

**PATIENT WILLINGNESS TO UNDERGRADUATE MEDICAL  
STUDENT INVOLVEMENT IN THEIR CARE AT THE KENYATTA  
NATIONAL HOSPITAL: A CROSS SECTIONAL STUDY.**

**DISSERTATION SUBMITTED IN PART FULFILMENT FOR THE  
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## **DECLARATION**

This is to declare that this is my original work and has not been presented to any university or other institution of higher learning for award of either a degree or diploma certificate.

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This dissertation has been submitted as part fulfilment of the award of Diploma in Research Methodology of the University of Nairobi with our approval.

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## **ACKNOWLEDGMENTS.**

Gratitude is expressed to my supervisors who opened my eyes to the scope that qualitative research has in clinical medicine.

## **ABSTRACT:**

*Research Question:* How willing are patients to the participation of medical students in their care.

*Objective:* To determine the level of patient willingness to medical student participation in their care

*Design:* Cross sectional study

*Methods:* Qualitative in-depth interviews of patients within the surgical wards of the Kenyatta National Hospital in Nairobi.

A sample of 16 patients purposefully selected from the surgical wards based on their prior contact with medical students were chosen.

Amongst the outcome measures evaluated were patient willingness to history taking and physical examination by undergraduate medical students. The patients' perception of student bedside conduct and patient readiness to decline to be seen by students. Factors influencing the level of patient willingness to be attended to by medical students and also to look at the patients' assessment of the benefit of medical students in the wards.

Data collected was entered into a questionnaire and analysed by themes and codes.

*Findings:* Participant willingness to participate in the training of medical students overall is favourable but should not be assumed. Some participants are declining to be seen by students and a means of correcting this situation needs to be found.

Areas of concern expressed by participants include privacy, student conduct, poor clinical skills and the inconvenient student visiting times.

Better training in student communication skills needs to be implemented. Improved bedside etiquette and respect for patients' "undisturbed times" need to be observed.

A balance must be struck between student eagerness to learn and patient willingness to be seen by students. As a result Medical Schools will need to consider incorporating alternate teaching methods to enable medical students to acquire the much needed clinical skills.

## **INTRODUCTION**

The fact that patients are admitted to teaching hospitals does not mean they automatically grant consent to be seen by medical students. Patients' rights must be maintained and their informed as well as willing consent must be granted for all parts of their care

With ever-increasing class sizes in medical schools the world over, more patients appear to be reluctant when it comes to consenting to medical student participation in their care (1).

A randomised controlled trial, reviewing patient office visits, suggested that patients are now less willing to medical students involvement in their care (2).

Medical schools have to accept that increasingly not all patients are willing to either give a history, or consent to a physical examination by medical students (3). This is to the detriment of the level of clinical skills that the students are able to acquire during their training. As a result medical schools may need to make changes in the teaching methods and find alternative approaches to the teaching of clinical skills.

This study aims to achieve a better understanding of the dynamics of the subjective aspects of patient student interaction. This qualitative study attempts to determine how willing our patients are to student participation in their care. Qualitative analysis using patient interviews was chosen in view of the rich nature of the data that can be collected, data that is more likely to cover most aspects of this relationship.

## **AIMS OF THE STUDY**

This study aims to ascertain the level of patient willingness to the participation of undergraduate medical students of the University of Nairobi in their care.

Specific objectives

1. To determine patients willingness to the participation of undergraduate medical students during their care.
2. To determine some of the reasons for patients' willingness (or unwillingness), to undergraduate medical student involvement in their care.
3. To advise what changes to patient participation in the clinical teaching of undergraduate medical students the medical schools can make.

## **REVIEW OF THE LITERATURE**

Literature relevant to the study was sought using the Ovid search engine and Medline.

Key words entered were patient “willingness”, “attitudes”, medical student “participation” “attendance”, “patient care”. Grey area literature was not reviewed for purposes of this study.

Patient consent or willingness to participate in the teaching process should not be taken for granted (4). Even at the best of times genuine consent from the patients is not given. Subtle duress may occur when consent is sought at the very last minute just as the consultation is about to commence. This scenario makes it difficult or even awkward for patients to decline (5). This is a scenario found all over the world and patient's rights are therefore regularly being infringed. Possibly this may contribute to some of the uncooperative attitudes seen in the settings used for clinical teaching.

In the community teaching settings of the developed nations, studies utilising self administered questionnaires show that even though a small number of patients object to medical students being involved in their management the majority do not. This situation remains the same even with no prior warning being given to them of their participation (6, 7, 8). Where objection is raised, this objection is greater to a physical examination (up to 30%), compared to simply giving a medical history. Using similar methods, similar results were obtained in the specialties. However in obstetrics and gynaecology, sexual health or genitourinary clinics slightly more opposition to the presence of medical students was observed, rising to an unwillingness level of 40% (9,10, 11, 12). Reasons associated with increased unwillingness related to the gender of the medical students, level of training and type of involvement. Invasive procedures, where these needed to be carried out by the students, invoked a greater reluctance (13).

Gender and race of the patients were found to be the most common association for patients declining participation of medical students' in their treatment (14, 15). Some of the patients main concerns were a poorer quality of care offered from students, loss of confidentiality, cultural differences and failure to request consent prior to consultation (10, 16).

A few extreme views suggest patients should be obliged to participate in the teaching of students if using public sector services (17), however this certainly goes against the patients' right to refuse. Under no circumstances should a patient declining the presence medical students' during their examination be considered to be "difficult" (5).

Both Shah-Khan and Choudhury et al, observed foreign patients in a western setting showed a greater unwillingness to medical student involvement in their care compared to the local native population (14,18). Their decisions (patients), may have been influenced by their religious and socio-cultural differences. For example muslims and some other faiths hold

strong views on how much of the body should be exposed for examination unlike in western cultures.

It is notable that during the literature search no similar study had been carried out within the region. With Kenya's diversity of cultural and social dynamics being different to the west; our results for a similar study may therefore also yield different results.

## **RESEARCH QUESTION.**

What is the level of patient willingness to medical student participation in their care? And what factors may influence this level of willingness.

## **JUSTIFICATION/ RATIONALE:**

Patient's refusal to participate in clinical teaching is probably not only due to "too many students". Possibly it is just a part of the broader picture of patient disposition to their participation in the clinical teaching process.

This study aims to get an in-depth perspective of patient willingness and the broader issues associated with patient acceptance (or otherwise), of student participation in their care.

This broader picture would best be captured through qualitative research techniques as opposed to quantitative methods. The rich quality of qualitative research data captures aspects of the data that would never be brought out by simple quantitative techniques. The data captured also is from the perspective of the research subject unlike qualitative which is more from the viewpoint of the researcher. This qualitative aspect was a perspective missing in some previous studies.

These resulting data can be used to help in addressing the reasons patients react to students the way they do. The advantage is these solutions will be they are specific to us and our patients.

An appropriately formulated action plan devised from the data can help tackle the observed poor student acquisition of clinical skills, and develop more appropriate teaching protocols. The end result will be a benefit to the patients, the students in the long run and by extension to the nation.



## **PARTICIPANT SAMPLE**

The study interviewed sixteen participants consisting of 10 males and 6 females from the Kenyatta National Hospital in Nairobi.

Participants were purposefully chosen from adults in the general surgical wards of the hospital. The participants were selected using the criteria of having stayed in the ward amongst the longest. On selection, if found not appropriate for the study, selection moved down to the next longest staying patient and so on. The main criterion for inclusion thereafter was they must have been interviewed by medical students.

Patients who declined to participate, or were unsuitable for any reason like inability to communicate, mental instability e.t.c. were excluded.

For all willing participants written consent to conduct the interview was obtained prior to commencement of the interview

## **DATA COLLECTION METHODS**

The cross sectional, qualitative study was conducted within the general surgical wards of the Kenyatta National Hospital over the period March 20<sup>th</sup> to 10<sup>th</sup> June 2009.

In depth interviews were conducted through a questionnaire with semi structured, mixed open and closed ended questions.

The questionnaire contained predetermined themes in the following theme areas;

1. How the students were identified
2. Participants' feelings when medical students took history from them.
3. Participants feelings when participants were examined by the students
4. Extent the participants were happy to allow medical students to carry out a physical examination on them
5. Factors influencing participants feelings to medical students, (age, gender, religion and general demeanour)
6. Whether the participants felt they benefited from the presence of medical students in their care.
7. The overall willingness of patients to having medical students involved in their treatment.

Prior to the interview the purpose of the interview and expectations were explained to the participants, and consent obtained. Participants were advised as to the possible utilisation of the study results to aid in the auditing of the student teaching programmes.

The patients were also advised the interview would be recorded and the data analysed later. Confidentiality of the data and the timeframe that this data would be retained was also explained to them.

Audio data was collected using a digital dictaphone, (Sony IC Recorder ICD-MX20). Additional written notes on non verbal responses and any body language were documented on the questionnaire.

All interviews were conducted on a one to one basis in a private room within the wards. On average interviews lasted about 15 to 20 minutes each, and at the end the participant was allowed to ask any question about the interview that they wished.

## **DATA ANALYSIS METHODS:**

The questionnaire had been pretested prior to the interview sessions to ensure it was understandable.

Post interview transcription was manually performed and the transcripts entered into a computer under the respective predetermined themes. The transcribed data was entered into a computer using Microsoft Excel 2007. The data was then coded manually into various codes and the results analysed.

## **ETHICAL ISSUES**

Ethical approval for this study was sought from the Kenyatta National Hospital Ethics and Research Committee. This approval was granted.

All patients granted a written consent of participation after having an explanation given to them.

All participants were assured the information they provided would be kept confidential and used only for the purpose of this study. In addition all patients were assured the audio data collected would be destroyed on completion of the study report.

## **FINDINGS**

The composition of the study group was mentioned earlier.

For the whole group the average age was 31 years (34.6 for the males and 27.5 for females

respectively).

Analysis of the marital status of the participants showed that eleven (11) of them were married.

Employment status of the participants showed that five (5), were unemployment; six were in the informal sector, self employed in various jobs. Three were students and only two were in formal salaried employment.

### **Willingness to History Taking**

On the theme of history taking, experiences ranged from total willingness to giving a history to the opposite extreme. On further questioning, the details of the unwilling patients were brought out. The main codes that came out were lack of choice (willing consent), feeling of subservience, repetition (inconvenience) and general student conduct.

The issue of choice related to the issues of willing consent, privacy and relationship with students.

There were participants who accepted to give a history to students only as they had no choice but to do otherwise.

***“I did not want to talk to them a lot but I saw I had better talk to them”***

How many participants are unwilling for reasons that can be resolved with students being taught how to master communication and listening skills? A proper introduction, explanation as to the purpose of the interview may simply be all that is needed. A simple and unobtrusive history may be all that is needed to gain the confidence of a lot of patients (19).

Though it may not come out directly, due to their economic situation some participants have no choice of which health facility they attend. They therefore may have a dislike for the institution but have no other choice but to use its facilities.

Generally the impression created from this study is there is a certain amount of lack of willing consent of patients to medical students taking their history.

Unfortunately some patients also mentioned a feeling of being subservient to the students (and doctors), and had;

***“No choice but to obey. Even if they are student sometimes they have read “idara” that they have understood even if a small amount”.***

Participants felt the medical personnel have a greater grasp of medical issues than themselves and so perceived themselves as having no role in decision making process. Greater involvement of patients in their care is lacking. In an effort to improve on this, patients need to be advised on the patient charter' and informed of their rights and expectations from their treatments.

A total dislike to the experience of history taking was expressed. Repetition by different groups of students and intrusion into their private lives was not liked.

***“I felt bad because you will come to me and ask all the details of my life, my family and all that. Ayah, now when you have finished another will come and start all over again and ask exactly the same questions. Till one time I asked one of them, now your questions are exactly the same as the last student. Why do you not go to them and get the details and you copy. Because they ask the same questions and they go deep”***

These experiences could lead to strained relationship between patients and students in the wards. The author feels this is certainly a genuine complaint as this hospital trains not only medical, but also paramedical staff and these large numbers certainly put a strain on the hospital patients.

The fundamental issue of communication seems to be coming out, participants are not being involved in the process to the extent they feel they want to contribute to the student education.

Participants' perception of students' general honesty and failure to identify themselves as indicated in the earlier section also provoked and unwillingness to give students the required medical history.

Despite the fact students are given ward orientation and advised on how to conduct themselves in front of patients, one participant stated.

***“And there are others who have a bad heart. Their conduct, I do not know if it is in their discipline or what”.***

Does the problem lie on the side of the participant, are they irritated due to being disturbed by many students (see later), or is the problem on the side of the student?

Surprisingly none of the participants mentioned breach of the confidentiality as one of their concerns when giving history. A survey in the United States found up to 60% of medical schools reported medical students posting unprofessional content (related to patients) on the internet. (20). This would be of great concern to our participants if this information was known to them especially if the information was enough to be identifiable back to them as individuals.

In a quantitative study from Saudi Arabia on patient willingness to history taking by medical students. Just over 90% had no objection giving their medical history even on some sensitive issues. But of these the majority felt they needed prior notice of their presence and preferred students of the same sex (21). The author is not aware of the level of prior warning given to participants in this study.

### **Willingness to Physical Examination**

This theme relates to the willingness of the patients to submit themselves to a physical examination by the medical students.

Generally no objection was expressed by the patients in varying ways. However on further prodding of objecting participants for more detail, issues of privacy (see next section), and examination techniques were causes for objection.

Examples of typical responses indicating the participants did not object to examination were;

***“Ehhhh I felt ok. It did not disturb you in any way.”***

***“No problem”***

The participants acknowledged receiving useful information about their condition from the students during the examination process. Additionally they indicated they were advised on preventive measures they can take in the future.

Areas of discontent and unwillingness to the examination process derived from the area of poor examination technique. This led to same distress to the participants.

***“Now there they hurt me a lot.”***

This suggests the clinical methods the students are exposed to needs to be improved. Should we ignore this future doctors will lack the skills needed to win the confidence of their patients.

Students need to be continually reminded of the need to predetermine tender areas prior to commencing palpation of their patients.

Another participant pointed to the lack of self confidence in the students;

*“And the others they are cowards and thy treble.”*

The author was not able to determine the gender distribution of this problem. However studies from the United States noted a gender difference in self confidence in the clinical setting. Third year female medical students were observed as being less confident than their male counterparts (22). Possible reasons for this apparent lack of self confidence could be due to pressure related to gender harassment and other related issues.

Of the participants willing to undergo examination, for some of these their choice of words almost suggested they were left with no choice but to submit to the physical examination process.

*“I did not feel bad as they are on duty.”*

The role of the ‘patients charter’ again comes up and the need to provide this document to all patients at admission.

### **Extent of Total Body Examination Allowed**

For this theme, overall patients claimed they would be comfortable with student examining all parts of their body. Two main codes came out of the responses; ‘limited examination allowed’ and ‘comprehensive examination allowed’. However, for those expressing only limited access the majority were observed to be males. On specific questioning most of these patients were against examination of the sexual organs in situations where the main complaint was not related to these organs. Two example responses from a male and female participant are;

*“No I will not let them examine me all over only the part that is ill. Because there are some parts that are not ill and it is not suitable to examine there.”*

*“As much as they can, Daktari. You would have no objection to them examining you fully. No. Are you familiar with a vaginal examination, would you allow them to do that? (After a period of silence and an embarrassed giggle) No. So there are some areas you would not allow them to examine? Just the down parts, these other parts no problem but just the down parts”*

Additionally the male patients preferred to be examined by the male students over the female students. The females on the other hand did not show such a preference.

A male patient response;

*“Mostly I will say not the females a lot.”*

Generally the data shows our participants generally did show some reluctance to examination of the sexual organs by medical students. This is not atypical to other studies that have shown similar results (21). Most patients would prefer this examination be carried out by the physician in charge of the case in the absence of students

### **Overall Feeling Of willingness Towards Medical Students**

For the theme of overall willingness, the general trend was one of willingness to assist the students in their training.

On a three stage Likert scale from not willing to very willing; willingness was average and no patient declared being very willing to talk with the medical students.

A typical response to this enquiry was;

*“Ehhhh, they asked questions and I replied to them. I was willing to talk to them”*

Some patients gave a lukewarm response

*“But on the first occasion did you have the willingness to talk to them. Ehhhh. Was it a lot of willingness or little?. Little”*

There were also those participants who overall were opposed. As in previous responses, again the issue of having no choice in the matter recurred.

*“Oppose, but I say I better go on like that”.*

This study did not look at the medical departments and it is possible that in those situations the level of willingness may vary to the surgical departments. In departments where no procedures are carried out participants are probably likely to show a higher level of willingness to students.

### **Factors Influencing Decisions Of Willingness**

This theme evaluates if any of the predetermined factors of age, gender or religion may have influenced the decisions of participants in their decisions.

Age and religion showed no negative influences on the decisions for all responses of the participants. Exemplified by the two responses below;

*“Now these students the way you saw them how old did you think they were. Maybe 20, 24 or there about, there is nobody I saw who may have reached 30, no. How did you feel (of the age). I was just enjoying when I was with them. Are these not like you children. (Chuckle) I just took them as my younger siblings. Ehhhh. So you have no problem with their age. No I had none I just looked at it as brothers and sisters. There were others who are saved and came with the word of god, and that made me happy”*

*“I do not look at religion”*

Despite the finding of this study; in other studies, age of patients has a relationship with their likelihood to decline to be seen by students. Younger patients are more likely to agree to medical students seeing them than their older counterparts (3).

However, gender as indicated earlier, showed some influence on the behaviour of the participants towards the medical students.

### **Would Participants Refuse to be Examined by Medical Students?**

This theme tries to determine if any patient would decline examination by medical students.



Despite the majority participants indicating they will not refuse medical students to see them, some did express a sense of having no choice in the matter.

***“No I can not. If he accompanies the doctors on the ward who I am use to I cannot refuse***

For those who indicated they may decline to be examined but students, they indicated this would more likely be a tactful rather than a blunt refusal.

***“Yes I have said we do it but we can not say, it is just through our actions. Either we avoid them by walking out to the toilet or go to watch TV. Alternatively we cover ourselves and look very serious.”***

Just how many participants were aware they could decline to be seen by medical students with no consequences is not clear. The author feels if this information was known to them probably a lot more would decline student participation. Even between different institutions the knowledge of patients’ rights will vary greatly (21). These subtle techniques used by patients should be an early warning sign to the teachers that all is not well.

Patients tend to be more comfortable to being seen in a clinical setting by students when they are accompanied by their supervisors and these quotes seem to support that.

### **Student Identification**

All participants had been seen by medical students. The identification of students was based on five main codes.

These included their characteristic red name badges on their lapels (badges). Self identification, attire (white lab coats) they wear within the wards, the fact they tended to ask questions (inquisitive), ward attendance sequence and appearance in groups.

The most common form of identification was through their name badges. Some of the participant responses to this theme were;

***“Ok. I saw a red badge on their whatever. (struggling to look for the correct words).”***

***“Yani, the way they come to talk to you, you will know this is a student and he wants information.”***

Additionally a majority of students identified themselves prior to commencing their interviews. One student it is claimed stated he was a doctor.

Reasons as to why some students did not correctly identify themselves did not come out clearly.

One study suggested medical students do not put as much emphasis on informing the patients of their status as the patients or the institutions expect. This trend increases as they progress up the educational ladder (23).

Could this be in an effort on the part of the student to get the same level of cooperation from patients as the qualified staff? Or is it just a reflection of the students' lack of knowledge in handling patients?

Students need to be aware of the impotence of informing patients of their status, as failure to do so may result in a negative response when they find out. On the other hand prior information to patients can lead to more understanding and cooperation from patients. Failure of students to identify themselves is probably responsible for this reaction of one participant;

*“You see some are serious and others are not serious. So if one comes to you, you will compare with how the other presented himself. The way this student came he told me he is a doctor rather than be sincere and tell me he is a student and I want to know this and that. Now he pretended to be a doctor and I had a little anger because I had some pain in this hand that was giving me problems and I tried to talk to the ward doctors and was not getting one. So I was annoyed and in pain so when he was trying to cheat me he was a doctor and already I knew he was a student eeh.”*

Other identifying factors were their collective appearance of the students in the wards in groups and their general approach to patients.

Student contact during previous admission(s) and the fact the students did not come to the wards on a regular basis were other pointers to their identification as medical students.

*“The other way of knowing is that they do not come to the ward all the time”*

Not unexpected their youthful looks was also mentioned as an indicator that they were students.

***“By their faces and the way they dress.”***

Generally none of the participants had any difficulty picking out the medical students amongst the ward personnel. Attire, general manner and youthfulness being some of the indicators.

None of the participants considered the senior house officers or the registrars on the wards as medical students. All these other cadres, though in training, have name badges indicating they are fully qualified and give no indication of a training status.

The re-labelling of name badges to reflect the correct grade of staff, for example “Medical Intern”, “Medical Officer”, “Senior House Officer” and “Surgical Registrar” may have an influence on participant attitudes towards them.

### **Student Bedside Manner during Clerkship**

In this theme bedside etiquette, apart from the issues of techniques and skills mentioned above, the main codes that came up were related to the way the students related with the participants, their attire and demeanour.

Generally most patients still prefer formal attire from the medical profession (24). This attitude is exhibited more so for the older generation (25). Casual and less formal attire for health and safety reasons are being adopted in some clinical areas.

Overall in this study patients felt the students were appropriately attired. And a typical response to this would be;

***“They were dressed well; you cannot but think they are not doctors.”***

Participants also felt that overall the students generally behaved in a respectful manner. This is brought out in this quote;

***“No they are very respectful and conduct themselves well. When you do not hear the question you inform them and also if you have a question you ask and they will answer you well till I was satisfied.”***

Those patients with differing views felt the dress code in some situations could be modified. This was particularly expressed by a male participant in the study.

*“But many of them (female) they preferred to wear longs and I was defeated if you allow them to wear longs. That was the only issue I had. Explain a bit more. Many that I saw they do not wear the usual clothes for females, they prefer men’s clothes of longs a lot. Did that disturb you a lot? I asked myself if there are no guidelines.”*

Dress code certainly affects the attitude of patients to the clinicians. The attitudes have moved slowly away from the formal code to the more casual, including scrubs, in some areas with acceptance from patients (26). As the students in this study are required to wear knee length white over coats it is not clear as to the main issue being raised by this participant.

#### **Did Patient Benefit From The Presence Of Medical Students In The Wards?**

With respect to this theme, the presence of students in the wards was overall positive from most participants. For the positive responses the main codes were in health education to patients and facilitation of patients’ treatment.

*“I benefited a little because there was one who I asked about all the medicines I was receiving here and how they helped me. Then another I asked what was the difference between hypertension and high blood pressure and she replied to me.”*

In addition they were also taught preventive measures on caring for themselves after discharge.

The students also provided a good avenue of communication with senior staff. This communication seemed to suggest some form of facilitation of their treatment process.

*“Yes as when they come to visit me like that when they leave, I am then take in by the doctors and treated.”*

*“Yes they tried a lot. And I did benefit as I had an external fixator which was hindering me a lot and when they came to see me I informed them and they told me let us learn on you and we will see how to get you on the operating list. So the students helped you with the seniors. Ehhh”*

In the authors opinion this benefit was more financial to participants as the length of stay and by extension hospital bills reduced. The long interval before surgical treatment was a common complaint expressed by participants.

Those participants, who felt they did not benefit from student participation, felt the students were the sole beneficiary.

***“For us there is no benefit. But they benefit as they came to learn from us and to present (to the teachers). Sometime if they present the way you (teachers), want it they will be marked.”***

This may be related to the frustration being expressed in the manner the students conducted the interviews to the inconvenience of the patients at times.

***“And they need to consider the times to come. Like the morning hours are ideal and in the evenings around 2.00pm or 3.00 pm or 4.00pm at the latest but to avoid this as much as possible as we eat early. Now do they come at night? Yes they do come at night. But not very late, up to 7.00pm, 8.00pm up to 9.00pm. That is the time they may extend to and they spend about 2 hours with us depending on their speed.”***

Though the author did not specifically follow up the issue of timing, in some studies patients were clear as to the specific time they wished to see students (21).

Despite the frustration expressed by some participants, students also managed to cheer them up by providing moments of light relief

***“It was good as they joked a bit and they were cheerful. Also they removed the stress of being in the hospital”***

## **CONCLUSION**

Medical schools in this part of the world have for a long time been lucky in the abundance of clinical cases with good clinical signs. As patients become more aware of their rights, willing consent becomes more important. Increasingly we now have to face the reality that patients are now less willing to be examined by medical students. The result of this is that the clinical skills acquired by students during training are likely to be adversely affected. This study clearly demonstrates that even though the overall consensus is willingness to medical student participation, not all patients are willing to be used by them for learning purposes.

Areas of patient concerns included the areas of personal privacy, student conduct, poor clinical skills exhibited by the students and the inconvenience of erratic student visiting times.

Some patients are clearly taking evasive action to avoid being seen by medical students. Effective communication between patients and students needs to be developed and probably the addition of communication skills in the curriculum would facilitate this. Students should also be able to communicate in a language that patients can understand. On the side of patients, the distribution of the “patients’ charter” informing them of their rights as well as obligations would also facilitate better communication. Better rapport between patients and students would lead to greater patient trust and confidence in the medical students.

Medical schools also need to strike a balance between patient willingness to be seen and student willingness to be taught.

This may involve significant review of their teaching methods. The use of simulated models may provide a solution to this problem. There are great advantages to using simulated models however, there are also disadvantages. The biggest disadvantage being simulated models loses the human element in the relationship of student and patient. This lack of a healthy relationship is apparently one of the factors that seem to come out of this study. Lastly, medical students not only need to be taught the art of communication with patients but also how to conduct themselves in their presence.

Courteous approach with appropriate introductions, simple explanations, and self-discipline are areas which seem to be weak in this study setup. Medical schools must address this issue even if it is only a small number of students who behave in this manner. Even this small number can have a snowball effect and adversely affect patient attitudes to even well-meaning students.

Additionally medical schools need to look into the issues of student numbers, how they train clinical skills to students and its effects on patient welfare. Too many students as a result of large class size, reduces the access that each individual student may have for patient contact. Even if a few will hide behind numbers and miss out, the remainder who practice clinical skills as expected will overwhelm the patients. Smaller clinical groups of students would be the ideal solution.

On the positive side, students provided patients with health information as well as a form of relief from personal stress situations. No doubt there are some patients who are more than happy simply to have someone to talk to. Medical students are thus playing a very important part as members of the multidisciplinary approach to overall patient management.

## **RECOMMENDATIONS.**

In conclusion in order to further improve the acceptance of students by the patients this study recommends the following;

1. Students being made aware of patients concerns relating to their ward contacts with them. Both communication and life skills will need to be imparted to the students to facilitate their communication with patients.
2. Greater recognition that patients in this country are becoming more aware of their rights and that there is a need to have a patients charter clearly stipulating their rights and obligations in the hospital.
3. Diversification of teaching methods by the medical school in order to reduce the load on patients from the large numbers of medical students.
4. An effort is made to make class sizes smaller.

The medical schools in this country will need to take note of these findings and recommendations. Some form of action plan is needed early to address these issues in good time.



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## APPENDIX

### Data collection sheet.

BASELINE INFORMATION ON INTERVIEWEE			
Respondent Code:			
Interview date:			
Interview start time:		Interview completion time:	
Educational Level:		Occupation:	
Age:			
Sex:			
Religion:			
Ward			
Is this the first hospital admission?			
Date of admission			
Primary pathology			

#### Introduction:

- Self introduction, name and general affiliation

#### Purpose of Interview

- Explanation of the study aims and objectives.
- Explain why patient been selected for interview.
- Explain that his confidentiality will be maintained and advise that the interview will be recorded and the reasons and also that the tape will not be disclosed to others and will be destroyed after use.

- 
- Seek confirmation of consent to conduct this interview and separately for recording the interview.
  - Ask if patient would like additional information relating to the interview before start the interview.

**Interview Begins:**

**1. General admission details**

- a. Could you tell me something about why you were admitted here?
- b. Tell me what were your expectations from your admission before you came to the ward?
- c. What were, if any the shortcomings you have noticed?

**Probe**

- a. Why do you think the shortcomings may have occurred?

Comments related to any non verbal responses.

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**2. Overall, how would you evaluate your stay within the ward during this admission?**

**Probe**

- a. Could you put this on a scale of very good, good, average, bad and very bad

Comments related to any non verbal responses.

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**3. What did you think of medical student participation in your treatment?**

- a. Which staff members were taking part in your care?
- b. Were there any medical students involved in your care?
- c. Tell me about your encounters with medical students?
- d. Could you tell me of what benefit to patients the medical students bring?
- e. Should they (medical students), continue giving this care in the wards?
- f. What are your overall feelings of medical student involvement in treatment of patients

**Probes**

- a. How are undergraduate medical students (of the University of Nairobi) identified?
- b. Evaluate students on a scale of strongly oppose, oppose, do not care, accept, happy with them, very happy

Comments related to any non verbal responses.

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**4. What was your willingness/opposition to medical student participation in your care?**

- a. Describe how you felt when medical students took a history from you?
- b. Describe how you felt when medical students examined you?
- c. How far will you allow the medical students examination to go?
- d. How many medical students would you allow to see you for each session?
- e. Could you put this willingness on a scale of Strongly oppose, Oppose, Neutral, Accept/support, Strong acceptance/support

**Probes**

- a. Tell me what you think the role of the supervisor/teacher should be when students are seeing you?

Comments related to any non verbal responses.

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**5. What factors influenced your willingness/opposition to student participation?**

- a. When the students approached you, describe your feelings towards them?
- b. Describe some of the reasons you had or thought of leading to you not allowing/not allowing students to examine you?
- c. If you were able to refuse being seen by medical students would you, and why?

**Probes**

- a. What thoughts were going through your mind? (steering)
- b. Were there any cultural issues that influenced your attitude?
- c. Were there any issues relating to age differences that influenced you?
- d. Were there any religious issues?

Comments related to any non verbal responses.

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**6. Overall how do you grade their stay in the ward in general**

- a. Overall how do you grade your stay in the ward?
- b. Overall how do you grade your perception of the standard of care of qualified ward personnel?
- c. Would you recommend the Kenyatta National Hospital to other relatives of yours?

**Probes**

- a. On a scale of very poor, poor, average, good, very good.

Comments related to any non verbal responses.

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**6. Opportunity to say anything they feel they would like to add**

- a. Is there anything I have not asked that you would like say or to make a comment on?

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Comments related to any non verbal responses.

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## Consent form

# CONSENT FORM

## INFORMED CONSENT FORM REQUESTING YOUR PARTICIPATION IN A STUDY TO FIND OUT WHAT YOU FELT ABOUT USING MEDICAL STUDENTS DURING YOUR TREATMENT

March 1<sup>st</sup> 2009 – 10<sup>th</sup> June 2010.

Researcher: Stephen W.O. Ogendo (020) 2726300 ext 43773

### Introduction

My name is Stephen Ogendo. I am A doctor working at the Kenyatta National Hospital.

In an effort to improve on our services, I am carrying out a study to find out your feelings about having medical students taking part in the care given to you during your stay in the hospital.

### Ain of the Study

The study that I am doing is called **“Patient willingness to undergraduate medical student involvement in their care at Kenyatta National Hospital.”** and the study is being carried out from 1<sup>st</sup> February 2009 to 30<sup>th</sup> April 2009.

This study has hospital authorisation through the through the Kenyatta National Hospital Ethical and Research Committee. This committee makes sure only authorised research is carried out in this hospital and also that you are not harmed or inconvenienced during research in any way.

What I hope to do is to find out what you felt about being treated by medical students in the wards and using this information to improve both their teaching and the services we offer to patients in the wards.

You have been identified by me as one of the participants to take part. Choosing you to take part was based on you having been amongst the longest staying patients in the ward and so have had a chance to meet the students.

You yourself will not benefit in any way from the results of this study, but we hope to use your comments to assist in reviewing the way medical students are involved in the treatment of patients.

### What will be asked of you?

What I would like from you is a little of your time, about forty five minutes, to sit down and talk to you about medical students and what you think of their involvement in the treatment we gave to you. This interview will be conducted in a private room to make sure your privacy is maintained. And with your permission, I would like to record the interview to make the taking of notes easier.

You will only be asked to answer a few questions about your stay in the ward with us, what you thought of the presence the medical students while in the ward. These questions will be general and asked in a way that allows you to answer freely in your own words. Should you feel that you do not wish to answer any specific question feel free to say so and we will leave that specific question out.

You do not have to take part in this study if you do not wish to do so, and your participation is totally voluntary. Should you decide that you do not wish to take part, we will guarantee that this will not affect the standard of care you receive from us now or in the future should you wish to have other treatment(s) at this hospital.



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**My obligations to you**

The information you will give will be treated in confidence and only used for the purpose of this study. Only questions directly related to the study will be asked of you. Your answers will be kept in a secure site and will not be given out to any other persons.

When the final report is written, no mention will be documented that can be traced back to you.

The tape recording of the interview will be erased three months after completion of the study report estimated to be July 2009.

**Contacts for further information**

You may want to ask more questions in order to make things clearer to you. In the event that you wish to have further information on the study from me feel free to contact me on (020) 2726300 ext 43773

If you would like confirmation on the authority to interview you, questions relating to your rights relating to this study or complaints relating to the conduct of this study you may contact the Kenyatta National Hospital Ethics and Research Committee (KNHERC) on (020) 2726300 ext 44102

This is to confirm that I, \_\_\_\_\_ have had an explanation given to me by Dr. Stephen Ogenko about his study. Based on the information provided to me I have agreed to take part in the study voluntarily on the understanding that the information will not be used for any purpose other than for the said study.

I also understand that I can withdraw at any time without it affecting the treatment I shall receive from this hospital now or in the future.

Signed \_\_\_\_\_ Date \_\_\_\_\_

I also give consent for the interview to be recorded.

Signed \_\_\_\_\_ Date \_\_\_\_\_

Patients copy \_\_\_\_\_

Researchers copy \_\_\_\_\_



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17<sup>th</sup> March 2009

Ref: KNH/UON-ERC/ A/168

Dr. Stephen W.O. Ogendo  
Dept. of Surgery  
School of Medicine  
University of Nairobi

Dear Dr. Ogendo

**RESEARCH PROPOSAL: "PATIENT WILLINGNESS TO UNDERGRADUATE MEDICAL STUDENT INVOLVEMENT IN THEIR CARE AT KENYATTA N. HOSPITAL" (P44/02/2009)**

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and **approved** your above cited research proposal for the period 17<sup>th</sup> March 2009 –16<sup>th</sup> March 2010.

You will be required to request for a renewal of the approval if you intend to continue with the study beyond the deadline given. Clearance for export of biological specimen must also be obtained from KNH-ERC for each batch.

On behalf of the Committee, I wish you fruitful research and look forward to receiving a summary of the research findings upon completion of the study.

This information will form part of database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

Yours sincerely

**PROF. A N GUANTAI**  
**SECRETARY, KNH/UON-ERC**

c.c. The Chairperson, KNH/UON-ERC  
The Deputy Director CS, KNH  
The Dean, School of Medicine, UON  
The Chairman, Dept. of Surgery, UON