KNOWLEDGE, ATTITUDES AND PRACTICE OF TRADITIONAL BONE SETTING IN IFTIN DIVISION, GARISSA.

BY

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DISSERTATION IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF MASTER OF PUBLIC HEALTH (MPH) OF THE UNIVERSITY OF NAIROBI

NOVEMBER 2015
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Signature------------------------- Date-------------------------
DEDICATION

This dissertation is dedicated to my wife Emily for supporting and encouraging me to continue despite the challenges.
ACKNOWLEDGEMENTS

I acknowledge the support given to me in the course of the study by my supervisors, who constantly provided in depth reviews and references. In addition I acknowledge the community leaders and gate keepers, without whose help I would not have had access to the people of Iftin.

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<table>
<thead>
<tr>
<th>ABBREVIATION</th>
<th>IN FULL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
</tr>
<tr>
<td>AMREF</td>
<td>African Medical Research Foundation</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CBOs</td>
<td>Community Based Organisation</td>
</tr>
<tr>
<td>CHW</td>
<td>Community Health Worker</td>
</tr>
<tr>
<td>CORPS</td>
<td>Community Owned Resource Persons</td>
</tr>
<tr>
<td>DMOH</td>
<td>District Medical Officer of Health</td>
</tr>
<tr>
<td>GOK</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledge, Attitude, Practice</td>
</tr>
<tr>
<td>KEMRI</td>
<td>Kenya Medical Research Foundation</td>
</tr>
<tr>
<td>KNH</td>
<td>Kenyatta National Hospital</td>
</tr>
<tr>
<td>MCA</td>
<td>Member of County Assembly</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MRTH</td>
<td>Moi Referral and Teaching Hospital</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NHDP</td>
<td>National Health Delivery Programs</td>
</tr>
<tr>
<td>TBS</td>
<td>Traditional Bone Setting/Setters</td>
</tr>
<tr>
<td>TRIPS</td>
<td>Trade Related Aspects of Intellectual Property Rights</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children Fund</td>
</tr>
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DEFINITION OF OPERATIONAL TERMS

**Attitude:** This is a way of perception/opinion about traditional bone setting or a way of behaving towards the practice of traditional bone setting.

**Beliefs:** What one accepts as real and true? Usually what is held at cultural or peer level.

**Bone fracture:** This is when there is loss of continuity in the substance of the bone.

**Community Health Worker:** A trained person, often a volunteer, who works within the community to teach people about health practices, provides some simple treatments, and refers sick people to health facilities for better treatment.

**Herbs:** These are traditional concoctions that may be of animal or plant origin. They may be applied on the skin, taken orally, applied on skin incisions or splayed on the patient.

**Knowledge:** These are facts, information, understanding and skills that a person acquired through experience or education on traditional bone setting.

**Orthodox methods:** These are the conventional “western” methods of managing fractures. These are the methods used by the conventional orthopaedic surgeon

**Pharmaceutical Agent:** Drugs manufactured using Orthodox methods and administered to patients with intent to cure their ailments.

**Practices:** A way of doing something that is common, habitual and expected by individuals, the family and/or community in practicing traditional bone setting.

**Surgery:** These are services involving sutures, incisions, excisions, manipulation, and other invasive procedures that require local, regional, or general anaesthesia.
**Traditional Bone Setting:** That act of managing a fracture using traditional methods such as massaging, manipulation, splint age, applying herbs and other traditional concoctions.

**Traditional Splint age:** This is the use of bamboo sticks, held together by camel skin and arranged either longitudinally or in a circular manner to stabilise a fracture.

**Referral:** This is the act of sending sick persons from the home or community to a health facility (hospital, health centre and dispensary) or other care service or from the health facility to the community.
ABSTRACT

The main aim of the study was to determine the knowledge, attitude and practice of traditional bone setting among the people of Iftin in Garissa County. The study was a cross sectional descriptive study carried out at Iftin Division of Garissa County between October 2013 and May 2014. Socio-demographic characteristics of age, religion, socio-economic status, marital status and level of education of the participants were assessed. A semi-structured questionnaire was used to collect quantitative data from FGDs, KIs, case narratives, and community participants. The TBS practitioners were interviewed using a set score matrix criteria and tested by the Cronbach alpha estimation reliability test and a value of 5.14 obtained. Both qualitative and quantitative data analytical methods were used in the study. A total of 151 participants were selected through non-probability selection criteria and interviewed by the principal investigator and three plaster technicians as research assistants.

The community knowledge on traditional bone setting was at 95%, and the utilisation of the services of TBS by the community was at 90%. The preference for the service was determined by the level of education, Muslim religion and influence by family and friends. Being a Muslim was 22 times more likely to prefer TBS. Other reasons for patronage of TBS was cost, easy accessibility, cultural belief, and pressure from relatives and friends. While other factors such as gender, marital status and age did not influence the preference for TBS.

The four traditional bone setters scored highly on their basic knowledge to treat fractures. Out of a maximum score of 35, two TBSs scored above 30 and the other two scored 23 each. However, all the TBSs scored poorly on classification of dislocations. Complications associated with TBS in this study included joint stiffness, shortening of the limb, angulations, osteomyelitis and gangrene leading to amputations.
The Iftin community have significant knowledge on TBS and have positively and strongly embraced TBS and consider it as a cultural norm. They believe that the orthodox form of fracture management is time consuming, and tied it to prolonged and expensive hospital protocols and procedures. While the community perceived low cost as a major influence on the choice of TBS, some charges by TBS were relatively high compared to the orthodox treatment costs. Although TBS practice had no formal documentation and training, their skills and knowledge on bone setting was reasonable and quantifiable.

It is therefore recommended that TBS cannot be ignored at Iftin and an impartial third party organisation be charged by the Garissa County healthcare system to bring the orthodox orthopaedic proponents and the traditional bone setter proponents together to set up and maintain acceptable working systems for TBS.