Washing away Ebola: environmental stress, rumor, and ethnomedical response in a deadly epidemic

Emerging infectious diseases are a critical issue in contemporary global environmental health. Ebola outbreaks, which have occurred over the last 40 years, signal the growing threat to human health of infectious zoonotic diseases that originate in animals and have the ability to cross over into human populations. Notably, the 2014/15 Ebola epidemic in West Africa become the largest, most widespread outbreak of this viral disease to date. Among its various impacts, the epidemic triggered a proliferation of rumors about possible emergent ethnomedical cultural responses. Rumor, an enduring feature of human social environments, can be a significant force in cultural change in times of social upheaval. Spreading across the complex topography of face-to-face and electronic social networks, rumor can guickly cause panic in a society, especially during disasters, wars, epidemics, and other environmental disruptions (Noii 2005; Nekovee et al. 2007). The power of rumors lies in their ability to "attract attention, evoke emotion, incite involvement, [and] affect attitudes and actions" (DiFonzo and Bordia 2007: 12). The 2011 Fukushima-Daiichi nuclear disaster in Japan, for example, triggered a rumor-driven salt-buying frenzy in China, impacting both social behavior and the price of this commodity (Zhao and Wang 2013). In the context of the HIV/AIDS epidemic, two harmful rumors-that the virus was developed in a laboratory in a Western country and that a public health team inoculated tens of thousands of Africans with an untested vaccine that caused the pandemicbecame widespread in Africa and beyond (Laccino 2014). As these examples suggest, rumor is a factor in environmental health, a feature of how societies monitor and respond to changing environmental conditions. Specifically, both of these examples demonstrate that rumors emerge when a social group is struggling to make sense of ambiguous, uncertain, or confusing situations, especially environmental contexts that are perceived as both threatening and immediate. Research suggests that people have a core psychosocial need to understand the world around them and to act effectively in it; therefore ambiguity in a threatening situation is often highly discomforting (Fiske 2004). Prevailing cultural constructions normally satisfy this need by providing symbolic webs of meaning and significance that help reinforce confidence in prevailing worldviews during times of change (Geertz 1973). Culture "impose[s] system on an inherently untidy experience" (Douglas 1966: 4). When events cannot be meaningfully understood in terms of existing cultural frameworks, however, novel ideas emerge and are shared among peers, may be changed and adapted through processes of group communication, and sometimes are adopted as a basis for subsequent action in the world. This process, which Williams (2009: 137) labeled "emergent culture," is a pathway along which "new meanings and values, new practices, new relationships and kinds of relationships are continually being created." Shibutani (1966) has proposed that when formal information is weak or absent—as certainly has been the case during the 2014/15 Ebola outbreak in West Africa people compensate by informally interpreting what is going on around them, giving rise to snowballing rumors. Rumors, in short, can serve as a mechanism of group sense making when existing cultural models of environmental reality no longer seem to make sense to people (Rosnow 1988). Yet this is not a well-understood aspect of environmental health. As Mitman, Murphy, and Sellers (2004: 12) observe, "[m]uch history of environment and health is about what we don't, or don't quite, know," and the role of rumor in human-environment relations is

certainly a part of what we need to know much better if we are to respond effectively in times of health crises (Grein et al. 2000). Based on qualitative interviews conducted in two cities in Cameroon, we examine the rise and spread of Ebola rumors, most notably popular ideas about the protective value of bathing in and/or drinking salt water. These rumors are significant for various reasons, but most notably because of the new health risks they introduced in the midst of the Ebola epidemic. Our concern in this chapter is with examining the special contribution anthropology can make to assessing and effectively responding to adverse rumors that magnify environmental health risks during epidemics. With the continual emergence of new infectious diseases in disrupted environments – such as anthropogenic deforestation and the rise of Ebola as a human disease – the stakes have increased and the specific ways communities respond to emergent environmental threats are now critical to understand.