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Review

Understanding careseeking for child illness in sub-Saharan Africa: A systematic review and conceptual framework based on qualitative research of household recognition and response to child diarrhoea, pneumonia and malaria

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ABSTRACT

Diarrhoea, pneumonia and malaria are the largest contributors to childhood mortality in sub-Saharan Africa. While supply side efforts to deliver effective and affordable interventions are being scaled up, ensuring timely and appropriate use by caregivers remains a challenge. This systematic review synthesises qualitative evidence on the factors that underpin household recognition and response to child diarrhoea, pneumonia and malaria in sub-Saharan Africa.

For this review, we searched six electronic databases, hand searched 12 journals from 1980 to 2010 using key search terms, and solicited expert review. We identified 5104 possible studies and included 112. Study quality was appraised using the Critical Appraisal Skills Program (CASP) tool. We followed a meta-ethnographic approach to synthesise findings according to three main themes: how households understand these illnesses, how social relationships affect recognition and response, and how households act to prevent and treat these illnesses. We synthesise these findings into a conceptual model for understanding household pathways to care and decision making.

Factors that influence household careseeking include: cultural beliefs and illness perceptions; perceived illness severity and efficacy of treatment; rural location, gender, household income and cost of treatment. Several studies also emphasise the importance of experimentation, previous experience with health services and habit in shaping household choices.

Moving beyond well-known barriers to careseeking and linear models of pathways to care, the review suggests that treatment decision making is a dynamic process characterised by uncertainty and debate, experimentation with multiple and simultaneous treatments, and shifting interpretations of the illness and treatment options, with household decision making hinging on social negotiations with a broad variety of actors and influenced by control over financial resources. The review concludes with research recommendations for tackling remaining gaps in knowledge.

Introduction

Diarrhoea, pneumonia and malaria constitute the largest disease-specific contributors to childhood mortality in sub-Saharan Africa (Friberg et al., 2010; Kinney et al., 2010). This burden could be significantly reduced with ready access to well-established effective and affordable prevention and treatment interventions (Jones, Steketee, Black, Bhutta, & Morris, 2003). A number of facility and

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community-based initiatives to improve access to and uptake of these interventions have been implemented across sub-Saharan Africa, with varying success (Arifeen et al., 2009; Bryce, Victora, Habicht, Black, & Scherpbier, 2005; Chopra, Patel, Cloete, Sanders, & Peterson, 2005; Hopkins, Talisuna, Whitty, & Staedke, 2007; Sazawal & Black, 2003). The main challenge is delivering these interventions equitably at scale within existing health systems and encouraging appropriate use by caregivers and families at community level (Schellenberg et al., 2003). As a result, childhood malaria, diarrhoea, and pneumonia burdens in sub-Saharan Africa remain stubbornly high.

While current policy efforts focus on scaling up the supply of community treatment for child illness, the effectiveness of these efforts hinge on the myriad decisions that families face about how and whether to respond to childhood illness as well as their complex and often constrained choices about how and where to access care. These decisions are determined largely by social, cultural and religious norms, beliefs about disease aetiology, acceptability of interventions, and local decision-making practices. Understanding these complex and inter-related influences on the demand side of treatment is critical to ensuring available interventions are relevant, acceptable and equitable and that they become common practice among caregivers and households (Bentley et al., 1988; Gove & Pelto, 1994; Pelto & Pelto, 1997).

There is a sizeable body of published qualitative research that explores household recognition and response to child diarrhoea, pneumonia and malaria in sub-Saharan Africa. Like other systematic reviews of qualitative evidence on health issues like TB treatment adherence (Munro et al., 2007), help-seeking behaviour in cancer patients (Smith, Pope, & Botha, 2005), unsafe medical injection practices (Reeler, 2000), and young people's sexual behaviour (Marston & King, 2006), this systematic review assesses the quality of the available evidence and synthesises the findings of these studies. While several recent reviews focus on malaria (Maslove et al., 2009; Mwenesi, 2005; Williams & Jones, 2004), a few reviews on diarrhoea exist from the 1980s (Bentley, 1992; Bentley et al., 1988; Weiss, 1988) and a few reflections on applied anthropology findings on acute respiratory infections date from the 1990s (Pelto & Pelto, 1997), none respond to the current efforts to address childhood illnesses in an integrated manner and none are 'systematic' in their approach.

While there is increasing attention being paid to delays in careseeking due to lack of awareness or health systems failures (Kallander et al., 2011), models of careseeking for child survival have remained static for the last 30 years (Mosley & Chen, 1984). While the identification and organisation of determinants of child survival into one framework has stood the test of time, it suggests a linear pathway of careseeking that is out of step with the multiple negotiations households make with various actors and health care options in constrained and unregulated plural health systems today (Bloom & Standing, 2008; Sharkey, Chopra, Jackson, Winch, & Minkovitz, 2012; Williams & Jones, 2004).

Our synthesis considers these three childhood illnesses together on the assumption that many of the findings will pertain to all three; where possible, we highlight any findings that appear disease specific. The objectives of this review are to: critically examine lessons learned from published social science research, develop a conceptual framework outlining how households in sub-Saharan Africa recognise and respond to child diarrhoea, pneumonia, and malaria, and identify gaps to inform future research.

Methods

Systematic reviews of qualitative research aim to identify, appraise, and summarise the current state of knowledge on a specific focused topic using systematic and transparent processes. In this review we use a comprehensive search strategy to identify relevant literature, predefined inclusion and exclusion criteria, quality assessment of included studies, and a recognised method for synthesising the findings across included studies. The goal in all systematic reviews is to minimise bias in the review process and enhance reliability and validity of review conclusions. The review team included social scientists with experience in medical anthropology, health systems and health services research, and epidemiology and a clinical child health expert. Several review team members also had previous experience working on systematic reviews of both quantitative and qualitative data.

Search strategy and selection criteria

We searched the following databases: PubMed, Scopus, CINAHL, AnthroSource, Sociological Abstracts, and PsycInfo from 1980 to 2010. Keywords for the search included terms for illness and disease (e.g. fever, pneumonia, diarrhoea, malaria) together with terms related to participants (e.g. caregiver, parent, mother, father) and terms for methods and concepts (e.g. qualitative, in-depth, focus group, decision making, attitude, health belief). A full list of search terms used is provided in Table 1. We also hand-searched 12 relevant peer-reviewed journals (dates from 1980 to 2010), and liaised with child health experts to identify any additional publications not otherwise identified.

We included published, peer-reviewed journal articles reporting qualitative data collection methods (focus group discussions, in-depth or semi-structured interviews, observation) and qualitative data presented as part of standalone qualitative studies or as part of mixed-method studies. Given the high burden of these diseases in sub-Saharan Africa and the perceived neglect of social science research in the region, we limited the review to studies that were conducted in sub-Saharan Africa. Titles and abstracts were initially screened for relevance by one author (JA). Two authors (JA and AG) independently screened the full texts of the remaining studies to determine the final set of studies meeting all inclusion criteria. Disagreements in the selection process were resolved by discussion. For childhood diarrhoea and pneumonia, we included articles published from 1980 to 2010, and for malaria, studies published from 2003 to 2010 (given that a review of qualitative evidence on treatment seeking and malaria was published in 2004 (Williams & Jones, 2004)). Due to time and resource constraints, we only included English-language articles.

Table 1
Search terms for electronic database searches.

Illness/ Disease	Participants	Topic	Method	Location
Febrile Fever Pneumonia Respiratory Diarrhea Dehydration Malaria Convulsions Cough Breathing Illness Health	Mothers Fathers Caregivers Caretakers Parents Child Infant Schoolchild Household Community	Attitude to health Health attitudes Maternal attitudes Seeking Decision making Beliefs Health beliefs Perception Knowledge Behaviour Health knowledge Health behaviour Health careseeking Health-seeking behaviour Help seeking Help seeking behaviour	Content analysis Ethnology Focus group Grounded theory In-depth Interviews Unstructured Vignettes Qualitative Narratives	Africa Sub-Saharan Africa [plus the names of 53 African countries]