Connecting global health interventions and lived experiences: suspending 'normality' at funerals in rural Tanzania

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Abstract:

In this paper we use the funeral space and its liminal nature as a milieu for exploring how a 'modern' health intervention, the mosquito bednet, is negotiated by its recipients in relation to its (non)-usage in such spaces. With a focus on sleeping arrangements at funerals and drawing on empirical data from participants living in rural southern Tanzania, we discuss how the bednet is linked to the notion of being unsympathetic to the death. Viewed as a symbol of modernity and a reflection of wealth and individual pride, the bednet becomes physically and symbolically inappropriate in the more sacred, 'in-between' site of the funeral. We also uncover how risk perceptions regarding malaria transmission are re-cast in funeral spaces, with socio-cultural practices and health-related behaviours being simultaneously 'risky' for individual mourners and reinforcing in terms of group social cohesion. As individual mourners' concerns about malaria risks are suspended, notions of pain and discomfort come to the fore as part of the mourning process and respect for the deceased.

Introduction

In the last decade or so increasing attention has been directed towards the social and cultural geographies of death and dying (see, for example, Kong, 1999; 2012; Maddrell, 2009; 2013; Maddrell & Sidaway, 2010; Teather, 1998; 2001). Important points of reference in this work are space and place and the meanings with which these are imbued in the wider context of 'deathscapes' (Kong, 1999; Maddrell & Sidaway, 2010). This work has included, *inter alia*, explorations of memorialisation and bereavement in spaces of remembrance such as war memorials (Gough, 2004; Muzaini & Yeoh, 2007), roadsides (Klaassens, Groote, & Huigen, 2009), cairns (Maddrell, 2009) and the home (Wojtkowiak & Venbrux, 2010), as well as the symbolic meanings of 'formal' spaces for the dead such as cemeteries (Teather, 1998). Virtual spaces have also become important as sites of remembrance and mourning through on-line and mobile phone commemorative practices (Kong, 2012; Maddrell, 2012). Other work has foregrounded spatial politics and the role of the state in landscapes of death. Work on post-war Singapore by Tan and Yeoh (2002), for example, explores how conflict, negotiation and resistance are played out against state control over urban planning, including clearance of Chinese burial grounds, and in state promotion of burial over cremation. Other Asian cities have witnessed this reduction in the physical space which is being devoted to

the dead, in order instead to make more space available for the living (Kong, 2012). Conflict and compromise are also explored by Teather (2001) in the context of Guangzhou, China as the state and the individual, and the traditional and the modern, coincide through the symbolic system of 'deathspace'.

Despite this focus on place-based analyses, however, there remain two, perhaps surprising, and inter-related, respects in which this otherwise welcome addition to the geographical canon is currently lacking. First, one corner of the discipline, health geography, has yet to make a full and engaged contribution to work on the social and cultural understandings of death and dying. Through his work on hospice care and home deaths and the paradoxes which subsequently transpire, Brown (2003) calls for greater engagement by health geographers with political theory. But there are also other contributions to be made, notably in terms of the experiential and corporeal facets of death and dying in particular spaces and places. As argued by Liaschenko, Peden-McAlpine, and Andrews (2011) there is scope for newer health geography research which focuses less on structural issues of care for the dying and more on the intimate experiences and practices relating to the dead and dying. Second, in broad spatial terms, most work on the social and cultural geographies of death and dying has been confined to European, North

American and urban Asian settings. Little attention has been directed by human geographers towards such research in the rural global South. Development geographers have tended to focus on demographic indicators of death, such as mortality rates and life expectancies, as ways of understanding death at the population level in the global South. The spotlight here has tended to remain on the means by which health, and access to health care services, can be improved (Potter, Binns, Elliott, & Smith, 2008) where aspects of health are regarded as both a process and an outcome of various approaches to development (Willis, 2011).

Recent critical engagements by geographers with the notion of 'global health' (Brown, 2011; Brown & Moon, 2012) offer potential opportunities to gain greater purchase on mortality in the global South. In this wider context of a more global governance of health, disease has become increasingly geopolitical (Ingram, 2009) as specific 'problems, populations, and spaces are rendered visible and amenable to intervention' (Brown, Craddock, & Ingram, 2012, p. 1183). This focus on specific global health 'problems' such as epidemics, or 'solutions' e.g. vaccinations, can obscure the broader political and economic structural dimensions of ill-health (Brown et al., 2012). Given increasing international attention in recent decades to control of infectious diseases (Ingram, 2013), of particular interest here are global public health

interventions and their part in disease governance. Herrick (2014) contrasts ongoing emphases amongst global health funders on technocratic interventions with the post-2015 development agenda's attention to social justice. She argues for an ethical need to 'chart the linkages' between funding, governance, public health interventions and local experiences.

This paper starts to fill some of the research gaps identified above and, in so doing, responds to Herrick's call by using empirical work in a specific deathscape in the global South – funerals in rural Tanzania – to explore the points of connection between an international public health intervention and the personal health and well-being experiences amongst the recipients of such interventions. By intersecting these different geographies we uncover the tensions between international imperatives to protect and 'control' the health of populations on the one hand and, on the other, the desires amongst citizens for collective social cohesion in a place and time of particular emotional meaning, the funeral. As a major public health intervention we focus on the mosquito bednet in the context of its important place in international malaria control programmes in the global South. Successful protection from malaria transmission requires consistent and sustained usage of the bednet and yet important socio-cultural events such as funerals afford particular circumstances under which bednet usage can transgress accepted socio-

cultural norms regarding 'appropriate' behaviour. Funerals in Tanzania can last for several days involving mourners in overnight stays away from their home settlement with consequent changes to 'normal' sleeping arrangements. In malaria endemic areas, where mosquito bednets normally serve as important night-time protective measures against malaria transmission, mourners' sleeping practices and associated health risk perceptions in the less 'everyday' space of the funeral therefore come to the fore.

Reduction of malaria morbidity and mortality has formed an important goal in the context of global health governance, through the Millennium Development Goals and beyond. In the development of global public health interventions against malaria the notion of disease 'control' is central, notably in relation to the disease vector, the malaria mosquito. From this, strategies to 'scale up' interventions such as insecticide-treated bednets (ITNs) and Long-Lasting Insecticidal Nets (LLINs) have been central to global policy for malaria with targets for increased spatial and population coverage, and 'sustaining control' (Roll Back Malaria, 2008). The World Health Organization considers mass bednet distribution campaigns to be 'an effective approach to creating consumer demand and a "net culture" in which the use of LLINs becomes a norm' (WHO, 2007, p. 6). For Turnbull (2000) such extension of Western laboratory science knowledge-spaces to the tropics in attempts to control

malaria necessitates a disciplining of all actors including scientists, local government officials and citizens; a disciplining which he argues is 'inappropriate in the disordered, complex world of tropical disease' (2000, p. 177). It has also been suggested that this disciplining extends to mosquitoes themselves and, given their biological adaptability, intervention strategies targeted towards controlling them are in need of continuous change (Beisel, 2010).

The complexities of daily life in the tropics, then, offer up a challenge to the consistent, sustained, nightly usage which the bednet necessitates in order for it to be most effective. Moreover, of course, bednet ownership far from equates with usage (Eisele, Keating, Littrell, Larsen, & Macintyre, 2009). Much previous research, rooted in a bio-medical perspective, has based explanations for non-usage of bednets on tangible economic and socio-demographic indicators such as wealth, age and gender with rather less attention being given to the ways in which malaria-related behaviours interplay with social practices and cultural norms (Dunn, Le Mare, & Makungu, 2011). Large scale studies across sub-Saharan Africa indicate that women of reproductive age and young children, two groups potentially most at risk of contracting malaria, are most likely to use bednets (Baume & Marin, 2007; Eisele et al., 2009). However, sleeping arrangements may be complex and uneven for different

family members and households, shifting in response to changing rural livelihood needs, farming practices, conflict over access to land and social interactions between households. Simultaneously, a range of socio-cultural practices and user perceptions may render bednet usage impractical or inappropriate. These include, *inter alia*, engaging in outdoor social activities during evening times; beliefs relating to malaria aetiology (Toé et al., 2009); and concerns regarding the impacts for personal health and well-being, including fears about the use of insecticide with which bednets are treated causing fertility problems or acting as a birth control measure (Alaii, 2003; Koenker, Loll, Rweyemamu, & Ali, 2013).

In the funeral setting, as a site and space where 'normal' sleeping arrangements are disrupted, the bednet has particular salience relating both to its material physicality and, consequently, its symbolism. A suspension of use of the bednet in this setting entails a re-negotiation of risks to individual health (from malaria transmission) and well-being (personal comfort). Thus despite bio-medical knowledge to the contrary, individual health is deliberately put 'at risk' in these spaces because of more pressing social and cultural norms. The need for individual health protection can therefore be both acknowledged and disregarded in recognition of a need to comply with 'acceptable' behaviours and practices. As a site 'apart' from the 'everyday', the funeral is explored here

in terms of its liminal nature to enable and illuminate these apparent contradictions, as mourners' 'normal' concerns about their own health and comfort are temporarily erased or suspended. The concept of liminality in the context of death and dying can be thought of both as a *state* which is experienced by those who have been bereaved, and 'the designation of a significant *place* which is associated with the deceased and is perceived as a permeable place, a borderland' (Maddrell, 2009, p. 678, our emphasis). In this framing, mourning is regarded as a transitional period, with both mourners and the deceased constituting 'a special group, situated between the world of the living and the world of the dead' (van Gennep, 1960 [1909], p. 147), 'betwixt and between' established states (Turner, 1967), and in which 'social life is suspended for all those affected by it' (van Gennep, 1960 [1909], p. 148). The funeral is explored here as a space which involves a temporary departure from routine concerns relating to individual, 'modern' notions of health (malaria) risks in favour of 'traditional', group norms. Participants often portrayed their multifaceted behaviours as, on the one hand, a consequence of traditional norms which they were brought up to follow, and, on the other, as a response to modern notions of risk – more recently acquired attitudes based on 'Western' medical advice and knowledge which they had learnt within their lifetimes. Interestingly, we found that participants articulated the tensions

they experienced through use of expressions which are most appropriately translated as 'traditional' and 'modern'. Rigg's (2012, p. 87) articulation of modernisation as a 'wish and desire to be modern', as distinct from modernisation as theory and as a development project, is pertinent here although modernity was not always a desirable end for our study participants and the *coexistence* of their 'modern' bio-medical knowledge and established socio-cultural beliefs generated some awkward contradictions for these residents. Attitudes and beliefs regarding bednet usage at funerals were not necessarily uniform or static, however, and some reflected on, but also struggled with, a potential need for change in traditional practices.

In this paper, then, we draw on empirical work to explore funerals as liminal spaces and times, through an examination of specific practices and beliefs linked to a 'modern' public health intervention. In particular we explore sleeping practices as a means of investigating the different meanings with which bednets are imbued in funeral spaces. The specific aims of the paper are therefore twofold: to explore how mourners' perceptions of risks to health and well-being are re-shaped in the liminal, 'in-between' space of the funeral in rural Tanzania; and to elicit the ways in which a global health intervention, as an aspect of modernity and 'intrusion' into the liminal space-time of the funeral, is negotiated by its recipients. We now outline the empirical data

collection in the study area and the more specific nature of sleeping arrangements at funerals.

Empirical data collection: methods and study participants

The study draws on narratives of participants living in two villages, designated here as 'Kilombero village' and 'Ulanga village', after the administrative districts in which they are respectively situated in the Kilombero valley, southern Tanzania. Data collection was carried out both as part of a larger, mixed methods research project[1], described in more detail elsewhere (Dunn et al., 2011) and during a further, follow-up fieldwork period for which there was a more specific focus on funeral practices. Both villages are inhabited by people belonging to several different tribes and religions (mostly Christian and Moslem) and relying on different livelihood sources (mostly farming, pastoralism or agro-pastoralism). Although a deeper ethnographic exploration would uncover specific and more nuanced funeral rites and rituals relating to each of these diverse groups it was not our intention to single out, for example, a specific tribal and/or religious grouping for anthropological study. Rather our aim was to address socio-cultural questions relating to sleeping arrangements and malaria risk behaviours in the context of a specific social gathering, the funeral space, which had emerged as an important, but under-

researched, area from the larger study. In this way, and in attending to the spatial and temporal contingency of funerary practices, it is important to emphasise their continually changing nature, with boundaries between practices at Christian and non-Christian African funerals being essentially artificial (Vansina, 2011). Our broader perspective also provided the potential for more 'representative' findings which offer greater relevance to public health practitioners and policy-makers. A questionnaire survey of 26 villages carried out as part of our larger study showed, for example, that 97% of households (n=18,956) reported that 'attending social gatherings or ceremonies e.g. funerals, weddings' would involve them in sleeping overnight away from their village or household. Equivalent findings for the two study villages are 96% (n=267) and 94% (n=661) for Kilombero and Ulanga villages, respectively. Given our good existing relationships with village leaders and elders this more extensive approach also allowed us, in the follow-up fieldwork, to continue to work with many of the participants who took part in the larger study rather than being seen to 'privilege' one sector of a village over another. The fieldwork for the larger study was carried out in the two villages over a two year period (January 2008 – January 2010) with two main phases of data collection followed by a third period of data collection in Kilombero village in 2011.

The analysis for this paper is based on data collected in focus group discussions and in-depth, one-to-one semi-structured interviews, all of which were conducted in Swahili and subsequently translated into English and fully transcribed. There were four focus groups in each village, organised according to gender and main livelihood with each group comprising 10 –12 participants. The Kilombero groups each met three times and the Ulanga groups twice. Twenty nine one-to-one interviews were carried out, 14 in Kilombero and 15 in Ulanga, with farmers, pastoralists and village 'officials' such as village-based health practitioners. In contrast to some other work involving data collection at funerals in Tanzania (Oberlander & Elverdan, 2000) the use of deeper ethnographic methods such as participant observation at funeral ceremonies was rejected on the grounds that this was likely to engender animosity towards the field researcher(s) through villagers' association of the researcher's presence with the death and therefore potential accusations of witchcraft. Focus groups and in-depth interviews were carried out in a range of locations including respondents' homes, village halls, local primary schools, and outdoors, for example, under a large tree, all places that were part of participants' everyday lives. The occasions were generally relaxed, involving introductions and informal social interaction as well as, at times, emotional exchanges between participants, and between the participants and the

researchers. As the focus groups met on a number of occasions there was time for a degree of trust to develop between the participants and the researchers, and this was reflected in the more difficult topics that were explored in later focus groups. About half of the interview participants were selected from members of the focus groups, and, with the exception of a few individuals who were absent from the area at the time, focus groups generally comprised the same participants on each occasion thus building on their shared experiences and knowledge which were conveyed.

The data collection process engendered complex and sometimes contradictory explorations of sensitive topics around behaviour at funerals, with participants being generally very well aware of the tensions and compromises that they made in balancing individual risk with the need to preserve social cohesion. Rather than applying a particular perspective we took a grounded theory type approach to the data analysis whereby the researchers worked together, and where theory is generated from data, both in terms of process and analysis (Glaser & Strauss, 1967). This interrelated cycle of data collection, evaluation and discussion, during and at the end of each of the three main periods of fieldwork facilitated the incorporation of our growing knowledge into an understanding of the situation that led to deeper questions in each subsequent period of data collection. Transcripts were first coded around particular issues

which were raised by participants in a 'fluid and dynamic process' (Cope, 2010, p. 448). In order to move from codes to explanation (Crang, 2005) these codes were then linked into themes and patterns of meaning, individual and communal behaviours, and explanations for these, with links made to the conceptual issues explored below. An overarching concept is that of liminality as a means of capturing the idea of a place in-between, not only in terms of the presence of both the living and the dead, but also as a site for articulating the tensions between traditional social norms and modern ideas of risks to health. We also saw the limitations of adopting any one sub-disciplinary approach to the topic – health geographies, development geographies, or social and cultural geographies – and instead worked towards an understanding that combined key concerns of each: understandings of health and health behaviours that combined with the lived experience of health and its relationship to other aspects of participants' social wellbeing, with a deeper understanding of the cultural beliefs and practices which informed their behaviour.

Ethical approval for the study was granted by both UK and Tanzanian institutional ethics committees[2]. In transcript extracts all participant names are pseudonyms and the villages are designated by the name of the administrative district in which they are situated: 'Kilombero village' and 'Ulanga village'.

Funerals and sleeping arrangements

Funerary events and post-funerary activities are of central cultural importance in Africa, involving issues related to status, succession and ancestors, extending over long periods of time and consuming significant financial resources, often to the frustration of development experts (Jindra & Noret, 2011). This tension over the primacy which is attached to funerals by communities over other activities was illustrated by the response of a non-governmental organization manager who participated in the empirical research on which the current paper is based. Whilst recognising the importance of funerals at community level he also bemoaned their impact on the work of his organisation, citing the time spent in travelling to a community to talk to people only to find that '*everyone [has gone] to the funeral... you spend half a day getting there, and half a day getting home, and you have accomplished nothing*'.

There are, of course, wide disparities in funeral practices between different parts of Africa. In Tanzania, the focus of this paper, dead bodies are disposed of by burial (although Europeans and Asians may be cremated) in privately owned graveyards, in graveyards owned by a church or mosque or, in remote areas, in sites allocated by the tribe (Matsunami, 1998). As important socio-cultural events in rural Tanzania, funerals normally extend over a period of a

few days and comprise up to three separate occasions; attendance can therefore involve a number of temporary migrations away from the home village. If the deceased is a close relative or attendance involves travelling a significant distance, attendance at the ceremony and related activities can entail being away from home for much longer, up to a month or more. Funerals are also frequent events and Marsland (2014) recounts weekly or even daily funerals in the Kyela district of south-west Tanzania. Our participants spoke of attending funerals every month or couple of months. Funeral mourners potentially involved nearly all family members: adults, older children and infants still breastfeeding. Participants spoke of how sleeping arrangements at funerals usually involved sleeping outdoors in the open air, on the ground, using only a bedsheet, *khanga* (cloth wrap), cattle skin or mat. Funeral attendance therefore necessitates a significant disruption to 'normal' sleeping arrangements[3].

In the few other studies of bednet usage at funerals in sub-Saharan Africa reasons suggested for non-usage include the practical difficulties of mounting a bednet outdoors (Alaii, 2003; Koenker et al., 2013); concerns over theft of bednets by visitors (Alaii, 2003); and the performance of night vigils/staying awake all night (Alaii, 2003; Koenker et al., 2013). Our findings indicate some commonality with the last of these rationales although much less clear support

for the other two, more strategic, motivations. Thus, although the practice of sleeping out-of-doors, directly on the ground may ostensibly be thought to preclude the use of a bednet on practical grounds, some of our participants argued instead that a net could be mounted, for example, with the aid of sticks. Most, but not all, of our participants also maintained that they had no concerns over bednets being stolen; and, where it was felt to be a concern, potential theft was not regarded as a reason to leave a bednet behind. Some participants referred to the requirements of traditional funeral practices such as singing throughout the night, and praying, as militating against bednet usage. However, and somewhat paradoxically, perhaps, the enactment of these rituals was also seen by one participant as offering a form of resilience against malaria risk; the process of being busy with, and engaged in, these specific activities providing a form of protection against being bitten by mosquitoes (Interview with midwife/nurse #1, Kilombero village). In their study in Tanzania Koenker et al. (2013) also note how some research participants felt that bednet usage at funerals would be inappropriate while other mourners remained without nets. The rationale for leaving bednets at home, then, is grounded in something other than tangible and pragmatic reasoning. In the following three sections we discuss the themes which arose from our empirical work and the different ways in which they substantiate and

advance ideas on deathscapes, global health governance, local experiences and liminality.

Suspending risks: Dirt, hygiene, pain and discomfort

Van Gennep's (1960 [1909], p. 146) suggestion that the 'duration and complexity' of transition (liminal) rites in funeral ceremonies makes them worthy of autonomy resonates with the ways in which local values were performed by our participants. The funeral as a liminal, 'in-between' place entails a temporary suspension of mourners' 'usual' concerns regarding risks to their own personal health and well-being. Mourners are expected to follow traditional practices which are specifically grounded in beliefs against the use of bednets, even though as individuals they might be aware that this will lead to an increased risk of malaria. 'Traditional' behavioural norms which emphasise their roles as members of a family and of a community were therefore foregrounded in the in-between space of the funeral while more 'modern' knowledge relating to their individual personal health protection was suspended. Thus, our participants conveyed how, for them, cultural norms dictate that bedding materials for funeral mourners are generally kept minimal. It is felt to be culturally inappropriate to sleep in a bed during periods of mourning and, by extension, to take sleeping accoutrements such as

mosquito bednets to a funeral. This also extends to mattresses and pillows – only a simple mat and/or bedsheet is felt to be appropriate. Some participants accounted for this through references to 'traditional beliefs' which are passed on through generations:

> '…in this village still we hold… they call it primitive traditions…Thinking like you can't sleep in a bed when you are in a mourning period; there is no justification but just concepts which we hold from our parents…'
> (Andwele, male farmer, Ulanga village)

Having self-centred thoughts about malaria transmission – a trait participants associated with change and modern attitudes – becomes incongruous in the space of the funeral, where priorities and attitudes relating to personal risk differ from those of everyday, 'normal' life, as explained by one pastoralist:

> 'You should forget everything when mourning… when a funeral happens you forget that you can expose yourself to a particular risk, so you cannot remember to sleep under a bednet' (Elimu, male pastoralist, Kilombero village)

A few participants altered their sense of a modern notion of risk by rationalising the probability of being bitten by a mosquito:

'[if you take a bednet to a funeral] they [other people] will say that "can this person die because [s/he] was bitten by mosquitoes on [only] one day at a funeral?" ' (Female farmer, Kilombero village)

'They [other people] would just think that I will sleep at the funeral for two days so there is no need for carrying bednets… nothing will happen' (Siti, female pastoralist, Kilombero village)

But these views are also blurred with more nuanced, wider perceptions of ill-health, with participants considering illness from malaria as a regular and inevitable aspect of their lives (Le Mare, Makungu, & Dunn, 2014). Other empirical research in the Kilombero Valley has similarly shown how, for residents, illness is 'a continuous transformation', 'something which emerges, disappears and reappears in a different form, and progresses over years' rather than being viewed as independent illness 'episodes' (Hausmann Muela, Muela Ribera, Mushi, & Turner, 2002, p. 408). In a similar vein, the idea of illness as a 'normal' part of life is considered by Smith and Easterlow (2005) who note how illness prevention and curing disease are fundamental political projects for governments so entrenched in ideas of 'a healthy productive workforce' that 'living with illness is regarded as an unwelcome, and essentially passing, blot on the epidemiological landscape. Illness is a problem to eradicate rather than a way of life to appreciate…' (p. 186). The idea of living with disease, rather

than being in conflict with it, is also reflected in more recent work at the health geography – cultural geography interface. Thus, Greenhough (2012) argues for 'living with viruses' rather than viewing them as threats to be eradicated, and advocating the beneficial effects to be had such as biological immunity. Thus, for our participants, living with malaria was the norm, and it was a foreign, modern, or urban idea to hope for life without illness.

The act of sleeping under a bednet was also connected by our participants with feelings of comfort or even pleasure and enjoyment, all of which are incongruous in the funeral space:

> '…it is a place for mourning… a sad situation not a joyful place… if you sleep under a net there it means you want to have a comfortable sleep…' (Saleem, male farmer, Ulanga village)

Notions of discomfort, even extending to physical pain, are manifested as part of the mourning process. Disturbance and discomfort were related by one villager to the importance of feeling the pain of the death, in this case through the *physical* pain of being bitten by mosquitoes, having a disturbed night's sleep and therefore sleeping without the protection which the physical, material bednet provides:

'You come to the mourning place, the place in which people are sad, why do you want to sleep in a comfortable environment? …if you use bednets it means mosquitoes cannot bite you… if they don't bite you it means you're very comfortable…you will not feel the pain of the burial… If they bite you it means you will not sleep, you will keep on thinking about the dead person' (Jabarl, male farmer, Ulanga village)

The notion of funeral mourners suffering physical pain is evident in other settings and societies, and a more extreme example is highlighted in Durkheim's discussion of self-inflicted pain during death rites of the indigenous Australian aboriginal tribe, the Warramunga (Metcalf & Huntington, 1991). They use weapons to inflict serious physical injuries on themselves and each other, including drawing blood. The funeral space, then, can be seen as a site of physical – as well as the more obvious emotional – pain. Our research suggests that the bednet, in creating a barrier to such pain, is matter out of place for mourners. Indeed, in her work in south-west Tanzania, Marsland (2006) comments that 'mosquito bites are traditionally symbolic of a woman's suffering when in mourning'. The blending of physical and emotional pain was also demonstrated through the practice of sleeping directly on the dirty ground. This was associated by one woman with the expectation that pain should be both felt and displayed as a part of mourning:

'... it is a time for mourning... so you have to tolerate pains… you have to sleep on the dust... to show that you have pains…' (Jina, female pastoralist, Kilombero village)

The practice of funeral mourners sleeping on the ground in the dust and dirt has important connotations in juxtaposing traditional and modern understandings of health and personal hygiene. In referring to Monica Wilson's work with the Nyakyusa tribe (one of the tribes in our study area) Douglas (1966) points to their 'welcoming' of dirt during mourning, as a means of keeping sane. In Kyela District, south-west Tanzania, the practice of sleeping outdoors without bednets at funerals has been made illegal for women under local bylaws which considered this tradition as 'unhygienic', leading to the spread of infectious diseases (Marsland, 2006; 2007). Marsland (2006) shows how such regulations are influenced as much, if not more, by local traditions than by public health agendas, and are means by which men use symbols of modernity to discipline women. This adds further complication to a simple, binary distinction between traditional and modern beliefs, for men and women often experience traditional and modern aspects of their lives in very different ways, and their social and cultural positions in their society dictate what aspects of modernity they can adopt.

As a sign of reverence for the deceased and sympathy for the relatives, notions of cleanliness are dispensed with, as illustrated in the following exchange:

> *Elimu: …we sleep on the ground with a bedsheet which [we] use to cover*
> *ourselves… there is no issue of cleanness/smartness there.*
> *Interviewer: Why is it like that?*
> *Robert: …if you really attend the funeral you have to forget smartness or*
> *cleanness.*
> *Elimu: If you really sympathise with people there, where and how I'm*
> *going to sleep is not an issue.*
> (Focus group, Male pastoralists, Kilombero village)

The notion of the bednet as an unwelcome physical and symbolic presence is signified in the following quotation where the bednet is perceived as a barrier against mourners' involvement in the funeral event:

> *'[If you sleep under a bednet people will feel that] you don't want to be*
> *disturbed, you want pleasure, you don't want disturbance' (Elimu, male*
> *pastoralist, Kilombero village)*

Such detachment, in which the mourner's own immediate and individual needs are prioritised, may in this way be regarded as fracturing the liminal state of mourning and diminishing a sense of connection with the deceased at an early

stage; the bednet may therefore symbolise a lack of relationship with the deceased. As a 'modern' object which offers its user protection from ill-health and potential death, the bednet may, then, hold an implicit, tacit association with the notion of life and living, and with a more contemporary, 'Western' approach to death in which, until very recently, the dead have been socially and spatially marginalised (Maddrell, 2013). These connections and relationships that the living maintain with the deceased can be thought of as constituting 'continuing bonds' (Klass, Silverman, & Nickman, 1996) and Maddrell (2013) shows how such bonds are played out by the bereaved in the longer term through 'absence-presence' whereby the physically absent deceased has continued presence. Whilst bednet usage in the Kilombero Valley has been promoted by health practitioners and professionals for many years, and bednets have become familiar objects to many residents, our findings suggest that they are still regarded by their users as 'modern', not necessarily in the temporal sense of a very recently introduced entity, but as cultural modernity. They have not been part of traditional, established funeral practices where the intention is to be true to customs that are maintained across generations. Ideas of the bednet as a symbol of modernity and of individual wealth, and the potential consequences for social unity are discussed in the following section.

Negotiating modernity: social cohesion and reverence

As a physical, owned object with associations with national and international public health programmes, the material bednet is a representation of a more 'modern' way of life, a way that is based on individual actions, concerns and prosperity. Traditional life is concerned with how one fits into the family and the group. In this social context a bednet which is a personal possession is considered an inappropriate display of wealth and a symbol of modernity:

> *'The problem is people will say that s/he [person sleeping under a bednet at a funeral] is showing off… pretending to be modern' (Female farmer, Kilombero village)*

Our findings also show how, from the perspective of rural citizens, those living in urban areas tended to be regarded as moving away from traditional norms of behaviour, and that perhaps this was 'acceptable'. Here, then, ideas relating to traditional norms and changes due to ideas of modernity are not stable but are experienced in different places in different ways. Thus, the following extract suggests how use of bednets in a more urbanised setting transcends the boundary of the more traditional, rural funeral space:

'One day I went to [large town] and there was a burial and we slept under nets… that's [large town]…' (Andwele, male farmer, Ulanga village)

Some participants associated the broader idea of wealth to specific personal emotions, particularly pride, boasting and happiness, which themselves are out of place at a funeral. Wealth and happiness were particularly inter-related in this way:

'…[the] perception people hold on sleeping with [a] bednet at a funeral is like a luxury thing… that is you are happy while others are crying' (Midwife/nurse #2, Kilombero village)

'It is like you are happy, you want to show that you're well-off…' (Elimu, male pastoralist, Kilombero village)

As 'foreign', 'out-of-place' material possessions, sleeping accoutrements which indicate a mourner's degree of wealth (the bednet, and other excessive items of bedding) may therefore signify a lack of sympathy and reverence for the death in the sacred, liminal time-space of the funeral.

But these concerns about the trappings of wealth, and the sentiments that they convey, impinging on the more traditional rural funeral may also conceal a more tacit fear regarding a potential threat to social cohesion. In this way even the *idea* of including a bednet in one's belongings as preparations are made to attend the funeral was signalled by some as unacceptable, as shown in the following reaction to the interviewer's suggestion that a bednet could be carried merely with the intention of using it once the burial ceremony had ended:

> *Interviewer: If you know that you are going to stay on after the funeral then why don't you go with your net, then after the burial you can use it?*
>
> *Elimu: Heeey that's impossible! How could you start preparing yourself taking bednets and other things! Intentionally making all those arrangements after receiving information about the death! Amazing.*
>
> *Group: [laughs]*
>
> *Interviewer: So the problem is... it is like when you get that information you didn't care much and intentionally you made those arrangements?*
>
> *Darweshi: That you were not shocked! As if you didn't really care; it didn't pain you when you received that information.*
>
> *(Focus group, male pastoralists, Kilombero village)*

This association in the participants' minds between taking a bednet to a funeral and a lack of concern over the death may signal a broader worry about maintenance of social unity, as indicated by Robben (2004) in his reflections on Durkheim's work on mourning as a collective obligation:

> *'Indifference to a death expresses a lack of moral and cultural unity, and an absence of social cohesion and solidarity' (Robben, 2004, p. 8)*

Concerns about social unity were also evident in participants' narratives where the potential for stigma was raised. Participants thus spoke of how using a bednet and bedding materials at a funeral would be regarded as something 'shameful' and how it would result in disapproval by others:

> *'…people will gossip! … People will say that this person is so proud, she can't sleep without a net here…' (Hasina, female farmer, Ulanga village)*
>
> *Interviewer: What is the main reason [for not taking mattresses and pillows]?*
> *Kweli (male pastoralist, Kilombero village): Shame of course, carrying a mattress while you are going to a funeral. I am sixty years old but I have never seen [this]!*

Some participants suggested that violation of traditional norms and beliefs should result in some form of punishment, such as paying a fine of some kind.

In this way, an action from 'normal' life – payment of a fine for an 'offence' – permeates the autonomy of the funeral in order to enforce social unity. Such sanctions signal how important it is to use funerals as a source of communal support and cohesion, specifically punishing what is seen as harmful, individualistic, modern behaviour. One participant recounted a specific outcome following an instance in which carrying bednets created offence:

> *'As I can remember during the funeral of [name] his grandchildren from [village name] came with his bednets and hung them on a tree; people were discussing much against them... [saying] "do they think that we [those not using bednets] don't have bednets in our home so they perceive us as fools? Do they think that the deceased was also a fool?" So they [those not using bednets] took their bednets and destroyed them.' (Mosi, male farmer, Kilombero village)*

For others there were longer term implications which extended to retaliation in terms of refusing to attend the funeral of the 'offender' on their own death:

> *Kitwana: When it comes to you they may not attend your funeral if you do that [sleep under a bednet]… Of course you can be isolated in other issues also.*
>
> *Robert: Definitely you will not be accepted within society.*

Kitwana: They would say that there is no need to inform that person to come here [to the funeral]… For that thing you would be perceived differently, as you isolating yourself from society.

(Focus group, male pastoralists, Kilombero village)

For a number of participants direct associations with witchcraft came to the fore in conversations about how such individuals would be regarded:

'I did not use mosquito nets there… they can suspect you of witchcraft activities…. (Omari, male school-teacher, Ulanga village)

'…it is difficult for one person to sleep under a bednet while others are sleeping without a bednet… a person who sleeps under a bednet will be perceived as a witch' (Janna, female farmer, Kilombero village)

'You know in situations where people suspect that you are a witch they treat you differently and where they have a perception that you are arrogant, proud due to bednet usage at a funeral then someone who had a long-term grievance against you takes that for granted to harm you and other people will be against you… because [if] anything bad happens to you after using a bednet people will say it is because s/he used a bednet at the funeral…' (Mosi, male farmer, Kilombero village)

In her work with Pogoro Catholics in Ulanga district, Green (1996; 2003) comments on how the practice of communal eating at funerals constitutes 'co-operating' or 'working together' in the burial. In drawing on the connection between witchcraft and sociality she notes how the inability to participate in such a practice represents the hallmark anti-social quality of a witch. Breaking of traditional socio-cultural norms by using a bednet at a funeral might similarly be regarded as a catalyst for rupturing a more general sense of commonality amongst mourners and, ultimately, endangering a sense of *communitas* in the funeral space. Communitas as part of the concept of liminality is a social modality in which bonds are anti-structural, and the hierarchies and social distinctions of everyday life are erased (Turner, 1974). Although our findings resonate with Turner's concept of communitas they suggest an indirect sense of this notion in that there was an implicit desire for mourners to conform to traditional beliefs and practices. Thus the practice of not using a bednet served as a reminder that, regardless of status, mourners comprised one community, hence cementing social cohesion. In turn, those who dissented from this non-usage would be ostracised by others. In not showing sympathy, those carrying a bednet would be regarded as unwilling to make a personal sacrifice, thus engendering a wider tacit concern that social unity would be jeopardised. Other work has suggested more explicitly

contradictory dimensions to deathscapes in terms of social unity. Thus for

Walter (1999, p. 123) in the context of death as a 'fateful moment for social

cohesion,' an unambiguous sense of unity and consensus might instead be re-

imagined as a wider set of possible responses which, depending on individual

circumstances, might include both the breaking and fostering of relationships;

isolation as well as community. Similarly, Vansina (2011, p. ix) highlights the

contradictory nature of funerals: 'funerals often trigger a crisis among the

surviving kin and neighbours... yet the rituals also tend to knit these groups

closer together and to increase their solidarity'. This sense of contradiction was

evident in our research when traditional values relating to behaviour at

funerals and modern knowledge about health risks coalesced. In the following

section we discuss some of the tensions which arose as a result of such

juxtapositions, and the ways in which ideas about change in traditional

practices are negotiated.

Mediating behavioural change

In making sense of modern health interventions some participants recognised

a potential need for change in the context of bednet usage at funerals. But the

contradictory nature of such an acknowledgement was expressed through

conflicting feelings about what the implications would be and who would take responsibility, or have sufficient status, for implementing such a change. The struggles which participants sometimes experienced were apparent in disagreements and inconsistencies in some narratives. We now use some of these conversations to illustrate how traditional and modern knowledge was negotiated 'in the moment'. In one focus group the notion of not taking a bednet to a funeral was referred to as a dated idea which belonged to former times, but simultaneously the practice of taking a bednet was criticised as unacceptable:

Hamisi: People carry their bednets at a funeral.

Mosi: If a funeral happens I will take my bednet

Interviewer: But you have said that people can destroy your bednet; how can you carry a bednet with you?

Buyu: That happened a long time ago

Hamisi: That happened in the past

Radhi: In past years of course

Interviewer: I heard that this week there were four funerals which happened in this village; did people carry their bednets to the funeral?

Hamisi: Eeeh (accepting)

Group: (silence)

Interviewer: People from here in [Kilombero village]?

Group: oh (accepting) yes

Interviewer: How were they treated by other people?

Mosi: They only laugh at them

.

.

Interviewer: Are they many or few, those who come with their bednets?

Group: Very few

Mbwana: They are still very few…. I slept at the funeral of [name] but I didn't see anyone with a bednet at that funeral

(Focus group, male farmers, Kilombero village)

For Mosi, who initially states in the above extract that he would take his bednet to a funeral, a sense of conflict was apparent as he subsequently referred to this as something which would provoke laughter and criticism from others. In this way there appears to be a recognition that, through a blurring of traditional and modern values, change is in progress and this brings with it a sense of unease. This contradiction of, on the one hand, villagers' bio-medical knowledge about how to protect themselves from malaria and, on the other, embedded socio-cultural beliefs about conventional behaviours at funerals and fear of being ostracised was summarised by one man:

> *'The issue of malaria is well understood by people but still people think that it is not proper to carry a bednet at a funeral so that is why they don't carry them.' (Radhi, male farmer, Kilombero village)*

Such contradictions were also apparent at a professional level. Thus for one health practitioner the importance of traditional norms and values surpassed any of his own bio-medical knowledge about the usefulness of sleeping under a bednet at a funeral:

> *Clinical Officer #1, Kilombero village: Myself I don't sleep under bednets during funerals; it is our tradition you know it is difficult to sleep under bednets while others are sleeping without a bednet…[laughing]… I think we [medics] should start telling people about that risk… I will also take my net there to show an example to people; I think they will understand because I'm the clinical officer.*
>
> *Interviewer: …so had you ever thought about doing that before?*
>
> *Clinical Officer: [laughing] No never… it never comes into my head.*

As the clinical officer reflects on his role and status there is an evident tension in his separation of his position as a medical practitioner in his professional life and his role as a funeral mourner intent on retaining social cohesion with others. 'Western' scientific knowledge which otherwise helps to shape

everyday medical practice, understanding and risk communication is therefore temporarily compartmentalised in favour of the more dominant expectations relating to the liminal, 'in-between' status of the funeral and mourning. In this way, as the 'traditional' and 'modern' are explicitly juxtaposed there is also a sense of underlying uncertainty about taking individual responsibility for initiating behavioural change and challenging established practices.

The idea of health related behaviours as dynamic and shifting in response to public health interventions was also expressed by some participants who spoke of such behaviours as 'changing with time'. In discussions about how this behavioural change should be mediated some participants expressed a desire for change but felt that the initiative should come through health campaigns from 'professionals' in a position of authority, either at government level or from scientific 'experts':

> *Radhi: I think that there should be awareness in the community that it is necessary to use bednets at funerals so that if a person carries his/her bednet to a funeral [he/she] will not be perceived wrongly; rather it should be noted that he/she is fighting against malaria (pause). The community also should easily understand that because we are normally malaria victims.*

Interviewer: What if the government announce that bednets should be used at funerals? Will people change their attitude on sleeping under bednets at funerals?... Is it easy for people to ignore their perceptions and adopt that of the government?

Two participants: Definitely people will carry their bednets.

Mosi: They can't ignore the government's order; those perceptions will be seized.

(Focus group, male farmers, Kilombero village)

'You know if you take a net to a funeral after community education you will have a reason that "[name of international bio-medical research station sited in the study area] people told us about sleeping with nets at funerals"' (Laketia, female farmer, Ulanga village).

In this way participants seemed to seek 'permission' from 'experts' as a means of legitimising a change in their 'traditional' practices. This allows them to still value their traditional social norms, while at the same time shifting the responsibility for change, and any consequences, onto an external party. A number of participants drew on specific examples of previous behavioural

changes which had been successfully brought about in this way in response to

public health campaigns:

> Robert: It is possible to change; we had various cultures around funerals,
> and the government through sensitization and punishment achieved
> elimination of them, for example carrying the dead body with 'machela[4]'
> ...it was prohibited and it didn't take a long time [for it] to be abolished.
> Interviewer: So what is your perception now?
> Mhina: It is difficult for us to start this move, but if it is initiated by
> certain professionals by educating people slowly it can be understood
> properly...
> (Focus group, male pastoralists, Kilombero village)

> 'I remember the issue of AIDS which was emphasised in church or
> mosque after service or even at the grave after a burial ceremony and in
> any other gatherings, people were sensitized on the issue of protection
> from AIDS; this means even this issue of bednets needs to be campaigned
> just like that; as a result it will be regarded as the normal thing.'
> (Ngonepe, primary school teacher, focus group, male farmers, Kilombero
> village)

Kweli: ...if the government can intervene when there is a cholera outbreak by imposing laws and punishment, they can do the same with the bednet... that people must sleep under a bednet during funerals no matter what!

Darweshi: No-one will ignore that! People will sleep under a bednet.

Machupa: No-one will complain.

Kitwana: Mmmh (accepting) and no-one will be blamed by other people if he/she sleeps under a bednet.

Kweli: He/she can't be regarded as immoral; it will be accepted that he/she is complying with the government's orders.

(Focus group, male pastoralists, Kilombero village)

The prospect of initiating change at the level of the village, however, was generally regarded as more problematic. In one focus group a participant proposed the use of village posters and meetings as part of an awareness campaign but in another group, in which the village Chairman was a participant, there was less certainty about agency at village level in this respect:

Hamisi: I think there should be a campaign in the community from outside the village. It is true that the [village] Chairman will be attacked

by people [if he suggests using bednets at funerals] as they won't

understand him...

Radhi: Awareness should be raised through community meetings; this is

possible if the Chairman will do so…

Mosi (Village Chairman): These people want villagers to kill me (joking)...

(Focus group, male farmers, Kilombero village)

In this way it appears that by referring to the village and village leaders, individuals are trying to negotiate acceptable behaviour. If their leaders and village groups can agree to the use of bednets at funerals, this gives authority to the individual for them to protect their health at the same time as new communal norms are realised. There may therefore be potential for health promotion to be more fruitful at village level than attempts to change individual behaviour.

Conclusion

This paper has uncovered the contradictions which emerge following actual or anticipated usage of a modern, global health intervention in a 'traditional' and sacred time-space in a global South setting, the funeral. In so doing, we have shown some of the ways in which socio-cultural practices and health-related

behaviours in a particular deathscape can be simultaneously 'risky' and 'unhealthy' for individuals on the one hand and, on the other, reinforcing in terms of group social cohesion. As perceptions of risk to individual health are recast in the liminal, less 'everyday' space of the funeral, mourners' concerns about their own well-being and comfort are temporarily suspended. As extended events of key cultural significance, and incurring temporary migrations, funerals in rural Tanzania afford not only a spatial and temporal disruption to 'normal' sleeping arrangements but also sites at which bedding materials are incongruous. As both a sleeping accoutrement with associations of 'comfort' and a trapping of modernity the mosquito bednet is out of place in such a milieu. As a 'modern' personal possession with connotations of wealth and pride the bednet's presence therefore has the potential to challenge traditional approaches to mourning and even to undermine social harmony. The juxtaposition of a specific object, a physical bio-medical intervention, and the space of the rural funeral therefore serves to uncover how global health strategies sidestep local meanings and practices in particular places. Indeed, the messiness and local nature of malaria is set aside by such strategies as 'we continue to try for monocultural, global solutions' (Turnbull, 2000, p. 14).

We argue that funeral rituals and spaces, and the mourning process in the communities studied here can be understood through a framing of liminality

which entails a complex negotiation of risk behaviours. In the context of a divergence from 'normality', the funeral engenders particular emotions which can be experienced and actively demonstrated in inter-related ways by mourners being unclean and by undergoing pain. We demonstrate how the bednet is loaded with inter-connected meanings relating to cleanliness and comfort which present awkward juxtapositions for mourners both in terms of sleeping practices which entail being in physical contact with the ground and through the notion of feeling the pain of the death. Individualistic feelings are therefore marginalised and funerals are seen as sites not only of emotional pain but also of physical discomfort, which should be experienced by the mourners.

There is also a sense of ambiguity and contradiction in the ways in which bio-medical knowledge about health risks merges with deeply held traditional views about acceptable health-related practices at funerals. For a population which has been the subject of public health programmes for many years, bio-medical information on malaria which is communicated to residents in this region bleeds into and co-exists with pre-existing indigenous knowledge through a form of 'medical syncretism' (Hausmann Muela et al., 2002). In the funeral space the presence of a bednet, either real or suggested, on one level raises tensions relating to its material and symbolic meanings which suggest a

lack of respect for the deceased. At the same time, however, the shifting

nature of participants' views and attitudes was revealed through their

recognition of a need for change in risky health behaviours. And yet such

acknowledgement itself was unsettling for participants. Perhaps paradoxically,

participants felt that the impetus for change in such practices should originate

from official public health campaigns.

Set alongside this is a global bio-politics which seeks to 'control' disease

transmission, in this case malaria, through increasingly wide spatial diffusion of

a technological intervention and through disciplining of all relevant actors,

both human and non-human. Behaviour which diverges from this agenda

counters public health ideas of order and regulation which are implicit in the

intervention's design. Such 'digressions' are seen here in the context of a

health intervention which has symbolic associations with pride, arrogance and

comfort, and hence indifference to the death. Our research therefore suggests

how, for the villagers in the study area, the socio-cultural and health-related

dimensions of global health interventions are tightly intertwined. This supports

calls for more extensive analyses of the inter-connections between health-

related behaviours, rural livelihoods and public health advice in the global

South particularly in terms of how public health messages interact with

collectively supported beliefs and practices (Le Mare et al., 2014). In the

funeral space at least, behaviour which might be interpreted from a public health perspective solely as health-related is, for those recipients of health interventions, understood through a much broader lens related to their social and cultural lifeworlds. Aspects of modernity and 'healthy' behaviours are therefore negotiated and resisted in favour of culturally sensitive behaviours, and maintenance of social cohesion takes precedence over individual desires for personal health protection and ameliorated risk. Where, as in rural Tanzania, these culturally embedded behaviours are associated with the system and practices of witchcraft, attention can be drawn away from more politically based causes of ill-health and poverty (Green, 2005).

In this paper we have attempted to demonstrate the value of adopting an integrated approach to understanding health related behaviours and practices in the context of the geographies of death and dying. We suggest that there are mutually beneficial opportunities for further intra-disciplinary engagement between social, cultural, health and development geographers in terms of aspects of death and dying considered here. Thus, emerging work in health geography, as referred to in the introduction, which calls for a re-thinking of the meaning of 'global health' (Brown et al., 2012) offers important opportunities to further explore the multi-scalar and bio-political nature of public health intervention strategies and technologies which are aimed at

reducing morbidity and mortality in the global South and elsewhere. Research which links scale, place, space and behaviour in a more 'relational' way (Cummins, Curtis, Diez-Roux, & Macintyre, 2007), for example, would be of value in this respect, for instance by uncovering the specific processes which shape the different attitudes at funerals in rural and urban settings. Finally, opportunities for further research exist in terms of a deeper ethnographic exploration of malaria risk behaviours and socio-cultural practices at funerals. Thus, whilst there was broad consensus across our participants in terms of beliefs which intersect with mourners' sleeping practices and the mosquito bednet, deeper empirical work on specific tribal and religious funerary practices, rites and rituals would enrich these findings in the context of discourses of modernity and risks to health. Fostering links between development geographies which are grounded in understanding the 'everyday' and lived experiences of people (Rigg, 2007), socio-cultural geographies which attend to issues of representation, power and different forms of knowledge (Duncan & Ley, 2005; Hall, 1997) and medical anthropology would facilitate such an analysis.

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Notes

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[2] Durham University, Ifakara Health Institute, and the National Institute for Medical Research, Tanzania.

[3] Although our focus is on practices in rural villages, ongoing work by one of us indicates that views of bednet usage at funerals as inappropriate also extend to the city of Dar es Salaam.

[4] A type of stretcher made from material from trees and on which dead bodies were carried home by villagers following a death in hospital. The body was covered by a bed sheet and tied onto the stretcher with ropes. This ancient practice has now been made illegal and punishable by a fine.

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