 years), and more likely to present with acute problems, whereas a practice dealing with an older patient population would deal with more chronic problems such as diabetes and hypertension.[52]

Very few patients mentioned second or third problems that they wanted to discuss in their initial reasons for encounter but many brought up entirely new issues at closure: 26% in the study group and 15% of patients in the control group. In two separate studies by White et al analysing and describing the closing moments of the medical visit, new problems were found in 21% and 23% of consultations[9, 12] despite the doctor having asked earlier for all patient concerns.

6.3 Length of consultation

The length of consultation in a family practice is always of concern, especially when it is busy, and patients are reluctant to wait. Consultation times tend to be shorter as the workload increases, such as in managed care situations when consultations are limited to 10 minutes or less.[14, 43] The mean time taken for the initial consultation in this study was 12.8 (±5.6) minutes for the control group and 13.8 (±6.6) minutes for the study group (not significantly different.) These times are well within the range of consultation times in First World health care. In two different cross sectional analyses done in six European countries[53] and Australia, New Zealand and the USA[50] consultation times ranged from 16.5 minutes in the US and Switzerland, around 15 minutes in Australia, New Zealand and Belgium, to 10 minutes in UK and about 7.7 minutes in Netherlands, Germany and Spain.

The time added to the control group by questions asked spontaneously by the patient was 4.5 (± 3.1) minutes, and the time added if the question was asked by the doctor was 4.3 (± 4.3) minutes (p=0.77). Mean length of total consultation in control group was 14 (±6.2) minutes, and 15.7(±6.95) in the intervention group (p=0.06). Although

time was added when an additional issue was dealt with approaching the end of a consultation and the trend appears to be a slightly longer consultation, the change in length is not statistically significant. Statistical significance would have to be confirmed with a larger study.

Although it is acknowledged that dealing with more problems during the consultation will usually lead to a longer consultation, time dealing with each problem is not increased.[23] In a UK study where patients were asked to write a list of problems before the consultation, and the number of problems in each consultation increased, the average time taken to deal with a problem remained about five minutes.[54]

6.4 Issues raised at conclusion of consultation

As well as the patients that raised new problems, there were some that had queries relating to their presenting problems: 7.6% of the control group and 6.97% of the intervention group. This represents the group of patients that were not completely happy with the explanations of their problem or the proposed management. Patients will be more satisfied when these matters are resolved.[4,7]

The remainder of the issues raised were requests for prescriptions, especially for ongoing chronic conditions which had not been discussed in the consultation, administrative functions requiring completion of forms, sick notes and referral letters, and subjects relating to other family members, such as reports on health problems

the patient felt the doctor might be interested to hear. These made up 34.6% of issues in the control group, and 27.9% in the intervention group.

Once the patient had introduced the problem, the doctor needed to respond. Many of the responses were not time consuming, such as receiving information, writing a prescription or a sick note, or arranging another appointment or referral. These made up 42.3% of the responses in the control group and 65% in the intervention group. Often patients will phone in between their doctor's appointments to arrange for these requirements, and it may be less irritating to make these arrangements at the time of the consultation.

6.5 Other factors

Women and patients attending in the morning appeared to be more likely to respond to the doctor when asked the research question, or to raise spontaneous issues. This trend would have to be confirmed with bigger sample groups.

7 CONCLUSION

Asking the question “Is there anything else?” before attempting closure may be a useful tool in the consultation. This enquiry ensures that all the patient’s issues have been discussed, even when given an uninterrupted opportunity to mention all their problems at the beginning of the consultation. The research completed in this small sample would indicate that patients readily accept the opportunity to discuss further concerns at the end of their visit, which may not have been mentioned previously in their list of presenting problems. Many of these issues were minor such as requesting a sick note or giving a report back on another family member’s health status, and not time-consuming to resolve. Overall, the mean consultation time was likely to be prolonged but the time added to each consultation was no more than if they had raised these issues spontaneously.

Giving the patient time to resolve confusion around the diagnosis or the treatment that has been prescribed may lead to better compliance. Unnecessary follow-up visits or telephonic queries may be prevented. These can be annoying when they interfere with the productivity of another day, particularly when they interrupt the flow of other patients’ consultations.

Further research using a larger sample group might give better insights into reasons for the encounter where the influence of other variables such as gender, income and chronic health problems could be comparatively understood. It might be revealing to measure if patient satisfaction outcomes improve if the question is asked.

Multi-centre research would illustrate how patients from different cultures with differing demographics respond to the research question. Cross-cultural and racial differences between doctor and patient might significantly influence how the patient might respond. The gender of the doctor and patient may also play a role in determining the outcome.

Another influence might be the different style of the consultation as conducted by the doctor[17]. Further research might show that a consultation with a biomedical focus would be less likely to elicit an expression of additional issues than a consultation with a patient-centered focus. If a patient interprets the doctor's mode of consultation as being accommodating of their particular needs they will establish a better rapport with the doctor[55]. Certain types of patient may be found to be more likely to approach particular types of doctor with a new problem, such as the same gender[56]. Research would probably show that a patient who feels comfortable in the consultation is more likely to ask additional questions or raise further issues if prompted.

Our aim as family practitioners is to help our patients understand their condition and work together towards the best possible outcome: a small extra question may make all the difference.

8 ADDENDA

8.1 Appendix A: Information and Consent Form

I am currently researching aspects of the medical consultation in this practice, towards a higher degree in Family Medicine. These aspects relate to the questions I ask and how these affect the length of the consultation, and not the diagnosis and treatment of the patient's medical problem. I would like to include your consultation in my study.

The information I am gathering is recorded confidentially and your name will not appear on my data sheet. I shall be recording your age, sex, reason for attending, other issues raised, and the length of the consultation. There is no possibility that any details of your consultation will be associated with your name or be divulged to any person not directly connected to the research.

The study has been approved by the University of the Witwatersrand medical research ethics committee.

I need your consent to include this data in my research. You have the right to refuse and such a refusal will in no way affect the care that you will receive from me or any other doctor in this practice. University procedures require that you give written permission below.

Thank you,

Dr Kirsten Welch
Department of Family Medicine
University of the Witwatersrand

Consent

I hereby give consent for information from this consultation to be included in the above research project.

Signed …….

Date ……..

8.2 Appendix B: Data Collection Form

Study number_____

Time _____h_____

Male/Female ☐

B/W/C/A ☐

DOB/Age in years_____ ☐☐☐☐☐

Date_____ ☐☐

Presenting complaint_____ ☐☐☐

_____

_____

Procedure: Yes/No ☐

Number of complaints ☐

Time of conclusion (i) _____h_____ ☐☐

Question related to “anything else” asked: Yes/No ☐

Patient response_____ ☐

_____

_____

Doctor’s reaction_____ ☐

_____

_____

Time of conclusion (ii) _____h_____ ☐☐

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