CHAIN Report 2001-1
(Update Report #33)

Dental Services for HIV+ Individuals in New York City’s CHAIN Cohort

Gunjeong Lee
David Abramson
Peter Messeri

Joseph L. Mailman School of Public Health
Columbia University

In collaboration with Medical and Health Research Association of New York
The NYC Department of Health
The NYC HIV Health & Human Services
HIV Planning Council

Submitted March 28, 2001
HRSA Grant # BRH890015-09-0
ACKNOWLEDGMENTS

A Technical Review Team (TRT) provides oversight for the CHAIN Project. In addition to Peter Messeri, PhD and Angela Aidala, PhD, both of Columbia’s Joseph L. Mailman School of Public Health, TRT members include Mary Ann Chiasson, DrPH, MHRA; Les Hayden, HIV Care Services/MHRA; Joanne Hilger, NYCDOH; Jeanne Kalinoski, HIV Planning Council, Jennifer Neslon, MHRA; and Ryan Chavez, HIV Planning Council

This research was supported by grant number BRH890015-09-0 from the US Health Resources and Services Administration (HRSA). This study was supported by the HIV Health and Human Services Planning Council of New York under a Title I grant of the Ryan White Comprehensive AIDS Resource Emergency Act of 1990 through the New York City Department of Health. It was conducted under the auspices of the Medical and Health Research Association of New York City, Inc. Its contents are solely the responsibility of the Joseph L. Mailman School of Public Health of Columbia University and do not necessarily represent the views of the funders.
Overview

The objective of this report is to document trends in the utilization of dental services by respondents in the CHAIN cohort. In particular, we have looked at trends in utilization of dental services between 1995-2000, trends in client satisfaction with dental services, whether or not there are group differences in these utilization and satisfaction trends, and the institutional settings in which the dental services were received. Our analysis is based on information provided by participants in the ongoing, longitudinal CHAIN study, a representative sample of HIV-positive adults in New York City’s HIV care system.

The key findings of this dental trend analysis are the following:

- There is a fairly consistent pattern of dental service utilization by CHAIN participants. Between 39% (254 out of 652 in Wave 5) and 44% (310 out of 700 in Wave 1) of the respondents reported receiving dental services in the prior six months at each of the six rounds of interviews. There is a slight, but statistically significant decreasing trend in dental service utilization between 1995 and 2000.

- Most of the dental service reported by CHAIN participants may be characterized as preventive dental care, including dental examinations, teeth-cleaning, and x-rays. Over all 35% of CHAIN participants have used preventive dental care and 27% of CHAIN participants have received non HIV related oral treatment including fillings, extractions, root canal, crown/bridge or denture work and gum care. Over all only 4% of CHAIN participants report HIV-related oral treatment in the prior six months for such conditions as thrush or mouth sores and the usage of HIV-related oral treatment has been decreased from 7% (49 out of 700) in Wave 1 to 1% (7 out of 508) in Wave 6.

- There are several statistically significant group differences in dental service utilization among CHAIN participants. Black and Latino participants are approximately half as likely to report using dental services as are white participants. Individuals with less than a high school education are much less likely to use dental services than are individuals with higher levels of education. Men who have sex with men are one-third more likely to report dental service use than are other CHAIN participants, and uninsured individuals are only one-quarter as likely as insured individuals to report dental services.

- There were no statistically significant differences in dental use patterns among several other groups: men were as likely to report dental use as women, unstably housed individuals were as likely to report dental use as participants who were stably housed, and individuals with low t-cell counts (less than 200 /µL) were as likely to report dental use as were individuals with higher t-cell counts (more than 500 /µL). One interesting finding was that over time, unstably housed individuals were more likely to report dental use than were stably housed individuals over time.
There is an increasing trend in patient satisfaction with dental services over the six years of the CHAIN study. In 1994-1995, 67% (193 out of 290) of participants who received dental services were satisfied with the service, compared with 77% (157 out of 204) of participants in 1999-2000.

There were statistically significant group differences in client satisfaction with dental services. Black participants were one and a half times more likely than white or Latino participants to express satisfaction with their dental provider, as were men in general, and individuals with private insurance. There were no statistically significant group differences in satisfaction for unstably housed individuals, current drug users, or individuals with low t-cell counts.

Among the dental service settings reported by CHAIN participants, there were approximately equal numbers of respondents who received dental services from private practice dentists and at voluntary hospitals (between 34% for private practice and 46% for voluntary hospital in Wave 5). Only 7% (19 out of 297 in Wave 6) to 13% (43 out of 319 in Wave1) of CHAIN participants reported receiving dental services at New York City Health and Hospital Corporation facilities.

On average, only 10% (339 out of 3328 in all Waves) of CHAIN participants reported receiving dental services at the same agency in which they received their primary HIV medical care.

At the most recent interview in Wave 6, we asked whether dental providers were aware of the respondent’s HIV status. Among the 196 respondents reporting any dental treatment, 173 (88%) answered that their dental provider was aware of their HIV status.

Although the CHAIN survey did not probe for barriers to care we did ask respondents if they were at all dissatisfied with the service they received at their most recent dental appointment. Across three waves of data, from October 1996 through December 1999, there were 629 reports of any dental service out of a total of 1,566 interviews (40%). Among these 629 reports of dental service, 34 individuals (5%) expressed dissatisfaction with the care they received at the most recent dental appointment. The principal reason individuals were dissatisfied related to poor quality of dental treatment (17 of 34 responses) as perceived by the clients. “The place did not look clean and they did not seem like they knew what they were doing,” one respondent reported. “They put a tooth in my mouth crooked and the lost my dentures twice,” another reported. One respondent noted that even after visiting a dentist for a particular problem, he wasn’t given antibiotics, “my mouth got infected, I had to get stitches and five teeth pulled.”

The second most commonly cited issue (8 of 34 responses) related to systematic problems in a dentist’s office, either in getting timely appointments or in the environment
of the dental office. Poor patient-provider relations were cited by 5 of 34 respondents, such a client reporting that the dentist developed a treatment plan without ever discussing it with the respondent. One respondent noted an HIV-specific issue. “They had the word ‘HIV’ written on the outside of my chart, which is illegal. The dentists don’t look at you as people,” the respondent concluded, “they look at you as teeth.”

Methods

CHAIN is an ongoing longitudinal study of persons living with HIV in New York City, conducted as part of the evaluation activities of the city’s Title I Health and Human Services Planning Council. Its purpose is to provide systematic data from the perspective of persons living with HIV about their needs for health and human services, their encounters with the full continuum of HIV services, and their physical, mental and social well being. The time period covered by this report is from 1995-2000, during which CHAIN participants were interviewed six separate times, at six to twelve month intervals.

At each interview, CHAIN participants are asked, “In the last 6 months, have you seen a dentist, oral surgeon, or other professional dental care provider?” Individuals who answer affirmatively are then asked how many visits they made to a dental provider in the prior six month period, the name and address of each dental provider visited, and the types of services received by the dental care provider. Every respondent who has visited a dental provider is expressly asked if he or she was treated for mouth sores or thrush in the prior six month period. Respondents are also asked, “Overall, how satisfied were you with the care you received in your most recent dental visit?” and they are given an opportunity to elaborate upon any reason that they were not fully satisfied with the services.

Figures 1 through 12 represent the trends in utilization and satisfaction reported by CHAIN participants.
Figure 1. Trends of Dental Care Utilization

- **Any Dental Care**
- **Preventive Dental Care**
- **Non-HIV Oral Treatment**
- **HIV Oral Treatment**

**Note:**
- Preventive dental care: examination, cleaning teeth, x-rays
- Non-HIV oral treatment: fillings, extractions, root canal, crown/bridge or denture work, gum care and other
- HIV-related oral treatment: treatment for any sores in the mouth—thrush or some other problem
Figure 2. Trends of Dental Care Utilization by Ethnicity

- Wave 1: 10/94-9/95 (N=700)
- Wave 2: 7/95-7/96 (N=568)
- Wave 3: 2/96-12/96 (N=480)
- Wave 4: 10/96-10/97 (N=420)
- Wave 5: 10/97-11/98 (N=652)
- Wave 6: 1/99-1/00 (N=508)

- White
- Black
- Latino
Figure 3. Trends of Dental Care Utilization by Sex
Figure 4. Trends of Dental Care Utilization by Education

![Graph showing trends in dental care utilization by education across different waves and years.](image)
Figure 5. Trends of Dental Care Utilization by HIV Risk Group

![Graph showing trends of dental care utilization by HIV risk group for different waves and periods with respective sample sizes.]

- **MSM**: Green triangle
- **Drug User**: Blue square
- **MSM & Drug User**: Light blue pentagon
- **Other**: Red diamond

**Wave Details**
- Wave 1: 10/94-9/95, N=700
- Wave 2: 7/95-7/96, N=568
- Wave 3: 2/96-12/96, N=480
- Wave 4: 10/96-10/97, N=420
- Wave 5: 10/97-11/98, N=652
- Wave 6: 1/99-1/00, N=508
Figure 6. Trends of Dental Care Utilization by Housing Stability
Figure 7. Trends of Dental Care Utilization by Current Drug Use

- No drug use
- Current drug use

<table>
<thead>
<tr>
<th>Wave</th>
<th>Dates</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 1</td>
<td>10/94-9/95</td>
<td>700</td>
</tr>
<tr>
<td>Wave 2</td>
<td>7/95-7/96</td>
<td>568</td>
</tr>
<tr>
<td>Wave 3</td>
<td>2/96-12/96</td>
<td>480</td>
</tr>
<tr>
<td>Wave 4</td>
<td>10/96-10/97</td>
<td>420</td>
</tr>
<tr>
<td>Wave 5</td>
<td>10/97-11/98</td>
<td>652</td>
</tr>
<tr>
<td>Wave 6</td>
<td>1/99-1/00</td>
<td>508</td>
</tr>
</tbody>
</table>
Figure 8. Trends of Dental Care Utilization by Tcell count

- Wave 1: 10/94-9/95, N=700
- Wave 2: 7/95-7/96, N=568
- Wave 3: 2/96-12/96, N=480
- Wave 4: 10/96-10/97, N=420
- Wave 5: 10/97-11/98, N=652
- Wave 6: 1/99-1/00, N=508

- Red triangle: Less than 200
- Blue square: 200-500
- Green triangle: More than 500
Figure 9. Trends of Dental Care Utilization by Insurance Type
Figure 10. Trends of Dental Care by Setting

- **Private Practice**
- **Voluntary Hospital**
- **HHC**
- **Other**