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Improving community health through marketing exchanges: A participatory action research study on water, sanitation, and hygiene in three Melanesian countries

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ABSTRACT

Diseases related to poor water, sanitation and hygiene (WaSH) are major causes of mortality and morbidity. While pursuing marketing approaches to WaSH to improve health outcomes is often narrowly associated with monetary exchange, marketing theory recognises four broad marketing exchange archetypes: market-based, non-market-based, command-based and culturally determined. This diversity reflects the need for parameters broader than monetary exchange when improving WaSH. This study applied a participatory action research process to investigate how impoverished communities in Melanesian urban and peri-urban informal settlements attempt to meet their WaSH needs through marketing exchange. Exchanges of all four archetypes were present, often in combination. Motivations for participating in the marketing exchanges were based on social relationships alongside WaSH needs, health aspirations and financial circumstances. By leveraging these motivations and pre-existing, self-determined marketing exchanges, WaSH practitioners may be able to foster WaSH marketing exchanges consistent with local context and capabilities, in turn improving community physical, mental and social health.

1. Introduction

1.1. Global WaSH issues and approaches

The World Health Organization (WHO)/UNICEF Joint Monitoring Programme (2015) estimates that 32% of the world's population does not use a safe sanitation facility, and 9% a safe water source. Diseases related to unsafe water, sanitation and hygiene (WaSH) products and services are major causes of mortality and morbidity (Prüss-Ustün et al., 2014). Also, lack of safe WaSH services affects children's nutrition and stunts growth, sometimes leading to cognitive impairments (Dangour et al., 2013; Spears et al., 2013). Advancing public health in developing countries through improved WaSH is thus of global urgency.

In seeking progress, WaSH practitioners across the globe facilitate interventions to provide improved products and services and encourage preferred WaSH behaviours. Such approaches have included Participatory Hygiene and Sanitation Transformation (PHAST, see Sawyer et al., 1998), Community Health Community Health Clubs (CHCs, see Waterkeyn, 2010) and Community-Led Total Led Total Sanitation (CLTS, see Kar and Chambers, 2008). Many of these approaches focus on stimulating demand for WaSH products and services by motivating changes to personal behaviours (Evans et al., 2014). In recent years, interest has emerged regarding the practice of sanitation marketing as a WaSH intervention that fosters entrepreneurial initiative among willing participants in local communities, establishes a sanitation supply

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chain, and encourages willing buyers and sellers to engage in value exchange. Five major reasons for WaSH practitioners to engage in sanitation marketing have been identified (Jenkins and Scott, 2010, p. 12):

1. "Marketing ensures that people can get what they want at a price they are willing to pay.
2. Marketing is financially sustainable, subsidy programs are not.
3. Marketing is cost-effective and can be taken to scale.
4. Direct provision of hardware is not enough; through market purchase, sanitation goes to those who are more likely to understand its purpose and will value, use, and maintain it.
5. The market already exists but may need targeted support to better serve the sanitation demand."

In the WaSH community of practice, however, sanitation marketing has often been narrowly interpreted as monetary exchange that is based on prices determined competitively or by negotiation. In contrast, marketing theory advocates that marketing exchange does not always have to involve a monetary transaction, or for that matter, be conducted by a dyadic set of exchange partners, such as a buyer and a seller (Bagozzi, 1975). Instead, the marketing literature construes exchange more broadly as a voluntary trade of things of value (Kotler, 1972), including those that are undertaken on the basis of social currencies (e.g., caring for one's friends when they are ill), or through philanthropic avenues (e.g., donating to a homeless person).

Marketing research also recognises many different types of exchange partners and their motivations (Laczniak and Murphy, 2012). This definition of marketing exchange, or simply exchange, suggests that programs that foster sanitation marketing, and indeed WaSH marketing more broadly, could involve a myriad of exchange partners interacting through monetary and non-monetary transactions to enhance health, through both improved WaSH products, services and behaviours and an increase in social capital derived from the exchange itself (Mohnen et al., 2011; Yip et al., 2007). Furthermore, researchers have criticised the marketisation approach for its potential to inflict damage if it becomes the defining feature of human activity (Conway and Heynen, 2006). Thus a useful inquiry is whether broadening WaSH marketing programs to encompass all types of exchange may produce better health outcomes for the communities with which practitioners engage.

1.2. Marketing exchange

Building on social exchange theories, marketing classifies exchanges into four archetypes: market-based, non-market-based, command-based and culturally determined. In market-based exchange, a buyer and a seller voluntarily deal in products and services on the basis of a pricing mechanism established by competitive markets or negotiation (Bagozzi, 1975). In non-market-based exchange, a supplier donates a product or service to help in some circumstance of disadvantage (e.g., charity) and receives no payment in return (Kotler, 1972). In command-based exchange, an institutional authority (e.g., a government utility) is regulated in how it makes available products and services by a provision rather than profit motive (Layton, 2007). In culturally determined exchange, a provider and recipient exchange value in ways sanctioned by local traditions and social norms (Belk, 2010). The term non-market is used here in order to be consistent with established economic literature to denote the work of civil society organisations (CSOs). However, we do acknowledge that in fact the two other categories of command-based and culturally determined also technically refer to that which happens outside the market, and could be subsumed under the 'non-market' label. We have expanded to these four types with the overall intent to show the richness and usefulness of other-than-market approaches, which may not be apparent in just a market versus non-market dichotomy.

The exchange archetypes are not mutually exclusive, and exchanges are often intricate combinations of the different types because they are put together to help meet a community's WaSH needs. Fig. 1 demonstrates some examples of exchanges that occur to meet WaSH needs, and highlights that many of them cannot be classified as a single type of exchange. This hybrid nature of exchanges reflects the need for broader parameters than monetary values when fostering markets in areas of limited resources. Therefore, applying this exchange perspective can assist in identifying economic, social, and health considerations useful in the design of WaSH interventions (Poortinga, 2006; Sridharan et al., 2015).

1.3. WaSH in Melanesia

The Melanesian region includes the island nations of Fiji, Papua New Guinea, the Solomon Islands and Vanuatu (Jones, 2005). The region experiences high diarrheal disease rates (77–98%) and Disability-Adjusted Life Years (1.5–16 DALYs per 1000 population), largely attributed to poor WaSH conditions (WHO, 2009a, 2009b, 2009c, 2009d). Many programs have been implemented in Melanesia with the aim of improving WaSH. These include the introduction of pro-poor water tariffs, behaviour change promotion campaigns, and the donation of WaSH products and services (WHO Regional Office for the Western Pacific, UNICEF, The Pacific Community Water and Sanitation Programme, & UN Habitat, 2016). Despite these efforts, WaSH improvement in the region has been limited. Further, as the region suffers from fragmentation in policy development, inadequate planning and communication between government and CSOs, and overall severe constraints of human and financial resources (WHO Regional Office for the Western Pacific et al., 2016), this situation does not look likely to change soon.

1.4. WaSH in Melanesian informal settlements

Urban migration for employment and education has substantially increased city populations in Melanesian countries. In particular, the low affordability of urban housing, combined with the complex and often conflict-prone land tenure system, has led to a proliferation of informal settlements (Schrecongost and Wong, 2015). These settlements are generally urban or on the urban fringes, have insecure land tenure, are unplanned (by the relevant government agency), and lack basic infrastructure (Water and Sanitation Program, 2015). Residents generally receive little or no income. Because these settlements are often on the boundaries of city council and provincial administrations, they tend to fall between urban and rural policies, and their rapid growth has exacerbated the challenge for WaSH service provision (Schrecongost and Wong, 2015). Most settlements lack connections to mains water and sewerage lines and cannot access council solid waste collection programs. Water-related diseases are common and there is a risk of transmission of these diseases to residents of formalised settlements, as residents move back and forth from the settlements for work, study and recreation (Schrecongost and Wong, 2015).

1.5. Market-based WaSH in Melanesia

Despite the proliferation of market-based approaches to WaSH elsewhere in the world (International Bank for Reconstruction and