

# Bridging the gap: how traditional healers interact with their patients. A comparative study in Cameroon

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## Summary

**OBJECTIVE** To compare traditional healers (TH) and Cameroonian representatives of Western medicine (Western providers (WP)) in terms of patient characteristics and communication patterns during the consultation in rural Cameroon.

**METHODS** A facility-based comparative study was conducted. Seven TH were compared to eight WP in the same district. Patients (five per provider) provided detailed socio-demographic data. Recorded consultations were analysed with the Roter Interaction Analysis System (RIAS).

**RESULTS** Patients were similar in socio-demographic characteristics except for age, where TH patients were on average 9 years younger ( $P < 0.05$ ). Patients of TH travelled 2.5 times as far to their provider as did patients in the WP group (79 vs. 31 km;  $P < 0.05$ ) and paid 12 times more for their treatment (123 vs. 10 Euros;  $P < 0.05$ ). Consultations of TH were shorter (5.6 vs. 10.3 min,  $P < 0.01$ ), had fewer utterances (100 vs. 166,  $P < 0.05$ ) and the patient's share in the communication was smaller ( $P < 0.01$ ). TH had a higher percentage of lifestyle and psychosocial information at the expense of medical information ( $P < 0.05$ ) and communicated more emotionally ( $P < 0.001$ ). They asked more frequently for their patients' opinion ( $P < 0.01$ ) and explicitly discussed their patients' concept of illness ( $P < 0.001$ ). Patients of TH responded with a higher percentage of active communication ( $P < 0.05$ ) i.e. question asking ( $P < 0.01$ ).

**CONCLUSIONS** Our data contradict the idea that the lack of money or geographical access to Western health care in rural Africa is the main reason for people to consult traditional healers. Compared to WP, TH interacted very differently with their clients, using a more patient-centred communication style, to seek common ground with patients. This different type of interaction could be a relevant factor contributing to the popularity of traditional healers in Cameroon.

**keywords** African Traditional Medicine, Health Care Seeking Behaviour, patient-provider interaction, communication, patient-centeredness, Roter Interaction Analysis System (RIAS)

## Introduction

Traditional medicine<sup>1</sup> is very popular in most regions of sub-Saharan Africa. According to WHO, in Africa, there is one traditional healer per 200 people, and it is estimated that they cover 80–90% of health care (WHO

2002, 2008). Studies have found various explanations for the popularity of traditional practitioners. The most frequently cited reasons are consistency with local cultural values and beliefs, a better healer-patient relationship, as well as proximity and lower cost compared to Western health care facilities (van der Geest 1997; Ndeso-Atanga 2003; Heinzerling 2005). Given the great number of people seeking care from traditional practitioners, numerous health programs have tried to involve traditional healers, especially for HIV/AIDS education and patient care (King & Homsy 1997; Mills *et al.* 2006). However, realising such programmes has been proved difficult (Kayombo *et al.* 2007).

<sup>1</sup>According to the WHO, traditional medicine is defined as a medicine including diverse health practices, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral-based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness.

In Cameroon, too, traditional medicine enjoys great popularity (Wootton 2006). In 2002, the Ministry of Public Health of Cameroon estimated that the population allocates 7% of their household health budget to traditional medicine; with poor people relying twice as often on traditional healers as rich people (Hillenbrand 2006). Studies in the North-West and South-West Provinces of Cameroon showed that in case of acute illness, seeking care from a traditional healer was more often the first choice than consulting a public health care facility (Ryan 1998; Ndeso-Atanga 2003). Similarly, another survey from a rural Cameroonian region reports that in case of acute diarrhoea, mothers tend to suspect a spiritual cause first and therefore resort to a traditional healer (Nkwi 1994).

Many public health programmes, however, rely on the interaction of patients with institutions that represent a 'Western Medicine'<sup>2</sup> approach. Several studies identified consulting traditional healers as a main cause for delaying or interrupting appropriate Western treatment (Scott *et al.* 2000; Okome-Nkoumou *et al.* 2005; Barker *et al.* 2006; Awah *et al.* 2008). To increase the effectiveness of public health programmes, a better understanding of the reasons why patients consult a traditional healer first seems warranted. So far most studies have focused on socio-demographic characteristics as determining factors for health seeking behaviour. They most often found that poor, low educated and rural populations predominantly relied on traditional medicine, but that it was popular throughout the whole society (Leonard 2003; Ngoma *et al.* 2003; Uzochukwu & Onwujekwe 2004). Other authors suggest that patients' perception of quality of care, i.e. the quality of the interaction with traditional healers was the main determinant for consulting a representative of traditional medicine (Makanjuola *et al.* 2000; Adelekan *et al.* 2001; de Villiers & Ledwaba 2003; Pinkoane *et al.* 2005). However, these assumptions are based on anecdotic evidence, sound empirical data are lacking.

The main objective of our study was to investigate by a standardised method whether traditional healers in a semi-rural Cameroon district differ in communication style from providers of Western medicine working in neighbouring official health centres. As a secondary objective, we compared traditional healers and their Western counterparts on grounds of patient characteristics and cost of treatment.

<sup>2</sup>In this article, the term 'Western Medicine' refers to an approach that is taught in a classical curriculum, based upon scientific evidence. Representatives of Western Medicine are also referred to as 'official' health care providers.

## Methods

### Study design

We conducted a comparative facility-based cross-sectional study among traditional healers and Western health care providers, in a semi-rural Cameroonian district. We compared patient characteristics and interaction patterns between providers and patients in these two groups.

### Study setting

The study took place from July to December 2008 in the semi-rural health district of Mfou. Mfou district belongs to the Central Province of Cameroon and is situated close to the country's capital Yaoundé. Its surface area is about 407 km<sup>2</sup> with an estimated population of 85 000. In 2008, there were 20 official Western health care facilities: one district hospital, one governmental periphery physician clinic, 12 governmental nurse clinics and six missionary nurse clinics.

In a preliminary survey community health workers and village representatives listed an overall number of 102 traditional practitioners residing in Mfou district. Twenty (19.6%) were traditional midwives, 70 (68.6%) sellers of traditional remedies and 12 (11.8%) traditional healers, who offer consultations on a regular basis and also have facilities to offer inpatient treatment. For the purpose of this study, traditional practitioners mainly selling remedies on the market or midwives were excluded. Initially, eight (67%) of the twelve traditional healers agreed to participate. To set up a control group, nurse clinicians who were working at the nearest official health care centre (seven governmental, one missionary) were invited to participate. All agreed. All health care providers – traditional and Western – were Cameroonian nationals.

All adult patients arriving for a first-time consultation and explicitly asking for treatment were eligible for participation. At each facility (traditional or Western) investigators asked the first five patients meeting these criteria to participate. After explanation of the study purpose, patients were asked whether they would give written consent to participation. All patient data were processed anonymously. The study was approved by the authorities of the Ministry of Public Health of Cameroon, and by an assembly of the involved traditional healers, health workers and village representatives.

### Data sources and description of variables

Data were drawn from three sources: structured patient- and provider-interviews and audio-recorded consultations.

A Cameroonian nurse, who is experienced in data collection and patient-interviews and who was not involved in the care of the patients, performed semi-structured interviews with patients and health care providers. Each patient agreeing to participate provided socio-demographic and medical information before the consultation and reported about the result of the consultation after the visit. According to the patient's preference either a local language (Ewondo and Eton) or French was spoken during the interview. The providers filled in a questionnaire after each patient, where they wrote down their diagnosis, the prescribed treatment, its duration and cost. The reported cost comprises all expenditures for consultation fees as well as drugs (Western or traditional). The duration of treatment signifies the duration for which the prescribed treatment has to be followed according to the provider. In case of natural goods being required for traditional treatment, such as chicken, machetes or cooking pots, two independent habitants of the village where the interview took place estimated the equivalent in currency.

The audio-recordings were coded with the Airs<sup>®</sup> software (Fischer 2005), applying the Roter Interaction Analysis System (RIAS). RIAS has been widely applied in high, middle- and low-income countries (Roter *et al.* 1997; DiPrete-Brown *et al.* 2000; Roter & Larson 2002; Labhardt *et al.* 2009). It is a tool that allows a quantitative description of interactions in medical settings through content-based coding. A coder listens to the recorded consultation and assigns one of 38 mutually exclusive predefined categories to each utterance. An utterance is defined as a statement that contains one conclusive thought; it can be as short as "yes" or consist of a long sentence. A detailed description of RIAS and the definition of the categories can be obtained through <http://www.riasworks.com>.

For further analyses categories are often grouped into broader entities. We followed the suggestions of Kim *et al.* (2000, 2001, 2002), which were developed in rural middle- and low-resource settings, very similar to our study population. In this approach the two main dependent variables are *facilitative provider communication* and *active patient communication*. RIAS categories summarised as *facilitative provider communications* involve showing agreement or understanding (e.g. "yes, at this moment in the year it is always difficult to find money for drugs because of the school fees that have to be paid"), discussion of personal and social issues (e.g. "you are still selling cakes on the market?"), partnership building (e.g. "mama, I am here to help you"), expression of positive emotions (e.g. "don't worry, you'll be better in a few days") and asking or giving information on lifestyle and psychosocial issues (e.g. "are you afraid of the gossip in the

village?"). Active patient communication consists of discussion of personal and social issues (e.g. "my husband is now working in the city"), expressing an opinion (e.g. "I need an injection"), expressing concerns (e.g. "they say that I will continue losing weight"), asking questions and asking for clarification (e.g. "do I have to take the drug before the meal?").

As a third dependent measure, we defined the code *talk about concept of illness* that could be coded as a proficiency item in addition to one of the 38 RIAS categories. This code has already been applied successfully in a study on patient–doctor interaction in Cameroon (Labhardt *et al.* 2009). It is rated whenever a concept of illness or a diagnosis is discussed, independently from the speaker. Typical expressions of the patients' concept are: "I have malaria", "I think I have typhoid fever" or "my husband made me so angry that I got this headache". But they may also issue concepts related to local beliefs, such as: "I have crossed [an invisible line drawn by an enemy that causes the illness]" or "somebody has thrown me a worm [causing pain in a particular part of my body]". Utterances of providers explaining their definite or suspected diagnosis were also coded as *talk about concept*. Examples are as follows: "your diarrhea comes from an amebic infection" or "it is the high blood pressure that causes your headache". In the case of traditional healers, the diagnoses mentioned were obviously very different from Western concepts, such as: *biya* (crossing something on your way that brings bad destiny), *kong* (expression for psychiatric symptoms related to the idea that your soul has been sold by someone to somebody else) or *oedip* (vaginal or urethral discharge from a sexually transmitted infection). Utterances discussing patient behaviour as a cause of illness were coded as *talk about concept* as well. Examples are: "that is because you drink the water from the pond instead of the water pump.", or "it would not have happened if you would have worn this amulet".

A nurse from Cameroon (the second author of this article), who mastered the local language and has long-standing experience in RIAS-coding, rated all consultations.

### Statistical analysis

Differences in nominal variables between the two groups of patients were examined with the Pearson chi-square test, differences in numeric variables with the two-sided *t*-test. For differences in RIAS variables we applied an ANOVA model that includes as factors the group (healer or Western provider) and the individual provider, confidence intervals are derived from the Fisher LSD method. All reported *P*-values are two-sided and values <0.05 were considered

significant. All reported confidence intervals are 95% intervals. Descriptive analyses were run on STATA 10.0, the ANOVA models on S-PLUS 7.0.

## Results

### Participation

Data from seven of the eight traditional healers who had agreed to take part were collected. One healer died during the study. Three of the healers were officially registered as traditional health care providers, the others worked on an informal basis. Among the Western health care providers complete data were collected for all eight participants. Characteristics of the two provider-groups are displayed in Table 1. In the patient group of Western providers, 43 patients were eligible for participation and 40 (five per provider) gave informed consent. Among the patients consulting a traditional healer, 35 (five per healer) of 39 eligible patients agreed to participate. Data of 39 visits at Western facilities (one dropped out because of bad recording quality) and 35 visits by traditional healers were analysed.

### Patient characteristics

Except for age, where patients of traditional healers were on average 9 years younger than in the group seeking Western medicine ( $P = 0.03$ ; CI: 0.9–16.1), socio-demographic characteristics of the two groups were similar. Table 2 shows a detailed socio-demographic description of the patients.

Table 3 shows the patients' access to health care and their habitual health seeking behaviour. Both patient groups lived at a similar distance from their next modern health care facility. However, 45% in the group of modern facilities and 89% in the traditional group had chosen to seek help at a facility further away ( $P < 0.001$ ). To get to the provider of their choice, patients of traditional healers had travelled more than twice as far as patients visiting Western facilities ( $P = 0.016$ ; CI: 9–86 km). Among

patients of traditional healers, 91% came on recommendation, mostly from family members, compared to 51% in the Western group ( $P = 0.002$ ). Patients of traditional healers stated in 54.5% that in case of illness they would normally seek care in some type of Western medicine first (either go to a health care facility or contact someone who sells Western drugs), compared to 77% in the other group ( $P = 0.002$ ). In the traditional group 63%, and in the Western group 38%, declared that before coming to the current provider, they had consulted elsewhere ( $P = 0.036$ ). Regarding the health problem that brought them to consult the current provider, 73% in the traditional and 18% in the Western group expressed a personal concept of illness that originated from traditional beliefs ( $P < 0.001$ ).

As shown in Table 4, traditional providers most often (77%) diagnosed a disease rooted in traditional beliefs, whereas Western providers overwhelmingly (90%) stated somatic Western diagnoses ( $P < 0.001$ ). The traditional treatments cost on average 13 times more and last six times longer than Western treatments ( $P < 0.001$  for both differences). Traditional providers prescribed an inpatient treatment more often than their Western counterparts (69% *vs.* 21%;  $P < 0.001$ ).

### Interaction patterns between health care provider and patient

Consultations of traditional healers lasted on average 5.6 min (SD  $\pm$  5.1 min) when compared to Western consultations lasting 10.3 ( $\pm$  7.4) min (CI: 1.8–7.7 min;  $P < 0.01$ ). Traditional consultations comprised on average 100 utterances ( $\pm$  92) compared to 166 ( $\pm$  131) in the Western group (CI: 24–107;  $P < 0.01$ ). Patients' share in the communication was 21.2% for traditional healers and 37.6% for Western practitioners (CI: 10.5–22.3%;  $P < 0.0001$ ). During three visits with a traditional healer the patient did not make a single utterance!

Table 5 shows the percentage distribution of different types of providertalk in the two groups. In relation to their total of utterances, traditional healers made 33.5%

**Table 1** Characteristics of the seven traditional healers and the eight Western health care providers who participated in the study

|                                     | Traditional Healers ( $n = 7$ )   | Western health care providers ( $n = 8$ ) |
|-------------------------------------|---|---|
| Gender                              | 3f, 4m  | 4f, 4m                                    |
| Age (range)                         | 49 years (31)   | 45 years (21)                             |
| Professional education              | 4 declared to have learned the art of healing<br>3 declared they are born with it | 5 Registered nurses<br>3 staff nurses     |
| Professional experience (range)     | 31 years (33)   | 18 years (30)                             |
| Patient frequency per month (range) | 26 (76)   | 89 (90)                                   |

**Table 2** Socio-demographic characteristics of the two groups of patients participating in the study. n.s. stands for non-significant

|                                      | Patients of traditional healers ( <i>n</i> = 35) | Patients of Western health care providers ( <i>n</i> = 39) | T-Test/Chi-squared test for significance of difference |
|--------------------------------------|--|--|--|
| Female                               | 69%  | 80%  | n.s.   |
| Age (years)                          | 32   | 41   | <i>P</i> = 0.03<br>(CI95%: 0.9 to 16.1)                |
| Familiar situation                   |  |  |  |
| Single                               | 43%  | 36%  | n.s.   |
| Engaged                              | 26%  | 13%  |  |
| Married                              | 17%  | 33%  |  |
| Divorced/widow                       | 14%  | 18%  |  |
| Age at marriage                      | 15.5 years                                       | 21.4 years   | n.s.   |
| Mean # of children alive             | 3.7  | 4.3  |  |
| Education                            |  |  |  |
| No primary education                 | 34%  | 26%  | n.s.   |
| Primary education                    | 43%  | 51%  |  |
| Secondary education                  | 23%  | 21%  |  |
| Missing                              | 0  | 2%   |  |
| Religion                             | 91% Christian                                    | 85% Christian  | n.s.   |
| Housing type                         |  |  |  |
| Brick-earth                          | 43%  | 51%  | n.s.   |
| Mixed                                | 23%  | 23%  |  |
| Concrete                             | 34%  | 26%  |  |
| Electricity                          |  |  |  |
| Yes                                  | 66%  | 51%  | n.s.   |
| No                                   | 34%  | 49%  |  |
| Television                           |  |  |  |
| Yes                                  | 57%  | 44%  | n.s.   |
| No                                   | 43%  | 56%  |  |
| Mean # of Visits to a city per month | 11   | 9  | n.s.   |

facilitative utterances when compared to 28.3% for Western providers ( $P = 0.051$ ). Nearly 10% of their utterances addressed lifestyle and psychosocial issues compared to only 1.4% in the Western group ( $P < 0.001$ ) and in 9.7% *vs.* 5.7%, they expressed positive emotions ( $P < 0.01$ ). They spent less of their share on counselling and informing on medical issues ( $P < 0.001$ ) and on asking medical and routine questions ( $P < 0.001$ ). Overall, 42.5% of traditional healers' talk was information giving, compared to 14.9% in the Western group (21.2–34.5%,  $P < 0.0001$ ). The percentage distribution of different types of information is displayed in Table 6. In 43% of their consultations, traditional healers asked at least once for the opinion of their patients, compared to only 18% in the Western group ( $P < 0.05$ ).

The percentage distribution of different types of patient's talk in the two groups (Table 7) shows that when talking, patients of traditional healers used 15.2% of their share for active categories compared to 8.3% in the Western group ( $P < 0.05$ ). They asked in 9.4% of their utterances a

question *vs.* 2.5% for patients of Western providers ( $P < 0.01$ ). They had a smaller percentage of giving information related to their medical problem ( $P < 0.001$ ) and during 17.8% of their utterances they expressed their agreement with what the provider just had said when compared to 7.8% ( $P < 0.01$ ).

Talking about the concept of illness was much more common during consultations of traditional healers. On average there were six compared to three utterances per visit that addressed concepts of illness (CI: 1.8–4.3 utterances per consultation;  $P < 0.01$ ). The issue of illness concepts was discussed in 6.9% of utterances during consultations of traditional healers and in 2.1% during visits in Western health care centres (CI: 2.8–6.9%,  $P < 0.0001$ ).

## Discussion

This study compared traditional healers with representatives of Western medicine in a health district of Central

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|  | Patients of traditional healers ( <i>n</i> = 35) | Patients of Western health care providers ( <i>n</i> = 39) | <i>T</i> -Test/ Chi-squared test for significance of difference |
|--|--|--|---|
| Distance to nearest health care center                                       | 7.7 km   | 9.3 km   | n.s.  |
| Distance to nearest hospital   | 13 km  | 17 km  | n.s.  |
| Distance to present provider   | 78.5 km  | 30.9 km  | <i>P</i> = 0.017<br>(CI95%: 9–86)                               |
| Habitual health seeking  |  |  |   |
| Western  | 46%  | 54%  | n.s.  |
| Street seller  | 8.5%   | 23%  |   |
| Traditional  | 37%  | 21%  |   |
| Prayer group   | 8.5%   | 2%   |   |
| Recommendation to consult the present provider                               |  |  |   |
| None   | 9%   | 51%  | <i>P</i> = 0.002  |
| Parents  | 23%  | 10%  |   |
| Family other   | 40%  | 23%  |   |
| Friends  | 29%  | 15%  |   |
| Consulted for the same problem before  | 63% yes  | 38% yes  | <i>P</i> = 0.036  |
| If yes where:  |  |  |   |
| Western  | 32%  | 60%  |   |
| Traditional  | 50%  | 33%  |   |
| Both   | 18%  | 7%   |   |
| Expressed a traditional concept of illness to explain current health problem | 63%  | 18%  | <i>P</i> < 0.001  |

**Table 3** Access to health care and patients' health seeking behaviour in the two groups of patients. n.s. stands for non-significant

Cameroon, to determine whether patients of traditional healers differ from those who seek help from a representative of Western medicine, and whether traditional healers practise a different communication style than Western providers.

We found that, first, patients of traditional healers are very similar to patients consulting Western providers concerning socio-economic parameters. Even though they live close to Western health care facilities, they are willing

to travel long distances to get to a traditional healer. Traditional treatments were much more expensive, took longer, and more often included inpatient treatment. These findings are different from previous reports of other authors, who had argued that in Africa mainly poor and less educated people seek care from traditional healers because they offer treatment at lower cost and are easier to reach (Cook & Zumla 2008). However, it seems that people in Cameroon know exactly where to seek help, their

|                            | Patients of traditional healers ( <i>n</i> = 35) | Patients of Western health care providers ( <i>n</i> = 39) | <i>T</i> -Test/ Chi-squared test for significance of difference |
|----------------------------|--|--|---|
| Type of provider diagnosis |  |  |   |
| Psychiatric                | 14%  | 0  | <i>P</i> < 0.01   |
| Somatic                    | 9%   | 90%  |   |
| Psychosomatic              | 0  | 10%  |   |
| Traditional                | 77%  | 0  |   |
| Treatment cost (CFA)       | 80 000   | 6300   | <i>P</i> = 0.0082<br>(CI: 128 000–20 000)                       |
| Treatment duration (days)  | 56   | 9  | <i>P</i> < 0.001 (CI: 73.7–20.3)                                |
| Outpatient treatment       | 31%  | 79%  | <i>P</i> < 0.001  |
| Inpatient treatment        | 69%  | 21%  |   |

**Table 4** Patients' health beliefs, providers' diagnoses and treatment conditions in the two groups. Cost is stated in Central African Francs (CFA), 1 Euro equals 650 CFA

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**Table 5** Percentage distribution of different types of provider communication in traditional healers compared to Western providers. *P*-values and confidence intervals originate from an ANOVA model that includes as factors the type of provider (Western or traditional) as well as the individual provider. *P*-values reaching the 5% significance level are marked with a \*

|   | Traditional Healers (%) | Western health care providers (%) | Difference (95%CI)       | <i>P</i> -value |
|---|-------------------------|-----------------------------------|--------------------------|-----------------|
| Provider facilitative communication                   | 33.5                    | 28.3                              | +5.2% (10.3% to -0.2%)   | 0.0512          |
| Question asking lifestyle and psycho-social issues    | 3.3                     | 5.1                               | -1.9% (0.9% to -4.5%)    | 0.174           |
| Information giving lifestyle and psycho-social issues | 9.9                     | 1.4                               | +8.6% (11.5% to 5.8%)    | < 0.0001*       |
| Builds partnership with patients                      | 6.0                     | 7.5                               | -1.5% (0.6% to -3.6%)    | 0.1712          |
| Expresses positive emotion                            | 9.7                     | 5.7                               | +4.0% (6.9% to 1.1%)     | 0.0075*         |
| Shows agreement                                       | 2.9                     | 7.2                               | -4.2% (-2.1% to -6.6%)   | 0.0004*         |
| Makes personal or social remarks                      | 1.5                     | 1.4                               | +0.1% (1.2% to -0.9%)    | 0.8329          |
| Other provider communication                          | 66.5                    | 71.7                              | -5.2% (0.2% to -10.3%)   | 0.0512          |
| Gives information on medical and therapeutic issues   | 41.2                    | 24.7                              | +16.5% (24.2% to 9.2%)   | < 0.0001*       |
| Gives instructions                                    | 1.4                     | 4.2                               | -2.8% (-0.9% to -4.5%)   | 0.0021*         |
| Question asking medical routine                       | 13.9                    | 29.9                              | -16.0% (-9.7% to -22.1%) | < 0.0001*       |
| Expresses negative emotion                            | 1.8                     | 1.6                               | 0.2% (1.4% to -0.9%)     | 0.1103          |
| Miscellaneous   | 8.3                     | 11.3                              | -2.9% (-0.6% to -6.1)    | 0.0300*         |

**Table 6** Percentage distribution of different types of information giving of patients in the traditional compared to the Western group. *P*-values and confidence intervals originate from an ANOVA model that includes as factors the type of provider (Western or traditional) as well as the individual provider. *P*-values reaching the 5% significance level are marked with a \*

|                                | Traditional Healers (%) | Western health care providers (%) | Difference (95%CI)       | <i>P</i> -value |
|--------------------------------|-------------------------|-----------------------------------|--------------------------|-----------------|
| Information giving medical     | 50.6                    | 71.1                              | -20.5% (-9.4% to -29.3%) | < 0.0001*       |
| Information giving therapeutic | 15.1                    | 12.8                              | +2.3% (10.8% to -3.6%)   | 0.5137          |
| Information giving lifestyle   | 15.4                    | 2.9                               | +12.6% (17.7% to 7.8%)   | < 0.0001*       |
| Information giving other       | 18.8                    | 13.2                              | +5.6% (12.3% to -6.3%)   | 0.2231          |

**Table 7** Percentage distribution of different types of patient communication in the patients visiting a traditional healer compared to the patient group of Western providers. *P*-values and confidence intervals originate from an ANOVA model that includes as factors the type of provider (Western or traditional) as well as the individual provider. *P*-values reaching the 5% significance level are marked with a \*

|   | Traditional Healers (%) | Western health care providers (%) | Difference (95%CI)        | <i>P</i> -value |
|---|-------------------------|-----------------------------------|---------------------------|-----------------|
| Patient active communication                  | 15.3                    | 8.2                               | +7.1% (12.9 to 0.9)       | 0.0204*         |
| Question asking                               | 9.4                     | 2.5                               | +6.9% (11.3% to 1.9%)     | 0.0039*         |
| Seeks clarification                           | 0.7                     | 2.1                               | -1.5% (-2.9% to 0.1%)     | 0.0616          |
| Shows concern or worry                        | 0.4                     | 0.3                               | +0.1% (0.8% to -0.6%)     | 0.6957          |
| Expresses opinion                             | 4.2                     | 2.6                               | +1.6% (3.9% to -0.5%)     | 0.1586          |
| Personal talk                                 | 0.6                     | 0.7                               | -0.1% (0.7% to -0.9%)     | 0.8096          |
| Other patient communication                   | 84.7                    | 91.8                              | -7.1% (-0.9% to -12.9%)   | 0.0204*         |
| Giving medical and therapeutic information    | 49.1                    | 0.70.4                            | -21.3% (-10.5% to -28.8%) | < 0.0001*       |
| Giving psychosocial and lifestyle information | 16.2                    | 10.0                              | +6.2% (12.5% to -0.5%)    | 0.0625          |
| Showing agreement                             | 16.7                    | 7.8                               | +8.9% (13.8% to 1.4%)     | 0.0053*         |
| Laughing                                      | 0.5                     | 0.8                               | -0.3% (0.5% to -1.2%)     | 0.5346          |
| Miscellaneous                                 | 2.2                     | 2.7                               | -0.5% (1.6% to -2.7%)     | 0.6190          |

choice is not a chance decision (Leonard 2000). In line with our results, recent studies in Cameroon on the treatment of epilepsy have shown that patients deliberately choose traditional care, even though it is 20 times more expensive than Western medical treatment (Njamnshi *et al.* 2009a,b; Preux *et al.* 2000).

Secondly, traditional healers interact differently with their patients than providers who have been trained in Western medicine. Even though the higher percentage of facilitative communication during traditional visits just missed the 5% significance level, traditional healers were significantly more patient-centred in several aspects: They focused more on psychosocial topics and on issues of daily life than on purely medical questions and in particular, they more often asked for the patient's opinion and frequently discussed their concept of illness. One might summarise these findings as stating that traditional healers followed a more 'psychosomatic approach' in the sense that they actively sought common ground with patients. Somewhat contrary to this statement is the finding that patients' share in the consultation is smaller with traditional healers; yet, in their statements patients have a significantly higher percentage of active categories; they do not appear intimidated but feel invited to ask more questions themselves. In short, one might say traditional healers try to approach their patients by talking about issues that matter in real life and by thoroughly exploring their beliefs. This attitude is reflected by patients' responses, who ask more questions themselves and provide less information in response to routine medical questions. Instead of a provider interrogating the patient about his/her symptoms, it is the patient, who uses his or her share in the consultation to interview the healer about the meaning of his/her symptoms, where they come from, and what can be done. One might summarise it as "tell me your symptoms" in Western consultations *vs.* "I'll tell you what's causing your symptoms" during traditional visits.

Public programmes delivering health care in sub-Saharan Africa often suffer from a loss of effectiveness through patients seeking care in the informal sector (Krause & Sauerborn 2000; Chuma *et al.* 2009; Porten *et al.* 2009). In many cases, perceived quality of care drives the choice of the facility more than cost or distance (Tembon 1996; Mugisha *et al.* 2004; Nuwaha 2006; Habtom & Ruys 2007; Kruk *et al.* 2009). Patients in Cameroon might perceive the interaction with traditional healers to be of higher quality, as they can communicate about psychosocial issues and as they receive a concept of illness that matches their own understanding. This may motivate them to travel longer distances and to pay higher consultation fees and treatment costs. The results of our study may encourage policy makers, programme managers, and

health care providers of the public health system to make patient-centred communication become an integrated part of their services to improve the perceived quality of care and subsequently the effectiveness of the public health care programmes.

This study has several limitations. First, the sample size of providers is small. Therefore, the traditional healers participating in the study do not represent the whole spectrum of traditional medical practices in the Mfou district. As explained in the methods section, we found over 100 persons providing traditional care in one way or another. However, we limited our sample to traditional healers, who conduct consultations on a regular basis with a curative intention. It is well possible that a majority of the estimated 80% of people in Africa, who regularly seek care from a traditional provider, rather go to traditional drug sellers without proper consultations, and in these instances easy approachability, low cost, etc. are important aspects. Secondly, for the same reasons, our data on socio-demographic characteristics of patients consulting the traditional healers cannot be generalised to the whole population seeking traditional care in Cameroon. Thirdly, one might argue that the differences in interaction between healers and Western health care providers are related to differences in the medical condition of patients and not to a genuine difference in communication style. This question is difficult to answer as we are only dealing with diagnoses that were given by health care providers themselves and cannot rely on a third party impression.

Further research should explore whether the findings of this study can be replicated in other regions and if the promotion of a more patient-centred approach among Western health care providers in sub-Saharan Africa might increase the attractiveness of Western health care providers, a prerequisite to improve the effectiveness of numerous health care programs in this region.

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