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Barriers and facilitators to dental care among HIV-Infected adults

Carrigan Parish, DMD^{1,*}, Karolynn Siegel, PhD¹, Margaret Pereyra, DrPH^{1,2}, Terri Liguori, MS^{1,2}, and Lisa Metsch, PhD^{1,2}

¹Department of Sociomedical Sciences, Mailman School of Public Health, Columbia University, New York, New York

²Department of Epidemiology and Public Health, Miller School of Medicine, University of Miami, Coral Gables, Miami

Abstract

Oral health problems can significantly compromise HIV-infected individuals' general health and well-being, yet many of them experience an unmet need for oral care. The barriers and facilitators of obtaining dental care in a sample of HIV-infected adults, all of whom were eligible for Ryan White Part A funding for their treatment, were investigated through qualitative interviews with HIV-positive individuals who had not received dental services in the prior 12 months (n = 44). Identified barriers were as follows: (1) dental anxiety and fear, (2) cumbersome administrative procedures, (3) long waits at the dental office, (4) problem focused care-seeking behavior, (5) transportation difficulties, (6) dentists' reluctance to treat people like them, and (7) psychological issues. Identified facilitating factors were as follows: (1) coverage for dental care, (2) being treated with respect and acceptance, and (3) having an assigned case manager or social worker. Many of the barriers uncovered in this qualitative study can be addressed and overcome by case management services, but other approaches are needed to address the additional psychological and stigma-related factors that are impeding access to oral healthcare in this population.

Keywords

oral health; HIV/AIDS; access/barriers to care; dental utilization

*Corresponding author: cp2695@columbia.edu.

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Authors' Contributions

Carrigan L. Parish, DMD, contributed to the overall writing and editing of the manuscript. She confirms that she had full access to all data; participated in the design, execution, and analysis of the article; and had final responsibility for the decision to submit and resubmit for publication. Karolynn Siegel, PhD, co-originated the study, oversaw the study's implementation, analyzed the study data, and contributed to the initial draft and editing of this manuscript. Margaret Pereyra, DrPH, contributed to the writing and editing of the manuscript. Terri Liguori was the interviewer of the study participants and reviewed the manuscript. Lisa R. Metsch, PhD, was the lead investigator for the study, conceptualized the study and contributed to the writing and editing of the manuscript. All authors were involved in editing the manuscript and have seen and approved the final version.

Conflict of Interest

The authors have no conflicts of interest to declare.

Introduction

Given that the incidence and severity of dental disease in HIV-positive individuals is greater than in the general population, available and accessible oral health care is especially critical for this population.^{1–5} Indeed, by some estimates, over 90% of HIV-infected individuals will have at least one oral manifestation attributed to HIV infection during the course of their disease.^{6–9} Poor oral health can compromise these individuals' overall well-being in a variety of direct and indirect ways, such as contributing to opportunistic infections, preventing proper swallowing of prescribed antiretroviral medications, and impairing the ability to speak clearly.^{10–15}

Despite the importance of oral health for HIV-infected individuals, many experience an unmet need for dental care, defined as either the presence of untreated dental problems or failure to obtain regular prophylactic care.^{3,16–20} The HIV Cost and Services Utilization Study [HCSUS] investigators found 19% of HIV-infected individuals in medical care had a perceived unmet need for dental care in the preceding 6 months and unmet dental care needs were more than twice as prevalent as unmet medical care needs.^{3,19} In a large multisite national study of HIV-infected adults who were accessing oral health care after not receiving any nonemergency services in the prior 12 months, investigators found that 48% reported an unmet oral health care need, and more than half (52%) had not seen a dentist in the past 2 years.²¹

Disparities in receipt of dental care among HIV-infected individuals have been linked to social factors. In the HCSUS study, factors associated with a perceived unmet need for dental services in the past 6 months included low income, lack of insurance, and Medicaid insurance that did not include dental benefits.^{3,19} Longitudinal analysis of the HCSUS data showed that having physical and mental health problems also interfered with the use of dental services.¹⁸ In addition, a prospective observational study of HIV-infected medical clinic attendees found that those of African-American ethnicity were 1.6 times as likely as Caucasians to have unmet dental care needs; specifically, they were more likely to have loose teeth, need extractions, and be episodic dental care utilizers.²² Other identified barriers to dental care among HIV-infected individuals have included having less than a high school education, lack of dental insurance, unstable housing, poorer perceived health status, and severe dental anxiety.^{19, 23–25}

The Ryan White Care Act funding makes medical care and supportive services available to HIV-infected individuals at no or low cost, largely removing financial barriers. Yet, in a 2003 Miami-Dade County, Florida study, only 24% of HIV-positive individuals served by Ryan White-funded medical clinics had obtained oral health services in the prior 12 months, suggesting that other barriers also exist besides financial limitations.²⁶ Among individuals receiving at least one Ryan White CARE Act-funded service in a San Francisco Eligible Metropolitan Area, unmet needs for services were most often attributed to agency barriers (54%), followed by emotional issues and lack of information.²⁴ Other common barriers to dental care utilization cited by HIV-infected individuals include: transportation issues, the inability to find a dentist, fear of contracting an illness at the dental provider's office due to compromised immune status, fear of transmitting the virus to a provider, fear of

discrimination and stigma, concerns that providers would not be knowledgeable regarding the specific needs of HIV-positive individuals, and loss of confidentiality about HIV serostatus.^{27–29}

To further illuminate barriers and facilitators to the use of dental care services by HIV-infected individuals, we conducted a qualitative study of HIV-positive individuals in South Florida who were eligible for Ryan White funding, yet did not receive consistent dental services. Specifically, we sought to better understand the barriers and facilitators that HIV-positive individuals commonly experience when securing dental services despite the elimination of financial barriers.

Methods

Sample

Participants (n = 44) were a subgroup of individuals who had participated in a randomized controlled trial that assessed the efficacy of a brief, client-centered dental case management intervention on dental care utilization by providing “first step” linkage of HIV-positive patients already in medical care to dental care.³⁰ Only those participants randomized to the “standard-of-care” control arm, which provided standard dental referrals and basic information on oral hygiene and self-care practices, were included in this qualitative study.

Trial participants were recruited from five Ryan White-funded HIV primary medical care clinics in Miami-Dade County, Florida. Eligibility criteria included: (1) age 18 or older, (2) currently in medical care (defined as having seen an HIV primary care provider in the past 6 months), (3) currently not receiving dental care (defined as not having received dental services in the past 12 months), and (4) eligible for Ryan White Part A funding for dental care, to ensure that cost of services was not a barrier to dental care.

A convenience sample of participants in the “standard of care” control arm were invited to complete qualitative interviews after completing the last follow-up visit associated with the randomized controlled trial. Of the 302 individuals originally randomized to the control arm, 47 were invited to participate, of which 44 agreed to participate. After signing an informed consent, all participants completed an approximately 45-minute, semistructured interview at one of two sites—an HIV clinic in Broward Country or a satellite office of the University of Miami in Miami-Dade County. All interviews, which were completed between October 2009 and February 2011, were digitally recorded and transcribed verbatim. The quality of the interview transcripts was controlled over the course of data collection by comparing the audio file against the transcription for accuracy and completeness for a random sample (15%) of cases. This analysis revealed very few errors or avoidable omissions (e.g., inaudibles) and no systematic problems in the transcription procedures.

Data analysis

A thematic content analysis of the interview data was conducted. The analysis began with a series of provisional codes developed based on a review of the extant literature on the factors that facilitated or impeded access to dental services among HIV-infected adults. This initial set of codes was then expanded by a review of 16 randomly selected interviews. Next, all the

interviews were read and coded. On a subset, inter-rater reliability was calculated and found to be high ($\kappa = .84$). Finally, all material assigned to each code was extracted and principal themes within that code were identified.

Results

The final qualitative interview study sample consisted of 27 (61%) males and 17 (39%) females. The mean age was 47 years (range = 30–67). The sample primarily consisted of minority participants with 27 (61%) Blacks, 7 (16%) Hispanics, and 7 (16%) Whites. With regard to education, 18 (41%) had less than a high school education, 17 (39%) had graduated high school or obtained a GED certificate, 5 (11%) had some college education, and 4 (9%) had completed college or graduate school. The average elapsed time since the participant had last been in contact with study staff as part of the original randomized trial was 19 months.

The majority of participants (72%) reported a regular source of dental care, usually through a clinic rather than with a specific dentist. Of these individuals, 56% reported their last dental visit was more than 6 months prior. All of the participants who did not have a regular source of dental care had not seen a dentist in at least a year and, in most cases, in at least 2 years. When asked if, since their diagnosis, they had been seeing a dentist more often, less often, or about the same as before their HIV diagnosis, about a third (38%) of participants said they were seeing a dentist more now than before their diagnosis. For these participants, dental care coverage provided by Ryan White programs or Medicaid made this possible. However, the majority of participants said they were seeing a dentist less often (33%) or only as often (29%) as before their HIV diagnosis.

Barriers to obtaining dental care

Dental anxiety and fear—Fear of pain and needles and more generalized anxiety were among the most commonly mentioned barriers to seeking dental care. Often the patients' fear was the result of bad experiences with a dentist earlier in life, sometimes as long ago as childhood, or in the recent past. When asked what has stopped her from seeing a dentist, one 49-year-old female participant stated:

R: First off, I'm scared of the dentist, terrified... I've had some really bad experiences with the dentist where they poked a literal hole in my mouth and it stayed there for a year, wouldn't close up. Last year I was in the hospital with an abscess on my face that was so large it turns half of my mouth sideways, heading up and down.

Cumbersome Administrative Procedures—Numerous participants reported bureaucratic and health care delivery system-related barriers to obtaining dental care, resulting in great difficulty and frustration in negotiating accessible care. A 54-year-old male participant who had not seen a dentist in a year and a half reported a number of system barriers he had encountered when he had tried to see a dentist:

R: I'd call, nobody would answer the phone, I'd have to leave a message and nobody would return my calls. After that went on for a few months ... I did get an

appointment and when the appointment time came around I was, I just didn't feel like going because I just wasn't in the mood and I didn't want to go through all the hassle of being, you have to be financially screened before and go through all of that, all the time. I'm just really tired of having to be financially screened all the time and before each appointment. And then, you have to get a TB test, you have to bring proof of HIV, and referrals and all that. It's just such a hassle.

Some participants were discouraged by the cumbersome procedures needed to get a referral to see a dentist. A 47-year-old male participant who had not seen a dentist in 9 years explained how the stress of dealing with getting a referral had discouraged him from seeking follow-up care after he had gotten his dentures, especially since he was not having any direct dental pain or discomfort. When asked why he had not been back to the dentist, he replied:

R: You wait in line to wait in a line and then you got to get the referral and then you got to wait till the referral goes through and then that's even another week, so even if I did have immediate pain, it would not be immediately that anything would happen. It would be another week or two that anything would even occur...I know Ryan White covers these things for me, but no, it's just the time and aggravation.

Long waits at the dental office—Participants also complained that when they did get an appointment to see a dentist, they often had to wait a long time, sometimes even hours, at the clinic or office before being seen. When asked why she did not like the clinic she was sent to, a 39-year-old female explained:

R: I felt like the people didn't care, so you have to stay all day. They never - - and when you're finally sitting, doctor - - you don't see why you stay for all day...That was the point, that was the reason why I didn't go.

A 49-year-old female participant complained of similarly lengthy delays, attributable to inconsistencies in dental providers:

R: they keep changing everybody and you don't get the same person every time and it's like they'll read what the other doctor wrote and say, "no, I'm not gonna do that, I'm not gonna do this."

Problem focused care-seeking behavior—Many engaged in what might be termed "problem-focused care." That is, they did not accept the notion of preventive oral care, but rather contended that they saw no reason to see a dentist unless they were experiencing an immediate problem or were symptomatic. One 30-year-old female participant who had had x-rays of her teeth taken 6 years earlier claimed never to have heard from the clinic for follow-up and to have received no reply when she contacted them to find out what to do next. She had not seen a dentist since then, simply reasoning, "I ain't having no problems."

Another 33-year-old male participant had lost a dental restoration in the prior year, but had not yet been to the dentist to replace it. The following exchange occurred when the interviewer explored if and when he might go to a dentist for care:

R: Based on if my teeth are going to need it again soon. If it is going to need it soon, then yes I am going to make an appointment.

INT: How will you know?

R: When I start having I guess sensitivity or problems with my teeth.

Many with full dentures felt that there was no reason to see a dentist unless their appliance broke or needed adjustments. One participant justified why he had not seen a dentist since getting full dentures 6 years earlier:

R: I ain't got no pain. If I had pain I would have went. But I don't see no sense of just— Like the old man says, 'If it don't need fixing, why work on it'.

Transportation difficulties—In a number of cases, transportation limitations, in the form of poor public transportation or not having a car, made getting to a dentist very difficult and/or time consuming. Also, many clinics were situated “in out-of-the-way places” where “there’s never bus service.” A 44-year-old female participant reported that before she had a car, the ordeal of getting to the dentist on public transportation had discouraged her from going for dental care. She explained:

R: Your whole life is scheduled around catching buses when you have to ride the bus ... I mean it's, you know, two, three buses to get to a place, you know, then you got to wait and then you got to take the bus back and then – and it becomes frustrating, so you don't go.

Another 67-year-old female also suggested that having to travel a long distance to see a dentist discouraged her from going, even when she had a painful symptom.

R: But when you get up and you've got to go so far, and you get negative ... if they're closer, you would go more often. But when you've got to go so far, you get up and you say, “I don't feel like going. I don't want to go way down there.” So it makes you decide, “I'll deal with the pain another day.”

Dentists' reluctance to treat “people like them”—A few participants felt their access to dental care was limited because they experienced difficulty finding a dentist willing to treat HIV-infected individuals. For example, a 37-year-old female said:

R: I'd go [for dental care], but it's kind of hard to get a dentist when you're HIV positive...It's very hard. The dentists don't accept because of the fear or what but it's hard. I can't keep one. It's a barrier.

Another participant, a 47-year-old male expressed reluctance to seek dental care after a dentist he had gone to would not treat him, presumably because of his HIV infection:

R: I just remembered this. Before I got my referral to come to this clinic, I did go to another dentist and I knew I was HIV. He told me and he looked inside my mouth at one time and he would not work on me.

INT: Did he give you a reason or was it implied?

R: It was pretty much just implied because there was no reason for him not to work on me because it was his field, and yeah, I just remembered that.

INT: How did that make you feel?

R: Less than “How could he?” Yeah. I was extremely upset over that because then I was afraid that I would be treated like that again and I didn’t want to be treated like that

Psychological issues—A small number of participants mentioned psychological barriers to obtaining dental care. For instance, a 33-year-old male spoke of the “treatment fatigue” he was experiencing as a result of the constant medical surveillance that his HIV disease required:

R: I am just too—I am tired of going to the doctor and dentist all the time. Since I have been diagnosed with HIV it is constant. Every six months you have to see your—or whatever, twelve months, whatever it is. But it is constant. Or twelve weeks, every twelve weeks I have to see my doctor. Then make another appointment for dentists and all that. It is just too much. It is not in my schedule.

A couple of participants spoke of the hopelessness that having HIV had invoked in them, and how the accompanying expectation they would not live a long life was a barrier to maintaining one’s health, including oral health. One was a 48-year-old male who felt he had lost the motivation to care for his health:

R: Psychologically, you just don’t take care of yourself like you’re supposed to because you start putting in your mind that hell, I’m dying anyways, and after a while you get that mindset to where you start not taking care of yourself properly, not eating right, not brushing your teeth, all kinds of stuff.

Another participant, a 34-year-old male, reported that he had not sought dental care because the problems of dealing with his HIV disease and the associated physical health problems it posed was so threatening that it eclipsed any concerns with oral problems. He said:

R: When you got HIV you ain’t paying too much attention to your mouth. Just a little bit to keep you going around smelling like no billy goat of alley when you open up your mouth and it smells like a garbage truck.... the main thing you worry about is when there is going to be a cure for AIDS. That is the only thing you think about.... Other things is just like misdemeanors, but you know that AIDS is a felony. It is first degree felony, so you try to work on that to get it down to a third degree felony or a misdemeanor.

Factors facilitating access to dental care

A number of factors that facilitated and/ or maintained their ability to obtain dental care were also mentioned by participants. Although far less numerous than the barriers identified, each was critical to their seeking and/or obtaining dental care.

Coverage for dental care—Not surprisingly, the most significant factor in participants’ access to and receipt of dental care was coverage through Ryan White Part A funding and/ or Medicaid. For example, a 50-year-old female explained how Medicaid made it possible for her to get oral care:

R: Just the Medicaid, I know if I need dental care I have no problem going to get it... So, definitely finances would be a barrier if I didn't have the Medicaid.

A 35-year-old female participant reported that Medicaid coverage allowed her to now receive more regular oral care: When asked if she saw a dentist more or less often since her diagnosis, she replied:

Actually more now because Medicaid paid for me. So I get regular appointments... They cover certain things—certain how many visits you have and stuff. They pay for it. You don't have to worry about paying out of your pocket.

Similarly, a 47-year-old male reported that his oral health improved on account of Ryan White funding because “*once again, I took the advice of my doctor and because of Ryan White, I then could afford certain dental care that I couldn't afford before.*”

Being treated with respect and acceptance—Being treated with respect and acceptance was often mentioned by participants as a main reason for their satisfaction with the dental care they had recently received and was also mentioned as a factor that influenced their willingness to seek dental care. For some, this respect was manifested in the time the dentist or staff took to explain the treatment procedures, as described by one 52-year-old male:

Because how they treat you, treat you so kind, they talk to you and make sure you're comfortable instead of just yanking and stuff, they explain things, that's what I like more. And I feel comfortable with them, before you had doctors in there, they were so rude and heard them snitching, it hurt. But they're more calmer with you so I like that better.

Having an assigned case manager or social worker—Having a case manager who provided the referral for dental care and helped the patient obtain the necessary documentation was also mentioned by several participants as important in facilitating their receipt of dental care. When asked if anyone had helped him access dental care, a 47-year-old male said:

R: With him [the case manager] guiding me in the right direction and giving me the proper referrals to get through whatever doors I needed to get through. Yeah, just the doctors and my case management because without them I would have no idea because there is no list. There's no pamphlet. There is nothing to tell you - -

A 47-year-old male also commented on how essential the assistance of a case manager was when asked by the interviewer if anyone helped him get dental care. He replied:

R: They [case managers] gave me the - - since I moved from Chicago six years ago, I had to get a new case manager to help me get settled in Florida and the proper places where I've got to go for my regiments, my medications and all that which would have been in limbo if I didn't have a case manager. It's very complicated on your own. You can't really - - it's almost impossible without a case manager. They're there to help you for your eyesight, any medical facility, food, whatever complications. They want you to have the best health as possible.

Discussion

Oral care is one of the most frequently unmet health needs of HIV-infected individuals.^{3, 16–20} Consequently, understanding the barriers and facilitators to getting HIV-infected individuals into care and maintaining them in care is especially important in this population. Although study participants were all eligible for Ryan White Part A funding for dental care, utilization of such services was low. Analysis of the interview data identified several common barriers to obtaining dental care.

A number of cumbersome administrative procedures associated with being able to see a dentist were noted barriers to care, especially the difficulty in negotiating the paperwork and extensive documentation needed in order to obtain a referral to a dentist. Having a social worker or case manager who assisted them in obtaining dental referrals and organizing the necessary paperwork was a facilitating factor frequently mentioned by participants, who generally spoke in very positive terms about how instrumental their social workers or case managers had been in making it possible for them to see a dentist. An analysis of baseline data from the parent trial found that having a case manager was the only care-related factor associated with having used dental services in the past year.³¹ Furthermore, analysis of the outcome data from the parent trial showed that the odds of utilizing dental services were, after 6 and 12 months, about twice as high among individuals assigned to a dental case manager compared to those without access to case management services.³⁰ Dental case management can encapsulate responsibilities beyond those at just the administrative level, and can include motivational interviewing, health literacy activities, care coordination, community outreach, and education.³² Studies on dental case management have shown that it leads to improved retention in dental care, completion of treatment plans, and improvements in oral health.^{30,33} In the era of interdisciplinary health-related practices, medical case management could also potentially play a role in encouraging oral health prevention as well, given its documented ability to help improve overall morbidity and mortality, medication adherence, and continuity of care.^{34–36} Such findings underscore the significant role that case management plays in facilitating and maintaining health care utilization and improved disease outcomes amongst underserved population.

Some patients seemed not to understand the importance of preventive professional oral care, which posed a barrier to obtaining routine care. Many were prompted to seek dental care only if symptomatic or if they identified a dental-related problem. Interestingly, a 2012 study of HIV-positive adults enrolled in a federally funded dental care demonstration project found that those with dental insurance were more likely to seek problem-based dental treatment, while lack of dental insurance was associated with seeking preventive-based care.³⁷ For many of the participants from disadvantaged backgrounds, financial barriers to oral care had seemingly long existed—not just currently but also earlier in life—and thus they had not been socialized to seek preventive oral care.^{38–41} Therefore, despite the alleviation of financial barriers, few of our study participants, sought preventive care, underscoring the fact that alleviating financial barriers alone will not sufficiently facilitate preventive dental care in this population. Rather, outreach efforts and education about the importance of comprehensive dental care and preventive hygiene techniques as a means of maintaining adequate oral health could likely be effective in motivating HIV-positive persons to seek

such services. One example is the “Promoting Oral Health Care for People with HIV Infection” booklet published by the New York State Department of Health AIDS Institute, which includes a set of “best practices” (e.g., simple fact sheets, oral care brochures, “education rooms” in lieu of waiting rooms, and education video libraries).⁴² Webinars and patient fact sheets about HIV and dental disease are also available through the National Institute of Dental and Craniofacial Research (NIDCR) and American Dental Education Association (ADEA).^{43,44} Such tools can potentially have a great impact by empowering HIV-positive patients and increasing patient knowledge through education.

Difficulties in getting to the dental clinic or office was another identified barrier. Some complained that the public transportation system made it difficult to get to appointments or necessitated a long and tiring trip. A few indicated that if they did not have a car or access to someone who did and was willing to transport them, getting to the dentist would be too hard to endure. This is consistent with many previous studies citing transportation as a common barrier towards securing dental services amongst special needs and disadvantaged populations.^{45–47} It has been suggested that facilitating linkages to community resources, such as mobile vans, may be a useful tool in easing the ability for these individuals to access dental services.^{45,47} “One stop shopping models,” where individuals can access medical and ancillary services in one setting, and in-house service models have also been proposed as ways to minimize the reliance of disadvantaged individuals on transportation in order to receive treatment services.⁴⁶

Some participants found it difficult to locate a dentist who would take their insurance or who was willing to treat HIV-infected patients. Whether dentists who refused their insurance were primarily motivated by a desire to avoid HIV-infected patients or the monetary disincentives that might have been involved is unclear. A small number of study participants, however, felt they were being discriminated against by these dentists and were therefore discouraged from seeking dental care and re-experiencing that rejection. Discrimination against HIV positive individuals in the dental setting was documented in the early days of the epidemic but has declined over the past few decades.^{48–52} Surprisingly, however, our results are consistent with other studies of dentists, dental students, and HIV-positive patients that have documented the presence of persisting discrimination and refusal to provide dental services to these patients, especially amongst older and foreign dentists.^{52–55} Although the HIV epidemic is in its fourth decade of existence and the American Dental Association has stated that HIV-positive patients can be treated safely in the dental setting, rendering denial of treatment as unethical, there is still a need for curriculum additions in dental schools and targeted education efforts in dental continuing education programs that educate the dental community, especially those who graduated from dental school a long time ago, about treating HIV-positive patients.^{52,56}

Fear of pain from the procedures and tools dentists used was also a frequently mentioned deterrent to seeking dental care. A substantial proportion of participants recounted vivid memories of painful and distressing dental experiences, often during childhood, which prompted avoidant behavior well into adulthood. Similarly, a 2012 study of HIV primary care patients (n = 444) assessing factors associated with dental anxiety and dental care utilization found that moderate to severe anxiety associated with securing needed dental

services was prevalent in this population and resulted in lower odds of utilizing dental services in the prior year, compared to those with moderate or no dental anxiety.²⁵ Interventions that address dental-related fears and avoidance behaviors while also empowering HIV-positive patients to prioritize their oral health may have a beneficial impact on dental care utilization.²⁵

Additional psychological issues were also alluded to as barriers to obtaining oral care. Some expressed hopelessness about living very long with HIV disease and therefore were not particularly motivated to preserve their teeth. Treatment fatigue after years of HIV surveillance and antiviral treatment were also mentioned in a small number of cases as reasons for not seeking oral care in addition to medical care. Consistent with other studies, another cited barrier was that maintaining their physical health posed significant challenges that occupied the primary focus of their attention, leading to low prioritization of oral health care.^{37, 57–60} It therefore becomes imperative that dental professionals, as well as healthcare professionals in general, promote the importance of proper oral healthcare as an extension of patient's overall general health and help patients to better understand the interrelated physiological relationship between systemic and oral health.

The factors mentioned that facilitated participants obtaining dental care were more limited, but equally important to understand. The availability of dental care insurance either through Medicaid or a Ryan White initiative was clearly the most important factor enabling participants to obtain oral care. In the absence of this coverage, most indicated they would simply have been unable to afford professional oral care and most were very grateful for this form of assistance, although some had expressed that they wished more procedures were covered. The future of Ryan White funding in the current era of healthcare reform remains to be determined; while Ryan White legislation is still part of the law, despite pending reauthorization, coverage of HIV individuals will be impacted by expansion provisions of the Affordable Care Act (ACA).⁶¹ The ACA provides new coverage options to HIV positive individuals who already have coverage or who are uninsured by expanding Medicaid eligibility and extending subsidized private coverage through the new Health Insurance Marketplace, subject to state legislature.⁶¹ However, because these changes are subject to the flexibility of individual state legislatures, there is still the potential for many HIV positive individuals to be ineligible for Medicaid and/ or assisted private coverage and thus reliant on Ryan White coverage.^{61,62} Therefore, advocates are urging that the Ryan White program be reauthorized and maintained as an important and necessary source of care for HIV positive individuals and integrated into the coverage now offered through this healthcare reform.^{61–63}

Participants were more apt to engage in care and return for preventive or follow-up treatment when they felt a sense of acceptance and respect by the dentist and his staff and did not feel that they were treated any differently on account of their HIV infection. Therefore, the manner in which patients are treated in the dental setting appears to have a significant impact on their satisfaction with dental care and their willingness to seek and maintain care. It is possible that the stigma that has historically been associated with HIV may have caused participants to anticipate or expect inferior or disrespectful treatment. If so, having these

fears not materialize when they did see a dentist may have led to heightened satisfaction with their care.

Despite the potential for serious complications or opportunistic infections, the majority of oral health problems experienced by HIV-positive individuals can be prevented by regular prophylactic care and require only routine treatment.^{29,64,65} Yet, the findings of this study indicate that, even when what is generally assumed to be the primary barrier to oral care—the cost—is minimized or eliminated, other barriers continue to keep HIV-infected patients out of care. Many of the barriers uncovered in this qualitative study can be addressed and overcome through oral health education, “one-stop shopping” integrated care models, and case management services that alleviate administrative barriers, promote the importance of oral health and prevention, and facilitate engagement in care. Other approaches may be needed to address barriers stemming from psychological issues, anxiety, and stigma. Given the now well recognized relationship between oral health and physical health, failure to address these barriers will limit the ability for HIV-infected patients to achieve optimal health.

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