Adolescent and young adult mortality in Latin American: a heterogeneous path marked by violence.

In addition to their biological and individual peculiarities, the level of mortality of young people is determined by their economic and social situation. In general the leading cause of death for people 15 to 29 years of age are those of external origin, related to violence.

Available statistics do not always permit the ascertainment of the health situation among young people from different social groups. Studies of the Pan American Health Organization (PAHO, 1998) have identified "extreme deprivation, family conflicts, family history of behavioral problems, and lack of a protective environment as risk factors common in most of the cases of substance abuse, crime, pregnancy and dropout rates seen in adolescents."

This paper aims to present an overview of the health conditions of adolescents and young adults in Latin American, based on the level and causes of mortality. The analysis is based on deaths by sex, age and cause available in the database of the World Health Organization and the population estimates and projections available at CELADE – the Population Division of U.N. ECLAC, for Latin American countries.

Given the limitations in the data sources (mainly under-registration of deaths), it is not always possible to make exact comparisons between countries in the region, especially for the more detailed aspects of the analysis. However, existing information does allow us to highlight important aspects of the health conditions of youth in the region.

The percentage of deaths of young people -- relative to the total count of deaths -- is an indicator that is affected by the age structure of population (the more aged countries in the region are those with the lowest percentage of deaths among young people). Nevertheless, it is an initial indicator of health conditions and the social situation of young people. It is also expected that deaths from infectious diseases, parasitic diseases, or degenerative illness are infrequent in this age group, and thus deaths from external causes (accidents, homicides, suicides) are dominant. For example, El Salvador and Colombia, which have a high percentage of deaths among young people, would be reflecting the greater impact of deaths from violent causes in those countries.

The percentage of deaths by sex show high male mortality coupled with distinct sexdifferences in causes of death. This situation is directly associated -- in the region – to lifestyle differences between men and women (given the predominance of deaths from external causes expected in these ages).

Additionally, an indicator designed to compare the level of mortality among countries and their development over time is the difference in life expectancy between 15 and 30 years (e15-e30), or the number of years life lost (YLL) associated with life expectancy. Based on the available information, this indicator was calculated for 20 Latin American countries in five-year periods between 1950 and 2005. And in order to compare adolescents and young adults to older adults, the same indicator was calculated for the population aged 30 to 44 years.

The trend in the number of YLL over the period 1950 to 2005 reflects the impact of the epidemiological transition as well as the impact of social factors on young people of both sexes. This provides important information about changes in the health and

socio-economic status of young people, mainly because deaths occur due to external causes, once progress has been made in the epidemiological transition.

The trend over time in YLL shows a reduction in YLL among Latin American youth and among young men an increasing vulnerability to external factors, mainly associated with violence.

In some countries in the region there is an upward trend in the number of YLL for young men in the recent period. This fact can be attributed to an increase in deaths from external causes, such as urban violence (homicide), suicides and transportation accidents. The current situation is distinct in that in prior periods violent deaths were associated with armed conflict. Another factor to consider is HIV / AIDS epidemic, although for the countries in the region it does not reach very significant levels.

Excess male mortality is quite high in Latin American countries, especially among young people. The mortality rate for young Latin American men is between 2 to 5 times that of young women, and there is no general relationship between the level of overall mortality and mortality among ages 15 to 29.

Two factors may explain this situation. First, the gains in life expectancy are mainly due to the progression of the epidemiological transition (decrease in deaths from infectious or communicable diseases – diseases which have the least impact on young people). Second, the observed differences between countries might correspond to different socio-economic conditions that lead to a greater or lesser risk of death (degree of urbanization, growing disparities or polarization, among others).

From the direct observation of these indicators it can be concluded that the regional picture is mixed, with significant differences in mortality by sex and with different causes. Therefore, a better approach to analyzing the mortality of young people might be to consider socioeconomic factors (among others, the urban environment, disparities, opportunities and expectations, institutional support and development).

When we examine mortality by cause (considering communicable diseases, degenerative diseases, external causes, ill-defined causes and other causes), the age group from 15 to 29 years is characterized by a large concentration of deaths in external causes, which far exceeds deaths from communicable and degenerative diseases combined. We analyze in more detail those deaths from external causes (emphasizing homicides, suicides and transportation accidents), deaths from HIV / AIDS and those related to pregnancy, childbirth and post-partum.

While a single pattern for the region cannot be defined, in the case of men, deaths from external causes or violence correspond to more than half of all deaths. There is excess male mortality in each of the causes of death analyzed (communicable diseases, degenerative diseases and external causes). But this differential is greatest among external causes of death which tends to confirm the hypothesis previously formulated to explain the differences in mortality among young men and women, during the latter half of last century.

Conclusions

The distribution of the causes of violent death, generally have a higher incidence among males, which can be attributed to sex differentials in behavior and lifestyles in the region. But as countries are progressing in development, increasing women's participation in economic activity and reduced fertility leads to a change of lifestyle bringing women toward more elevated risks of violent death, similar to men. Countries such as Argentina, Uruguay and Venezuela presented a similar percentage of deaths among men and women for transportation accidents and in several countries there are no significant differences in deaths from suicide. Deaths from homicides in Latin American countries clearly affect men more so than women, in countries like Colombia and El Salvador homicides account for more than 50 percent of male deaths.

Studying the impact of HIV / AIDS on young people's health by analyzing mortality rates for this cause in this age group would be disguising the magnitude of the problem, because the interval between infection and death means that infection during adolescence can result in mortality in the adult years. In fact, deaths from this cause have greater weight at older ages, which could best be avoided if young people were properly informed and protected from potential infection.

In summary, although mortality for those 15 to 29 years is lower than that of other age groups, young people face specific challenges to their health and access to health services, a fact that is little recognized by Governments and health ministries. In addition to providing a basic level of health care for this group, including promoting healthy behaviors and environments, it is necessary to make a greater effort to collect data on the health of young people and involve them in the process. No doubt much progress has been made in regard to the health of young Latin Americans but the information discussed here, although it presented limitations, showed the vulnerability of young people to socio-economic conditions to which they are exposed. Therefore, more investment in the health of young people represents an investment in their development and productive capacity, since good physical and mental health contributes to better academic performance and participation in the job market.