



Context matters: Community social cohesion and health behaviors in two South African areas



Sheri A. Lippman^{a,b,*}, Hannah H. Leslie^{c,d}, Torsten B. Neilands^a, Rhian Twine^b,
Jessica S. Grignon^{e,f}, Catherine MacPhail^{b,g,h}, Jessica Morris^a, Dumisani Rebomboⁱ,
Malebo Sesane^f, Alison M. El Ayadi^j, Audrey Pettifor^{b,k}, Kathleen Kahn^b

^a University of California San Francisco, Center for AIDS Prevention Studies, Department of Medicine, San Francisco, CA, USA

^b MRC/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

^c University of California, Berkeley, Division of Epidemiology, School of Public Health, Berkeley, CA, USA

^d Harvard T. H. Chan School of Public Health, Department of Global Health and Population, Boston, MA, USA

^e University of Washington, Department of Global Health, Seattle, WA, USA

^f International Training and Education Center for Health (I-TECH) South Africa, Pretoria, Republic of South Africa

^g School of Health, University of New England, Armidale, NSW, Australia

^h Wits Reproductive Health and HIV Institute (WRHI), School of Clinical Medicine, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

ⁱ Sonke Gender Justice, Cape Town, South Africa

^j Bixby Center for Global Reproductive Health, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco, USA

^k University of North Carolina at Chapel Hill, Gillings School of Global Public Health, Chapel Hill, NC, USA

ARTICLE INFO

Keywords:

Social cohesion
South Africa
Alcohol
HIV testing
Health behavior
Sexual behavior

ABSTRACT

Background: Understanding how social contexts shape HIV risk will facilitate development of effective prevention responses. Social cohesion, the trust and connectedness experienced in communities, has been associated with improved sexual health and HIV-related outcomes, but little research has been conducted in high prevalence settings.

Methods: We conducted population-based surveys with adults 18–49 in high HIV prevalence districts in Mpumalanga (n = 2057) and North West Province (n = 1044), South Africa. Community social cohesion scores were calculated among the 70 clusters. We used multilevel logistic regression stratified by gender to assess individual- and group-level associations between social cohesion and HIV-related behaviors: recent HIV testing, heavy alcohol use, and concurrent sexual partnerships.

Results: Group-level cohesion was protective in Mpumalanga, where perceived social cohesion was higher. For each unit increase in group cohesion, the odds of heavy drinking among men were reduced by 40% (95%CI 0.25, 0.65); the odds of women reporting concurrent sexual partnerships were reduced by 45% (95%CI 0.19, 1.04; p = 0.06); and the odds of reporting recent HIV testing were 1.6 and 1.9 times higher in men and women, respectively.

Conclusions: We identified potential health benefits of cohesion across three HIV-related health behaviors in one region with higher overall evidence of group cohesion. There may be a minimum level of cohesion required to yield positive health effects.

1. Introduction

Momentum around understanding the social determinants of health has increased in Western countries over the past three decades, with growing evidence that the social environment shapes health and

health behaviors (Bronfenbrenner, 1979; Cassel, 1976; Kaplan et al., 2000; Krieger, 2001; Berkman and Kawachi, 2000). Among social contextual factors most commonly studied at a community level, social cohesion, or the shared trust, connectedness, or unity experienced by members of a residential area or social group (Sampson, 2003;

* Correspondence to: 550 16th Street, 3rd Floor, San Francisco, CA 94158-2549, USA.
E-mail address: sheri.lippman@ucsf.edu (S.A. Lippman).

Sampson et al., 1997; Kawachi and Berkman, 2000), has been associated with various healthy behaviors and improved health outcomes in multiple contexts. For example, seminal research in Chicago found higher levels of neighborhood collective efficacy (social trust and expectations of reciprocity or social control) correlated with lower rates of violent crime (Sampson et al., 1997). At the state level, increased membership in social organizations, or civic engagement, a construct related to social cohesion, has been associated with decreased all-cause mortality in the U.S. (Kawachi et al., 1997). More recent studies have also demonstrated a protective association between social cohesion and civic engagement with both early sexual debut and rates of sexually transmitted infections (STI) in the U.S. (Ellen et al., 2004; Holtgrave and Crosby, 2003; Jennings et al., 2014; Youngblade et al., 2006).

While evidence for the link between community social connectedness and trust and improved health outcomes is gaining traction in the U.S. context, there has been less research on these associations in lower income countries. In sub-Saharan Africa, where the HIV epidemic continues to have a strong impact on population health, few researchers have examined the impact of community social cohesion or related measures of community connectedness on HIV and HIV-related risk behaviors. Related research in sub-Saharan Africa has largely operationalized social cohesion at the individual level, as an individual's perceived level of social cohesion in his/her community or an individual's reported membership and involvement in groups. At the individual level, some evidence from African countries indicates social cohesion and civic engagement play a protective role on sexual health, increased condom use, decreased intimate partner violence, and delayed sexual debut, although not all associations have been protective (Gregson et al., 2011; Burgard and Lee-Rife, 2009; Pronyk et al., 2006; Campbell et al., 2002).

After decades of HIV prevention and care programming focused almost entirely on individual behavior change in Africa, there is a growing call to understand how social environments shape HIV acquisition to inform critically needed improvements to HIV prevention programming, particularly in addressing modifiable social factors (Underwood et al., 2014; Poundstone et al., 2004; Fritz et al., 2010; Campbell et al., 2005; Pronyk et al., 2008a). We sought to understand the relationship between community social cohesion and behaviors associated with HIV acquisition in South Africa using data from two population-based surveys in high HIV prevalence rural districts to examine varied experiences of social cohesion and sexual risk behaviors. Specifically, we assess the association between a community-level measure of social cohesion and recent HIV testing, heavy alcohol use, and concurrent sexual partnerships.

2. Methods

2.1. Setting and study design

Data for this study came from two separate population-based HIV prevention and care research initiatives in rural and peri-urban areas of South Africa – one in North West and the other in Mpumalanga Province. Studies included similar survey data collection protocols and measures.

Data from the North West Province were collected from January–March 2014, in Lekwa-Teemane and Greater Taung sub-Districts within Dr. Ruth Segomotsi Mompati (RSM) District. RSM is comprised of both rural and peri-urban areas, with an economy centered on beef production and agriculture. The study area includes approximately 230,000 people, the majority of whom speak Setswana. Adult HIV prevalence in the North West Province is estimated at 20.3% (Shisana et al., 2014). Twenty-three enumeration areas (EAs) in each sub-district were selected proportionate to size based on 2011 census data (sampling frame provided by Statistics South Africa). All dwelling units (DU) in selected EAs were enumerated prior to data collection. Up to 36 inhabited DUs were then randomly selected from each

EA (1561 DUs in total) for inclusion in the sample. One adult (18–49 years) was randomly selected per DU for participation. Data collection has been described in detail elsewhere (Lippman et al., 2016a).

Data from Mpumalanga Province were collected between July–September 2014, in a largely rural area of the Bushbuckridge sub-district, within Ehlanzeni district. Remittances from migrant laborers in the nearby mining, agriculture, and tourism industries are the mainstays of the local economy. The province has the second highest HIV prevalence nationally, estimated at 21.8% among adults of reproductive age (Shisana et al., 2014). The study area is a health and socio-demographic surveillance site (Agincourt HDSS) run by the Medical Research Council/Wits University Rural Public Health and Health Transitions Research Unit. At the time the survey was conducted, just over 113,000 residents were living in 28 enumerated villages, most of whom speak XiTsonga (Shangaan) (Kahn et al., 2012). The sampling frame consisted of all HDSS households with a resident aged 18–49 in 27 villages (one small village was excluded). Random selection in each village resulted in 3456 total households for inclusion.

Selection criteria required an age range of 18–49 years, ability to provide informed consent, and household residence. In North West residency was defined as sleeping in the DU an average of four or more nights per week and in Mpumalanga residency comprised having spent at least nine of the past twelve months in the area.

2.2. Data collection

Fieldworkers located participants, confirmed eligibility, obtained written informed consent, and conducted a survey using computer-assisted personal interviewing (CAPI) at the participant's home, in the participant's language of choice [English, Setswana, or XiTsonga]. The surveys included questions on demographic characteristics, HIV testing history, health services utilization, sexual behavior, alcohol consumption, and community social factors, including community cohesion. In the North West, participants were compensated with a mobile phone airtime voucher worth approximately five US dollars. In Mpumalanga, no compensation was offered, consistent with research unit policies. Additionally, in the North West, participants were offered HIV rapid testing at the time of the survey; testing was not an inclusion criterion for the survey.

All procedures were approved by the Committee for Human Research at the University of California, San Francisco (UCSF). Procedures for the North West site were also approved by the Human Subjects Division at University of Washington; the Human Sciences Research Council Research Ethics Committee in South Africa; the Policy, Planning, Research, Monitoring and Evaluation Committee for the North West Provincial Department of Health; and the CDC's Center for Global Health, Human Research Protection. Procedures for the Mpumalanga site were also approved by the Institutional Review Board at the University of North Carolina at Chapel Hill; the Human Research Ethics Committee of the University of the Witwatersrand, South Africa; and by the Mpumalanga Provincial Health Research Committee.

2.3. Measures

Participants in each study responded to a six-item cohesion measure based on the scale developed by Sampson et al. (1997) modified for use following qualitative research and validated by our team (see Table 1 for items) (Lippman et al., 2013; Lippman et al., 2016b). All items had response options of disagree, somewhat agree, and agree. We calculated individual and group cohesion scores using the average of item responses ranging from 0 (Disagree) to 2 (Agree). We used item response modeling (IRM) to assess and summarize the cohesion scale using a one-parameter multinomial (partial credit) model following prior validation (Lippman et al., 2016b; Masters and Wright, 1997). To create a group-level metric of cohesion, we estimated

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات