Anthropology & Medicine

Routledge
Taylor & Francis Group

ISSN: 1364-8470 (Print) 1469-2910 (Online) Journal homepage: https://www.tandfonline.com/loi/canm20

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To cite this article: Sada Mire (2016) 'The child that *tiire* doesn't give you, God won't give you either.' The role of *Rotheca myricoides* in Somali fertility practices, Anthropology & Medicine, 23:3, 311-331, DOI: 10.1080/13648470.2016.1209636

To link to this article: https://doi.org/10.1080/13648470.2016.1209636

Published online: 10 Nov 2016.

ANTHROPOLOGY & MEDICINE, 2016
VOL. 23, NO. 3, 311–331
http://dx.doi.org/10.1080/13648470.2016.1209636

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'The child that *tiire* doesn't give you, God won't give you either.' The role of *Rotheca myricoides* in Somali fertility practices

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ABSTRACT

The paper introduces the *Baanashada Dumarka*, a Somali fertility therapy carried out by a spirit medium, known locally as *'Alaqad. Baanashada* is aimed at women whose fertility issues are believed to be caused by spirits. The study also explores a component of the *Baanashada*, namely, the use of *tiire* (*Rotheca myricoides*), or the butterfly bush. Although *Rotheca myricoides* is known to possess a number of medicinal components as confirmed by studies of modern science, so far, there exist no studies on its potential (or lack of) fertility effects. Hence, the alleged fertility benefits of the butterfly bush need examining. The author is aware of at least one recent case that a Somali woman from Europe died of herbs placed in her cervix by a traditional healer in Somaliland. This piece of information indicated not only the role of herbal medicine in fertility practices, but also the popularity of traditional reproductive medicine beyond border, class or educational background. Yet, current research into Somali women's health focuses mainly on Female Genital Mutilation (FGM), examined often without the context of wider cultural practices. This paper, however, suggests that rituals, beliefs and material culture play a paramount role in women's practices. For example, as explored elsewhere, the *wagar*, a wooden and sacred object made of the African olive, is critical for fertility practices. The current paper illuminates further the significance of reproduction practices in Somali society and the potential continuity of traditions associated with the perpetuation of kinship. It concludes that fertility rituals are part of a wider context of interaction with sacred landscapes, objects and archaeological sites, often associated with past legends in the Horn of Africa.

ARTICLE HISTORY
Received 25 November 2013
Accepted 2 July 2016

KEYWORDS
Somali; reproduction; fertility/infertility; healing; spirit possessions; medical anthropology; *Rotheca myricoides*/Clerodendrum myricoides; ethno-botany, plants, indigenous knowledge

1. Introduction

Some research has been carried out on the awareness of Somali women of the repercussions of FGC/M (Female Genital Cutting/Mutilation), and their experiences of access to maternity care both in Somali territories and in the Diaspora (e.g. Bulman and McCourt

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This article was originally published with errors. This version has been amended. Please see Corrigendum (http://dx.doi.org/10.1080/13648470.2017.1301566).

2002; Ismail 2011). However, only now are studies on fertility practices of Somali women beginning to emerge (Mire, 2015a, and forthcoming).

This paper is part of a study of Somali fertility beliefs, practices and associated material culture, a hitherto unexplored field of research. It explores traditional healing practices claiming to restore fertility. The vast material culture, including objects, *medica materia* and sacred landscape features all converge to form a major component in the area of fertility. This paper is also the first study to introduce the *Baanashada*[1] *Dumarka*, the 'nurturing of the women' (from hereon *Baanashada*), which is a nurturing and healing treatment that takes place during a seven-day period. The author has interviewed over 50 women of different ages (mainly 25 to 45). However, the ritual of *Baanashada* was a three-group interview, each with four people of different ages, as opportunities were presented to the author during fieldwork between 2007, 2010, 2011 and 2013 in the Hargeysa, Awdal and Togdheer regions. Furthermore, elderly cult devotees have provided information about *zar*. The analysis is based on the views of these individuals and groups.

The main findings and arguments of this paper can be summarised in a few points; the author demonstrates the role of the butterfly bush (*Rotheca myricoides*) in fertility rituals in Somali society, which surprisingly has never been reported before (Section 2); the author also shows the role of spirit possessions in Somali fertility beliefs and practices, particularly in the *Baanashada* therapy (Section 2). Furthermore, both the *Baanashada* and spirit possession rituals are part of a wider field concerning fertility beliefs and practices, currently and historically, and form part of non/pre-Islamic indigenous culture, whilst embracing important sites, landscapes, legends and sacred objects associated with the past (Section 2). For example, the shrine and 'sacred landscape'[2] of Aw-Barkhadle in the Hargeysa region plays an important role in fertility rituals due to its historical and pre-Islamic ritual significance. As such, the paper encourages multidisciplinary research into past and present uses of plants, landscapes and associated rituals to understand the practices and beliefs that are fundamental to the perpetuation of kinship in the Cushitic[3] Horn of Africa (Section 2). The paper also notes that although modern medical investigation attributes many medicinal properties to *Rotheca myricoides*, thus far no modern medical study has been carried out on its potential fertility use. Hence, this paper both presents the local use for this purpose and argues also for further investigation of the fertility effects (or lack) of the butterfly bush (Section 3).

2. *Baanashada Dumarka* and its cultural and historical context

This section begins by introducing the practice of *Baanashada Dumarka* within a historical and cultural framework. It aims to understand the significance of reproduction practices in Somali society and the potential continuity of traditions associated with the perpetuation of kinship. One woman reported that women say:

> '*Inan'ka tiire ku'siin waayay, Ilaah-na ku'siin mayo.*' 'The child/boy *tiire* doesn't give you, God won't give you either'.

This seems to be a prevalent view of the powers of *tiire* among Somali women. The *Baanashada Dumarka* is a physically intrusive process, which requires access to entire body and to the *makaanka* (the womb), via the cervix. As one of the interviewees put it: 'the healer turned it [the womb] using two fingers'[4] (Interviewee Elderly lady 3 in Hargeysa, 2007; interviewee Nasra, 2007). This procedure, which the author explains in detail below, is supposed to 'correct' the uterus.

Fertility practices exist in Somali society (Mire, 2015a and forthcoming). The Siti is an ancestral veneration ritual conducted during the seventh and ninth month of pregnancy, and after childbirth. This sacrificial ritual is for women, by women and with women. It is an ancient tradition where all female religious ancestors are called upon and praised for their *Baraka* of the mother and the infant. Although the Siti seems to pre-date Islam, these venerated ancestors are still associated with Islam itself (Mire, forthcoming). Another ritual of relevance involves the *wagar*, a sacred wooden object, carved out of the African olive, as explored elsewhere (Mire, 2015a). The *wagar* features in both fertility and child protection rituals in order to ward off evil spirits from the keeper. This practice appears related to ancient pre-Christian and pre-Islamic religions of the Cushitic-speaking peoples, who held or still hold beliefs in the sky-God *waag/waga*. The Konso of Ethiopia, another Eastern-Cushitic speaking people, erect *waga*, a wooden sculpture representing the deceased on the grave (Hallpike, 1972). Although linguistically connections between the words *waga*, *waaq* or *wagar* are unlikely (see Mire, 2015a), the *wagar* and *waga* of the Konso are sacred objects associated with ancestor practices. This is part of the ancient traditions of Cushitic speaking peoples to erect stelae on graves as markers whilst signifying their ancestors.

The *wagar* has the shape of a club (See Figure 1) and is in fact the only tree unanimously viewed as sacred in northern Somali culture. Women retain these sculptures from early-married life to old age, sometimes passing it on from one generation to the next. The tip of the *wagar* is dipped in oil and heated in order to burn specific areas of the abdomen to treat infertility (Mire, 2015a). The Siti and the *wagar* are part of the wider context of rituals that include practices such as female circumcision (Mire, forthcoming). Usually, it is the Madhibaan[5] women who traditionally perform *Baanashada* (and Infibulation/Female Genital Cutting/Mutilation), having inherited the skills from mothers and grandmothers. As for the *Baanashada*, relevant herbs and plants, collectively known as *dhir'-baanta*[6] (medicinal/nurturing plants) are selected in order to treat the women.

Figure 1. A century old *Wagar*, a sacred wooden sculpture, carved from a sacred tree (*Olea Africanus*) belonging to the author (copyright: Sada Mire).

Considering the wider context of fertility practices of the Somali, an intriguing element of the *Baanashada* is its integration of various traditional practices: (a) insertion of *tiire*; (b) the ritual massage of the whole body; (c) 'the turning of the *makaanka*'; and (d) the *zar* practice. These processes are staged to aid healing, but are also typical of the various rituals that are otherwise associated with local Cushitic practices and/or non-Muslim neighbours.

In the wedding ceremony of another Eastern Cushitic speaking people – the Matcha Oromo – the bride weaves a ritual container specifically put blood from a sacrificial sheep, together with sprouting coffee fruits and beans, on which a male Elder is invited to use to smear the fresh blood and the beans and coffee fruits on the bride's belly and the inside of her thighs. The Elder blesses the bride with the coffee fruits, which suggests the number of children her mother in law wishes her to bear (Bartels, 1983). Such fertility rituals are part of the many Cushitic traditions among the Eastern Cushitic-speaking peoples and cannot all be mentioned here (see Mire, forthcoming). According to oral history, similar practices existed amongst the Somali too. It is already noted that the *'Alaqad* will insert two fingers in the cervix and turn the uterus.

The point of interest here lies within the notion of 'making it right'/'correcting it'. It is possible to associate the 'turning of the uterus' and the *Baanashada* ritual massage with the legend of Buʿur Baʿayr, a pre/non-Muslim religious leader, who supposedly observed 'wicked' and 'sexual' rites (Mire, forthcoming). As the main religious leader of the site of Aw-Barkhadle (before Aw-Barkhadle arrived), he is said to have granted marriage by sleeping with the bride on the first six nights of the wedding (Mire, forthcoming). According to the legend, Buʿur Baʿayr lived in the twelfth century AD and was the religious leader and ruler at the centre of Aw-Barkhadle,[7] previously known as Doggor, now 30 minutes' drive from Hargeysa on the Berbera Road (see Figure 2, site 12, and Figure 3) (Mire, 2015a, and forthcoming). According to sources, Buʿur Baʿayr was a '*gaal*' (a non-believer/infidel) or, as some suggest, a superficial Muslim who practised traditional medicine. The author proposes Buʿur Baʿayr's six night wedding ritual might be best observed within Cushitic fertility practices. It is likely this process is not only a marital rite of passage but also a means of granting sacred fertility to the newlyweds (Mire, ibid.). Perhaps, as the Matcha Oromo Elder, he also had a role to make the bride fertile through rituals and blessings. Perhaps a Cushitic notion of ritual massage has been construed into actual intercourse. However, within the Matcha, there is a symbolic intercourse between the bride and the groom during the wedding night, which is supervised by two Elders, a woman and a man (Bartels, 1983). Hence, ritualistic and symbolic intercourse may have been integral to fertility practices on the whole. This opinion is bolstered by another practice, as witnessed until recently by the interviewees, whereby within some Somali clans, the groom's young, male clan members kidnap the bride, only to return her when she falls pregnant. The Somali sources suggest that there were many ways to marry people. Now marriage has been unified in the Islamic era. Also, the men of the Matcha Oromo still practice sharing their wife with their patrilineal clansmen. Any potential offspring resulting from such encounters belong to the husband. However, a child from a man of another clan is not desired. The same would have been logical in the Somali context, where it is still normal for a widowed woman to become an 'inherited' wife of the brother of her deceased husband. It is also possible that this is how male infertility is dealt with, through

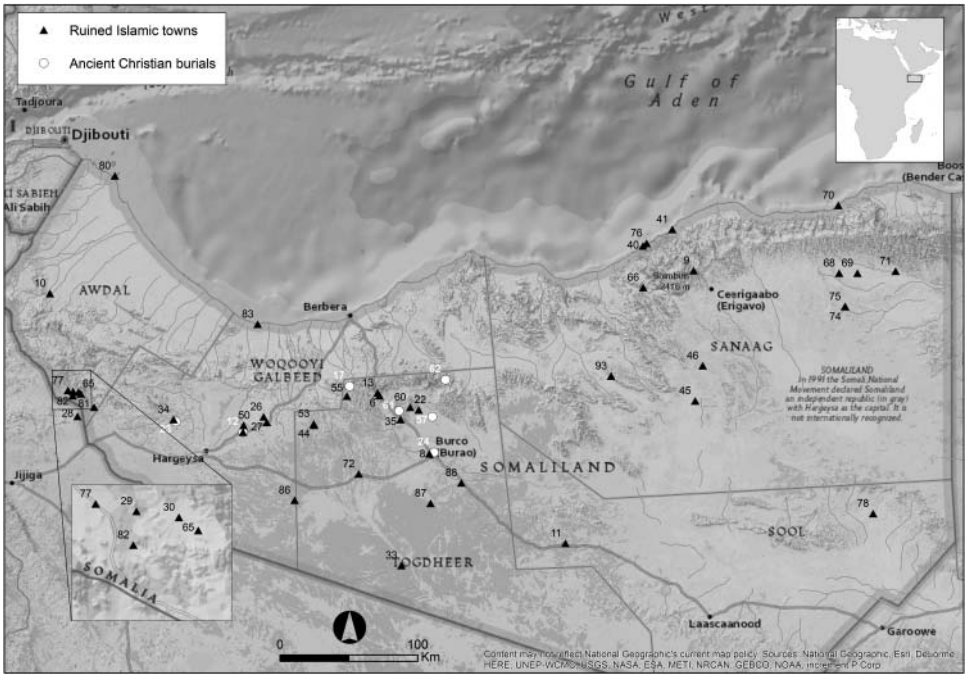

Figure 2. A map of archaeological sites including Aw-Barkhadle sacred landscape and other fertility sites (copyright: Sada Mire).

Figure 3. Aw-Barkhadle Sacred Shrine and Landscape, near Hargeysa (copyright: Sada Mire).

the lineage men impregnating the women (through some agreement, either secretly, or with the knowledge of a few), while female infertility is harder to hide.

According to the above accounts of the *Baanashada*, the woman spends a week with the *'Alaqad*. The traditional healer seems to do this through a combination of her alleged healing powers as well as those of medicinal herbs. Historically, healers were not just experts in traditional medicine but also revered religious figures as indicated by the case of Buʻur Baʻayr (and Gedi Babow in the south) as well as the Oromo practices. Somalis share many affinities with their neighbours, including inhabiting the same area. That pre-Islamic rulers claimed closer links with the divinities and deities, and were able to convince people of their unique potency is a common thread (Mire, forthcoming). The current Somali *waddaads* (religious men), who provide blessings, also retained the mediatory and ritual role of their pre-Islamic counterparts (Lewis, 1998). It is easy to associate what the healer does during the *Baanashada* with the practices of Buʻur Baʻayr. From the point of view of traditional culture, the healer, who facilitates fertility, recalls the powers of earlier religious and spiritual leaders, including sacred ancestors such as Buʻur Baʻayr, who are now only remembered in the oral history and legends of the Somalis.[8] Perhaps the *Baanashada* and the turning of the uterus/womb although controversial now, might have been part of such ritual repertoire employed to enable fertility.

Thus, the notion of symbolic and ritual penetration/'turning the uterus' by a revered religious or spiritual figure may have existed in the pre-Islamic fertility culture of this region. This is supported by oral history and the archaeological findings of phallic gravestones in burial sites around the country, confirming the ritual significance of the male (lineage) potency (see Figure 4) (Mire 2015a, and forthcoming). As this author reports elsewhere (Mire 2015a, and forthcoming), there is a dearth of research, and thus understanding, of the pre-Islamic and pre-Christian religious beliefs in the Horn of Africa – as well as a dearth of contextual knowledge of local symbolism within the region's archaeological record. Furthermore, there are anthropological studies that have reduced phallic symbolism to a representation of masculinity and warrior culture (e.g. Joussaume, 1995) and some deny phallic symbolism altogether (e.g. Amborn, 2009). However, fertility rituals that involve sacred stones, including phallic gravestones, are practised (Mire, 2015a and forthcoming).

There is a much more complex symbolism regarding 'killing and bearing' which involves fertility and sacrifice, as amply demonstrated by Bartels (1983). Consequently, from a historical point of view, the archaeological phallic gravestones and fertility stones found at Aw-Barkhadle ritual landscape – and previously at the site of Buʻur Baʻayr (Mire, 2015a, and forthcoming) – shed light on past and present fertility practices at this site and the Horn of Africa more generally. Interestingly, the use of the *wagar* is also associated with the site of Aw-Barkhadle[9] (Mire, 2015a). Furthermore, we have found many more sites associated with fertility rituals in Somaliland (Mire, 2015b).

A recent inspiring issue in this journal discusses traditional practices in sub-Saharan Africa, and examines the association between material culture, such as shrines, and the medicinal substances used in folk medicine (Insoll, 2011a, and 2011b). The African continent has a rich heritage in traditional folk medicine (Iwu, 2014), but as yet, both current and historical use of these medicinal plants is a field that is rarely researched (Iwu, 2014).

This study therefore is not only concerned with the *Baanashada* and its stages, including the use of *tiire*, but, as noted above, also shows how shrines, such as that of Saint Aw-Barkhadle, thought to be from the twelfth century AD (Mire, 2015a and forthcoming),

Figure 4. A phallic stela on one of the graves of Aw-Barkhadle cemetery (copyright: Sada Mire).

are associated with various fertility rituals and rites in both the pre-Islamic and Islamic eras (Mire 2015a, and forthcoming). As for the *wagar*, it has been used in ancient traditions associated with pre-Islamic religion and in both the beliefs of the divinity of trees and, more specifically, the sky-God *Waaq* of the Eastern Cushitic speaking peoples.

3. *Tiire* (*Rotheca myricoides*)

For many people in the UK and elsewhere, a butterfly bush, *Rotheca myricoides*[10] (Cambridge bush or Oxford bush) is a blue-purple flowering plant which has recently become a popular patio or pot-plant, flowering in spring and autumn while being moved indoors during the frost season (see Figure 5) (GRIN, 2014). However, in Africa, where the bush is native, it is also steeped in tradition. In the highlands of Somali-speaking Ethiopia and

Figure 5. *Tiire*, the Butterfly bush, Rotheca myricoides, a specimen plant owned by the author (copyright: Sada Mire).

Somalia, including Somaliland (an internationally unrecognised self-declared region), where the butterfly bush is locally known as *tiire* (or *tiiro* as it is known in the regions of Awdal and Ogaden), this plant is used for medical purposes. Its popular name refers to the flower's butterfly formation. It is a small, multi-stemmed, evergreen shrub, which stands between two to three metres tall, and around two metres or more wide. Its fruits are edible when ripe, with their colour ranging from dark green to black or red. At the time of the fieldwork conducted as part of this research, a sample[11] was brought back from the Gaʿan Libaah Mountains of the Togdheer region. In the Somali region, *tiire* is used for many ailments including fertility problems; its leaves and roots are separated to produce medicinal concoctions when mixed with other plant products, which are then used for the *Baanashada Dumarka* treatment.

3.1. Modern science and the potential health benefits of Rotheca myricoides

Studies of the *Rotheca* plant are being undertaken through various animal experiments, based on the assertions of traditional medicine with regard to its biological benefits.

The components discovered feature numerous benefits and functions, including anti-inflammatory, antioxidant, antimalarial, and anti-diabetic properties (Shrivastava and Patel 2007a,b; Nerio et al. 2012). Moreover, Japanese research has recently confirmed its preventative and curative properties against diabetes. A study on *Rotheca myricoides* found that the leaf extracts of the plant reduced the glucose level in mice (Nerio et al. 2012, 120). Another recent report (Shrivastava and Patel 2007a, 142−150) reviews the *Clerodendrum* genus used in therapies within healthcare the world over. In Asia, particularly the Indian sub-continent, it is used not only in replacement and conventional therapy, but also in folk medicine where numerous species of *Clerodendrum* have been utilised to counter illnesses including 'asthma, pyreticosis, cataract, malaria, and diseases of blood, skin and lung', according to Shrivastava and Patel (2007a, 223). Interestingly, Lal and Lata (1980, 274) report that in India, a decoction of fruits from the *Clerodendrum indicum* and *Clerodendrum petasites* species are used to produce sterility, declaring these particular sub-species as 'a strong steriliser'. They suggest that on the basis of the *Clerodendrum/Rotheca* genus having been used for thousands of years in traditional medicine − and together with the results from clinical studies − more studies are needed to further investigate its properties (Lal and Lata 1980).

A study of both in vitro genotoxic and antigenotoxic effects of numerous South African plants used in folk medicine found the extracts from *Rotheca myricoides* displaying anti-mutagenic potential (Verschaeve and Van Staden 2008). This is a point of interest as medical research concludes that natural antimutagenic substances have the ability to lower the risk of cancer from daily exposure to both environmental mutagens and mutagenic pharmaceuticals. Other studies suggest that *C. myricoides* has antiplasmodial substances, which may lead to antimalarian drug development (Deressa, Mekonnen, and Animut 2010, 27−28; Muregi et al. 2004, 379−384). Furthermore, others have shown the potent insect antifeedant activity of *C. myricoides* against the African armyworm (*Spodoptera exempta*) (Cooper et al. 1980, 7953).

The ethnobotanical study conducted by Wilson and Mariam (1979, 30) in Ethiopia lists one of the regional uses for *R. myriciodes* (*ugandense*) as an antidote to poison when the root extracts are drunk as a decoction. Most research carried out on the medicinal activities of *R. myricoides* in Africa come from Ethiopia and Kenya (e.g. Wilson and Mariam 1979; Cooper et al. 1980; Deressa et al. 2010; Muregi et al. 2004). In the Somali Ogaden region of Ethiopia, the current author learned that *tiire* is also used for treating respiratory tracts and nasal cavities (Abdulfatah Abdulahhi, pers.com. 13 April 2011). In powdered form, the *tiire* root is used as an antihistamine against allergies, such as hay fever (*sanboor*). Furthermore, the author's anthropological study of female fertility practices identify *tiire* as an ingredient in the *Baanashada Dumarka* to alleviate infertility through encounters with individuals who believe, with *tiire*, pregnancy is possible.

Research on its medicinal uses have yet to be conducted within the Somali region. Furthermore, the current author has yet to come across a study on the efficacy of *Rotheca myricoides*' chemical constituents in treating infertility conducted through the perspective of modern medicine.

3.2. The stages of *Baanashada Dumarka*

The woman is placed on a strict diet during the seven days of treatment. The first stage of the baanashada dumarka is the *da'arbah*; a process that involves eliminating the bad from

the body through vomiting and diarrhoea. The consumption of beverages and food soaked in or cooked with the roots of *tiire* relieves constipation. Tea and fresh camel milk prepared with *tiire* are also consumed, but in the absence of the latter, roots are soaked in water and this – as well as other beverages and food combined with *tiire* – is taken only when its bitterness (*qadhaad*) comes through.

In the second stage of the *Baanashada*, a fat sheep is sacrificed to appease the spirits, sometimes with its blood smeared on the patient's hands, feet and face, especially in *Mingis* and *Maame zar* types. She ingests food consisting of pure fat and meat, including the fatty head of either a sheep or a goat, which the healer combines with *tiire* before cooking. Here, *dihin* (fat) is considered valuable, with the development of the *haydh/baruur* – the crucial fertility fat – being highly dependent upon its consumption. Hence, a soup (*maraq*) containing sheep or goat's head, bone marrow, stomach and medicinal herbs is prepared and thought to have a nurturing effect upon women. Under the instructions of the healer, the patient consumes all of the *maraq* whilst standing up – this posture is meant to defy the bad spirits.[12] *Muqumad*, sun dried, deep fried meat cubes, soaked in ghee, is also eaten for its nurturing qualities. This procedure exists to fatten up a woman so that she may become more fertile.

Apart from *tiire*, powdered fenugreek seeds (*Trigonella foenum-graecum*) (see Figure 6), or *hulbad*, is also used to cure pains in the abdomen, back and joints. There are two ways to prepare *hulbad*. The first is to roast it; its colour turns red, which indicates that it is ready to be eaten, preferably in a soup. At times, it is combined with chillies to produce a sauce. The second is when it is soaked overnight in water. The *hulbad* is drained in the morning with the remaining paste, turned into a drink with a mixture of milk and sugar and sometimes lemon.

> They [the healers] take stones and cook them in water, then put them under your skirt so that all the heat flows through your body. Then she [the healer] gives you a whole body massage. She will turn your *makaanka* if it is lying in the wrong way. She does this by putting two fingers in you and turns the *makaanka*. ('Nasra', 2007)

An interviewee from Hargeysa explained the '*Alaqad* will insert two fingers in the cervix and turn the uterus. It is important to note that there is no sexual connotation behind the 'turning' nor is it perceived as such by the interviewees. It is in fact equivalent to undergoing a transvaginal ultrasound with transducer – it is a painful experience one endures with the goal of increasing fertility in mind. As often Somali traditional medicine uses heat massage and baths in hot springs, the notion of a ritual massage seems interesting here.

Another interviewee provides details of the fourth stage of the *Baanashada*: the insertion of a piece of *tiire* and dates into the vagina (see Figure 7):

> Some women use it [*tiire*] to put it in their vagina/*hoosta*; they take a date and take out the stone inside and then replace the stone with a piece of *tiire* root [about 2–3 cm] and insert it, they will keep it for days; this will lead to internal infection caused by the *tiire* and the date and then it will create a pus and this is thought to be cleansing the bad things inside, because there is pus coming out. ('Elderly lady 2 in Hargeysa', 2007)

In Asia, North Africa and Near and Middle East, the date palm (*Phoenix dactylifera*) has a long history and features in ritual contexts often depicted as a fertility symbol or an attribute of gods (Tengberg 2012, 141). Muslims consider dates a sacred food source and eat

Figure 6. Hulbad or fenugreek powder (*Trigonella foenum-graecum*) (copyright: Sada Mire).

them specifically to break the fasting during the holy month of Ramadan. In Somali culture, dates are credited for having a multitude of benefits such as vitamins, minerals and properties important for various bodily functions, whilst promoting recovery in antenatal/postnatal care and wellbeing. Dates are also a known laxative used to eliminate waste from the body and relieve constipation, which explains the insertion[13] of *tiire* and dates into the vagina. One of the interviewees believes the 'pus [waste] coming out' is evidence of the *tiire* and the date getting rid of harmful things in the body and healing it.

The fifth and final stage of the *Baanashada* is '*saar ka tun*', which literally means 'drumming the spirit (*zar*) out of the person' in an attempt to rid or satisfy the spirit whose possession of a woman prevents her from getting pregnant.

The *zar* is a spirit possession cult originating in Ethiopia but now found in North Africa, Sudan, Egypt, Arabia, and Iran (Boddy 1982, 1989; Lewis, et al 1991; Lewis, 1966;

Figure 7. Dried *tiire* roots used in traditional medicine including for fertility purposes (copyright: Sada Mire).

Antoniotto 1984; Ahmed 1988; Markis, 1996). It has been noted that reasons for being possessed include anxiety and deprivation of food resources, nutrition and personal development (Kehoe and Giletti, 1981; Shack, 1971). *Zar* and its potential links to fertility and Cushitic belief systems is explored elsewhere (Mire, forthcoming). For individuals whose self-identities are consumed by their fertility issues, their inability to reproduce leads them to believe they are indeed possessed by alien (often Ethiopian) spirits.[14] This Somali case substantiates Janice Boddy's (1989) argument from Sudan that women with fertility problems undeniably pursue *zar* therapy. As the concept of spirit possession exists in numerous religions, its therapeutic practices are known within socio-cultural and religious perspectives as well as in the fields of psychology and medicine. Makris (1996) refers to how historical change affects possession practices in Sudanese society and its use to create

an alternative identity separate from the dominant identity, whilst Natvig (1988) examines the transitional rites and symbolism of the relationship between possessed and the spirit. A recent study by Mack (2011) discusses the concept of 'spirit speech', including exotic spirits' languages as a curative and empowering element.

The average age of a possessed married woman ranges from 35 to 45. Generally, women of this age group are the most likely to experience a decline in fertility levels. From the Somali data, it would appear that importance is not only placed upon a woman's fertility, but also her ability to produce a son. So although the top of the average age is probably the same as Boddy's Sudanese data, the inability to give birth to boys rather than the issue of fertility *per se* is also attributed to spiritual interference.

> You go to the *'Alaqad* when you are not well, when you are ill, you show where you have pain, or tell her what is wrong. Then she will tell you that you have *zar*, after she has fainted she will be able to say what is wrong with you. She will be able to say exactly which one [of the *zar* types] is yours, like mine is *maame*, but there are many different ones. She will say. She takes the *zar* away from many people. (Interviewee Elderly lady 2 Hargeysa)

After the *'Alaqad's* diagnosis, other women are invited to participate in a drumming ceremony with the intention of appeasing or expelling the zar from the body. Sometimes, the patient converses with and acquaints herself with the spirit who has possessed her in a private session mediated by the *'Alaqad*. The above interviewee relays the close of the ceremony: '[S]o after you give his *qoftaan* and *nadaafadiisa* [gifts of adornments and perfumes] then you will get better'. The patient offers gifts of incense, coffee and perfumes to gratify the spirit via the *'Alaqad* (Interviewee Elderly lady 2 Hargeysa).

To expel spirits, although most of the time the spirit is evoked with no association to a sheik or a saint, the interviewees not only go to the *'Alaqad*, but also to Muslim sheikhs in order to receive *du'a* (Islamic prayer) to expel *jinns*. There is an element of devotion here regardless of medium (spirits/sheikhs/saints); ultimately, the illness is a ritual illness, manifested in this altered state of behaviour and mind, which requires spiritual healing.

As also noted by Natvig (2013), people evoke saints and spirits through *zar* songs in Egypt. However, the present study has found that there is an element of syncretism of beliefs too: sometimes the saint is the spirit and sometimes the saint is evoked to fight the spirit. Saints are beings capable of miracles. It is not surprising then that a site associated with the Sufi Saint Aw-Barkhadle featured in many of the interviewees' experiences of fertility rituals. Aw-Barkhadle is a shrine that most of the women with fertility issues in Hargeysa region go to, in the past and the present, according to oral history and present observations (Mire 2015a, and forthcoming). The efficacy derives from the blessed saint, who is associated with miracles and shrines and the surrounding landscape, which is believed to be sacred, and is blessed by the saint. The landscape includes sacred wells, springs, trees, stones and mountains (Mire, forthcoming).

> It is actually difficult to wholly divorce any aspect of Talensi medicine from a ritual dimension or, indeed, a link with shrines. (Insoll 2011b, 193)

Although shrines can be many things, the Sufi Saint Shrines of Sheikhs, such as Aw-Barkhadle, are often seen as places of miracles and are intertwined with the Saints' ability to produce rain and to bring fertility to animals and humans. Currently, the use of *zar* and Islamic prayer creates a tenuous relationship between sheiks and the *'alaqad* cult.

Abdalla (1991) observed a similar relationship within the Malam leaders and Yam-bori practitioners of the Hausa.

The issue of fertility is not necessarily a taboo subject amongst women; instead it is a shared, collective experience, particularly for those who have had or are experiencing fertility concerns themselves. A care network is formed around the suffering individuals and comprises women from their community. They provide financial and emotional support, help with household duties and attend the *zar* rituals and ceremonies they must undergo. The spiritual aspect of fertility treatment such as the participation in the *zar* ritual is required through religious devotion to transform the individual in terms of self-identity, fertility and ultimately the acceptance of the reality of her situation or God's will (*qaddar Allah*). Devotion also exists for the '*Alaqad*; in the case of the *Baanashada*, the interviewees spoke of their reverence for a famous '*Alaqad* in the Hargeysa region active in the mid-1960s and 1970s.

The *Baanashada* treatment is repeated for at least three years until the woman either becomes pregnant or gives up trying. Indeed, it is not a cheap ceremony so many stop after a few sessions. For these women living on the boundaries of a patrilineal society, it is not enough to simply get pregnant; they are expected to produce males in order to extend the lineage. The woman's own status as well as her husband's and his lineage depend on her capability to produce one or more boys (Mire 2015a, and forthcoming). The inheritance of wealth and status is intimately linked to this patrilineal system, where ultimately, boys have more value than girls.

4. Discussion

The veracity of these treatments has not been proven or refuted, nor have the effects on women's bodies ever been studied. What women experience in terms of fertility treatments is, mostly, if not completely, unknown to their male partners and, indeed, to male society in general. Unbeknownst to them, treatments such as the insertion of herbs into the vagina may consequently leave women to suffer, in silence, from further health and fertility complications along with mental health issues.[15] Most husbands also seemed, according to the interviewees, unaware of the realities of women's health, both physical and mental.

It is important to note that people have become *illbah* (enlightened) and use modern medicine when and where it is possible. Nevertheless, the current author was made aware of a recent case of a woman who was brought to a hospital in Somaliland after being taken ill. Her reluctance to divulge information about the source of her illness cost her life. The woman had come to Somaliland from a European country to undergo the traditional fertility healing ritual and had died from the insertion of 'herbs' into her cervix. It is not known what type of herbs that were involved in this lethal case, but the fact that the entire *rotheca myricoides* bush is poisonous, if digested, shows how such herbs can be dangerous, if there is a misuse. For many women, they have no choice but to use alternative therapy. But for a Somali woman with access to modern medicine to seek out a fertility practice so life threatening only illustrates the great importance placed by Somali women on these traditional fertility treatments, whilst demonstrating the immense pressure to become pregnant and produce boys.

Not only are people moving to receive alternative therapies, but traditional medicine moves too with people in Africa (Dilger, Kane, and Langwick 2012). It is well known that

Somalis of the diaspora consult both modern medical practitioners and traditional healers for the treatment of ailments (Mire 2015a, and forthcoming; Tiilikainen, 2012). The current author has on several occasions witnessed those in diaspora communities who have travelled back to the Horn of Africa when desiring an alternative diagnosis and treatment for their illness, often under the recommendation of family and friends. Herbal medicines such as *tiire* are brought back to the diaspora. For example, the present author interviewed a British-Somali man with kidney problems who was advised by his UK doctors to use dialysis, but instead travelled to Somaliland to consume camel milk as a form of treatment not readily available in the UK. On his return, the doctors apparently concluded that his test results had improved for reasons unknown to them after this visit to Somaliland. The man believes it was camel milk that improved his condition. Ultimately, the man received a kidney transplant, which was successful.

There is a tendency to bring herbs and spices from their country of origin back to their adopted homelands. For example special spices, such as *hulbad,* are imported as ingredients for traditional Somali food. Objects of ritual significance and healing abilities, such as the *wagar*, are also brought back by diasporic communities (Mire 2015a, and forthcoming). Holy water considered to hold powers to both heal and ward off evil spirits is brought by Somalis from the sacred Zamzam well on their return from a pilgrimage to Mecca, as is *'ashar* – locally sourced holy water that has received a sheikh's blessing as a substitute when water from Mecca is not directly available. *Khat,* which is imported from Ethiopia and Yemen, is used by Somali communities in the West. It is commonly used by men who suffer from depression, or who are experiencing some form of trauma and alienation, for its stimulating effects (Giannini and Castellini 1982). Historically, *khat* was regarded as a healing substance, and was consumed collectively under ritualistic circumstances (Mire 2015a, and forthcoming).

In the Horn of Africa, these practices were for centuries, indeed millennia, only recorded through oral traditions (Wilson and Mariam 1979). The importance of plant and animals is recognised as an integral part of the history of traditional medicine of Africa (Adeola 1992; Sundby 1997), particularly in the Horn of Africa, which retains a rich heritage of ethno-botany. Scientific studies indicate that certain pharmaceutical substances are active in traditional medicines and treatment (Wilson and Mariam 1979, 29; Elmi et al. 1984). However, in medical anthropology, very little is actually known about traditional medicine and its history within Somali territories.

It is possible that ancient, pre-Islamic medicine was later practised in a clandestine manner after the arrival of Islam, so as not to offend the new adopted religion. It is still a prevalent attitude to equate non-Islamic beliefs and practices with 'ignorance'. Also, the introduction of modern, conventional medicine lends more weight to this particular attitude.

Since the start of the Somali civil war, nearly 25 years ago, there has been major displacement of people across the Somali region and, as a consequence, the loss of specialist medicinal knowledge. With such great dispersal of people in an area larger than both Wales and England combined[16] – and with an estimated population of 3.5 million – it is noted that '[W]ith each succeeding generation the chances of distortion or misrepresentation of the original plant or cure are greatly increased, and many mistakes are bound to occur' (Wilson and Mariam 1979, 30).

Somalia as a whole has suffered one of the longest civil wars in modern history, which has dispersed and displaced many of its inhabitants. Although in later years some effort has been made to improve health and medical care in Somaliland (Ismail 2011), it seems that more than 80% of Somalilanders still have no access to modern medicine, so indeed, they have no choice but to rely on the sometimes distorted practices of folk medicine. The total number of doctors working in Somaliland in 2011 was only 111 (UNDP Human Development Report 2011). A MSF Frontline Report by Dr Sohur Mire confirmed the scarcity of adequate maternity care and also how the lack of infrastructure restricts many women from rural areas coming to the few hospitals that exist (MSF Frontline Report 2011).

From the sparse numbers of doctors accessible in this country, it is hardly surprising that a large proportion of the population, especially in the rural areas, rely on traditional medicine for their primary health care. Certain landscapes throughout Somali territory are known for distinctive native pharmacopoeia and hold significance for ritual and healing amongst the Somali (Mire forthcoming). The author has come across a number of landscapes in Somaliland including Aw-Barkhadle near Hargeysa, Dhagah Kure of Arabsio and also the Dhaymoole area near Berbera on the coast, which are all associated with indigenous herbs and bushes used for medicinal purposes.

This is perhaps why many Somalis speak immediately of the landscapes they grew up in and their skills and experience when asked about their heritage (Mire 2007, 2011). Somali culture is based on oral traditions and oral transmission of skills and knowledge. Their perspective on heritage is what the current author calls a 'knowledge-centred' approach, preserving knowledge and skills rather than objects (Mire 2007, 2011). Hence, most of the Somali traditional medicinal knowledge is undocumented beyond this oral culture (Mire 2007, 2011). In neighbouring Ethiopia and Kenya, research has shown that many plants have properties that can help develop drugs against diverse ailments, noting inspiring conservation projects, as the plants themselves, are under threat and in need of protective measures (Yineger et al. 2008, 132). Shrivastava and Patel (2007a, 223) add that '[N]ew transgenic varieties could be created as efficient green production lines for pharmaceuticals by using genetic engineering and tissue culture for multiplying and conserving the species, which are difficult to regenerate by conventional methods and to save them from extinction'. However, in Somalia, big trees such as the African olive (*Olea africanus*) and various acacia species, which constitute most of the large flora in this region and take a long time to regenerate, are under threat due to the current severe desertification and deforestation caused both by a lack of reliable rainfall and the excessive burning of trees for the international charcoal trade. Recent years' reduced rainfall and sustained droughts have led to famine as late as in 2011, while exacerbating the disappearance of many flora in the region.

5. Conclusions

This is the first paper on fertility rituals involving *tiire* (*Rotheca myricoides*), the butterfly bush. The paper introduces an ethnographic study of *tiire* and its role in local fertility rituals and treatments, such as the *Baanashada Dumarka*, amongst the Somali. When women face difficulties in getting pregnant, their female network provides advice and support. Such advice and a great deal of desperation may lead them to take some risks in parts of the treatment known as *Baanashada Dumarka*. Modern scientific studies have

confirmed numerous species of *Rotheca/Clerodendrum* genus are known to possess medical components. However, there are no modern scientific studies to prove or refute the claims made of *Cl. myricoides* when used as a fertility treatment. Nevertheless, whether or not it does have beneficial and medicinal properties, the claims made of *R. myricoides* in the context of fertility therapy in this Somali case needs laboratorial investigation. Understanding any potential consequences of intrusive treatments such as insertion of *tiire* in the cervix might help women who are already in a vulnerable situation.

The general lack of awareness of the wider context of female fertility practices and their impact on the mental and physical health of Somali women is apparent in the approach that only focuses on FGM. Therefore, this study proposes the need for a wider exploration of culture-specific belief systems beyond FGM.

Furthermore, from a historical point of view, as noted elsewhere (Mire 2015a, and forthcoming), the possible link between the ritual and symbolic intervention by religious figures and the *zar* spirit possession therapy, substantiates further study into the legends of Buʿur Baʿayr along with similar religious leaders in oral and historical records. Archaeology has been important in shedding light on this subject, as it has done with the Aw-Barkhadle site (Mire 2015a, and forthcoming) in the analysis of its material culture from non-Islamic religions, and through the discovery of its phallic gravestones, fertility stones and other ritual traditions. Hence, the article calls for a multidisciplinary study of rituals, landscapes and practices in the Somali region and their socio-cultural role and health implications.

Notes

1. The *Baanashada* comes from the words *baano* (v.) to fatten up and *baanasho* (n.), fattening up, something that is usually recommended after an exhaustive illness. In the context of this paper, the word is used in an all-inclusive manner.
2. Sacred landscape is a term the author finds useful in defining the site of Aw-Barkhadle; the term is appropriately applied to an area purely used for ritual purpose. Its ritualistic meaning is derived from its natural and cultural features perceived within a local context as sacred due to its religious attribution and connections to past and/or present religions. However, the writer also uses the term ritual landscape in order to convey the active ritual use of this sacred landscape.
3. Cushitic refers to the linguistic group of the Horn of Africa.
4. This is reminiscent of the notion of sweeping the womb, as practised in modern medical intervention.
5. The Madhibaan is a Somali clan considered an underclass by the nomadic Somali clans due to their occupation as farmer-craftsmen and, previously, hunters and leatherworkers.
6. The word *dhirbaanta* is made up of the word *dhir*, which means trees/herbs and the word *baanta*, which means nurturing/healing.
7. The name Aw-Barkhadle comes from the Sufi Saint Shrine of Sheikh Yusuf Al-Kawnayn who, according to the legend, defeated the 'wicked' Buʿur Baʿayr (Mire 2015a, and forthcoming).
8. Such legends as that of Gedi Baabow in southern Somalia are intriguingly similar to that of Buʿur Baʿayr in the north (Mire forthcoming). The phallic gravestones are also found in southern Somalia too.
9. The actual site is located in a ruined town, which developed into the capital of the Muslim Ifat state. Its leaders allowed themselves to be buried at Aw-Barkhadle to legitimatise their genealogical link with the revered Saint Aw-Barkhadle, fifth ancestor to the Ifat ruler Dunyahir (Mire forthcoming).

10. *Rotheca myricoides* (the butterfly bush), also known as *Clerodendrum myricoides/ugandense*. *C. myricoides* is one of 30 species recently transferred to the *Rotheca* genus.
11. The sample included a plant that was successfully replanted in the author's family farm in Dararwayne, near Hargeisa.
12. Certain medicines, including modern medicines, are taken in a standing position so that they can reach the stomach quicker.
13. By contrast, in India, the placement of medicinal herbs and roots in the vagina is reportedly a common form of birth control used to abort infants (Lal and Lata 1980, 274). As early as the second millennium BC, the transfer of crops took place between East Africa and India, probably through caravan routes and seafaring (Boivin and Fuller 2009, 114). The exchange of medical knowledge was therefore inevitable between the two continents and within various regions. Historically, the Horn of Africa has itself imported medicinal material such as dates and black oil seeds. The latter, originally from India, is a major component in many Somali remedies; its use in the region appears to date back to pre-Islamic times.
14. Also, Somali women express that the spirits possessing them come from Ethiopia. The origin of *zar* is analysed elsewhere (Mire forthcoming).
15. An older former midwife who was one of the first Somali professional midwifes trained by the British in Somaliland in the end of 1950s, then a British Protectorate, confirmed that women take dangerous risks and often end up facing further health problems as a result of some practices.
16. For example, the Sanaag region of Somaliland is almost a third of the country's size, yet when the current author was travelling through this region in 2007 there was only one medical doctor in the whole area.

Ethical approval

The research was approved by the University College London Ethics Committee.

Acknowledgements

Although most of the funding for this research was privately sourced, it also benefited from initial PhD fieldwork grants from University College London's Graduate School, the Institute of Archaeology, and the University of London, in 2007. Taxonomist and environmentalist Abdi Dahir identified *tiire* as *Clerodenrum ugandense*. And professor Mats Thulin confirmed my own *tiire* sample as this species; I thank both for their vital and kind help. I am also grateful for additional medicinal information on *tiire* from Ogaden region provided by Abdifatah Abdullahi. Professor John Mack kindly read and commented on the article. My friends Dr Amy Strecker, Geeleen Albano Chaves and Marilyn Downes provided useful comments on the language. The article was much improved thanks to comments from the anonymous reviewers. I thank my mother, Ugaso Kahin Bulhan, for introducing me to the medicinal traditions of the Somali society. Last but not least, I am deeply grateful to my interviewees and sources for sharing their knowledge and experiences. Any shortcomings in this article are mine alone.

Disclosure statement

No potential conflict of interest was reported by the author.

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