Building social currency with foreskin cuts: a coping mechanism of Papua New Guinea health workers and the implications for new programmes

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Background

Recent research as part of a multi-disciplinary investigation on the acceptability and impact of male circumcision for HIV prevention in Papua New Guinea (PNG) has shown that health workers (HWs) undertake unauthorized forms of penile cutting practices in public health facilities or in community settings, at times within a traditional context. Participation in these activities shares common features with coping mechanisms, strategies used by HWs to alleviate the burden of unsatisfactory living and working conditions. Coping mechanisms, however, are typically described as motivated by economic advantage, but in PNG evidence exists that the behaviours of HWs are also influenced by opportunities for social capital.

Methods

Twenty-five in-depth interviews (IDIs) were completed with a variety of HWs from 2009 until 2011 and were triangulated with findings from 45 focus group discussions and 82 IDIs completed with community members as part of a wider qualitative study. Thematic analysis examined HW participation in unauthorized penile cutting services.

Results

The emergence of unauthorized practices as a coping mechanism in PNG is compelled by mutual obligations and social capital arising from community recognition and satisfaction of moral, professional and cultural obligations. Using the example of unauthorized penile cutting practices amongst HWs in PNG, the research shows that although economic gains are not explicitly derived, evidence exists that they meet other community and socio cultural responsibilities forming a social currency within local traditional economies.

Conclusions

Coping mechanisms create an opportunity to extend the boundaries of a health system at the discretion of the HW. Fragile health systems create opportunities for coping mechanisms to become institutionalized, pre-empting appropriate policy development or regulation in the introduction of new programmes. In order to ensure the success of new programmes, the existence of such practices and their potential implications must be addressed within programme design, and in implementation and regulation.
KEY MESSAGES

- Coping mechanisms have been typically described as motivated by economic advantages; however, in Papua New Guinea evidence exists that the behaviours of public servants are influenced by capital derived from relationships or satisfaction of religious, cultural or moral obligations.
- Fragile health systems create opportunities for unauthorized practices to become institutionalized, pre-empting appropriate policy development or regulation even before new programmes are introduced.
- The success of health programmes underpinned by informal systems will not be achieved merely through bureaucratic regulation but with strategies that encompass and recognize differences within organizational cultures and communities.

Introduction

Coping mechanisms are strategies used by health workers (HWs) to alleviate the burden of unsatisfactory living and working conditions such as poor supervision, inadequate or intermittent remuneration, or working in hostile environments, in low- and middle-income countries (McPake et al. 2000; Schwalbach et al. 2000; Macq et al. 2001; van Lerberghe et al. 2002; Ferrinho et al. 2004a). Along with health system failures, coping mechanisms are shaped by social, political and institutional environments in which HWs operate and are as important in shaping how health services function and are perceived as are planned health reforms and management (Roenen et al. 1997; Schwalbach et al. 2000; Macq et al. 2001; van Lerberghe et al. 2002). Coping mechanisms include unauthorized practices or activities that fall outside standard treating practices that can impact on service delivery and may include illegal and non-illegal activities. This article will examine Papua New Guinean (PNG) HWs engagement in unauthorized penile cutting activities.

Coping mechanisms and their relationship with health systems

Coping mechanisms arise due to extreme discrepancies between social, economic and professional expectations of HWs and real-life situations (Table 1) (Schwalbach et al. 2000; van Lerberghe et al. 2002; García-Prado and González 2007). There are a number of different types of coping mechanisms which are described in the literature. These include HWs receiving informal payments or under-the-counter payments for otherwise free services (Delcheva et al. 1997; Giedion et al. 2001; Falkingham 2004; Lindelow and Serneels 2006; Tediosi 2008; Liu and Sun 2012); misappropriating drugs or other supplies (Israr, et al. 2000; Ferrinho et al. 2004a; Lindelow and Serneels 2006); moonlighting in other roles or dual practice (Ferrinho et al. 2004a; Jan et al. 2005; González and Macho-Stadler 2013), preferential treatment including accelerated access to health services for friends, family or those who are able to afford bribes or under-the-counter payments (Roenen et al. 1997); and other unexplained absenteeism (Chaudhury et al. 2005; Manzi et al. 2012). There has also been a move to acknowledge other potential coping strategies for HWs, such as receiving in-kind or in-gratitude payments like access to accommodation or food for services they perform (Roenen et al. 1997; Chereches et al. 2013); using time or resources—such as health service vehicles—from government projects for personal use (McPake et al. 1999; Macq et al. 2001; Ferrinho et al. 2004b); and exploitation of allowances and per diems designed to enable supervision or attendance at courses (McCoy et al. 2008; Smith 2003; Vian et al. 2011).

Engagement in coping mechanisms has consequences for the equity and efficiency of health systems and quality of health care (García-Prado and González 2007; Jumpa et al. 2007; Kiwanuka et al. 2011). Health system impacts include competition for time (due to HWs being less available at public facilities, thereby compromising service delivery), conflict of interest (for example when HWs lower the quality of services they provide in the public sector in order to drive patients to the private sector) and brain drain (or inequitable distribution of HWs between public and private, rural and urban, primary and tertiary and poor and rich settings) (Macq et al. 2001; van Lerberghe et al. 2002; Ferrinho et al. 2004b; Kiwanuka et al. 2011; Ashmore 2013). Misuse by HWs of their privileged access to resources such as pharmaceuticals contributes to financial losses in the health-care system, as well as the growing sense of mistrust and disrespect for HWs and their institutions (Ferrinho et al. 2004a). Informal payments or under-the-counter payments provide a financial barrier to those who can’t afford to pay, and as a result again jeopardize the necessary trust between user and provider and public expectations of health service delivery (van Lerberghe et al. 2002; Dabalen and Wane 2008). Inappropriate or unnecessary attendance at training sessions, primarily to obtain the per diem allowances creates inefficiencies in health systems, including reduced HW availability (van Lerberghe et al. 2002; Conteh and Kingori 2010; Vian et al. 2011).

Although, coping mechanisms may be considered a part of corrupt practices of government employees, or labelled as the result of poor motivation or inefficient practice, there is evidence that coping mechanisms are not necessarily due to predatory behaviour but a strategy to deal with difficult situations that can have positive impacts as well...
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Unauthorized penile cutting in PNG

Penile cutting practices have become of significant interest since large-scale clinical trials in Africa showed that male circumcision (MC) has a protective efficacy of around 60% in preventing HIV acquisition in heterosexual men (Auvert et al. 2005; Bailey et al. 2007; Gray et al. 2007; WHO/UNAIDS 2007; Siegfried et al. 2009). In some communities where MC for HIV prevention is being considered, evidence exists of a considerable variety of already established penile cutting practices within communities that have not been shown to be protective against HIV (Brown et al. 2001; Vincent 2008; Hill et al. 2012). That is, these penile cutting practices often do not involve full circumferential cut and removal of the foreskin but rather incisions that do not alter the size of the foreskin or minimize the exposure of langerhans cells that have been described as vulnerable to the HIV virus (McCoomb and Short 2006; Pask et al. 2008; Kigozi et al. 2009; Doyle et al. 2010). PNG is one such context where a recent study categorizing the various types of penile cutting demonstrated that these cuts do not conform with the guidelines for medical circumcision (Hill et al. 2012).

Penile cutting in PNG has a complex history embedded in religion and traditional ritual and more recently has included contemporary practices that are the outcome of peer influence and the evolving sociocultural environment (Williamson 1990; Kempf 2002; MacLaren et al. 2011a; Hill et al. 2012; Kelly et al. 2012a; Kelly et al. 2012b). HWs in PNG have been observed to be engaging in these penile cutting practices justifying their actions on both medical and non-medical grounds, utilizing health system resources without the formal approval of the Department of Health (MacLaren et al. 2011b; Tynan et al. 2011; Hill et al. 2012). In a recent study, almost a quarter of the 33 frontline HWs interviewed reported regularly engaging in penile cutting services that operated outside the current regulations of the PNG health system, and a number of other HWs reported that they were aware of colleagues being involved in unauthorized penile cutting practices (Tynan et al. 2011). Services included: providing instructions on how to perform a foreskin cut for non-health-related purposes; supplying equipment such as spatula, scalpel, plaster, bandage and gauze from the health facility to men to perform penile cutting at home; or providing penile cutting services to their communities for contemporary or traditional reasons (Tynan et al. 2011). These findings are supported by another study of 483 PNG men with a penile foreskin cut for non-health-related reasons, who reported that HWs were the second most likely persons to have performed the procedure (MacLaren et al. 2011b).

Community obligations and other sociocultural responsibilities play an important role in the fabric of many PNG communities and potentially interface with the health system (de Renzi 2000; van Amstela and van der Geest 2004; Tivinarlik and Wanat 2006; Bainton 2008; Reilly and Phillpot 2008). Strong links to community responsibilities have been shown to outweigh other organizational ties in PNG, resulting in some HWs performing duties outside their role description (Razee et al. 2012; Tynan et al. 2013). Further to this, the wantok system in PNG—loosely defined as a set of obligations between individuals of similar geographic origin, kinship, language group and/or social or religious associations—has particular application for engaging in certain practices (de Renzi 2000; Tivinarlik and Wanat 2006; Bainton 2008; Reilly and Phillpot 2008). In the public service, this clan-based allegiance has been shown to commonly override the responsibilities of organizational processes, inadvertently leading to conflict of interest and nepotism within education, business and health service networks in PNG (de Renzi 2000). The wantok system thus serves as a form of social economy, where social capital or resources derived from specific social structures can be accumulated by actors (including HWs) within the community, and then used to pursue their own interests (Baker 1990).

Methods

Study design

This research is part of a multi-disciplinary investigation on the acceptability and impact of male circumcision for HIV prevention in PNG, and used qualitative methods to explore HW participation in unauthorized penile cutting practices in PNG. Unauthorized practices were defined as those activities that were not considered a part of a HW’s expected role within the health system or did not conform to standard treating practice, however involved the use of HW’s medical skills, health system
supplies or impacted on delivery of other services. The qualitative research methods included in-depth interviews (IDIs) with 25 frontline HWs involved in sexual and reproductive health, and data triangulation with findings from an additional 45 focus group discussions (FGDs) and 82 IDIs completed with community members as part of a wider qualitative study on community perceptions about masculinity and penile foreskin cutting and penile modifications in PNG. The fieldwork was completed in five diverse social and geographical locations around PNG including Central Province (CP); Eastern Highlands Province (EHP); East Sepik Province (ESP); Madang Province (MP); and West New Britain Province (WNB) from 2009 until 2011 (Figure 1). Approval for the research was obtained from research ethics committees at both the PNG Institute of Medical Research (PNGIMR) and the University of Queensland.

Sampling and data collection for fieldwork
An iterative, purposive sampling technique was used to identify potential study participants following initial interviews with key national and local stakeholders at each study location. IDIs and FGDs were completed with a variety of HWs, from various government and non-government health facilities around PNG; men who had undergone penile cutting, inserts or associated practices; and other community leaders who had unique insights and lived experiences in the study area. Interview guides were developed following extensive literature review and discussions among the research team and followed a number of themes including types of services provided and knowledge of penile foreskin cutting in PNG. Interviews were completed by the in-country research team from the PNGIMR and a researcher from the University of Queensland. Interviews were conducted in either English or PNG pidgin (the most widely spoken of PNG’s three national languages) as per the participant’s preference, digitally recorded, transcribed verbatim and translated into English.

Data analysis
The framework analysis method, appropriate for the analysis of qualitative data for policy-oriented studies, was used to analyse the data (Braun and Clarke 2006). All IDIs and FGDs were initially double coded by the in-country research team at the PNGIMR. In cases of discrepancy in coding a third researcher coded the selected text in question. Preliminary analysis of the HW interviews showed the differing roles that HWs played in penile cutting in PNG. Themes were further updated as the analysis developed and organized around identification of whether respondents discussed unauthorized penile cutting practices or services that operated outside the rules and regulations of the health system, and reasons for their participation. These themes were further triangulated with IDIs and FGDs completed with community members to assist in exploring the interconnections of the sociocultural context in which the HW was participating. Final codes were developed by the first author and adjusted as required following review from fellow authors.
Results and Discussion

Analysis of the data revealed a number of additional motivators and obligations other than direct financial gain that prompted the provision of unauthorized penile cutting. These included a change in social standing, meeting of cultural obligations, roles within traditional economies and participating in traditional roles as a dual practice. In the sociocultural context of PNG, these unauthorized practices seem to arise from the need to cope with the pressures of community expectations within a failing health system, and are not entirely about alleviating the burden of unsatisfactory living and working conditions. The relationships gained or maintained by the HWs through participating in unauthorized practices influence the social standing of the HWs which is further amplified by perceptions from the community that HWs are technically safer practitioners. Their response to the social and cultural pressures on them to engage in penile cutting does generate a ‘currency’ that provides a form of social investment and exchange for the HW within their local sociocultural environment (Table 1).

How performance of foreskin cuts boosts HWs social currency in PNG

The HW as a cultural ‘broker’: facilitating access to services

The role HWs played with connecting the community to the health system was varied. According to the respondents, it was quite common that knowing someone working within the health service provided ease of access to health staff and facilities for assistance with penile cutting:

What they normally do is—they come and see somebody that they know in the hospital and then that fellow will come around and inform us that these guys are coming for, or they want to do, circumcision. [Medical Officer WNB]

HWs suggested that the reasons the community members approached them was because they were embarrassed or concerned about the anticipated attitudes of other HWs. However, indirect access to the health service also had the potential to reduce the costs associated with transport and time off work, or even the reported waiting times, if they went through the usual, formal channels. One HW reported that he had been waiting for over 6 months to get his son circumcised at the provincial hospital. Therefore, accelerated access to health services via complex kinship networks or wantoks, often free of formal charges, has a significant worth.

The HW as ‘big man’: social recognition and prestige

The social recognition obtained in being able to assist community members with penile cutting forms a source of significant social capital for the HW in PNG, where men can achieve status, fame and authority as ‘big men’ (a title of status or leader) through their actions (Bainton 2008). Access to unique skills, even where this did not result in higher wages, provided an opportunity to augment existing status within the community. HWs advised that, based on their observation of what was happening in their community, they were aware that their skills in penile foreskin cutting could be used to build their reputation. Their technical skills could be further developed with experience and would then respond to a range of differing requests from the community.

Sometimes I do full removal. Get rid of the skin and later when there is only half of the skin, I use to sew it, suture. So there are two types I do for circumcision. One is ‘open cut’ (dorsal slit cut only), especially in their community where it is their custom, and the other is the ‘round cut’ (full circumcision). Because of my health worker training I am able to apply the skills I know and perform what they (the community) want. [Community Health Worker WNB]

Possession of exclusive knowledge or recognition through skills or position in a community has important implications for many communities of PNG (de Renzio 2000; Bainton 2008). The status of the ‘big man’ in PNG is not gained through acquisition of leadership roles in the community, but rather the outcome of a series of acts which elevate the person above others as an acknowledged standing in interpersonal relations (Sahlins 1963; de Renzio 2000). Individual status may be distinguished according to professional standing, income and the subsequent capacity for conspicuous consumption resulting in the power of influence in the community (Bainton 2008). For the HW, providing a special service for a community member may assist in elevating their own community position. Likewise, a HW providing a special service for a ‘big man’ in the community also involved an exchange of recognition.

…the big man, for example, radio announcer or bank managers, they come. These big men when they come they say ‘you touched my body (penis) so here is 50 kina for you have some drinks (beer).’ Only those big men help us (give us money). Not small boys, not other men no, only big man like bank managers, radio managers. They say ‘when you are finish you go and get a 6 pack and wash your hands.’ [Community Health Worker ESP]

The opportunity to elevate social standing was also evident in communities which engaged in traditional penile cutting activities. In these communities there seemed to be a particular impetus for HWs to perform penile cutting, either due to community expectation or the role the HW perceived they played in the community. In essence, HWs in traditional cutting communities were able to participate in distinct dual practices in their community, one as a HW and the other as a recognized traditional penile cutting practitioner. Dual practice in the health sector has previously been described as HWs working concurrently in the public and private sector to mitigate low salaries and other unsatisfactory conditions (Ferrinho et al. 2004b). In PNG, dual practice may take the form of engaging in work that is part of traditional culture, with the use of public system resources and may be seen as a potential opportunity to elevate social standing or be a part of facilitating customary practices in the community.

The HW as a player: benefits from local economies

HWs reported that the penile foreskin cutting services they provide were typically on a voluntary basis, for non-identified medical reasons and conducted outside of usual work hours, for
no arranged payment. However, distinction was made between payment to the hospital or a wage to the HW and payment ‘in kind’ due to gratitude or for a assisting with a customary or contemporary practice. For customary penile cutting practices, this involved payment to the HW by customary means, such as shell money and ‘karuka nuts’ (an edible nut popular and widely available particularly in the highlands of PNG), which have substantial value in traditional economies (Strathern 1993; Bainton 2008; Lederman 2009), or invitations to customary celebrations. In other provinces it was common that offers of fruit and other foodstuffs were provided in appreciation of the service. Therefore, although the participants reported that money rarely changed hands, and then only in gratitude for services or with customary payments, there was still an economic benefit obtained through traditional economies, but this itself could produce unpredictable outcomes.

The tradition of compensation in PNG may also extend to HWs motivation to engage in unauthorized practices. Compensation in PNG is expected following many different kinds of loss, including death during clan fights or other accidents, and there is considerable pressure to pay to ensure further trouble and bloodshed is prevented (Trompf 1994; Strathern and Stewart 2000). Various factors influence the amount of compensation that needs to be paid, including the nature of the event, the relationship of the parties involved and the economic or social position of the guilty party (Trompf 1994; Goddard 1996; Strathern and Stewart 2000). HWs have also been implicated in cultural compensation claims by providing services for a fee, where unexpected complications resulted from the service, or outcomes were considered unsatisfactory by the client (van Amstela and van der Geest 2004). Obligation to participate in unauthorized practices, however, may be driven by fear of repercussions arising from perceived responsibilities from their professional roles. For example, HWs not only feel pressure to assist with dealing with complications sustained from a penile cut completed by non-HWs, but also risk sharing the blame for negative outcomes. Committing to undertake the procedure themselves may seem to limit these risks.

This fear may also impact on a HW’s decision not to engage in a service. For example, one HW was concerned about the possibility of a national MC programme for HIV prevention for fear that this would raise community expectations of complete protection from HIV and could result in retribution in the event of a circumcised man becoming HIV-positive.

If our awareness [health promotion] goes wrong, the consequences will come back to us. If circumcised men are infected, they will point their fingers to us the health people and say, ‘You said I will not get it and I went for circumcision but now I got it and your words are lies’. They will not believe us and this has its consequences too.

[Health Extension Officer EHP]

**The HW as ethical practitioner: fulfilment of moral obligation and professional satisfaction**

Justification for engaging in unauthorized penile cutting practices, according to most respondents, was due to the perceived failings of the health system to respond appropriately to the potential complications following penile foreskin cutting undertaken by non-HWs. HWs saw their participation as a necessary part of their responsibility of being a HW in PNG. Reasons for engagement in regular unauthorized practices centred around a genuine concern that the men from the community would perform the penile foreskin cut in precarious ways regardless of whether they had HW support or not. In some cases, HWs even reasoned that if they could not provide the services themselves then supplying the equipment and instructions for the desired penile foreskin cut would assist in ensuring safety of the procedure.

Many times they come and ask me for equipment. And many times I get cross at them and reject them. I tell them that they should come to me and I will do it. But since many will not come out, like I said already, they are very young and are ashamed to come. So when I recognize their problem, I now give them equipment and just advise them how they should do it. [Health Extension Officer EHP]

The sense of responsibility to compensate for the failings of the health system, combined with a deep sense of need for service and religious conviction, have been shown to be key motivators of HWs engagement in health services in PNG (Jayasuriya et al. 2011; Razee et al. 2012; Tynn et al. 2013). Participation in unauthorized practices assists in satisfaction of moral responsibility as a HW and committed religious practitioner as well as general professional self-fulfilment.

**Conclusions**

Coping mechanisms create an opportunity to extend the boundaries of a health system at the discretion of the HW (van Lerberghe et al. 2002). In the case of PNG the emergence of unauthorized practices as a coping mechanism is compelled by mutual obligations where HWs are obliged to share professional skills and access to resources as part of communal social capital rather than engage in cash economies. Likewise, HWs acquire social currency or resources and status which arise from social networks and communities, by providing preferential treatment and resources amongst these networks (Tynn et al. 2011). This has implications not only for quality control of services conducted in informal environments and medico-legal issues around accreditation, but also for introduction of new programmes that may overlap with the sociocultural environment, such as male circumcision for HIV prevention.

The introduction of new health programmes requires concerted efforts from all sections of the health system. However, in the case of fragile health systems, opportunities are created for unauthorized practices to become institutionalized, pre-empting appropriate policy development or regulation even before new programmes are introduced. If practices are already informally established, this creates difficulties in measuring the impact of new intervention programmes because of misreporting or under-reporting, and delivery of services that do not conform to standards. If there is a male circumcision programme introduced in PNG for HIV prevention, the regulation of the dorsal foreskin slit procedure within the health system will be imperative. Current research to determine whether dorsal slit procedures offer any protective effect in terms of HIV acquisition will play a significant role in determining what form of regulation would be
appropriate. There will also be significant tensions across cultural domains, arising from conflicts around preferred ways and reasons for engaging in particular practices. The coping strategies adopted by the HWs for the provision of unauthorized penile cutting practices in PNG end up undermining the existing system because the provider creates their own working conditions and income in the form of social and economic gains. Yet the relationships and systems that develop, even if they have negative consequences for the health system, are the result of HW desire and obligations to fulfil their full range of social responsibilities, and often are seen by them as consistent with their professional roles. Although some may draw parallels with HWs continued engagement in female genital cutting in other countries (Caldwell et al. 2000; Shell-Duncan 2001; Christoffersen-Deb 2005), MC—and dorsal slit penile cutting—does not involve the same negative clinical, social and cultural consequences.

In order to ensure the success of new programmes which already have an established informal system, it will be important to acknowledge the existence of such practices and ensure understandings of potential implications are included within the programme design (Berman and Cuizon 2004; Jumpa et al. 2007; Kiwanuka et al. 2011). It has been argued that, even in an adverse socio-economic environment, it is feasible to create conditions that allow individual providers’ strategies to remain compatible with equity and quality, while responding to their aspirations for survival, social status and professional satisfaction (Roenen et al. 1997). Improvement of working conditions in a place such as PNG, however, is more than a combination of adequate salary and access to resources (Segall 2000; van Lerberghe et al. 2002). It also means developing good supervision and support, acknowledging the complex role HWs play in their communities and harnessing these conditions for positive outcomes. Perhaps most importantly, it requires a social environment that reinforces professional behaviour and boundaries, and acknowledgement that legislation and regulation are not enough. This study used penile cutting practices as a focus; however, it is likely that reasons for engaging in coping mechanisms for other unauthorized practices are likely to be similar in PNG. What is clear nonetheless is that HW management in PNG extends beyond the boundaries of health organizations into the complex sociocultural environment in which they work.

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Conflict of interest

None declared.

References


Mendi, Highland Papua New Guinea


