Why Patients Patronize Traditional Bone Setters

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Abstract

Traditional bone setting is an old practice found almost in all communities of the world.1 In Turkey there is high degree of confidence in the bone-setter's art.2 In different categories of traditional healers the least rated were the diviners, traditional bone setters and pharmacists in Western Nigeria.3 Orthopaedic surgeons in developing countries are faced with diverse challenges posed by the complications resulting from management of fractures by the Traditional Bone Setters (TBS).4 Modern technology and modern orthopaedics treatment have made traditional bone setting obsolete in developed countries, the practice is still much with us in developing countries and in Africa in particular.1 This study was conceived with the objective of finding out why patients patronize the traditional bone setter despite the complication associated with it and to make recommendations.

INTRODUCTION

Traditional bone setting is an old practice found almost in all communities of the world.[1] In Turkey there is high degree of confidence in the bone-setter's art.[2] In different categories of traditional healers the least rated were the diviners, traditional bone setters and pharmacists in Western Nigeria.[3] Orthopaedic surgeons in developing countries are faced with diverse challenges posed by the complications resulting from management of fractures by the Traditional Bone Setters (TBS).[4] Modern technology and modern orthopaedics treatment have made traditional bone setting obsolete in developed countries, the practice is still much with us in developing countries and in Africa in particular.[1]

TBS services are well preserved as a family practice, and training is by apprenticeship. Records are kept strictly by oral tradition [5]. The principal and the common mode of immobilization is application of tight splint at the fracture site.[6] These traditional fracture splints are made from, bamboo, rattan cane (Oncocalamus yrightiana) and palm leaf axis (Elaeis guineensis).[7,8] These materials are knitted together to form a mat-like splint which are usually wrapped round the fracture site tightly. The immobilization is done most of the time without basic knowledge of anatomy, physiology or radiography which make limb and life threatening complications inevitable. These complications vary from acute compartmental syndrome, tetanus, deformities, chronic osteomyelitis, gangrene, amputation and death. [1, 4, 9] In The Gambia, Bickler et al found out that bone setter's gangrene occurred almost exclusively in children from rural areas most of which underwent proximal extremity amputation[9]. These complications do not seem to deter other patients from patronizing the TBS rather this practice continues to flourish [1,10]. This study was conceived with the objective of finding out why patients patronize the traditional bone setter despite the complication associated with it and to make recommendations.

MATERIALS AND METHODS

This was a prospective study done at Wesley Guild Hospital Ilesa. Twenty-nine consecutive patients who presented at orthopaedic out-patient clinic after attending Traditional Bone Setting Centers were recruited for the study. It was a ten month study, conducted between October 2003- July 2004. Information about the patients' biodata, reasons for patronizing TBS, duration of treatment at bone center were obtained and filled into prepared proforma. The data obtained was recorded and analyzed on Microsoft Excel.

RESULTS

In the study, 29 patients with 33 bone and joint injuries were studied. There were 8 females and 21 males with female: male is 1:2.6. The age ranged from 7-85years with mean of 38.4±18.2 years. The means of contact with the patients were are shown in Table I

Figure 1

Table 1: Means of Contact with Traditional Bone Setters (TBS)

Contact	No of Patients(n)	Percentage (%)
Old patients	13	44.8
Middle men	12	41.4
Direct contact	4	13.8
Total	29	100

The 33 pathologies comprises of 30 fractures and 3 dislocations. These are shown in the table II below.

Figure 2

Table 2: Pathologies treated by Traditional Bone Setters

Pathology	Site	Number(n)	Percentage (%)
Fractures	Femur	8	24.3
	Tibia	8	24.3
	Radius/Ulnar	5	15.2
	Humerus	4	12.1
	Pott's	4	12.1
	Barton	1	3.0
Dislocations	Hip	1	3.0
	Wrist	1	3.0
	Elbow	1	3.0
Total		33	100

The duration of treatment ranged from 1-72 weeks with mean 10.8 ± 13.3 weeks. It was in-patient (admission) services in 12, domiciliary (patient's house) in 8, out-patient (visiting the TBS center on appointment) in 8 and combination of in-patient and domiciliary in 1. Twenty-three of these patient attended TBS primarily from the site of injury (one of which had multiple fractures) and 6 attended TBS after initial hospital treatment. The reasons why patients are patronizing bone setter and coming back for Modern Orthopaedic Services (MOS) are shown below in Table 111.

Figure 3

Table 3: Reasons for patronizing Traditional Bone Setters and coming back for MOS by the patients

	Reason	No	Percentage (%)
Reasons for patronizing TBS (n=29)	Quicker services	12	41.4
	Cheaper services	9	31.0
	Fear of amputation	3	10.3
	Combination of above	4	13.8
	Strike in government Hospitals	1	3.5
Reasons for seeking MOS (n=29)	Non-union	16	55.1
	Malunion-LLD of lower limb	6	20.7
	Malunion- Deformity of UL	6	20.7
	Chronic Osteomyelitis	1	3.5

MOS= Modern Orthopaedic Services

DISCUSSION

The complications caused by these bone setters in Nigeria has been called atrocities by some authors.[4]

This study revealed that males accounted for large portion of patients seeking TBS treatment and showing that males are predominantly injured just like any other trauma. The age mean was 38.4±18.2 years, this shows that young adult patients mostly patronize the bone setters. The duration of management at the TBS centre was as long as 18 months in a patient with close femoral shaft fracture who ended up with non-union after the prolonged treatment. The young age of the patients and the prolong duration of management would have cause loss of significant productivity in otherwise productive age group. Twenty-three of the patients (79.3%) went to TBS centre from the sites of injury, this included a patient with multiple fractures. This could be dangerous especially in those that would have sustained concomitant life threatening injuries.

Contact with the TBS in 85.2% of patients is mainly through middle men and old TBS patients in almost equal proportion this closely agrees with Solagberu's study who found that the initial idea of visiting TBS was mooted by an external person in 75% of cases [11]. The middlemen are said to be always around the hospital premises to introduce the TBS treatment as soon as the opportunity arises. Different kind of fractures and dislocation were managed by the TBS in this study using the typical splint and herbal concoction without consideration for reduction and alignment. It is important to let the TBS be aware of their limitation in making diagnosis and proper treatment through proper education as previously

suggested.[8] The study revealed that 72.4% of the patients attended TBS because they wanted cheaper and quicker services than modern orthopaedic treatment. In his study Thanni, also found out that many people patronize TBS because the services are cheaper, but this was a surveyed work by means of administered questionnaires[10].

This study also showed that many of the patients wanted quicker services for their acute problem so as to go back to work early; unfortunately they ended up with the primary pathologies poorly treated and complicated despite long period of management. Cash and carry hospital practice and bureaucratic delivery may have encouraged TBS patronage. Improved, affordable and accessible hospital services in developed countries were instrumental to better fracture management and phasing out the harmful TBS practices. Fear of amputation was the reason of patronage in 7%, though this is a small percentage, education of the populace is important to let them know that MOS does primarily conserve limbs and amputation is carried out on limbs that cannot be conserved or dead limbs. Complications of the TBS treatment were mainly nonunion and malunion which accounted for 96.5%. Ignorance, culture and traditional beliefs of the society have been adjusted for patronage in other studies.[4,10,12] Education of the public and the patients, letting them to be aware that quick and cheaper services do not equate to good functional outcome. In southern Ethiopia, instructional courses to bone setters led to significant reduction of gangrenous limbs and amputation within two years. [6] There is also a good place for the bone setters to be educated properly in order to eliminate or reduce the occurrence of these complications.

CONCLUSIONS

The study revealed that patients attending traditional bone setting centers want cheaper medical care and more importantly quicker service and quicker union of the fracture which they believed that the bone setters can offer. It is recommended that affordable and accessible hospital services should be provided to reduce the TBS patronage. Also education of the bone setters, the public and the patients will go a long way in minimizing or abolishing the preventable complications associated with traditional bone setting.

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References

1. Oginni LM Traditional Bone Setting in Western Nigeria. In Biodun Adediran (Editor)
Cultural Studies in Ile-Ife Institute of African Studies, Obafemi Awolowo University Ile-Ife. 1995; 202-208.
2. Hatipoglu S, Tatar K. The strengths and weaknesses of Turkish bone-setter. World Health Forum. 1995; 16(2):203-5.
3. Odebiyi AI. Western trained nurses' assessment of the different categories of traditional healers in southwestern Nigeria. Int J Nurs Stud. 1990;27(4):333-42
4. Omololu B, Ogunlade SO, Alonge TO. The complications seen from the treatment by traditional bonesetters. West Afr J Med. 2002 Oct-Dec;21(4):335-7. Comment in: West Afr J Med. 2003 Dec;22(4):343-4; author reply 344.
5. Onuminya JE. The role of traditional bonesetter in primary fracture care in Nigeria. S Afr Med J. 2004 Aug;94(8):652-8.
6. Eshete M. The prevention of traditional bone setter's gangrene. J Bone Joint Surg Br 2005 Jan; 87(1):103-3
7. Ofiaeli RO. Complication of methods of fracture treatment used by traditional healers: a report of three necessitating amputation at Ihiala, Nigeria. Trop Doct.1991 Oct; 21(4):182-3.
8. Oginni LM. The use of Traditional Fracture Splint for Bone Setting. Nig. Med. Pract. Vol 24 No 3 1992; 49-51
9. Bickler SW, Sanno-Duanda B. Bone setter's gangrene. J Pediatr Surg. 2000 Oct;35(10):1431-3.
10. Thanni LO. Factors influencing patronage of traditional bone setters. West Afr J Med. 2000 Jul-Sep;19(3):220-4
11. Solagberu BA. Long bone fractures treated by traditional bonesetters: a study of patient behaviour.Trop Doct.2005 Apr;35(2): 106-8.
12. Ekere AU.The scope of extremity amputations in a private hospital in the south-south region of Nigeria. Niger J Med. 2003 Oct-Dec;12(4):225-8.

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