

Injections and Patient Satisfaction in Zulu-Speaking Patients

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Abstract

Background:

There is a belief that Zulu patients who do not receive an injection, as part of the consultation in family practice, will be less satisfied with the consultation than those patients who receive an injection.

Methods:

A cross-sectional study of adult Zulu patients attending a family practice in northern KwaZulu/Natal in which a questionnaire was given to those patients receiving injections and those who did not, in order to assess satisfaction with the consultation.

Results:

One hundred and eighty Zulu patients receiving injections were compared to 132 Zulu patients who did not receive injections. Those who had not received an injection were more satisfied with their consultation, compared to the group who did receive an injection. This result held after testing for confounding variables.

Conclusions:

Adult Zulu patients, especially those who are younger and of higher educational achievement, need not be offered a therapeutic injection in order to obtain patient satisfaction.

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Introduction

One of the main objectives in a consultation is for patients to leave the consulting room feeling satisfied with their consultation. Satisfied patients are more likely to remain with a physician, keep appointments, comply with treatment and refer other patients to their physician¹. Among the factors that allegedly influence Zulu speaking patients' satisfaction is that of receiving an injection as part of the consultation. In a study about patient perceptions Mfenyana² said: "...the majority of black people preferred an injection every time they consulted their doctor...". Giving injections to Zulu speaking patients has become routine in many practices

in the belief that this is what patients want. Injection therapy is common throughout the developing world³ and the reasons for its popularity remain unanswered. This study was done to measure satisfaction in those who did receive an injection compared with those that did not receive an injection.

If a doctor understands the relationship between giving an injection and patient satisfaction, then a more rational therapeutic decision can be made, especially in rural black practices.

Patients and Methods

This study was done in a private

practice in Northern Kwazulu/Natal in South Africa. Patients attending the practice come from a very wide area, either Vryheid (and the adjoining township of Bhekuzulu), eMondlo (a rural township about 30 km from Vryheid) or from other rural areas. A cross-sectional study was conducted with systematic sampling of Zulu patients of 18 years of age or older, attending the three-person practice. Every fifth patient was selected and each day the first person to be selected was chosen by a random number from 1 to 5. If the fifth patient was a child, the next adult patient was selected. Age, gender, educational level, time seen, which doctor was seen and the area where the patient lives, together with whether an injec-

tion had been given were all recorded for each patient.

To measure satisfaction the Medical Interview Satisfaction Scale (MISS) was used.⁴ The MISS is categorised into three clinically relevant dimensions of satisfaction with the patient-provider interaction: "cognitive", "affective" and "behavioural". Cognitive items refer to the doctor giving explanations and information and the patient understanding of diagnosis, aetiology, prognosis and effects of treatment. Affective items refer to the patient's perception of the treatment relationship, including feelings of trust and confidence in the doctor, and perceptions of the doctor's positive regard for the patient and willingness to listen to his/her concerns. Behavioural items measure the patient's evaluation of the physician's professional behaviour, physical examination, diagnostic procedures, treat-

ments and giving of advice. The questionnaire consists of 26 Likert-type items with 5-point responses and was translated from English into Zulu and the translation tested by getting another person to translate it back into English. A Zulu-speaking assistant was available to help illiterate patients.

For a relative risk of two to be significant at the 95 significance level, with 90% power, 250 patients are required. As satisfaction was measured in three different categories, cognitive, affective and behavioural, a larger sample was taken to enhance statistical accuracy.

Student's t-test and Chi-square tests were used when appropriate and multiple regression was performed to assess the association between injection and satisfaction scores, while controlling for confounding variables.

Results

Eighteen patients refused to participate usually because of time constraints. Three hundred and forty three questionnaires were completed but 31 had to be discarded, as they had not been completed correctly. The great majority of those that were discarded did not indicate whether an injection had been given or not. Of the 312 remaining questionnaires, 180 (58%) were from patients who had received an injection and 132 (42%) were from patients who had not been given one.

The patients who had been given injections differed from those who had not (see Table I). There were no statistical differences between the groups as far as the time of day seen or which doctor was consulted.

Patients who had been injected were

Table 1: Characteristics of patients and their levels of satisfaction

		Injection given	No injection	Significance
Mean age (years)		37.7 (SD 15.04)	31.5 (SD 9.07)	0.0001
Male		73 (40%)	66 (49%)	
Female		107 (59%)	67 (50%)	
Educational level				
	No education	44 (24.4%)	1 (0.75%)	0.001
	Standard 5	43 (23.9%)	9 (6.8%)	
	Standard 8	38 (21.1%)	16 (12%)	
	Standard 10	45 (25%)	70 (52.6%)	
	Tertiary	10 (5.6%)	37 (27.8%)	
Place of residence				
	Vryheid	46 (25.4%)	72 (54.6%)	0.001
	eMondlo	40 (22.1%)	32 (24.2%)	
	Rural	95 (52.5%)	28 (21.2%)	
Levels of satisfaction		Mean (SD)	Mean (SD)	
	cognitive satisfaction	3.95 (0.68)	4.43 (0.63)	0.0001
	affective satisfaction	3.39 (0.56)	3.71 (0.51)	0.0001
	behavioural satisfaction	3.09 (0.46)	3.28 (0.41)	0.0003
	total satisfaction	3.50 (0.49)	3.83 (0.42)	0.0001

less satisfied than those who had not been injected (see Table I). We found no statistical difference between males and females in satisfaction scores, but patients with lower educational levels were generally less satisfied, as were those coming from rural areas. There was a weak correlation between age and satisfaction score (Pearson correlation coefficient $r < 0.2$).

Discussion

Zulu patients in this practice are very likely to receive an injection. However this study has shown that Zulu patients who do not have injections are more satisfied with the outcome of the consultation with their family physician than those who receive an injection as part of the consultation. This surprising finding is supported by the fact that the younger the patient and the higher the educational level achieved by the patient, the less likely is that patient to have an injection and the more likely that the patient is to be satisfied at the end of the consultation. Living in an urban as opposed to a rural situation is also associated with not having an injection and being more satisfied with the consultation. It is therefore likely that as Zulu patients become urbanised and achieve higher educational levels, injection therapy is less likely to play an important factor

in achieving satisfaction within a consultation.

Patient satisfaction is not easy to measure and is influenced by many factors, including the issuing of a prescription or administration of an injection. The MISS questionnaire used in this study has shown good internal consistency and is easy to use. In a comparison of a later version of the MISS questionnaire with another well-validated questionnaire, the Consultation Satisfaction Questionnaire (CSQ), both questionnaires give similar results.⁵ However, the results of using such questionnaires in cultures or health care systems for which they were not designed, must be treated with caution.⁴

To illustrate this difficulty, one variable associated with higher levels of satisfaction, was the higher educational level of the Zulu patient. In contrast, studies in the United Kingdom and United States of America, quoted by Lewis 6, found that the higher the educational level of the patient, the lower was the level of satisfaction. The fact that patients of lower educational achievement in our study were assisted in completing the questionnaire is unlikely to have resulted in lower satisfaction scores, as such patients would be more likely to have given positive answers to please the assistant.

Although injection therapy is culturally acceptable and sometimes

medically indicated, we believe that the tendency to give injections may encourage patients to become doctor or nurse-dependent. In health services with cost constraints, encouraging patients to seek out doctors for injections is one way of increasing demand. Giving injections increases costs and also possible local and systemic effects from injections may also contribute to higher costs. Observer bias in this study was possible as one of the authors (HN) was involved in the study. However, because of the sampling technique, he was unaware which patients were being selected. The other two practitioners in the practice were unaware that the study was being done.

The results of this study indicate that doctors need no longer feel that injections are necessary to achieve a satisfactory consultation. Many younger and better-educated Zulu patients are very satisfied with consultations that do not end with an injection.

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