SSM - Population Health 3 (2017) 539–548

Contents lists available at ScienceDirect

SSM - Population Health

journal homepage: www.elsevier.com/locate/ssmph

Article

Patient-provider communication styles in HIV treatment programs in Bamako, Mali: A mixed-methods study to define dimensions and measure patient preferences

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ARTICLE INFO

Keywords:
Sub-Saharan Africa
Mali
Patient-provider communication
Patient-centeredness
Patient engagement
Antiretroviral therapy
HIV
Vignette survey

ABSTRACT

Effective patient-provider communication (PPC) promotes patient adherence and retention in long-term care. Sub-Saharan Africa faces unprecedented demand for chronic care for HIV patients on antiretroviral therapy (ART), yet adherence and retention remain challenging. In high-income countries, research describing patient preferences for different PPC styles has guided interventions to improve PPC and patient outcomes. However, research on PPC preferences in sub-Saharan Africa is limited. We sought to define PPC dimensions relevant to ART programs in Bamako, Mali through recordings of clinical interactions, in-depth interviews and focus-group discussions with 69 patients and 17 providers. To assess preferences toward contrasting PPC styles within dimensions, we conducted a vignette-based survey with 141 patients across five ART facilities. Qualitative analysis revealed two PPC dimensions similar to those described in the literature on patient-centered communication (level of psychosocial regard, balance of power), and one unique dimension that emerged from the data (guiding patient behavior: easy/tough/sharp). Significantly more survey participants chose the vignette demonstrating high psychosocial regard (52.2%) compared to a biomedical style (22.5%) ($p < 0.001$). Within balance of power, a statistically similar proportion of participants chose the vignette demonstrating shared power (40.2%) compared to a provider-dominated style (35.8%). In guiding patient behavior, a similar proportion of participants preferred the vignette depicting the "easy" (38.4%) and/or "tough" style (40.6%), but significantly fewer preferred the "sharp" style (14.5%) ($p < 0.001$). Highly educated participants chose biomedical and shared power styles more frequently, while less educated participants more frequently indicated "no preference". Working to understand, develop, and tailor PPC styles to patients in chronic care may help support patient retention and ultimately, clinical outcomes. Emphasis on developing skills in psychosocial regard and on adapting styles of power balance and behavioral guidance to individual patients is likely to yield positive results and should be considered a high priority for ART providers.

1. Introduction

Sub-Saharan Africa is currently experiencing a massive increase in demand for effective outpatient chronic care, primarily due to the unprecedented 12 million people living with HIV who are now accessing antiretroviral therapy (ART) (UNAIDS, 2016). Maximizing the individual and public health benefits of ART depends on keeping patients in care and on treatment for the remainder of their lives. However, inadequate adherence and poor patient retention in ART programs remain significant issues: 35% of patients in sub-Saharan Africa exhibit suboptimal ART adherence and 20% are lost to follow-up within twelve months after treatment initiation (Fox & Rosen, 2015; Mills et al., 2006).

The way providers communicate with patients (including transferring information, establishing roles, conveying or reacting to emotions, and balancing power) can affect patient adherence and retention in outpatient chronic care (Flickinger, Saha, Moore, & Beach, 2013; Haskard Zolnierek & DiMatteo, 2009). Patient-provider communication

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http://dx.doi.org/10.1016/j.ssmph.2017.05.012
Received 20 February 2017; Received in revised form 22 May 2017; Accepted 23 May 2017

(PPC) that consists of scolding, belittling, or abusive language is one of the most commonly cited barriers to retention among ART patients in sub-Saharan Africa (Dahab et al., 2008; Layer, Brahmbhatt, et al., 2014; Layer, Kennedy, et al., 2014). Stigma, discrimination, or simple misunderstandings between patients and providers also contribute to interruptions or discontinuation of treatment (Carillon, 2011; Gourlay et al., 2014; Ware et al., 2009, 2013). Fear of future scolding may deter patients who have missed appointments from returning to care (Dahab et al., 2008; Layer, Brahmbhatt, et al., 2014; Ware et al., 2013). On the other hand, higher patient ratings of PPC have been associated with higher patient satisfaction, better ART adherence and fewer missed appointments in studies in South Africa and Kenya. (Wachira, Middlestadt, Reece, Peng, & Braitstein, 2014; Watt et al., 2010).

Research from high-income countries posits that provider trainings can improve the specific PPC skills that are linked to patient satisfaction and medical adherence, including encouraging patient participation in decision-making, expressing empathy, asking open-ended questions, and demonstrating regard to the psychosocial aspects of the illness experience (Rao, Anderson, Inui, & Frankel, 2007). Improvements in PPC do not necessarily lengthen consultation time, and can often make consultations more efficient (Roter, Stewart, Putnam, & Lipkin, 1997). Yet despite potential gains in patient retention and adherence, there have been few systematic efforts to improve PPC among chronic care providers in sub-Saharan Africa. The dominant emphasis of HIV treatment programming has been scaling up access to services, with relatively less attention to ensuring the quality of those services. Further, conceptualizations of quality PPC can vary according to situation, cultural context and individual patient characteristics (Say, Murtagh, & Thomson, 2006; Schouten & Meeuwesen, 2006) and little guidance exists for developing interventions specific to chronic care in sub-Saharan Africa.

Research in high-income countries has produced an array of theoretical models specifying PPC dimensions and constructs, yet the transferability of these models to other settings has been under-examined. Further, some research in high-income countries has identified patterns of patient preferences toward different PPC styles based on patient demographic or treatment characteristics (Say et al., 2006), yet research that examines if similar patterns exist in low-income countries is lacking.

In Mali, research indicates that both PPC and retention in ART programs are in need of improvement. Mali has one of the lowest ART patient retention rates in sub-Saharan Africa: Only 64% of patients remain active in treatment one year after starting ART (UNAIDS, 2013). In one study in Bamako, Mali's capital, 40% of people living with HIV surveyed felt that communicating with their HIV treatment provider was "difficult" or "somewhat difficult" (Morrison, 2010). In aiming to define locally-relevant dimensions of PPC and assess patient PPC preferences, our study represents a first step toward designing interventions to improve communication skills among ART providers in Mali.

1.1. Considerations in defining and classifying PPC styles

Researchers in high-income countries have spent considerable effort defining, operationalizing, and measuring the impact of *patient-centered communication,* the dominant theoretical framework for effective PPC. While its definitions and components vary, patient-centered communication generally refers to PPC that actively seeks to understand the patient as a "unique human being" (Lipkin, Quill, & Napodano, 1984). Patient-centered communication can be delineated in two fundamental dimensions: First, as an alternative to "disease-centered" communication, providers can demonstrate *psychosocial regard* by acknowledging individual patients' humanity, unique worldview, and psychosocial illness experience. Second, as an alternative to "provider-centered" communication, providers who *share power* consider patients as equal partners by allowing them greater control in consultation dialogue and treatment-related decisions (Krupat et al., 2000). While other theoretical frameworks of patient-centeredness offer more constructs, most can be classified under these two broad dimensions.[1]

Some studies have suggested that without much adaptation, the idea of patient-centered communication is cross-culturally transferable. For example, a single measure of perceived patient-centeredness ("my provider knows me 'as a person'") was significantly associated with ART adherence in both the United States (Beach, Keruly, & Moore, 2006) and South Africa (Barry et al., 2012). Additionally, ART providers from South Africa saw their most important task as supporting and empowering patients, reflecting perceived value in both psychosocial regard and shared power (Stein, Lewin, & Fairall, 2007). Outside of HIV, studies in Africa have also suggested that patient-centered communication is both preferred by patients in outpatient clinics and effective in promoting continuation of women's chosen methods of family planning (Abdel-Tawab & Roter, 2002; Lau, Christensen, & Andreasen, 2013).

Other researchers have challenged the notion that patient-centeredness as defined in Western literature accurately describes ideal PPC according to patients in other settings. According to patients in a Tanzanian program to prevent mother-to-child transmission of HIV, ideal PPC is caring, yet authoritative and instructive (Våga, Moland, Evjen-Olsen, Leshabari, & Blystad, 2013). Research from rural Cameroon suggests that patients seek traditional healers in part because of the quality of PPC, which consisted of less patient control, yet more psychosocial talk and active patient questioning compared to PPC in biomedical settings (Labhardt, Aboa, Manga, Bensing, & Langewitz, 2010). To define PPC dimensions for this present research, we considered the potential transferability of patient-centered communication dimensions in the existing literature, while also recognizing that communication may be conceptualized differently in our particular research setting.

1.2. Considerations in measuring individual PPC preferences

Beyond potential differences in cultural conceptualizations, variations in individual patient preferences add complexity to defining provider communication skills to target in PPC interventions. As it is unlikely that all patients will prefer the same PPC type, examining patterns in individual preferences may help guide providers in tailoring styles to different patients or matching patients to providers with different practice styles. A number of studies on individual PPC preferences suggest variability in preferred balance of power. In high-income countries, higher socioeconomic status, higher education, younger age, and sometimes female gender are associated with preference for a shared power style over a provider-dominated one (Say et al., 2006). In a rural health clinic in Sierra Leone, patients with higher education—particularly females with higher education—also preferred more shared power (Lau et al., 2013). However, little research has examined if any specific patient characteristics are associated with PPC preferences in HIV care in sub-Saharan Africa.

1.3. Objectives

In our study, we aimed to (1) define and classify locally-relevant PPC types in Bamako, Mali and (2) measure patient preferences for these different PPC types.

[1] For example, Epstein et al.'s review of patient-centeredness (2005) proposes four dimensions, of which the first two may be classified as *psychosocial regard* ("eliciting and understanding the patient's perspective" and "understanding the patient within his or her unique psychosocial context") and the second two as *shared power* ("reaching, with the patient, a shared understanding of the problem and its treatment that is concordant with the patient's values" and "'helping the patient to share power and responsibility by involving him or her in choices to the degree that he or she wishes").