UN/POP/MORT/2003/6
3 September 2003

ENGLISH ONLY

WORKSHOP ON HIV/AIDS AND ADULT MORTALITY IN DEVELOPING COUNTRIES
Population Division
Department of Economic and Social Affairs
United Nations Secretariat
New York, 8-13 September 2003

ADULT MORTALITY IN THE ERA OF HIV/AIDS: LATIN AMERICA AND THE CARIBBEAN *

Eduardo Arriaga

* This document was reproduced without formal editing.
** Arlington, VA, U.S.A. The views expressed in the paper do not imply the expression of any opinion on the part of the United Nations Secretariat.

A. Introduction

The decline of mortality in countries of the Americas during the last 50 years has reduced the differences of life expectancies at birth among the countries. There was only 50 years ago, that while some countries had their life expectancies around 70 years others had a rather high mortality with life expectancies at birth close to 40 years (Arriaga 1968). At the current time, from 37 countries listed by United Nations (2003) only one country (Haiti) has a life expectancy at birth under 50 years, 7 countries had life expectancies between 65 and 70 years and in 29 countries the life expectancy for b

In addition, the change of mortality (or tempo) also mmmmmmm

for the year 1988 which was constructed several years ago based on the Coale-Demeny West life table model (Hernandez 1994), figure I. For males, the mortality in young adult ages 15 to 49 in 2001 is slightly higher that the estimated levels in 1988. Since the Cole-Demeny models did not include AIDS, given the similarity of the mortality pattern among women in Honduras in 2001 and 1988, it is likely that the AIDS mortality in Honduras for females is not too high. If the epidemic for females is not too high, it is also likely that the epidemic for males still would be low, and the probable increase of mortality among males could be due to: a) increase of external causes, b) small increase due to AIDS. The other possibility is the male mortality at ages 15 to 49 in 1988 could have been underestimated and that the real trend of mortality in those ages could have been a decline of mortality.

But there is no question that the sharp increase of male mortality rates at ages 10 to 14, 15 to 19 and 20 to 24 in Honduras in 2001 probably is not due to AIDS but external causes. For instance, the mortality rates from AIDS in Brazil are presented in the figure II. They show the lowest values at age 15 to 19, where practically there is not mortality from AIDS. However, the total mortality rates for Honduras at this particular age for 2001, already is higher than the estimated rate for the same age in 1988.

The comparison of the Honduran mortality pattern estimated with census data with the United Nations pattern (average of the periods 1995-00 and 2000-05) does not reject the hypothesis that the mortality from AIDS in Honduras is not too high as the case of Barbados and Puerto Rico. The comparison of the patterns for males show census mortality rates higher than the UN pattern at ages 15 to 19 and 20 to 24 where mortality from AIDS cannot be too high, figure III. After age 30, both patterns are practically the same. This fact would suggest that such increase of the census mortality at young ages 15 to 25 has to be due to external causes. El Salvador has a high mortality from external causes, as well as Guatemala. Het.98 174.3866 471.3027.6427 Tm(the same.0 0 10.98Tmc(for m)Tj10.98 0 0 148 0h27 73 445.9828 Tm98

exists (condoms) countries in the world should made aggressive advertising to let know the people of the problem that they are facing, and telling them about the possibility of having a safer sex activities with the use of condoms. Those opposing to this possible policy should be pointed out as avoiding a possible reduction of the spread of AIDS.

According to the limited information available, the mortality pattern of AIDS in the Americas (excluding the few Caribbean countries), seems to have more differences between sexes than the available models simulating the epidemics of HIV or the mortality pattern estimated for African countries. It may be useful to review such models base on available information. Probably models were developed when the period from acquiring HIV to developing AIDS was shorter than at current times. May be it would be necessary to have more than a model. One for more developed countries were drugs retarding the period from HIV infection to AIDS are available and another where such drugs are not available for everyone.

Diseases of the circulatory system and neoplasseful to review such m60ion10.98 0 0 10.98 129.,7814 Tm03l011

Table 1. Contribution to the Change of Life Expectancy at Birth by the Change of Mortality at Indicated Ages, and Years of Life Expectancy Lost Within Each Selected Age Groups Because of Mortality. Selected Countries of the Americas at Indicated Years.

Argentina 1979-81 to 1995-97			Argentina	Males				Argentina	Females			
Age	Male	Female					Relative					Relative
0-14	1.34	1.24	Age	1979-81	1995-97	Change	change	Age	1979-81	1995-97	Change	change
15-49	0.73	0.71	0-14	0.66	0.41	0.25	0.38	0-14	0.54	0.33	0.21	0.39
50-64	0.69	0.49	15-49	1.22	1.08	0.14	0.11	15-49	0.75	0.53	0.22	0.29
65+	1.29	2.46	50-64	1.57	1.28	0.28	0.18	50-64	0.76	0.62	0.14	0.18
Total	4.04	4.90	65-84	7.70	6.80	0.90	0.12	65-84	5.26	4.13	1.13	0.22

Barbados 1979-81 to 1993-95			Barbados	Males				Barbados	Females			
Age	Male	Female					Relative					Relative
0-14	1.20	1.29	Age	1979-81	1993-95	Change	change	Age	1979-81	1993-95	Change	change
15-49	-0.91	-0.25	0-14	0.47	0.23	0.24	51.53	0-14	0.43	0.18	0.25	58.27
50-64	-0.12	0.16	15-49	0.81	1.20	-0.39	-47.83	15-49	0.53	0.63	-0.10	-19.30
65+	-0.65	-0.35	50-64	1.26	1.30	-0.04	-3.37	50-64	0.86	0.81	0.06	6.54

Cuba 1979-81 to 1997, 96, 99			Cuba	Males				Cuba	Females			
Age	Male	Female					Relative					Relative
0-14	1.30	1.09	Age	1979-81	96,97,99	Change	change	Age	1979-81	96,97,99	Change	change
15-49	0.16	0.61	0-14	0.41ch								

Mexico 1979-81 to 1979-99 Mexico Males

Table 2. Year of Life Expectancy Lost Between Birth and age 85, Because of the Mortality at Indicated Causes of Death and Age Groups, by Sex

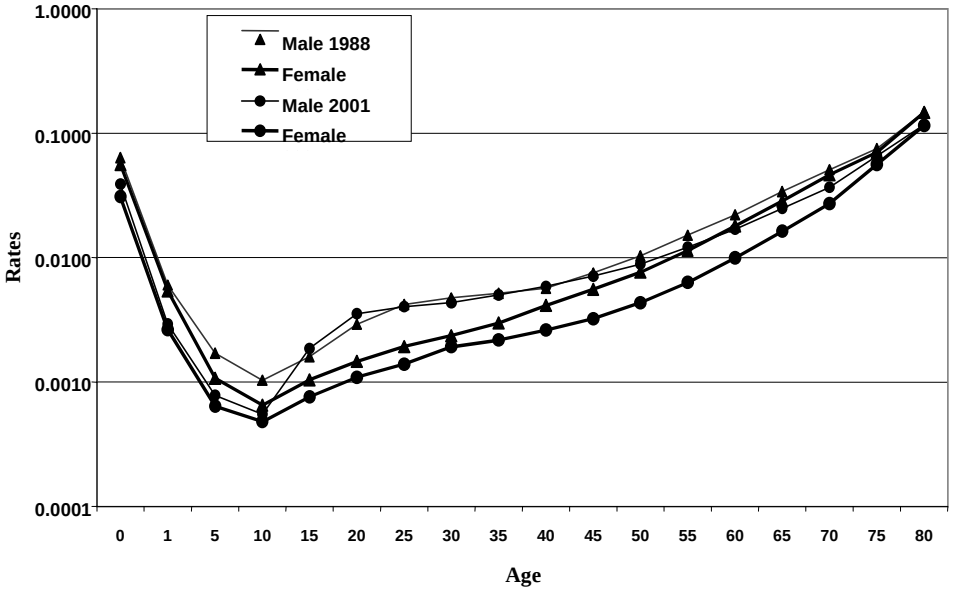
Jamaica

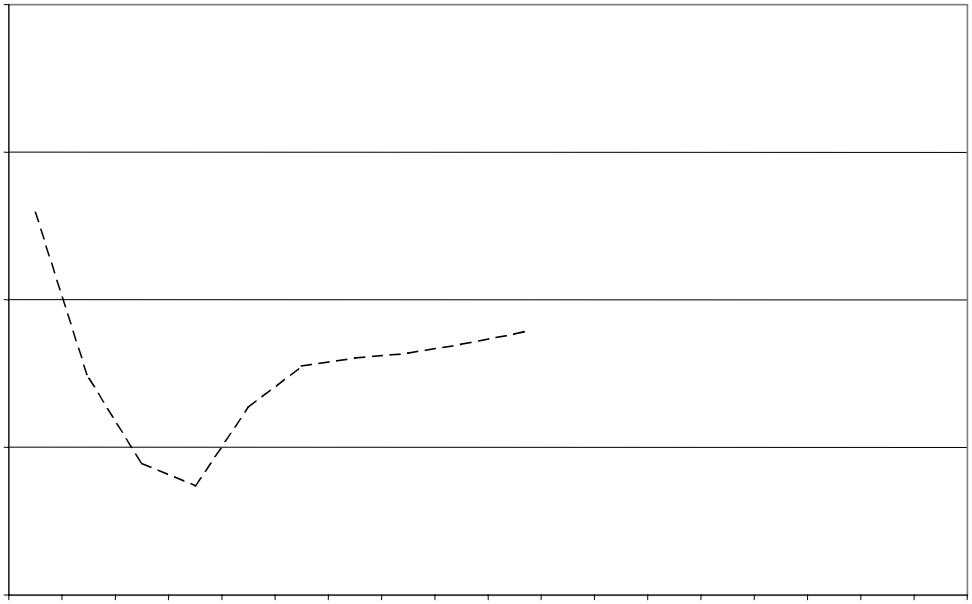
Dominican		15-49			50-64			65-84			15-49			50-64			65-84	
Republic	External	0.61	Circulatory		1.31	Circulatory		2.23	Circulatory		0.33	Circulatory		0.74	Circulatory		2.11
	Circulatory	0.38	Neoplasm		0.27	Neoplasm		0.60	Neoplasm		0.19	Neoplasm		0.30	Neoplasm		0.39
	AIDS	0.28	Cirrhosis		0.23	Cirrhosis		0.27	AIDS		0.18	Diabetes		0.16	Diabetes		0.36
	Cirrhosis	0.09	External		0.23	Diabetes		0.24	External		0.13	Cirrhosis		0.13	Cirrhosis		0.21
	Neoplasm	0.07	Diabetes		0.18	Acute Resp.		0.17	Diabetes		0.05	External		0.04	Acute Resp.		0.14
Trinidad and		15-49			50-64			65-84			15-49			50-64			65-84	
Tobago	External	1.31	Circulatory		2.30	Circulatory		2.35	Circulatory		0.58	Circulatory		1.67	Circulatory		2.29
	Circulatory	0.72	Diabetes		1.05	Diabetes		0.69	Neoplasm		0.45	Diabetes		0.97	Diabetes		0.92
	AIDS	0.56	Neoplasm		0.42	Neoplasm		0.64	External		0.32	Neoplasm		0.55	Neopl		

Table 3. Years of Life Expectancy Lost (YLEL) between Ages 0 to 85, Because of AIDS Mortality in Selected Countries and Years, by Sex.

Country	Years	Male	Female	Country	Years	Male	Female
Argentina	1995-97	0.29	0.10	Ecuador	1995-97		

Figure I. Mortality rates by age and sex, Honduras, 1988 and 2001





G. References

Arriaga, Eduardo E. (1968).