Article

Effects on quality of care and health care worker satisfaction of language training for health care workers in South Africa

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Abstract

Most research into medical communication has been in a Western setting. Communication between non-language-concordant health care workers (HCWs) and patients adversely affects patient and staff satisfaction. To the best of our knowledge, no intervention studies have been conducted in Africa.

Objective. To determine whether teaching Xhosa language skills and cultural understanding to HCWs affects patient satisfaction, HCWs' ability to communicate effectively with Xhosa-speaking patients and HCWs' job satisfaction levels.

Design and setting. A before-and-after interventional study was performed at two community health centres and a district hospital in the Western Cape Province of South Africa.

Participants. Fifty-four randomly selected patients (27 pre and 27 post intervention) assessed communication with HCWs and rated their satisfaction. Six non-Xhosa-speaking HCW participants completed pre- and post-intervention questionnaires.

Intervention. HCWs completed a ten week basic language course comprising ten 120 minute interactive contact sessions developing basic Xhosa speaking and listening skills and cultural competence.

Outcome measures. Questionnaires used a Likert scale to rate degrees of agreement or disagreement with statements. Patients assessed communication with HCWs, quality of care and rated their satisfaction. HCW questions were grouped according to themes, including ability to communicate, job satisfaction and staff interpersonal relationships.

Results. Patient satisfaction showed significant improvements. Patients perceived HCWs to be more understanding, respectful and concerned, and to show better listening skills, after the intervention. Patients were better able to understand HCWs and their instructions. HCWs' ability to communicate improved and HCWs experienced decreased frustration levels.

Conclusions. Teaching language skills and cultural sensitivity to non-Xhosa-speaking HCWs in South Africa improves ability to communicate, increases patient satisfaction and decreases misunderstandings and frustration.

Introduction

Communication difficulties between health care workers (HCWs) and non-language-concordant patients are well documented all over the world. The importance of good communication between HCWs and patients cannot be over-emphasised.

Patients with limited English proficiency have been shown to be less satisfied with their clinician's communication and with their overall health care.[1] A literature review on the impact of language barriers to health care by Timmins[2] showed that 86% of studies evaluating quality of care found a significant detrimental effect due to language barriers. In addition, adverse events suffered by patients with limited English proficiency are more severe than those suffered by English speaking patients[3] and more likely to be due to communication errors. In South Africa, language barriers have been cited as reasons for poor adherence to antiretroviral therapy,[4] for HCWs not initiating the treatment of insulin on patients who need it[5] and for poor asthma care.[6]

In South Africa, eleven official languages are spoken. In the Western Cape there are three official languages: Afrikaans, Xhosa and English. According to the language policy of the Western Cape Government, any of these languages may be used in a person's communication with any institution of the provincial or local government.[7]

The majority of patients seen in the public health sector of the Western Cape are black African Xhosa-speakers, many of whom are educated to primary or secondary school level and do not speak English or Afrikaans.[8] Most HCWs in the public health service in the Western Cape do not speak an indigenous African language and interpreters are not employed in primary health care centres. This leads to language barriers to effective communication, particularly between HCWs and Xhosa-speaking patients.[8]

South Africa has eight medical schools. Language and communication courses form part of the curriculum in four medical schools – the universities of Cape Town and Stellenbosch teaching Xhosa, University of KwaZulu-Natal teaching Zulu and the universities of Pretoria and the Free State teaching Sesotho. However, the first of these courses was only introduced in 2003, thus most practising doctors in South Africa have not had any formal language or communication training. A number of surveys conducted in South Africa have recommended that practising HCWs should be taught language skills in the spoken languages of the population where they are working and trained in communication.[9,10] However, these recommendations have not been based on any empirical intervention studies and it is unknown whether implementing these recommendations would have an effect at all, and if so whether the magnitude of the effect would warrant large-scale implementation of language training.

Few intervention studies for HCWs and non-language-concordant patients have been previously performed around the world. Teaching Spanish to HCWs in the USA has shown significant improvements in communication with Hispanic patients and in-patient satisfaction.[11,12] Multifaceted interventions targeting staff-patient communication have been shown to improve patient satisfaction in emergency room settings in Australia.[13] A study of 'short course' focused language interventions

in Honduras,[14] a developing country, resulted in a larger amount and better quality of medical counselling after the intervention. However, no intervention study has previously been attempted in an African setting, where language barriers may be greater than in any of the previously described studies.

In addition, cultural competence, or the ability of individuals to establish effective relationships despite cultural differences, has been shown to be an important determinant, independently of language skill, of effective communication and patient satisfaction.[15,16,17] Cultural differences may be present between many HCWs and patients, but are especially marked in the South African public health service, where many patients are poor and do not have a high degree of education, most doctors do not speak an indigenous African language and there are differences in socio-economic class and cultural background. Although some studies in Western settings have shown that culture-specific models of disease are not common reasons for misunderstandings in the primary care setting,[18] differing explanatory models of disease have been shown to be a significant barrier to communication and satisfaction in the South African setting.[19]

This study aimed to determine whether teaching basic Xhosa-language skills and cultural understanding to non-Xhosa-speaking HCWs had an effect on patient satisfaction, on HCWs' perceived ability to communicate effectively with Xhosa-speaking patients and HCWs' job satisfaction levels.

Methods

A before-and-after interventional study was performed at two community health centres and a district hospital in the Western Cape. Six non-Xhosa-speaking HCWs (4 doctors, 1 physiotherapist and 1 dietician) completed a 10-week basic Xhosa course (the intervention). The course was run by a private company and was aimed at employees working in the health sector. Ten 120-minute interactive contact sessions aimed to develop basic speaking and listening skills in Xhosa and cultural competence.

HCWs participating in the research completed pre- and post-intervention questionnaires measuring their self-assessment of communication with Xhosa-speaking patients and their job satisfaction related to communication. The HCW participants were not informed either before or after which of their patients had been interviewed.

Patients who had consulted the HCW were offered the option to participate in the study if their self-rated English proficiency was poor (1 - 3 on a 5-point Likert scale). Fifty-four patients completed a questionnaire to determine their perceptions of their communication with the HCW and their satisfaction, 27 before and 27 after the intervention. Between 3 and 6 patients completed the questionnaires per participating HCW. The patients being interviewed were not told whether the HCW had completed the language course or not. Post-intervention questionnaires were administered between 2 and 4 weeks after the HCWs intervention.

The questionnaires were designed using a Likert scale to rate degrees of agreement or disagreement with statements. The patient questionnaires were translated into Xhosa and back-translated into English to determine accuracy of translation. The questionnaires were piloted and adapted according to recommendations made during the piloting process and both the respondents' understanding and the questionnaire's length were confirmed as being appropriate.

For the patient responses the two-sample Wilcoxon rank-sum test for independent samples (Mann-Whitney test) was used to determine whether there were statistically significant differences in these responses. The Wilcoxon signed rank test for paired observations was used to analyse the pre- and post-intervention responses of the HCWs.

HCW questions were grouped according to themes, including perceived ability to communicate, job satisfaction and staff interpersonal relationships. For each theme the total of the scores of all the HCWs was summed and compared pre and post intervention but for questions phrased in the negative, 'reverse' allocation of values was applied to the Likert scores.

Ethical approval was received from the ethics committee of the health sciences faculty of the University of Cape Town, the provincial department of health and from all facilities where research was conducted. All health care and patient participants completed informed consent statements.

Results

Fifty-four randomly selected patients (27 pre and 27 post intervention) assessed communication with HCWs and rated their satisfaction. The two samples of patients used did not significantly differ in terms of their self-assessed ability to speak and understand English or Afrikaans, age or gender.

Seven questions were used to assess the patients' satisfaction with and perceptions of the HCW's communication with them before and after the course. Six of the 7 showed a significant improvement in the patients' responses after the HCW had completed the course. All of the areas showed an improvement. Fig. 1 demonstrates the percentages of patients who agreed with statements assessing the perceived quality of care they received relating to communication with the HCW before and after the intervention.

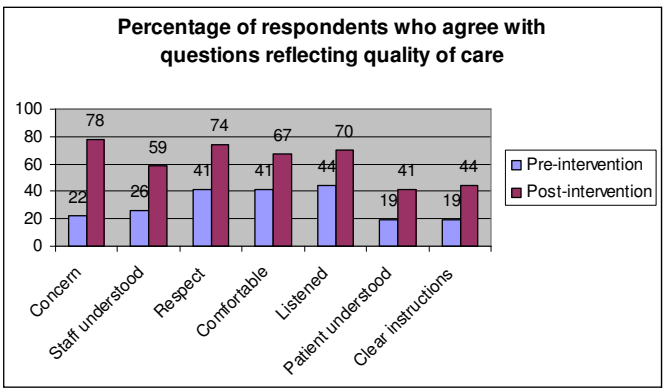

Fig.1. Percentage of respondents who agree with questions regarding quality of care.

Questions showing significant improvement after completion of the course included whether the HCW was concerned about him/her ($p<0.01$), whether the HCW understood his/her problem ($p<0.01$), whether the HCW respected him/her ($p=0.02$), whether the HCW listened to him/her ($p=0.02$), whether the patient understood what the HCW said ($p<0.01$) and whether the instructions given to the patient by the HCW were clear ($p<0.01$).

The only question which did not show a significant improvement after the intervention asked whether the HCW made the patient feel comfortable ($p=0.055$).

Six non-Xhosa-speaking HCW participants completed pre- and post-intervention questionnaires. The questions for HCWs were grouped ac-

cording to themes, including ability to communicate, job satisfaction and interpersonal relationships between staff members.

The group of three questions assessing the ability to communicate showed a significant improvement between the pre- and post-course responses (p=0.02). Significant improvements were shown in the HCW's perceived ability to speak Xhosa (p=0.03), in their perceived ability to communicate with Xhosa-speaking patients (p=0.03) and in their self-assessment of being able to fully understand Xhosa-speaking patients (p=0.03).

Fig. 2 shows the percentage of HCWs agreeing with statements related to their ability to communicate with Xhosa-speaking patients pre and post intervention.

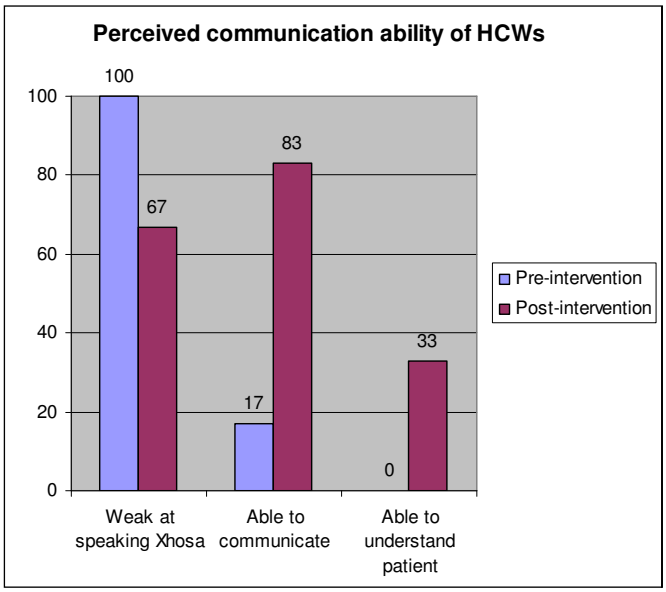

Fig. 2. Perceived communication ability of HCWs.

The group of four questions assessing effects on job satisfaction did not show a significant difference as a group (p=0.20). Within this group, however, the question asking the HCW whether it is frustrating to communicate with Xhosa-speaking patients showed a significant improvement, i.e. a decrease in frustration levels (p=0.0495).

Fig. 3 shows the percentage of HCWs agreeing with statements related to job satisfaction pre- and post-intervention.

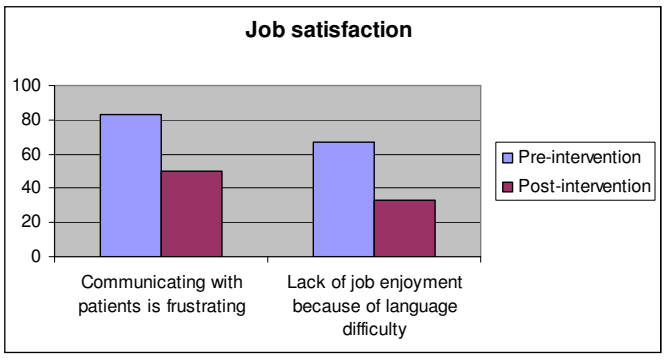

Fig. 3. Job satisfaction.

Two questions assessed the effects of completing the course on interpersonal relationships with Xhosa-speaking staff members. These did not show a significant difference (p=0.90).

Two questions asked the HCWs for their perceptions on the effectiveness of communicating via an interpreter. These showed a lower percentage of agreement with the statements after the course than before, i.e. the HCWs perceived that communication via an interpreter was less effective after they had completed the course. These results were not statistically significant.

Fig. 4 shows the percentage of HCWs agreeing with statements regarding the use of interpreters pre and post intervention.

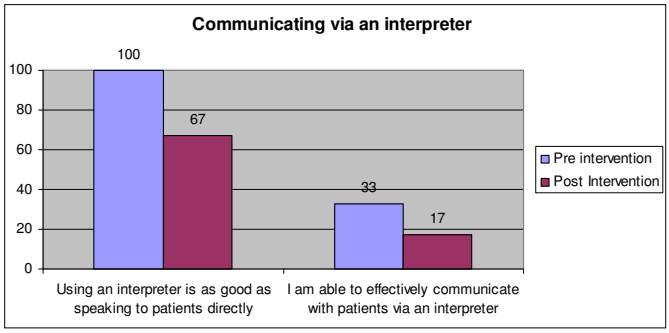

Fig. 4. Communicating via an interpreter.

Discussion

A 10-week basic Xhosa language and cultural competency course improved outcomes significantly, from both the HCWs' and the patients' perspectives.

Patient satisfaction showed significant improvements. The patients perceived the HCWs to be more understanding, respectful and concerned, and to show better listening skills. The patients also stated they were better able to understand the HCWs and the instructions given by the HCWs after the intervention.

The HCWs experienced improvements in their ability to communicate with Xhosa-speaking patients, as shown by significant improvement in their self-rated ability to speak Xhosa, their perceived ability to communicate with Xhosa-speaking patients adequately and their perceived ability to understand what Xhosa-speaking patients are saying.

In addition to improved communication, HCWs experienced decreased frustration levels related to communication with Xhosa-speaking patients. Other assessments of HCW job satisfaction did not show significant improvements. This could be attributed to the fact that job satisfaction is derived from a large number of factors, not only through the quality of HCW-patient interactions.

The HCWs assessed communication via interpreters as being less effective after the course. This probably reflects their increased awareness of interpreter errors after learning some basic language skills, rather than a worsening of their skills in using interpreters following the course. Interpreter errors are common and important causes of miscommunication in medical encounters.[20,21] Using interpreters is a skill that needs to be learned and should be included in all courses where cross-cultural and cross-language communication is being taught.

Post-intervention questionnaires were administered between 2 and 4 weeks after the HCWs intervention. It is unknown whether the short-term effects would be followed by equally good improvements in outcome over the medium and long term.

Despite the small sample size in this study, the magnitude of the effect of the intervention on patient satisfaction was great enough for it to

be seen easily, indicating that it was not only a statistically but also clinically significant effect. Statistical power was lower in the assessment of effects on HCWs than on patients' satisfaction. There was a trend towards better job satisfaction after the intervention.

The participating HCWs signed up for the language course voluntarily. This might imply that they were pre-selected as persons interested in issues of language and culture. This could contribute towards their successful completion of the course, the marked improvements in communication ability and the resultant improvement in patient satisfaction. The results might not be as marked if a similar study was done on HCWs required to learn Xhosa mandatorily as part of their undergraduate or postgraduate education curriculum.

HCW language skills were assessed after the course by self-assessment and patient assessment rather than through direct observation.

Conclusion

Teaching language skills and cultural sensitivity to HCWs improves patient satisfaction and decreases misunderstandings and frustration levels. Courses in language skills, effective interpreter use and cultural sensitivity should be considered for all South African medical curricula and postgraduate training encouraged for all practising HCWs and made available in public health care facilities.

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