ORIGINAL ARTICLE

Determinants of Patronage of Traditional Bone Setters in the Middle Belt of Nigeria

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Abstract

Background: *Traditional bone setting is a practice that is common in our environment. This is a community based survey of opinions concerning orthodox and traditional fracture management in four states of the middle belt of Nigeria. We set out to ascertain the factors influencing preference of treatment of fractures among populations in the middle belt of Nigeria.*

Methodology: *A community based questionnaire survey of randomly selected adults regarding preference of choice of treatment between orthodox and traditional fracture management.*

Results: *One hundred and eighty-six questionnaires were found analyzable with a male to female ratio of 2:1. There was a preponderance of preference for orthodox fracture management (70.4%). Decisions were mainly collegiate, outside the influence of the individual; only 9.9% decided to attend traditional bone setters on their own.*

Conclusion: *Reasons adduced for preference of traditional bone setters were incongruous and inconsistent. A fixated cultural outlook was recognized as being the motivating factor for patronage of traditional bone setters. Need for enlightenment campaign of the public against patronage of traditional bone setters is emphasized. A gradual phasing out of traditional bone setting with a road map towards making orthodox fracture management available to all is advocated.*

Key words: *Traditional bone setting, orthodox fracture management, preference of treatment, fixated cultural outlook.*

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Introduction

Various studies have shown that there is a high degree of patronage of traditional bone setters (TBS) in our environment [1,2,3]. In the rural communities, the TBS appears to be the first port of call [1,3]. They enjoy a popularity that cuts across educational barriers in both rural and urban settings [2]. There seems to be a machinery within the community which ensures continued patronage of TBS. This occurs despite numerous negative reports of their practice highlighted from various parts of the country [1,2,3,4,5].

The disturbing aspect of their practice is that it is not regulated and that they appear to enjoy free liberty to advertise and canvass for patients [1,6]. Their numerous failures, often catastrophic and unacceptable are explained away [1,2,3,7]. Non-scientific observation shows that the communities which bear the brunt of these adverse consequences appear to be in sympathy with the practitioners, often rationalizing such failures and going ahead to further advertise for them, thus encouraging their continued practice [3].

This community based survey was conducted as the third part of a larger study of the impact of TBS in the middle belt of Nigeria. It seeks to determine the factors influencing patronage of TBS and to elucidate opinions of the populace concerning the practice. It is hoped that it would form the bedrock for possible community enlightenment campaigns and dialogue with government.

Materials and Methods

This is a community based survey of opinions of respondents, involving the administration of a structured questionnaire to respondents in the communities within four states of the middle belt of Nigeria, covering Plateau and Nasarawa states, and the southern parts of Kaduna and Bauchi states. The respondents were randomly selected adults. Individuals were approached in the communities and requested to grant interviews. No patient was followed.

Interviews were conducted by the authors and where respondents did not understand English, the assistance of an interpreter (*usually from that particular community*) was used. This mode of questionnaire administration was chosen to enable detailed explanation of contents of the questionnaire.

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The parameters studied included demographic data, state of origin, educational level, prior treatment of self or relatives by TBS, preference of mode of treatment (TBS Vs Orthodox), opinion concerning the better option and reasons adduced for such. The responses so gathered were collated and analyzed.

Results

Two hundred and fifty questionnaires administered out of which a total of one hundred and eighty-six were found analyzable. Of these there were 125 males and 61 females, giving a male to female ratio of 2:1. Their ages ranged from less than 20 to over 70 years. Majority of the respondents were in the third and fourth decades of life giving 45% and 22% respectively. The respondent's state of origin varied widely, covering 24 states of the federation, with 131 (70.4%) from the middle belt region. They cut across all educational levels with 21.5% attaining secondary school education and 59.6% attaining tertiary education.

Twenty-one percent of the respondents had previously been treated by a TBS while 60.7% had had either a friend or a relation treated likewise. The injuries varied widely with a concentration of tibial/leg injuries (32.1%), hand injuries (17.3%), femoral fracture/thigh injuries (9.9%). Out of 137 respondents who had either been treated by TBS themselves or had relatives or friends so treated, the decision was taken by parents in 44.5% and by relatives in 28.5%. Advice from friends accounted for 17.5% of these cases while 9.4% accepted responsibility for the decision to attend TBS (Table 1).

In terms of choice between orthodox fracture treatment and TBS, 74.7% preferred the former while 24.3% preferred the later. One percent had no opinion. Various reasons were adduced by those who preferred orthodox care including; better diagnosis and care (37%), use of x-rays (31.1%), better hygiene (24.7%), and less complications (12%). We note that multiple reasons were given in some cases. Other reasons given include the following; absence of superstition, inclusion of dietary advice, analgesia, better functional outcome, civilized and more scientific nature of treatment (Table 2). On the other hand, those who preferred TBS buttress their choice on the following reasons; faster recovery (17.7%), cheaper treatment (16.1%) and that it gives better outcome (10.7%). Other reasons are that it is more reliable, simpler, involves less drug ingestion, incurred no amputation and is more convenient and closer to the patients.

Table I Sources Of Decision To Attend Tbs

FACTOR	NO. OF RESPONDENTS	PERCENTAGE
SELF	13	6.9
PARENTS	61	32.8
RELATIONS	39	20.9
ADVICE FROM FRIENDS	24	12.9
ANY OTHER METHOD	2	1.1
NOT APPLICABLE	62	33.3
TOTAL	201	100

Table II reasons adduced for preference of orthodox care

REASON	NO. OF RESPONDENTS	PERCENTAGE
BETTER DIAGNOSIS AND CARE	70	37.6
LESS COMPLICATION	24	12.9
BETTER FUNCTION/OUTCOME	18	9.6
CIVILIZED AND SCIENTIFIC METHOD	9	4.8
ANALGESIA	15	8.1
HYGIENE	46	24.7
RELIABLE	18	9.6
MORE TRAINED PRACTITIONERS	45	24.2
USE OF X-RAYS/EQUIPMENT	58	31.2
NO SUPERSTITIONS	3	1.6
INCLUSION OF DIETARY ADVICE	4	2.2
TOTAL	310	100

NOTE: Some respondents gave multiple reasons for preference

Table III reasons given for preference of tbs

REASON	NO. OF RESPONDENTS	PERCENTAGE
ANALGESIA	4	3.3
CONVENIENT	6	4.8
FASTER	33	26.8
CHEAPER	30	24.4
CLOSER	5	4.1
BETTER OUTCOME	20	16.3
LESS AMPUTATION	4	3.3
SIMPLER	7	5.7
MORE RELIABLE	9	7.3
LESS DRUG REACTION	1	0.8
NATURAL	4	3.3
TOTAL	123	100

NOTE: Some respondents gave multiple reasons for preference

Discussion

The sample size in this survey may appear small for any reasonable conclusion but the authors encountered some reluctance to grant interviews particularly among the rural population. The subjects appeared to say what they thought was expected of them on the one hand and in some communities, they represented the opinion of a respected educated leader who directed their responses. This rendered many questionnaires unanalysable. This observation was more rampant among females and might have impacted on the M:F ratio of 2:1 in this population.

We note that the age distribution of the respondents varied from teenage to elderly subjects. Though the target states are the four middle belt states of Plateau, Nasarawa and parts of Bauchi and Kaduna states, because of the blind random selection, respondents cut across 24 states. However, majority came from the target middle belt states.

From this series 82.2% of respondents have had experience, either personal or through relatives and friends of TBS. That underscores the observation that patronage of TBS is high in this environment [1,2,3].

Out of 186 respondents, only 9.4% of the population decided to attend TBS on their own. Decisions to attend TBS were largely collegiate being taken by parents, relatives and friends at a time when the patient was incapacitated by the traumatic episode. This may mean that the first natural instinct is to consult TBS. This could be explained by the level of confidence that the population have for TBS [1,5,6,7].

However the finding of 74.7% preference for orthodox treatment does not correlate with the observation above. This is why there is doubt as to whether the respondents actually say what they believe and practice.

The reasons adduced for preference for orthodox medicine appear well informed. However, those who preferred TBS gave fallacious reasons of faster recovery (17.7%), and better outcome (10.7%). There is no known substance that quickens bone healing and the argument of better outcome is not borne out by the experience of numerous complications of TBS practice seen in orthodox hospitals [1,2,6,7].

Only the 16.1% that gave the reason of cheaper treatment cost could be taken seriously. The reason given that TBS incurred no amputation is one of the powerful propaganda used by TBS to obtain and maintain clientele [1,2,3,9]. It has been documented by various studies that activities of TBS occasioned gangrene, which present in hospitals for amputation or end up in fatality [2,3,10,11,12]. This singular factor needs to be seriously addressed by orthodox practice in order to disabuse the minds of the unsuspecting ignorant public[13].

Conclusion

It has been observed that the society appears fixated in the confidence they have for TBS who are increasingly becoming bold [1,3,6]. They create an air of superiority over orthodox practitioners by purporting to receive referrals from hospitals and point accusing fingers at hospitals in terms of amputations and fatalities occasioned by TBS practice [3].

We strongly believe that there is need for enlightenment campaign of the public through the media and other for a [1,2,13]. The practice of TBS should not be permitted unrestricted reins since there is no basis to recommend them [1,2,6]. The difficulties in bringing orthodox fracture management to all at affordable costs should be tackled via a roadmap of long term solution while phasing out TBS.

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