exceeding deaths from HIV, expansion of HCV testing and treatment with new, highly effective, direct-acting antiviral medications at SSPs provide an opportunity to cure HCV and dramatically reduce HCV prevalence and death among clients.¹⁹ Primary prevention through syringe exchange and secondary prevention through on-site screening and linkage to care and treatment are essential to realizing these objectives for HCV and "getting to zero" new infections for HIV.

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OPEN

Contraception and PrEP in South African Hair Salons: Owner, Stylist, and Client Views

To the Editors:

INTRODUCTION

Nearly half (44%) of unintended births in South Africa occur among women aged 15–24 years—the same group with one of the highest HIV incidence rates in the world.¹ Black African women aged 20–34 years have an annual HIV incidence of 4.5% in South Africa, despite increasing antiretroviral therapy coverage nationwide.² Women in this age group are both more likely to discontinue contraception and less likely to use preexposure prophylaxis (PrEP) for HIV prevention consistently compared with older women.^{3–5}

A potential strategy for prevention of both unwanted pregnancies and HIV infection is to engage young women in safe, community-based venues. This contrasts with current approaches, which emphasize health clinics as the portal for obtaining prevention services.⁶ Hair salons, where women attend regularly and spend substantial time without male partners, offer a unique venue for delivery of contraceptive and HIV prevention

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services.² Hair salons are considered a "safe" community space where individuals can focus on personal appearance, receive community news, and socialize.² Assessing health delivery needs, preferences, and behaviors in a venue focused on wellness is a crucial step in developing a novel platform for future prevention interventions.

We surveyed hair salon owners, stylists, and clients at community hair salons in and around Umlazi Township in Durban, South Africa, to assess the acceptability and feasibility of offering family planning and HIV prevention services at salons.

METHODS

Study Setting and Participant Enrollment

We conducted a cross-sectional survey at a convenience sample of hair salons in and around Umlazi, a densely populated urban township outside of Durban.^{7–9} Salon owners (male and female), stylists (male and female), and clients (female) aged 18 years and older willing to provide informed consent were enrolled at community hair salons. A bilingual research assistant (English/ Zulu) orally administered a brief survey gauging interest in the delivery of health care services at hair salons and assessing the feasibility of offering limited health services to salon clients. The study protocol was approved by the University of KwaZulu-Natal Biomedical Research Ethics Committee (Protocol BE388 16) and the Partners Institutional Review Board (Protocol 2016P001268/MGH).

Outcome Measures

To assess feasibility, we asked owners and stylists about salon size and setup (ie, opening hours, number of salon chairs, number of unique clients per month, and availability of a private room to offer health services). We asked clients how often they frequent the same salon and the length of a typical visit. To assess acceptability, we asked owners, stylists, and clients whether they would be comfortable offering/receiving limited health care services and education at the salon. We also collected data on current contraceptive use among clients.

Analysis Plan

We used descriptive statistics to evaluate aggregate survey data. We assessed the relationship between salon features and clients' attitudes toward receiving health services at the salon using the Fisher exact test. We used the McNemar test to determine the difference within stylists' or within clients' attitudes between different types of health services.

RESULTS

Salons

We visited 17 hair salons, 5 in the city of Durban and 12 in the surrounding township area, with a median of 235 unique monthly clients [interquartile range (IQR) 110–425] (Table 1). Nine salons (53%) had a private room available that could be used for health services.

Owners

Most salon owners (94%) were comfortable with a nurse offering health education and health services addressing family planning, contraception, and HIV prevention for interested clients at the salon. Of all health services, owners were least comfortable in offering HIV testing (88%).

Stylists

We surveyed 92 stylists; 98% were comfortable with a nurse offering health education or offering health education services themselves if trained. More stylists were comfortable with clients receiving injectable contraception compared with HIV testing (98% vs 87%, P =0.002). There was no significant difference between the proportion of stylists comfortable with clients receiving injectable contraception and receiving PrEP (98% vs 95%, P = 0.250).

Clients

We surveyed 326 female clients, of whom 29% were aged 18-24 years. Most clients reported visiting the salon monthly (72%), returning to the same salon for most visits (80%), and spending 1-2 hours per visit (73%). Many

TABLE 1. Characteristics of EnrolledStudy Participants

	Value
Salons (N = 17)	
Location	
City, n (%)	5 (29)
Township, n (%)	12 (71)
Salon chairs, mean (IQR)	7 (6–10)
Unique clients per month, mean	235 (110-425)
(IQR)	. ,
Private room, n (%)	9 (53)
Owners $(N = 17)$	
Age, median years (IQR)	36 (33–43)
Female, n (%)	11 (65)
Comfortable with clients	
receiving health services	16 (05)
Injectable contraception, n (%)	16 (95)
PrEP, n (%)	16 (95)
HIV testing, n (%)	15 (88)
Stylists (N = 92)	
Age, median years (IQR)	29 (26–32)
Female, n (%)	75 (82)
Comfortable offering health	90 (98)
education with proper	
training, n (%)	
Comfortable with clients receiving health services	
e	00 (08)
Injectable contraception, n (%)	90 (98)
PrEP, n (%)	87 (95)
HIV testing, n (%)	80 (87)
Female clients $(N = 326)$	
Age, median years (IQR)	28 (24-33)
18–24 y, n (%)	93 (29)
25–29 y, n (%)	98 (30)
30–34 y, n (%)	64 (20)
≥35 y, n (%)	71 (22)
Frequency of salon visits	
<1 mo, n (%)	41 (13)
1 mo, n (%)	235 (72)
1–2 mo, n (%)	40 (12)
≥2 mo, n (%)	10 (3)
Length of salon visits	
<1 h, n (%)	55 (17)
1–2 h, n (%)	238 (73)
2–3 h, n (%)	27 (8)
≥3 h, n (%)	6 (2)
Return to the same salon for most visits, n (%)	262 (80)
Currently using contraception,	239 (73)
n (%)	
Male condoms, n (%)	164 (69)
Injectable contraception, n (%)	106 (44)
Other, n (%)	56 (23)
Comfortable receiving health services	
Injectable contraception, n (%)	298 (91)
PrEP, n (%)	250 (77)
HIV testing, n (%)	242 (74)

clients (73%) reported currently using contraception (44% used injectable contraception and 18% did not answer). Most clients were comfortable hearing about health topics (95%) and being offered health services (94%) during their salon visit. More clients were comfortable receiving injectable contraception in the salon compared with undergoing HIV testing (91% vs 74%, P < 0.0001).

Association Between Client/ Salon Characteristics and Willingness to Receive Health Services in the Salon

Clients surveyed in township area salons were more willing to receive contraception (98% vs 83%, P <0.0001), PrEP (83% vs 68%, P = 0.002), and HIV testing (78% vs 69%, P = 0.055) than clients from Durbanbased salons. Although not significant, clients were more willing to receive contraception (96% vs 89%, P =0.055) and HIV testing (81% vs 71%, P = 0.076) in salons owned by men; owner sex was significantly associated with client willingness to receive PrEP (84% vs 74%, P = 0.047). Young women (18-24 years of age) were significantly less willing to receive contraception in the salon compared with older women (85% vs 94%, P = 0.014) but were not significantly less willing to receive PrEP (72% vs 79%, P > 0.1) or HIV testing (71% vs 76%, P > 0.25). Women reporting already using contraception were significantly more willing to receive contraception in the salon (92% vs 78%, P = 0.028) but were not significantly more willing to receive PrEP (73% vs 70%) or HIV testing (72% vs 70%, both P > 0.5). Having a private room in the salon was significantly related to client willingness to receive contraception (96% vs 86%, P =0.003), PrEP (84% vs 67%, P < 0.001) and HIV testing (79% vs 69%, P = 0.042).

DISCUSSION

In a survey of hair salon owners (N = 17), stylists (N = 92), and clients (N = 326) at salons in and around Umlazi Township in Durban, South Africa, we found the idea of offering

family planning and HIV prevention services at these community venues to be both acceptable and potentially feasible. Overall, most salon owners (95%), stylists (99%), and clients (94%) were interested in having health services offered at the salon. A significantly greater proportion of clients were comfortable receiving injectable contraception compared with undergoing HIV testing (91% vs 74%, P < 0.0001).

Our study may be considered within the context of other salon-based interventions exploring the use of stylists as mentors and health educators, including studies evaluating intimate partner violence screening in US salons and methicillin-resistant Staphylococcus aureus, Hepatitis C, and hypertension screening in African American barbershops.^{7,8,10–12} Although these studies have laid the groundwork for successful implementation of targeted health services in the salon, our study is unique to the field of HIV implementation and to the South African setting. In addition, our work proposes ongoing contact with hair salon clients for sustainable, long-term contraception and HIV prevention.

PrEP is currently recommended by the World Health Organization for all people at substantial risk of acquiring HIV. Recently launched programs, such as the South African "She Conquers" campaign, emphasize HIV prevention for young women; yet, PrEP distribution and availability in South Africa is limited.^{13–15} Although South Africa has significantly scaled up HIV treatment programs, prevention efforts have lagged; how PrEP may be most effectively delivered and by whom remain largely unknown. Because young women in sub-Saharan Africa face unique contextual barriers to accessing health services, including sex norms and relationship dynamics, and often exhibit poorer health outolder comes compared with women,^{13,16,17} novel implementation strategies for PrEP delivery should be evaluated.¹⁸ Compared with PrEP, contraception was more acceptable to both the stylists and clients; thus, packaging HIV testing with contraception may improve acceptability of

HIV prevention services in the neighborhood salon setting, especially for HIV-negative women who may not be willing to receive PrEP from an HIV clinic.

Our study has several limitations. Because the study was a brief survey to gauge interest in the delivery of health services in salons, we asked a limited set of questions. Additional qualitative data aimed at a more nuanced understanding of the trends and relationships reported here would inform intervention development. HIV testing is a critical component of offering PrEP at the hair salon, as PrEP can only be offered to individuals who receive a negative HIV test result. Although owners, stylists, and clients were least comfortable with HIV testing at the salon, more than 80% of owners and stylists were willing to offer testing, and 74% of clients would be comfortable being tested. Having a private room in the salon significantly increased client willingness to receive health services, but only half of the salons had a private room available. Further in-depth interviews with clients and owners may inform strategies for creating private spaces within the salon for health services and may also inform how salon atmosphere and business would be affected by having a nurse present. In addition, although stylists were highly enthusiastic about offering health education, further information is needed to inform training for stylists to serve as peer educators. Qualitative work addressing topics such as resources that would be useful for supporting a health intervention in the salon, desired training in topics related to HIV testing, PrEP, and family planning, and potential incentives for participation in health promotion activities are needed to inform the development of staff training sessions and materials.

Overall, most owners, stylists, and clients were willing to receive contraception and PrEP from a nurse in hair salons in and around Umlazi Township. Frequent client visits and willingness of stylists to offer health education suggest that a stylistinitiated, nurse-supported health intervention could be feasible in the salon setting. Hair salons represent a promising venue for reaching young women in sub-Saharan Africa at risk of unintended pregnancy and HIV infection.

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HIV Status Is a Greater Determinant of Low Self-perceived Life Expectancy Than Cigarette Smoking in a Well-resourced Setting

To the Editors:

An increased awareness of patientreported outcomes (PROs) has emerged in the field of infectious diseases and in the field of HIV in particular.¹ It was recently suggested to add a "fourth 90" to the World Health Organization's (WHO's) existing 90-90-90 continuum of care target to ensure that "90% of people with viral load suppression have good health-related quality of life."² Furthermore, quality of life should entail attention to 2 domains: comorbidities and self-perceived quality of life.²

There are several objective estimates of life expectancy in people living with HIV (PLWH).^{3–5} Life expectancy of PLWH in Denmark older than 50 years and without comorbidity was almost 9 years lower than in the general population.⁴ Another study in the same population showed that the number of life-years lost attributable to smoking was approximately 12 years compared with 5 years lost because of HIV.³

In this study, we assessed selfperceived life expectancy in well-treated Danish PLWH and in a cohort from the

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