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Youngsters With HIV/AIDS May Be Your Patients

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ABSTRACT

Advances in pharmaceutical "cocktails" are prolonging the lives of hundreds of thousands of US residents, including thousands of children who are infected with HIV/AIDS. The demographic characteristics of the increasing number of these children who are surviving and reside in communities were reviewed to alert pediatric dental practitioners to the reality that these children may be their patients. (*J Dent Child.* 2004;71:105-109)

KEYWORDS: HIV/AIDS, DEMOGRAPHICS

"Don't tell me nothin' about no AIDS because that won't impact me. And if I was to get it, all I'd have to do is take a pill in the morning and I'll be OK," said a 15-year old girl.¹

oes it really matter that by the mid-2000, 438,795 US residents, including 5,086 children younger than 15 years died from AIDS² when "we now have cocktails that save people" with HIV/AIDS, including protease inhibitors and antiretroviral medications? Acquired immunodeficiency syndrome (AIDS) is a specific group of diseases or conditions that are indicative of severe immunosuppression related to infection with the human immunodeficiency virus (HIV). (Unless otherwise specified, the terms "pediatric," "children," or "youngsters" throughout this report referred to persons younger than 13 years.)

There were 431,924 US residents, including 5,575 children, reported to be living with the HIV infection and/or AIDS, including more than:

- 1. 100 children in Connecticut, Illinois, Louisiana, Maryland, Michigan, Ohio, Oregon, South Carolina, Virginia and Puerto Rico;
- 2. 200 children in California;
- 3. 400 children in Texas;
- 4. 600 children in New Jersey;
- 5. 700 children in Florida;
- 6. 800 children in New York (Table 1).

Throughout this report, HIV infection data should be interpreted with caution. HIV surveillance reports may not be

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Does it really matter that society "simply accept millions of deaths and dismiss them as simply the problem of another continent, or the unfortunate consequence of poverty?" 4

Does it really matter that the continuing tragedy of the HIV/AIDS epidemic in this country often has been "lost" in the news reports that emphasize the tragic and spreading epidemic of HIV/AIDS in Africa and the efforts to reduce the costs of the "life saving cocktail" for the poor on that continent?⁵⁻¹⁰

Yes, it really does. Through the mid-2000 in the US:

- 1. More than 6,800 cases of AIDS were reported for children, younger than 5 years.¹¹
- 2. More than 8,800 cases of AIDS were reported for children, younger than 13 years.³
- 3. One in every 50 black men and 1 in every 250 white men were infected with HIV.
- 4. One in every 160 black women and 1 in every 3,000 white women were infected with HIV.
- 5. AIDS was the leading cause of death for blacks between the ages of 25 and 44 years.¹

Earlier demographic reports in the *Journal of Dentistry for Children* reviewed the increasing number of reported pediatric HIV/AIDS cases in the period prior to the "pharmaceutical cocktail that saves people" between the early 1980s and the first half of the 1990s. ^{12,13} This report carried the review forward to

Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware Dist. Col. Florida Georgia Hawaii	Living with HIV infection* 40 — 36 21 — 27 95 — 158 — 4 — 4	Living with AIDS 25 1 9 23 218 7 76 15 92 610 93 5	living with HIV infections & AIDS 7,932 245 7,264 3,500 43,286 8,167 5,784 1,138 6,054 50,957 9,919 974
Alaska Arizona Arkansas California Colorado Connecticut Delaware Dist. Col. Florida Georgia Hawaii	36 21 — 27 95 — 158 — 4 —	1 9 23 218 7 76 15 92 610 93	245 7,264 3,500 43,286 8,167 5,784 1,138 6,054 50,957 9,919
Arizona Arkansas California Colorado Connecticut Delaware Dist. Col. Florida Georgia Hawaii	21 — 27 95 — — 158 — — 4	9 23 218 7 76 15 92 610 93	7,264 3,500 43,286 8,167 5,784 1,138 6,054 50,957 9,919 974
Arkansas California Colorado Connecticut Delaware Dist. Col. Florida Georgia Hawaii	21 — 27 95 — — 158 — — 4	23 218 7 76 15 92 610 93	3,500 43,286 8,167 5,784 1,138 6,054 50,957 9,919
California Colorado Connecticut Delaware Dist. Col. Florida Georgia Hawaii		218 7 76 15 92 610 93	43,286 8,167 5,784 1,138 6,054 50,957 9,919 974
Colorado Connecticut Delaware Dist. Col. Florida Georgia Hawaii	95 — 158 — — 4 —	7 76 15 92 610 93	8,167 5,784 1,138 6,054 50,957 9,919
Connecticut Delaware Dist. Col. Florida Georgia Hawaii	95 — 158 — — 4 —	76 15 92 610 93	5,784 1,138 6,054 50,957 9,919 974
Delaware Dist. Col. Florida Georgia Hawaii	 158 4 	15 92 610 93	1,138 6,054 50,957 9,919 974
Dist. Col. Florida Georgia Hawaii	4 	92 610 93	6,054 50,957 9,919 974
Florida Georgia Hawaii	4 	610 93	50,957 9,919 974
Georgia Hawaii	4 	93	9,919 974
Hawaii	_		974
	_	5	
Idaho	_	_	
			517
Illinois	2/	134	9,581
Indiana	34	17	5,771
Iowa	3	4	890
Kansas	11	5	1,806
Kentucky	_	15	1,555
Louisiana	98	55	12,115
Maine	_	7	437
Maryland	_	165	9,517
Massachusetts	_	79	6,613
Michigan	93	34	8,884
Minnesota	28	13	4,080
Mississippi	47	27	6,043
Missouri	45	17	8,355
Montana	_	_	161
Nebraska	7	4	921
Nevada	24	11	4,683
New Hampshire	_	4	476
New Jersey	372	265	27,165
New Mexico	3	8	1,530
New York	_	811	52,873
North Carolina	110	51	13,222
North Dakota	1	1	109
Ohio	67	42	9,627
Oklahoma	14	9	3,643
Oregon	16	8	2,017
Pennsylvania	10	8 176	10,858
Rhode Island	_	7	
South Carolina	— 98	32	875 10,908

South Dakota	5	1	251
Tennessee	64	20	9,952
Texas	272	157	27,608
Utah	7	7	1,658
Vermont	_	1	173
Virginia	76	86	13,190
Washington	_	15	3,928
West Virginia	4	4	1,001
Wisconsin	27	12	3,738
Wyoming	_	2	136
Guam	1	_	67
Puerto Rico	_	173	9,023
Virgin Islands	3	8	380
Total	1,911	3,664	431,924

*Includes only persons from areas with confidential HIV reporting. Excludes 2,038 adults/adolescents and 57 children reported from areas with confidential HIV infection reporting whose area of residence is unknown.

the end of the decade. Between 1993 and 1999, there was a 22% increase in the number of children with AIDS who were alive in the United States, an increase from more than 3,000 to more than 3,700 children.¹⁴

NUMBER OF PEDIATRIC AIDS CASES

More than two-thirds of the 8,804 reported pediatric AIDS cases (reported through mid-2000) were the result of the mother's IV drug use (35%) and/or at-risk sexual activity (33%). Reported risk factors for mothers and their children varied by race/ethnicity.

- 1. Mother's IV drug use was reported for 31% of white, nonHispanic children, compared to 36% of black, nonHispanic and Hispanic children.
- 2. Mother's at-risk sexual activity was reported for 9% of white, nonHispanic children, compared to 31% of black, nonHispanic and 39% of Hispanic children.
- Blood transfusions for children were reported as a risk factor for 12% of white, nonHispanic children compared to 2% of black, nonHispanic and 4% of Hispanic children (Table 2).

The proportion of the 8,804 children with AIDS was almost equally divided between boys and girls (51% vs 49%). Seventy-seven percent of the children with AIDS were younger than 5 years. Fifty-eight percent of the children were black, nonHispanic. Twenty-three percent of the children were Hispanic. Seventeen percent were white, nonHispanic (Table 3).

DECLINE IN THE NUMBER OF PEDIATRIC AIDS CASES

The annual number of diagnosed pediatric AIDS cases reached a high of 947 in 1992. In 1994, there were 582 deaths of children with AIDS (Table 4).

Trends in AIDS incidence among children have continued to decline as a result of the dramatic success of efforts to reduce

Exposure category	White nonHispanic	Black nonHispanic	Hispanic	Asian/Pacific Islander	Native American	Total*
Mother at risk for HIV infection IV drug use	480	1,893	741	4	14	3,137
At-risk sexual activity†	143	1,620	804	16	10	2,896
Transfusion (mother)	44	75	32	1	_	152
Has HIV infection, risk not specified	175	1,368	280	10	4	1,842
Hemophilia/coagulation disorder	159	34	37	3	2	236
Transfusion (child)	189	89	92	11	_	381
Other risk not reported or identified	26	99	30	4	1	160
Total	1,535	5,158	2,016	49	31	8,804

^{*}Total includes 15 children whose race/ethnicity are unknown.
†Includes sex with injecting drug users, bisexual males, persons with hemophilia, and with HIV infected persons.

	White nonHispanic	Black nonHispanic	Hispanic	Asian/Pacific Islander	Native American	Total*
Male						
<5 yrs	521	2,110	766	16	12	3,429
5-12 yrs	340	458	280	9	6	1,096
All ages	296,931	208,389	111,895	4,852	1,821	624,714
Female						
<5 yrs	490	2,102	758	15	13	3,383
5-12 yrs	184	488	212	9	_	896
All ages	27,889	74,331	25,680	694	412	129,190
Total*	324,822	282,720	137,575	5,546	2,234	753,907

^{*}Totals include individuals for whom race/ethnicity and/or gender are unknown.

perinatal (mother-to-child) HIV transmission. In 1994, clinical trials showed that HIV infected women could reduce the risk of transmitting the virus to their babies by as much as two-thirds through the administration of zidovudine (ZDV or AZT) during pregnancy, labor and delivery, and by giving their babies AZT for the first 6 weeks after birth. As health practitioners incorporated these guidelines into their practices, perinatal AIDS incidence dropped dramatically. For example, between 1992 and 1996, the number of children with perinatally acquired AIDS decreased by 43%. But despite declines in all racial/ethnic groups, the majority of perinatally acquired AIDS cases continued to occur among black and Hispanic children. 18

CHILDREN WITH HIV/AIDS AND THE DENTAL PRACTICE

Children with HIV/AIDS were not residents of 1 or 2 "other" states or any single metropolitan area. They resided in each state in the nation and the metropolitan areas. (Tables 1 and 5). No children living with AIDS were reported in 2 metro-

politan areas with populations over 500,000 (Wichita, Kan and Youngstown, Ohio):

- 1. Fifty or more children living with AIDS resided in the metropolitan areas of Baltimore, Boston, Fort Lauderdale, Fla, Houston, Los Angeles, Newark, NJ, and West Palm Beach, Fla.
- More than 100 children living with AIDS resided in the metropolitan areas of Chicago, Miami, Philadelphia, and Washington, DC.
- 3. More than 500 children living with AIDS resided in the metropolitan area of New York (Table 5).

"You'd better not refuse to treat an AIDS or HIV-positive patient" was the admonition in an earlier article in the *Journal of Dentistry for Children*. The Bragdon case concerned a Maine dentist who declined to treat an HIV woman in his office, preferring to treat her in a hospital setting. The Supreme Court ruled, "HIV-infected patients, even those with no apparent signs of disease, can be protected by the Americans with Disabilities Act."

Table 4. Reported Pediatric AIDS Cases and Deaths Through December 1999¹⁷

	Diagnosed cases during interval	Deaths during interval				
Before 1985	252	104				
1985	250	119				
1986	340	167				
1987	506	294				
1988	617	321				
1989	725	176				
1990	812	399				
1991	812	399				
1992	947	425				
1993	918	541				
1994	810	582				
1995	667	536				
1996	485	420				
1997	290	209				
1998	194	115				
1999	93	76				
Total*	8,718	5,084				

*Total includes children whose dates of death are unknown. Note: Data are updated in subsequent federal reports. Data in more recent years do not necessarily represent final tallies.

"By force of that law, no health provider may discriminate against such a patient. In other words, the health provider must treat the patient."²¹

As a result of new forms of "pharmaceutical cocktails," the life expectancy of AIDS and HIV positive children (and adults) in the nation will be extended. While one cannot lose sight of the deaths and tragedies resulting from the worldwide HIV/AIDS epidemic, similarly, one must not overlook these children (and adults) who continue to live with HIV/AIDS in the states, metropolitan areas, and communities, and who need dental services.

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Table 5. Estimated Number of Children Younger Than 13 Years Living with AIDS at the End of 1999 (Data as of September 2000) by Metropolitan Areas with 500,000 Population or More, and 10 or More Cases^{19*†}

Area	Cases	Area	Cases	
Atlanta, Ga	47	Nassau-Suffolk, NY	26	
Baltimore, Md	96	New Haven, Conn	46	
Bergen-Passaic, NJ	19	New Orleans, La	25	
Birmingham, Ala	10	New York, NY	524	
Boston, Mass	64	Newark, NJ	73	
Chicago, Ill	102	Norfolk, Va	33	
Cleveland, Ohio	13	Oakland, Calif	12	
Dallas, Tex	10	Orlando, Fla	32	
Detroit, Mich	19	Philadelphia, Pa	143	
Fort Lauderdale, Fla	96	Richmond, Va	14	
Fort Worth, Tex	11	Riverside-San Bernardino, Calif	16	
Hartford, Conn	16	Sacramento, Calif	10	
Houston, Tex	64	St. Louis, Mo	13	
Jacksonville, Fla	38	San Diego, Calif	18	
Jersey City, NJ	23	San Francisco, Calif	12	
Los Angeles, Calif	50	San Juan, Puerto Rico	48	
Miami, Fla	140	Tampa-St. Petersburg, Fla	44	
Middlesex, NJ	22	Washington, DC	140	
Monmouth-Ocean, NJ	26	West Palm Beach, Fla	73	
All metropolitan areas with population of 500,000 or more				
Metropolitan areas with 50,000 to 500,000 population				
Nonmetropolitan areas			172	
Total				

*The number of children living with AIDS reported in this table differs from the totals in Table 1. Data for this table are for a somewhat earlier period.

†These numbers do not represent actual cases of persons with AIDS, but rather are point estimates adjusted for delays in the reporting of AIDS cases and deaths, but not for incomplete reporting.¹⁹

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