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BASIC INDICATORS FOR GENDER EQUITY ANALYSIS IN HEALTH

Gender, Ethnicity and Health Unit



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1. Demographic dimension:

1.1 Population

- Population distribution by sex and age

1.2 Households

- Percentage of female-headed households
- Percentage of households with children under 5 years old
- Percentage of households with people older than 64 or 79 years of age

2. Socio-economic dimension:

2.1 Income

- Percentage of female-headed households at each level of poverty
- Levels of poverty with and without income contribution from female spouses
- Ratio of women's average earned income as compared to that of men

2.2 Education

- Illiteracy rates, by sex
- Percentage of women and men by years of education
- Drop-out rate of adolescent women due to pregnancy

2.3 Work

- Adjusted rate of women's and men's participation in economic activities
- Participation rate of 15-59 year-old women and men in economic activities, by poverty level, according to presence of children under 15 years old in the household
- Open unemployment rate, by sex
- Percentage distribution of economically active population (EAP) employed according to employment categories, by sex
- Percentage distribution of EAP employed in low-productivity sectors of the labor market, by sex
- Weekly hours worked by employed women and men, by employment category
- Percentage of women in decision-making positions within the government
- Distribution of time per day (in minutes) of total work (mercantile and unpaid domestic) between women and men
- Percentage of women and men with access to pension plans

3. Environmental conditions :

- Percentage of households with access to potable water in the house

4. Political and legal dimension:

4.1 Gender equality

- Existence of national policies supporting equal opportunities and/or gender equity
- Existence of official organizations in charge of national policies on gender equity
- Existence of legal quotas to promote women's political participation
- Existence of maternity leave laws
- Existence of labor laws regarding child care
- Existence of regulations to allow paternal child care during children's first year
- Existence of regulations to guarantee retirement and pension plans for older women who did not participate in the labor market
- Existence of legislation to promote gender equality among adolescents
- Existence of media regulations aimed at avoiding sex discrimination and promoting gender equality
- Existence of legislation to prohibit gender stereotypes in school textbooks
- Existence of laws that consider attention to and prevention and eradication of intra-family violence and sexual abuse against women, and which utilize resources from the public budget
- Existence of initiatives to facilitate unpaid production of household health care services at home

4.2 Sexual and reproductive health

- Existence of laws on sexual and reproductive rights
- Existence of regulations to allow voluntary sterilization
- Existence of regulations to allow family planning upon request by women
- Existence of regulations for voluntary interruption of pregnancy for therapeutic reasons, rape or incest
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- Mortality in 1-4 year-old children from causes of mortality preventable through immunization, by sex

2.2 Mortality preventable through timely detection and treatment

- Maternal mortality ratio
- Mortality from malignant neoplasms of the uterus
- Number of deaths from acute diarrheal diseases (ADD), registered in 1-4 year-old girls and boys
- Number of deaths from acute respiratory infections (ARI), registered in 1-4 year-old girls and boys

2.3 Mortality preventable by applying a set of measures

- Number of deaths from AIDS, by sex
- Mortality from nutritional deficiencies and anemia, by sex
- Mortality from lesions and intoxications of non-intentional origin, by sex
- Mortality from intentionally self-inflicted lesions, by sex
- Mortality from homicides and lesions intentionally inflicted by another person, by sex

2.4 Other causes of preventable mortality (to a lesser degree than the above)

- Mortality from malignant neoplasms of the lung, trachea and bronchial tubes, by sex
- Mortality from cirrhosis and other chronic diseases of the liver, by sex
- Mortality from breast cancer in women
- Mortality from prostate cancer
- Mortality from hypertensive diseases, by sex
- Mortality from diabetes mellitus, by sex
- Mortality from cerebrovascular diseases, by sex
- Mortality from ischemic heart diseases, by sex

3. Morbidity and preventable lesions

3.1 Nutrition

- Prevalence of anemia in women of child-bearing age
- Prevalence of malnutrition (measured by body mass index) in women who have had one or more children in the period between the last 2 months and the last 5 years
- Prevalence of obesity, by sex

3.2 Intra-family violence and sexual abuse

- Prevalence of intra-family violence, by sex
- Rate of demand for care due to intra-family violence, by sex
- Incidence of sexual abuse, by sex

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- Mortality from intentionally self-inflicted lesions, by sex

4. Risk behaviors

- Prevalence of tobacco addiction, by sex
- Prevalence of alcohol consumption, by sex
- Prevalence of consumption of illicit drugs, by sex

5. Sexual and reproductive health

- Percentage of women with living partners who use modern contraceptives
- Total fertility rate
- Fertility rate among adolescents
- Average age of mothers at birth of first child
- Percentage of births with high reproductive risk
- Percentage of 15-19 year-old women who are pregnant or have had at least one child
- Percentage of 35-49 year-old women who are pregnant or have had at least one child
- Percentage of women with living partners who use contraceptives for birth-spacing purposes
- Percentage of women who have had 4 deliveries or more
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1.1 Coverage of insurance plans

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- Family planning coverage in insurance plans

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- Percentage of women attended by qualified health personnel during delivery
- Percentage of pregnant women who received tetanus vaccinations
- Percentage of women 30 years and older who have had a Pap smear in the last three years
- Unsatisfied need regarding family planning

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- Availability of emergency obstetric services for every 100,000 women

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- Out-of-pocket health expenditures, by sex

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1. Participation in the labor market

1.1 Formal

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- Women's participation in unpaid work in the formal health sector

1.2 Informal

- Daily time (in minutes) that women and men dedicate to production of health services at home, without remuneration
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REFERENCES

CONCEPTUAL FRAMEWORK¹

1. Conceptual core issues

The mandate to integrate a gender perspective in the Pan American Health Organization's technical cooperation is based on four conceptual keystones: health, equity, gender, and citizen participation.

Health

According to the definition adopted by the WHO/PAHO, health is “a state of integral physical, mental and social well-being, not only the absence of illness or disease.” Therefore, health is a positive concept that emphasizes both physical abilities and personal and social resources; hence, it is not the exclusive responsibility of the health sector, nor is it limited to healthy lifestyles (2). Achieving the highest possible health level is a fundamental human right, embedded since 1946 in the WHO constitution.

Equity

Equity is not the same as equality. Similarly, not all inequalities are considered inequities. The notion of inequity adopted by WHO/PAHO has been reserved for inequalities that are “unnecessary, avoidable and unjust”(3). So, while equality is an empirical concept, equity constitutes an ethical priority related to principles of social justice and human rights.

Gender

Gender is not a synonym of sex. “Sex” refers to the biological difference between men and women, while “Gender” refers to the social construction of that which is “Masculine” and that which is “Feminine,” and to the way in which these two constructions are articulated in power relationships. Neither is “Gender” equivalent to “Woman.” The concept of Gender is not applied to women or to men *per se*, but to *unequal* relationships between men and women (or between the “masculine” and the “feminine” spheres) with regard to resource distribution, responsibilities and power.

Integrating the gender perspective in health analysis implies linking sexual divisions of labor – productive and reproductive – and power in a given population with epidemiological profiles and characteristics of accessibility, financing and management of the health system for that population.

Citizen participation

Social participation plays a critical role in effective and sustainable achievement of the wider objectives of equity and, in particular, gender equity. This participation is conceived of as exercising the full civic right of women and men to have an influence on the factors and processes that affect their health – individual and collective – and not simply to carry out actions prescribed by others, or to serve as an instrument to reduce the costs of health services provision. The emphasis given to women – especially poor women – responds to the urgent need to

¹ This section is based on the work of Gómez, E. *Equidad, Género y Salud: retos para la acción*. *Revista Panamericana de la Salud Pública*. Vol. II. Nos. 5/6. 2002. (1, pp. 454-461)

eliminate the instrumentalist approach to women's participation which has historically permeated the health system, promoting instead a fairer distribution of resources, responsibilities and power in the production of health.

2. Meaning and dimensions of gender equity in health

Gender equity in the sphere of health would then be interpreted as the absence of unfair and remediable inequalities between women and men which are associated with systematic disadvantages for one sex or the other in the socio-economic context.

The sphere of health involves several dimensions: the *state of health*, *health-care services* – one of many health determinants – and the *health management* processes:

- in the area of *socio-economic determinants* of health, gender equity means equality of access and control over resources that permit exercising the right to health (food, housing, healthy environment, education, information, work, remuneration, technologies, and services, among others);
- with respect to the *state of health*, gender equity would be shown by comparable health levels in women and men, not only among themselves, but also with respect to achievable levels in specific populations, i.e., health levels of women and men belonging to the most socially privileged groups;
- regarding *health-care services*, gender equity implies that:
 - resources are allocated according to specific needs of men and women;
 - services are received according to particular needs of each sex, regardless of their capacity to pay,
 - men and women contribute to financing health services according to their economic capacity, and not according to risks or needs inherent in each sex and life cycle stage;
- regarding *participation in health management*, gender equity demands a fair balance of distribution of work by sex (paid and non-paid), of compensation associated with that work, and of decision-making power.

2.1. Gender equity and determinants of health

Beyond its importance in identity formation, the concept of gender constitutes one of the primary issues around which social life is organized. **Gender** is a stratifying category, which occupies a central place – along with **class** and **race** – in the macro level of allocation and distribution of resources that make achieving and maintaining health possible.

The relevance of the gender category at the macro level lies in its function of linking two dimensions that are complementary to economy. On the one hand, the gender approach guarantees the existence of a *non-remunerated* work sphere, called *reproductive* labor, where the work force is reproduced and put into circulation; and on the other, it conditions alternatives in the remunerated work sphere, called *productive* labor. The intersection of these two spheres places women in a subordinated and disadvantaged position with regard to access and control of certain material and non-material resources necessary to reach a high level of well-being. The most important of these resources are: housing, access to ownership of land and productive capital, education, information, income, food, credit, protection of social benefits, discretionary use of time, and participation in political power. For the purposes of this document, analysis will be limited to interactions between gender, class and ethnicity, which are translated into differences in opportunities for *employment*, *education* and *political power*.

• **A disproportional representation of women in poverty sectors** has its roots in three major factors:

- 1) The preeminence that society places on “*reproductive*” work in women’s lives limits their opportunities to participate in remunerated “*productive*” work;
- 2) The social devaluation of “female” work which is translated into *lower levels* of remuneration, autonomy and social benefits in the labor market, and *exclusion* with respect to monetary compensation, social benefits, and lack of acknowledgement of women’s financial contribution associated with work in the domestic sphere.
- 3) Implementation of macro policies that, because they are created in an overly-crude framework, lack an analysis of the realities of people’s lives; as a result, in many cases the policies have disproportionately worsened women’s life conditions relative to men, as can be seen in the reduction of costs for social services.

In most societies women assume the majority of the responsibility of reproductive labor involved in taking care of children and the home, work that tends to be perceived as a natural female function without any economic value. Conversely, remunerated labor, which is always considered to be productive, has historically been seen as men’s main responsibility. Such an arrangement has led to the economic subordination of women that is rooted in the *economic invisibility* of their contribution in reproductive labor, which is not registered in national censuses and even less in national accounting.

Economic subordination of women dedicated to working at home is dramatically evident in the cases in which many women and their children are left helpless due to abandonment by, or death of, the spouse. Helplessness in terms of economic and social benefits does not happen because such events reduce women to poverty, but because women do not on their own exercise access to and control of resources that are basic to well-being.

The introduction of women to the labor market does not cause an essential change in the sexual division of labor; it simply places women in two spheres of activity, both of which are ruled by the same hierarchical system giving rise to the so-called “double shift.” Women’s need to reconcile their reproductive and productive roles, along with a social undervaluation of their work, gives rise to deep differences in work patterns for each sex. Women’s working patterns have the following characteristics:

- Heavier workloads/longer times worked if both productive and reproductive labor are taken into account;
- Less participation in the salaried work force: although female participation in labor has increased rapidly, more than 50% of women in the region are still outside the salaried workforce;
- greater unemployment in females than in males in almost all the region’s countries;
- concentration in employment with lower salaries, and lower salaries for the same work. In the countries in the region for which information is available, women’s average income falls between 55% and 83% of men’s average income, a figure which is not justified by different levels of education (4);
- greater representation in employment in which they are not covered by the national health system, such as part-time jobs and work in the informal sector;
- discontinuity in work history – generated by birthing and raising children, which hinders access to social health system benefits in the long term.

- **Formal education** is a necessary but not sufficient condition to guarantee comparable levels of access to employment, income and social benefits between women and men. It is truly a basic ingredient for “empowerment,” which marks deep differentials in women’s health-related behavior, in particular that related to reproductive health.

Regarding differences by sex in educational levels, is worth noting that:

- the gender gap in basic, elementary and high-school education in the region is increasingly getting smaller, so that, with a few exceptions, women of young cohorts have an equal or higher educational level than men;
 - the differences by sex which are unfavorable for women become quantitatively evident in enrollment in higher education and qualitatively evident in the disciplines that the female population concentrates on. These disciplines tend to be perceived as an extension of reproductive work in the public sphere, and have lower social recognition and economic valuation;
 - the difference by sex in years of education does not correspond to the differences by sex in salaried income. In some of the region’s countries the gender gap in income increases as the educational level increases.
- Women’s disadvantage in political participation is also related to the observed pattern of division and hierarchical division of labor by gender. “*Women represent a clear minority in actual exercise of power or authority in decision-making throughout the world*”(5; p.85). Women occupy less than 10% of higher political decision-making positions (parliaments, ministries, supreme courts), and continue to be markedly underrepresented in all the structures of national, local and sectorial power that define priorities and assign resources. The health system is not an exception in this respect; to the contrary, women actively participate in most sanitary development programs during their execution, but they are not involved in the phases of planning, design, and allocation of resources for such programs.

2.2. Gender equity in the state of health

Throughout the world, women tend to live longer than men, enjoying lower mortality than that of men at any age. This does not necessarily mean that women enjoy better health. Mortality only reflects extremes in damages to health, and does not take into account the large variations seen in the well-being of survivors.

Gender equity in the state of health does not mean equal rates of mortality or morbidity for both sexes. It means absence of *preventable* differences between women and men in opportunities to survive and enjoy good health, and in the probability of not suffering any disease, disability or premature death from *preventable* causes.

Operationalizing health as an “*integral state of physical, psychological and social well-being*” is still a methodological challenge with few satisfactory answers. One of the reasons for this situation is that available information – in particular in developing countries – comes from essentially negative indicators, such as those of diseases and disabilities (physical and mental), death and risk behaviors. Some exceptions to this tendency aim at the operationalization of healthy *personal* lifestyles, including adequate nutrition, physical activity habits, and self-

regulation of fertility. At a *collective* level, formulation and implementation of healthy public policies about peaceful cohabitation, alimentary and occupational safety, healthy environments, fulfillment of basic needs (including health services) and reduction of inequities, stand out.

It is worth emphasizing the dimension of reproductive health from the perspective of rights, because of the important role it plays within the gender context, as well as the availability of relevant information. Reproductive health has been defined as:

“A general state of physical, mental, and social well-being and not just the absence of illness or disease, in all aspects related to the reproductive system and its functions and processes. Consequently, reproductive health entails the capacity to enjoy a satisfactory sexual life without risk to procreate, and the freedom to decide whether to procreate or not, when and with what frequency” (6, Chap.7, paragraph 7.2).

Within the general topic of health and gender equity, it is necessary to emphasize the following elements:

• ***Greater survival of women is not, nor has it been the rule: hostile conditions in the social context may reduce, or even cancel, female survival advantages.*** Women’s lower mortality is not constant through time, nor does it exist in all countries, age groups and socio-economic levels.

- Greater female life expectancy, which is a current characteristic of industrialized countries, was not a reality for those countries at the beginning of the twentieth century, and is not currently a reality in some countries of Africa, or South-East Asia (7). This greater female mortality has been associated not only with high rates of maternal mortality during child-bearing ages, but also with patterns of intense discrimination against women.
- In addition to the age group between **15-49 years old**, greater female mortality has been detected with a distressing frequency in the age group between **1-4 years of age** (8). Given the acknowledged biological female advantage of survival at the beginning of life – even in the uterus – greater mortality in girls than in boys is an important alarming indication regarding the possible existence of discrimination against girls, particularly at home.
- In Latin America and the Caribbean, the markedly higher male mortality observed during the 1990’s at the non-poverty level is reduced, and even disappears in the poverty groups in some countries. This is due to the fact that a proportional increase of mortality related to poverty was greater for women than for men, showing the disproportionate negative impact that poverty has on women’s health (1; pp. 457-458).

• ***Survival advantage is not necessarily equivalent to better health or life quality.*** Empirical evidence indicates that women tend to experience greater morbidity than men throughout their life cycle, which is expressed in higher incidence of acute disorders, greater prevalence of non-fatal chronic diseases, and higher levels of disability in the short and long term (9).

• ***There are important differences by sex in the nature, prevalence, risks and consequences of health problems and, as a result, in the ability to prevent them.*** From the perspective of equity, it is necessary to emphasize differences by sex in mortality and morbidity which are preventable through sectorial or multisectorial interventions. Some examples are presented below:

- *Conditions that affect women exclusively and are highly preventable by the health sector*

- ✓ There is no doubt that maternal mortality is preventable and unjust; therefore it is a critical indicator of women's discrimination and low social status.
- ✓ Mortality due to cervical-uterine cancer is clearly preventable through availability of simple and economic al technologies for its early detection and treatment.

- *Conditions that affect the sexes differentially and are preventable through a set of inter-sectorial measures*

- ✓ Violence marks the greatest mortality differentials by sex, mainly to men's disadvantage. This differential by sex in deaths from accidents and homicides is closely related to role divisions and cultural expectations between women and men in which "manliness" is related to certain risk, protection and domination behaviors.
- ✓ Violence against women is also linked to domination behaviors that are tolerated and encouraged primarily among men, constituting the most blatant expression of inequality of power between the sexes.
- ✓ Other important mortality and disease differentials by sex, related to more prevalent risk behaviors among men are those related to lung cancer, cirrhosis of the liver, and AIDS.

These examples can be used to point out that, although expressed differently by sex, rigidity in role separation, unequal power relationships between men and women, and social demands associated with the exercise of power – inter- and intra-gender – have clearly negative effects on physical, psychological and social integrity, not only of women, but also of men.

2.3 Gender equity in access to health-care services

Women's tendency to use health services more frequently than men cannot be automatically interpreted as an expression of their social advantage.

Gender equity in access to health services does not mean that men and women should receive equal quotas of resources and services. On the contrary, it means that resources must be allocated and services received differentially according to particular needs of each sex, life stage, and socio-cultural-economic context, and regardless of people's capacity to pay.

The notion of *need* based on the concept of equitable distribution aims at differential allocation of resources according to particular requirements of groups and individuals. As a result, its estimation is essential as a denominator to calculate use of services. With regards to this particular issue it is worth emphasizing that:

☛ **Women have a greater need for health services** than men, generated particularly, but not exclusively, by their biological reproductive role;

☛ **Size and direction of differences by sex in consumption of health services** depends on age, type of service, type of affiliation to health-insurance plans, and socio-economic level, among other variables (10);

☛ **Poverty disproportionately limits women's access to health services.** As just mentioned, when the gender gap is adjusted to accommodate differences in consumption needs of health services, it disappears or can even be reversed in low-income sectors of some countries (I; pp.459).

☛ In terms of **coverage of public or private insurance plans**, it is important to mention that, while national health services and insurance plans depend on employment and on the way material and non-material goods are divided by sex in society, a majority of women will not have access to health services as a civic right. It is worth pointing out that indirect access as a dependent (and not as a titleholder or contributor) places women – and their children – in imminent danger of lack of protection caused by widowhood, spouse separation, changes in spouse employment situation, or changes in regulations for dependents.

2.4 Gender equity in financing health-care services

The principle of equity whereby financial contributions would be in agreement with the economic capacity of male and female contributors is, in general breached for women, particularly in non-pooling risk systems for health-care services. Women tend to pay more than men to protect their health, not only in absolute terms – given their greater need for services – but also, in proportional terms, as a result of their lower economic capacity.

- **Greater absolute payment:** In the United States women of child-bearing age pay 68% more than men in out-of-pocket expenses for health-care services (11). In Chile private insurance premiums during child-bearing age are 2.5 times higher for women than for men. In four Latin American and Caribbean countries with household survey information available, out-of-pocket health expenses are between 16% and 40% higher for women than for men;
- **Greater relative payment:** As a group, women have lower capacity to pay than men. Since they constitute the great majority of non-remunerated workers and are at a disadvantage in the remunerated work market, they have less access to resources to pay directly for services or insurance plans.

Gender equity in financing health-care services requires that women and men contribute according to their economic capacity, and not according to risks or needs inherent to each sex and life stage.

A central requirement for gender equity in financing health-care services is that *cost of reproduction should be equitably distributed* in society, instead of being disproportionately borne by women of child-bearing age.

2.5. Gender equity in health-care management

Women represent over 80% of the labor force in the health sector. Perhaps the most important and least appreciated fact is that women are the main administrators and providers of health-care services within the family and community. In fact, more than 85% of early detection and treatment of diseases occurs outside health-care services and is mostly provided free of cost by women at home and in the community. This does not take into account women's role in vaccination campaigns and attention to the elderly, children, and the disabled, as well as of those who are ill and those who are healthy.

In spite of this extremely important contribution to health development, women remain in a **disadvantaged position within the formal and informal health system**,

- they are a majority in less remunerated and prestigious positions within the formal sector, even when controlling for profession;
- they remain less represented in the local, national and sectorial power structures that define priorities and allocate resources for health; and
- they perform, without remuneration, the greatest portion of informal jobs of promoting and attending to health and disease in the family and the community.

The lack of economic valuation of women's contribution and time leads to promotion of apparently neutral policies such as "cost-reduction," "reduction of government involvement," and "decentralization," which, in fact, embody substantial gender bias because they transfer costs from a remunerated economy to an economy based on women's unpaid work. Thus, the premise that supports some measures for adjustments and reform is that the government can reduce expenses by reducing services – for instance, reducing length of hospital stay, the amount of institutional health-care for the elderly, or attention to mentally ill patients – on the assumption that such services may be provided by families. But these policies do not consider the impact that expectations concerning availability, responsibility and lack of cost of women's time have on their employment and payment situation, and the physical and emotional fatigue that these assumptions and policies cause. Neither do they consider the support structures necessary to provide health services at home, nor the efficiency and long-term sustainability of this type of arrangement.

Gender equity in health management goes beyond ensuring equal salary for work of equal value in the formal health sector. It demands, based on a valuation of non-remunerated attention provided by women at home and the community, a fair distribution of actual costs of providing the service, not only between men and women, but also within the family, the community, the State and the market (12).

In addition, it requires equal participation of women and men – in particular of sectors with less resources – in decision-making, when defining priorities and allocating public and private resources necessary to ensure health.

In summary, emphasis placed on women within the gender equity context in health is a response to the facts that:

- ✓ because of their reproductive function, **they have a greater need for health services** than men;

- ✓ because of their disadvantaged position at work, **they have less access to and less control of resources** that define exercising the right to health;
- ✓ because of their greater need of services in reproductive health and their lower economic capacity, **they pay more in absolute and relative terms** than men for their health-care services;
- ✓ due to cultural standards in labor division and valuation, they enjoy **lower remuneration, prestige and autonomy** in the formal health system, **they assume health care at home without remuneration**, and **have less influence on decisions** concerning resource allocation;

Due to their role as informal health-care providers, they are more affected than men by the increase in or reduction of cost of public services.

METHODOLOGICAL CONSIDERATIONS

Given that not all indicators presented have been validated, internationally accepted, and used routinely, certain modifications and adjustments will be necessary. Indicators must be adapted to each country's health situation and based on data availability.

Without underestimating the importance of adjusting qualitative data to existing information in each country, emphasis is given to quantitative measurements in health differentials between women and men and other sub-groups. References to qualitative indicators in this document are limited to political and legal determining factors. The fact that a gender analysis must indeed include quantitative measurements and qualitative information is emphasized.

Criteria for selecting indicators

Considering the conceptual relevance of the dimensions of inequity that we are trying to operationalize, and the compromises reached in international conferences, indicators have been selected by taking into account the following criteria (13):

- **relevance to policy-making**: information must be useful to guide actions taken in the short, medium and long term, aimed at creating greater gender equity;
- **reliability**: data must be reliable; i.e., possess a minimal quality to be used in a reliable way. For indicators measuring differentials, absence of bias may be more important than precision;
- **simplicity**: required techniques to collect and analyze data must be simple so that collection, processing and analysis can be done by local personnel in charge of these functions;
- **accessibility**: data required must be available or relatively easy to collect through validated methods;
- **sustainability**: it must be possible to calculate indicators routinely through time;
- **timeliness**: timely information is useful for making informed decisions with updated data; information may stop being useful if unduly delayed.

It is worth noting that not all countries in the Region have the necessary data available to actually compute several indicators. However, if the importance of these indicators in quantifying differences between women and men is established, a contribution is made to initiating investigations specifically dedicated to these issues.

In general, morbidity data are scarce and of poor quality. For this reason data quality and availability must be assessed against usefulness of information, when computing indicators and measuring inequalities. With regard to mortality data, for the year 2000 most countries of the Region display under-recording, ranging from 0 for certain countries with the best vital event recording systems up to 94.5% in Haiti; likewise, the percentage of deaths from poorly defined causes also varied between 0.8% in Cuba and 48.5% in Haiti (14). However, problems of data quality due to under-recording do not hinder the calculation of mortality rate differentials between women and men, because it affects the data of both population groups.

Use of vital statistics, administrative health records, censuses, demographic and health surveys, employment surveys, income and expenditure surveys, other surveys on life conditions that include modules about health, and official police statistics are suggested as the main sources of data. Specific sources must be defined for each country.

Sex differentials

Indicators presented are aimed at highlighting and measuring the differences between women and men in health issues. These differences will make it possible to identify inequalities, among them those that may be classified as preventable and unjust. It is important to emphasize that not all inequalities are inequities, since equity is an ethical concept that refers to the justice or injustice of such differences.

As a response to this attention to ethics in the selection of health indicators, special emphasis has been given to those health conditions, situations or problems that have a high possibility of being prevented within the framework of available prevention, detection and treatment technology. Therefore, indicators included show health situations that (15):

- **are specific to one of the sexes:** for instance, cervical uterine cancer, maternal mortality and abortion affect women; prostate cancer affects men;
- **are more prevalent in one of the sexes:** anemia from iron deficiency affects mainly women; men face a greater mortality from lesions and violence;
- **differentially affect each sex:** malaria in pregnant women is an important cause of spontaneous abortion or fetal mortality;
- **have different risk factors for each sex:** men have greater health problems related to alcohol consumption and performance of dangerous occupations; women have a greater risk of being victims of sexual abuse and intra-family violence;
- **receive different responses from the health sector or society:** family planning has been focused on women; stigmatization due to HIV/AIDS is greater for women; cardiovascular problems are regarded as particular to men.

Special interest has been given to highlighting measurement of inequalities, not only between men and women, but also between the different sub-groups of women and men, classified by age, socio-economic level, ethnicity, zone of residency, employment condition, membership in specific groups (migrants, displaced, refugees and the disabled). Currently, it is not possible to obtain many of the suggested disaggregations to measure inequalities in population sub-groups,

which are necessary from an equity perspective. For this reason it is important to promote recording of these variables in data sources.

Measuring gaps

In order to facilitate measurement of differences between women and men, disparity indicators such as differences and ratios are suggested (16).

Differences and proportions provide different information:

- **differences** evaluate the magnitude of the gap between population groups;
- **ratios** evaluate the relative difference between population groups.

For instance, in the case of mortality, differences are useful to determine the contribution of various causes of mortality to the total difference in mortality by sex, and to compare the current number of deaths occurring among women and men.

Ratios are used to evaluate changes in mortality by sex over time as well as changes in risks of dying. Ratios may also be used when comparing mortality rates from specific causes in order to generate hypotheses about a disease because the ratio of mortality rates from a specific mortality cause is independent of the amount of deaths that occur from each cause, as illustrated in the following table (16):

Comparison of ratios and differences between mortality rates by sex, from causes with high and low frequencies of occurrence

Causes of mortality	Mortality rate/100.000		Difference (M-W)	Proportion (M/W)
	Men	Women		
Cause A	20	10	10	2
Cause B	10	5	5	2
Cause C	5	2,5	2,5	2

The size of the differences between mortality rates from a specific cause, by sex, depends on the frequency of deaths from those specific causes in the population. On the other hand, the ratio of rates only depends on the magnitude of one rate relative to another.

Comparisons of the differences and rates make a more thorough evaluation of the differentials in mortality between women and men possible.

Given that population age structure has an important impact on risk of death, it is worth remembering that in order to make comparisons between mortality rates, it is necessary that those rates be adjusted for age, using the same reference population.

The difference between the rates, as well as the ratio of rates, may be used to evaluate social inequalities, comparing corresponding rates at different social levels. The difference of the rates describes the size of the gap between one group and another; for instance in Peru, between 1995 and 2000, the difference in perinatal mortality rates between mothers without education and those with higher education was 13 per 1000 pregnancies of 7 months or more (17). A ratio of rates conveys the relative magnitude of two rates, and is expressed as a proportion; for instance, the

maternal mortality in Honduras is 3.09 times greater than that in Costa Rica, or the maternal mortality rate in Costa Rica is one-third (0.32) of that registered in Honduras (14).

Likewise, for indicators expressed in absolute numbers, such as life expectancy at birth, inequalities may be measured by differences or ratios of the values of one group with respect to those of another group. In any case, it is important to consider the statistical significance of results, using either *t*-tests for absolute numbers or χ^2 for rates (13).

When populations or population sub-groups are small or when the frequency of occurrence is relatively low, aggregation of data from several years is suggested.

Measurement of differences between population groups, taking account of variations in sex and other variables such as age, socio-economic level, zone of residency, educational level, activity level, ethnicity, membership in specific groups (migrants, displaced, refugees, and disabled persons), would make it possible to perform an analysis of gender equity in health.

Gender-based analysis

Gender-based analysis (GBA) is an analytical tool that uses sex and gender as organizing principles that help clarify the differences between women and men, the nature of their social relationships, and their differences in the social sphere, in life expectancies, and in economic circumstances. A GBA identifies the way in which these conditions affect the health of women and men, and their access to and interaction with the health system (18).

GBA provides a reference framework that recognizes that women and men cannot be treated as a homogeneous group, and is useful to analyze and formulate policies, programs and projects, as well as to guide data collection. As mentioned before, GBAs must address diversity, taking into account not only sex, but also factors such as age, socio-economic level, zone of residency, ethnicity, and membership in specific population groups.

Measuring inequalities in the issues and populations proposed in the present document will make it easier to perform a GBA, by providing a key instrument for making informed decisions that will contribute to gender equity.

PROPOSED INDICATORS

I. SOCIO-ECONOMIC DETERMINANTS

During the last few decades, there have been important advances in the state of health in the population of the Americas; however, remaining inequities in socio-economic determinants of health limit enjoyment of the benefits of optimal health by certain population groups that have historically been excluded.

Some demographic indicators have been included in this chapter, because it is important to consider population and household structure in achieving and maintaining health. These indicators also serve to disaggregate data. Their importance lies in the fact that population aging, epidemiological changes in the Region, and implementation of certain sanitary policies are leading to an increasing demand for health services at home and in the community. In general, this production of services is seen as an extension of unpaid domestic work which mainly falls on women.

Important social changes have taken place in the last few years, such as an increase in women's educational level, which in many cases reaches enrollment rates equal to or even greater than those of men in elementary and middle education; greater participation of women in the labor force, which has given rise to greater access and control over resources, and to a change in power relationships between the sexes; the creation of a legal framework to promote gender equity and equal employment opportunities between men and women, and exercise of sexual and reproductive rights.

In spite of these positive changes, women continue to have work overloads because the sexual division of labor places almost all reproductive labor on their shoulders, which in most cases must be reconciled with women's productive role in the public sphere. A persistent inequality in the distribution of power and responsibilities, as well as in access to and control of material and non-material resources between women and men, places women in a subordinate position and in relatively greater exclusion, perpetuating limitations to improving their living conditions and developing their negotiation and decision-making capacities in issues related to their well-being.

In the sphere of health care services financing, several studies carried out by the World Health Organization and the World Bank have documented the importance of investing in health, especially women's health, because of its high rates of return and its contribution to the reduction of poverty, which is an important contribution to economic and social development (19).

Importantly, gender equity in financing health care services means that the cost of reproduction should not fall disproportionately on women; instead it must be fairly distributed throughout society. In general, public and private health systems are not fair in this sense, and women have to face the demand of making greater financial contributions for health services. Likewise, if pre-paid medicine is based on risks because of greater costs associated with services, women, the elderly, and those suffering from chronic diseases should not be the most disadvantaged.

DEMOGRAPHIC DIMENSION

1.1 POPULATION

Population distribution by sex and age

Definition

Absolute distribution: Number of women and men in each 5-year age group, in a given year and territory.

Percentage distribution: Quotient of the number of women in a specific age group, divided by the total number of women, for a given year and territory, multiplied by 100. Male figures are calculated in the same way.

Percentage of women in an age group =
$$\frac{\text{Number of women in that age group}}{\text{Total number of women}} * 100$$

Percentage of men in an age group =
$$\frac{\text{Number of men in that age group}}{\text{Total number of men}} * 100$$

(Equal for each age group of women and men).

Relevance

Women's and men's needs and opportunities are different in each life cycle stage; likewise, women's needs are different from those of men. With regards to public policy, population structure must be taken into account – considering the specificities and needs of each one of the population groups. Population structure, along with epidemiological information for each of those groups, will provide guidelines on demands for preventive health, treatment and rehabilitation services, and health promotion within the formal sector, at home as well as in the community.

Increased life expectancy at birth and epidemiological changes in the Region bring about an increase in the incidence of diseases requiring long-term attention. The elderly suffer chronic diseases that increase demand for health care services at home and in the community. These services are mainly provided by women, as an extension of their unpaid domestic work.

In addition to offering relevant information for decision-making in the area of health policy, information on demographic structure allows the creation of specific indicators for specific age groups.

Required information

Population by sex and age group.

Sources of information

- Population censuses
- Specialized surveys in countries that do not have an available census or population projections

- Population projections

Suggested disaggregation

- Zone of residence: urban and rural
- Specific population groups: ethnicity, migrants, displaced people, refugees²

Comment

Age-groups starting at 5 years of age up to 60-64 years have traditionally been used; the oldest age group has been that of 65 years and older. Considering the ageing of the population in the Region, it is every day more important to elaborate tabulations with wider age ranges, to include age groups up to 80 years old and older, or even 85 years old and older.

1.2 HOUSEHOLDS

Percentage of households with a female head of household

Definition

Quotient of the number of households with a female head of household³, divided by the total number of households, in a given period and territory, multiplied by 100.

$$\% \text{ of households with female head of household} = \frac{\text{Number of households with a female head of household}}{\text{Total number of households}} * 100$$

Relevance

The growing proportion of households with a female head of household means that, in addition to their responsibilities in the reproductive sphere, women are assuming responsibilities in the productive sphere, making it difficult to balance such roles, as well as causing work overloads with impacts on the physical and emotional well-being of these women.

According to information for a group of countries of the Region, the percentage of urban households with a female head of household varies from 21% in Bolivia to 35% in Nicaragua (4).

In addition to the total percentage of households with a female head of household, it is important to have information about types of households, since they may be substantially different. Household categories include: unipersonal, nuclear with two parents, nuclear with one parent, nuclear without children, extended and mixed. For instance, among Latin American and Caribbean countries for which there is information available, in the group of urban nuclear households with one parent, more than 83% are headed by women (4), showing that in cases of separation of couples, the responsibility of taking care of children tends to fall disproportionately on women.

² Not all countries of the Americas record these variables in their population censuses, or keep records of population that allow identifying a phenomenon such as migration.

³ Head of household is the person recognized as such by the other members of the household.

The different numerators and denominators of these indicators emphasize that, in addition to nuclear households, there are other types of households with their own characteristics and dynamics which must be considered when creating policies. In general, it has been assumed that a household is a homogeneous planning and analysis unit in spite of existing evidence of different types of households and internal differences in the distribution of resources and power. This unequal distribution of material and non-material resources among household members may place women and girls in a disadvantaged position, especially in light of their disadvantaged situation with respect to access to education, food, ownership of property, the social health system, decision-making and credit, among other resources.

Required information

Total number of households

Number of single-headed households

Households with two parents, nuclear with one parent, nuclear without children, and extended and mixed households

Sex of person recognized as head of household.

Sources of information

- Population censuses
- Household surveys

This indicator is available for several countries in the Region, by urban and rural zones, in CEPAL's Women and Development Unit's web page (4).

Suggested disaggregation

- Zone of residency: urban and rural
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comment

The definition of the percentage of households with a female head of household in each of the household categories would be: quotient of the number of households with female householder within each one of the categories (single-headed, nuclear with two parents, nuclear without children, and extended and mixed), divided by the total households of the corresponding category, multiplied by 100.

Example:

$$\% \text{ of single-headed households with female head of household} = \frac{\text{Number of single-headed households with female head of household}}{\text{Total number of single-headed households}} * 100$$

Percentage of households with children under 5 years of age

Definition

Quotient of the number of households with children under 5 years of age, divided by the total households, in a given period and territory, multiplied by 100.

% of households with children under 5 years of age =
$$\frac{\text{Number of households with children under 5 years of age}}{\text{Total number of households}} * 100$$

Relevance

Due to the sexual division of labor, women generally assume the responsibility of taking care of children, in particular when they are younger and are not going to school. The time that women dedicate to non-remunerated attention in the reproductive sphere limits their participation in educational, labor, political and recreational activities, reducing the possibilities of their own development. The situation becomes even worse in the particular case when households have female heads of household, especially in the case of poor households.

The limited amount of time available to women who are heads of households is increased by the lack of service facilities to care for children. Also, the low level of responsibility of men for taking care of their children reduces the time women can dedicate to other activities that would benefit their personal development. The search for gender equity and equal opportunities for women and men must take account of this aspect of time distribution in taking care of children less than 5 years of age.

Required information

Population censuses
Household surveys

Suggested disaggregation

- Sex of head of household
- Population specific groups: ethnicity, migrants, displaced persons, refugees
- Poor and non-poor households

Percentage of households with people 64 years and older or 79 years and older

Definition

Quotient of the number of households with people 64 years and older or 79 years and older, divided by the total number of households, in a given period and territory, multiplied by 100.

% of households with people 64 years and older =
$$\frac{\text{Number of households with people 64 years and older}}{\text{Total number of households}} * 100$$

% of households with people 79 years and older =
$$\frac{\text{Number of households with people 79 years and older}}{\text{Total number of households}} * 100$$

Relevance

Due to the sexual division of labor, women have traditionally been in charge of taking care of the diseased, the disabled, and those who cannot look after themselves in their homes and

communities, as an extension of their unpaid domestic work. In the recent past, one of the factors that has tended to increase this work load is ageing of the population, further limiting the possibilities of caretakers to participate in educational, labor, political and recreational activities, especially in households with female heads of household, and even more so in poor households unable to pay for care services.

With the increase in life expectancy at birth, the incidence of diseases requiring long-term attention such as Alzheimer's, arthritis, cancer, cerebrovascular and cardiovascular accidents, osteoporosis and tuberculosis, among others, have also increased, and attention to those suffering from these problems usually depends on unpaid women's work. It is noteworthy that the people providing this attention at home are facing increasingly complex tasks, and even medical procedures for which they are not necessarily trained.

Public sanitary policy cannot ignore the growing demand for attention, nor the fact that the amount of unpaid attention is being more and more limited by the growing integration of women into the labor market.

Required information

Number of households with people 64 years and older or 79 years and older.
Total number of households

Sources of information

- Population censuses
- Household surveys

Suggested disaggregation

- Sex of head of household
- Population-specific groups: ethnicity, migrants, displaced people, refugees
- Poor and non-poor households

Comment

The maximum age group definition, older than 64 or older than 79, would depend on life expectancy at birth in each country. The latter value may be used in countries with greater life expectancy.

2. SOCIO-ECONOMIC DIMENSION

2.1 INCOME

Percentage of households with female heads of household at each level of poverty

Definition

Quotient of the number of households with female heads of household in each poverty level, divided by the total number of households of the corresponding level, in a given period and territory, multiplied by 100.

% households with female heads of household =
$$\frac{\text{Number of poor households with female heads of household}}{\text{Total number of poor households}} * 100$$

% poor households with female heads of household =
$$\frac{\text{Number of poor households with female heads of household}}{\text{Total number of poor households}} * 100$$

Relevance

In over one-half of the countries for which information is available, households with female heads of household are more frequent in poorer levels, which indicates that poverty affects women and their dependants disproportionately. Public policy must consider the important obstacles that limit women's options to overcome poverty, in particular those related to access and control over material and non-material resources, especially those related to care of dependants such as children and the elderly.

According to data presented by CEPAL, 28% of urban households in Costa Rica are headed by women, while among poor households in the same zone, 45% are headed by women (4).

Required information

Number of households
Sex of head of household
Poverty level of households

Sources of information

- Household surveys

This indicator is available for several countries in the Region and can be found on CEPAL's Women and Development Unit's Web page (4).

Suggested disaggregation

- Zone of residency: urban and rural

Levels of poverty with and without income contribution from female spouses

Definition

Quotient of the number of two-parent households below the poverty line, not considering the economic contribution of female spouses, minus the number of two-parent households that remain below the poverty line, including economic contribution from female spouse, divided by the total number of two-parent households in a given period and territory, multiplied by 100.

Magnitude of poverty with and without income contribution from female spouse =
$$\frac{(H1-H2)}{HB} * 100$$

H1 = Number of poor two-parent households not including economic contribution from female spouse

H2 = Number of poor two-parent households including economic contribution from female spouse

HB = Total number of two-parent households

Relevance

There is evidence of improved well-being in households in which women contribute economically. In two-parent households, women's economic contribution is a strategy to break the circle of poverty in spite of the limitations these women have to face, especially since the burden of reproductive labor continues to disproportionately be their responsibility, and because of the lack of access and control over resources that would help them achieve better performance in the productive area.

This indicator is a methodological approach to measuring women's economic contribution to rising above the poverty line of two-parent households through their participation in the labor market. According to available data, the economic contribution of female spouses in El Salvador's urban zone makes it possible for 12% of two-parent households to rise above the poverty line because 45% of two-parent households would be poor if it were not for women's economic contribution, as compared to 33% of two-parent households with a contribution from female spouses (4).

Required information

Two-parent households

Sex of head of household

Household income and income of female spouse

Poverty lines

Sources of information

- Household surveys

This indicator is available for several countries in the Region on CEPAL's Women and Development Unit's Web page (4).

Suggested disaggregation

- Zone of residency: urban and rural

Ratio of women's average earned income as compared to that of men

Definition

Quotient of average earned income of working women, divided by average earned income of working men, in a given period and territory, multiplied by 100.

$$\text{Ratio of earned income} = \frac{\text{Monthly average earned income of working women}}{\text{Monthly average earned income of working men}} * 100$$

Relevance

On average, women generally receive lower incomes than those of men. The earned income differential is not only due to educational differences; other factors such as gender relationships and position in the labor market also contribute to the salary gap. In several countries in the Region, the ratio of women's average earned income with respect to that of men is greater in groups with higher educational levels.

According to CEPAL (4), women have a lower average income than that estimated for men at the national level. In very few cases, in certain specialties, categories or employment groups, women have a higher income than men. In general, women are located in greater proportions in low-productivity sectors of the labor market, and therefore receive a lower income.

The low valuation of work performed by women in the labor market is also linked to the fact that women's income has traditionally been assumed to be complementary to that of men; however, it must be noted that an increasingly greater number of households are headed by women, or that women are the main sources of household income. It is important to note that women's low income has a negative impact on access to health services and contribution to social health systems and retirement pension plans, thus perpetuating the difficulties that women encounter in trying to improve their living standards and that of their families.

Required information

- Men's average monthly earned income
- Women's average monthly earned income

Sources of information

- Surveys on employment, income and expenditure
- Surveys on living standards, including a module on income

This indicator is available for several countries in the Region on CEPAL's Women and Development Unit's Web page (4).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 15-24, 25-34, 35-44, 45-54, 55 and over
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Employment groups: executives, professionals and technicians, administrators, manual workers

2.2 EDUCATION

Illiteracy rates, by sex

Definition

Quotient of the number of women 15 years and older that are illiterate⁴, divided by the total of women 15 years and older, in a given territory and a specific point in time (usually the middle of the year), multiplied by 100. The equivalent figure for men is calculated in the same way.

$$\text{Women's illiteracy rate} = \frac{\text{Number of illiterate women 15 years and older}}{\text{Total number of women 15 years and older}} * 100$$

$$\text{Men's illiteracy rate} = \frac{\text{Number of illiterate men 15 years and older}}{\text{Total number of men 15 years and older}} * 100$$

Relevance

Education is an important input that society facilitates or restricts access to for women, which is necessary for the achievement of their autonomy and participation in economic and social development with opportunities equal to those of men. A direct relationship between women's educational level and various aspects related to exercising their rights, included reproductive rights, has been confirmed in multiple studies.

During the last few decades, differences between women's and men's illiteracy rates have been increasingly reduced, reaching equal levels in some countries of the Region; in some countries men's illiteracy rate is actually higher. However, other countries still show important differences in illiteracy by sex. In Guatemala in 2002, women's illiteracy rate was 36%, while that of men was 21% (14). Likewise, there is evidence of disparities by sex among groups of lower socio-economic level, rural residency, and Native Americans compared to the socially privileged. In Ecuador in 1998, women's illiteracy rate was 12% and that of men was 8%; taking into account the zone of residence, a greater gap was registered in rural zones, where illiteracy rates were 21% among women, and 15% among men (20).

Required information

Population 15 years and older, by sex
Illiterate population 15 years and older, by sex

Sources of information

- Population censuses
- Household surveys

Data on illiteracy is available for several countries in the Region on CEPAL's Women and Development Unit's Web page (4), while data on literacy rates by sex are available on web page of the Area of Health Analysis and Sanitation Information Systems, PAHO.

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 15-24, 25-49, 50-64, 65 and older
- Socio-economic level
- Population specific groups: ethnicity, migrants, displaced persons, refugees

⁴ Illiterate population is defined as that which is not capable of reading and writing a simple and brief story about their day-to-day life (4).

Percentage distribution of women and men by years of education

Definition

Quotient of the number of women 15 years and older in each one of the periods of years of education (0-5, 6-9, 10-12, 13 and more), divided by the total number of women in the same age group, for a given year and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

% of women 15 years and older with 0-5 years of education =
$$\frac{\text{Number of women 15 years and older with 0-5 years of education}}{\text{Total number of women 15 years and older}} * 100$$

% of men 15 years and older with 0-5 years of education =
$$\frac{\text{Number of men 15 years and older with 0-5 years of education}}{\text{Total number of men 15 years and older}} * 100$$

(Same for all other ranges of years of education)

Relevance

Education is a basic instrument that enables healthy development of women, since it allows them to achieve autonomy and participate in economic and social development under equal conditions with men.

It is worth emphasizing that several studies have shown a direct relationship between women's educational level and several aspects related to the exercise of their rights, including reproductive rights.

In 14 out of the 17 countries for which CEPAL has information available, the percentage of women with 13 and more years of education is greater than that recorded for men. However, wage levels do not show the advantage of this level of education for women (4).

Required information

Population 15 years and older, by sex

Population 15 years and older according to number of years of education, by sex

Sources of information

- Population censuses
- Household surveys

The indicator of population by completed years of education is available on CEPAL's Women and Development Web page (4).

Suggested disaggregation

- Zone of residency
- Age groups: 15-24; 25-59, 60 and older
- Socioeconomic level

- Population-specific groups: ethnicity, migrants, displaced persons, refugees

Comment

This indicator may be complemented by 15-24 year-old and 25-59 year-old women's and men's average number of years of education, available on CEPAL's Women and Development Unit's Web page (4).

School drop-out rate of adolescent women's due to pregnancy

Definition

Quotient of the number of adolescent women who drop out of school due to pregnancy, divided by the total number of adolescent women who drop out of formal education, in a given period and territory, multiplied by 100.

$$\text{Adolescent women's school drop-out rate due to pregnancy} = \frac{\text{Number of adolescent women who drop out of school due to pregnancy}}{\text{Total number of adolescent women who drop out of formal education}} * 100$$

Relevance

The right of pregnant adolescent women to continue studying is frequently not exercised as many of them are forced to leave educational centers, either because they are not accepted there, or because the centers do not have the necessary conditions to facilitate the continuation of their education. Female adolescents' dropping out of school because of pregnancy limits their personal growth as well as their future opportunities in the economic, social, and political spheres.

In order to facilitate the exercise of fundamental rights, public policies must take into account the need of pregnant adolescents and those who are mothers, enabling them to continue studying for their own benefit and for that of their offspring. Mothers and pregnant adolescents must develop their potential and capabilities to insert themselves into the labor market under better conditions, achieve their autonomy, and have greater negotiating and decision-making capacity over subjects that directly concern them. Therefore, policies must prevent this group of adolescents from being excluded from their right to education, and, instead, contribute to empower adolescent and younger females to achieve sustainable development.

Required information

Number of adolescent women who drop out of formal education
Number of adolescent women that drop out due to pregnancy

Sources of information

- Household surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Socio-economic level
- Population specific groups: ethnicity, migrants, displaced persons, refugees

Comment

Very few countries of the Region keep records of the information necessary to compute this indicator; it is therefore recommended that such information be collected in further investigations.

2.3 WORK

Adjusted rate of women's and men's participation in economic activity

Definition

Quotient of the number of economically active women, divided by the total number of women of working age, in a given date and territory, multiplied by 100. The equivalent figure for men is calculated in the same way. It is important to note that there are differences between different countries in the minimum age at which persons are allowed to work: in some countries it is 12 years, in others 15 years, and in others, 10 years.

Women's participation rate in economic activities =
$$\frac{\text{Number of economically active women}}{\text{Number of women of working age}} * 100$$

Men's participation rate in economic activities =
$$\frac{\text{Number of economically active men}}{\text{Number of men of working age}} * 100$$

Relevance

During the last decades, women's integration into the labor market has grown considerably, but in spite of this, women's labor participation still continues to be markedly lower than that of men. Women's integration into the labor market offers them the possibility of autonomy and empowerment because remunerated work allows women to increase their possibilities of accessing monetary and non-monetary resources, giving them greater negotiating and decision-making capacity over issues that concern them.

In addition, meaningful economic contributions by women to development have been demonstrated. Nevertheless, women still face obstacles in participating in the labor market with regard to having the same opportunities as men. These limitations are conditioned by reproductive activities that are mainly women's responsibilities, on one hand, and by preferences of certain sectors of the economy for male work, on the other hand.

Among the countries for which there is information available for 1999, Colombia and Paraguay show the highest rates of female labor participation; in urban zones they reach 55%; in rural zones, the country with the greatest female labor participation is Bolivia, with 77% (4).

The risk of under-recording women's labor participation in agricultural censuses is worth emphasizing, because when their production is oriented towards self-consumption and breeding small animals, many times that participation is not taken into account in agricultural investigations.

Required information

Economically active population, by sex
Population of working age, by sex

Sources of information

- Population censuses
- Employment surveys

This indicator is available for several countries in the Region on CEPAL's Women and Development Unit's Web page (4).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 0-14, 15-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Population-specific groups: ethnicity, migrants, displaced persons, refugees

Comment

For purposes of comparability in the region, it is best to use the ILO's definitions of economically active population and working age population.

Participation rate of 15-59 year-old men and women in economic activities, by poverty level, according to presence of children under 15 years old in the household

Definition

Quotient of the number of 15-59 year-old poor employed women with children between 0 and 14 years old in the household, divided by the total number of employed women between 15 and 59 years old, in a given period and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

Rate of participation of 15-59 year-old poor women in economic activities with children under 15 in their household =

$$\frac{\text{Number of 15-59 year-old poor employed women with children under 15 in their household}}{\text{Number of 15-59 year-old employed poor women}} * 100$$

Rate of participation of 15-59 year-old poor men's in economic activities with children under 15 in their household =

$$\frac{\text{Number of 15-59 year-old poor employed men with children under 15 in their household}}{\text{Number of 15-59 year-old poor employed men}} * 100$$

(Same for non-poor group)

Relevance

During the last decades, women's integration into the labor market has grown considerably. Women's participation in economic activities brings about the possibility of autonomy and

empowerment, because through paid work they have access to monetary and non-monetary resources that give them greater negotiating and decision-making capacity over issues that concern them. Income generation mainly among women in poor population groups allows them to improve their living standards and that of their offspring. Therefore, in spite of the presence of minors in households, women participate in economic activities, although this does not necessarily imply a reduction in their reproductive workday labor.

In some countries for which CEPAL has information available, poor women's participation rates in economic activities, regardless of the number of children less than 15 years in the household, remain stable; in other countries, rates increase as the number of minors grows (4). Therefore, in order to relieve women's work overload, those who make public policy decisions must consider initiatives to lessen this reproductive work load.

Required information

Poor and non-poor employed population between 15 and 59 years of age, by sex
Poor and non-poor employed population between 15-59 years of age, with children under 15 in their households, by sex

Sources of information

- Population censuses
- Employment surveys

This indicator is available for several countries of the Region, by numbers of minors in households, on CEPAL's Women and Development Unit's Web page (4).

Suggested desegregation

- Zone of residency: urban and rural
- Population specific groups: ethnicity, migrants, displaced persons, refugees

Open unemployment rate, by sex

Definition

Quotient of the number of women in open unemployment, divided by the total number of economically active women, in a given period and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

Open unemployment rate for women =
$$\frac{\text{Number of women in open unemployment}}{\text{Total number of economically active women}} * 100$$

Open unemployment rate for men =
$$\frac{\text{Number of men in open unemployment}}{\text{Total number of economically active men}} * 100$$

Relevance

The greatest rates of women's open unemployment with respect to those of men show that women have less access to the labor market, hindering women's capacity to have access to monetary and non-monetary resources which would enable them to achieve autonomy and develop their decision-making capacity.

The economic crises that most countries in the Region have undergone have brought about growth in open unemployment, which has had a disproportionate impact on women. According to International Labor Organization estimates, total unemployment in Latin America and the Caribbean in 2003 reached 8.0%, affecting women, whose unemployment rate was 10.1%, to a much greater degree than men, whose unemployment rate was 6.7%; likewise, juvenile (less than 25 year-old) unemployment also affected women to a greater degree – the rate for women was 15.9%, compared to 13.0% for men (21).

According to data presented by CEPAL for 1999 for urban zones, of the 17 countries for which there is information available, four showed a greater unemployment rate for men than for women. In the rest of the countries, the difference between women's and men's open unemployment can be high, as it is in the case of Ecuador, where it reached 20% for women and 11% for men (9), or 0% as was the case in Nicaragua and Paraguay (4).

Required information

Economically active population (EAP) in open unemployment, by sex
EAP, by sex

Sources of information

- Censuses
- Employment surveys

This indicator is available for several countries of the Region in the CEPAL Women and Development Unit's Web page (4).

Suggested desegregation

- Zone of residency: urban and rural
- Age groups: 0-14, 15-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Population-specific groups: ethnicity, migrants, displaced persons, refugees

Percentage distribution of economically active population (EAP) employed according to employment categories, by sex

Definition

Quotient of the number of women employed in each one of the employment categories (employer, self-employed, unpaid family worker, domestic service), divided by female employed EAP, in a given period and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

% of women working as employers = $\frac{\text{Number of women working as employers}}{\text{Number of women employed EAP}} * 100$

Total economically active women employed

$$\% \text{ of men working as employers} = \frac{\text{Number of men working as employers}}{\text{Total economically active men employed}} * 100$$

(Same for other employment categories)

Relevance

Women's remunerated employment is a measurement of their capacity to access financial resources to achieve autonomy and negotiating and decision-making power. There is evidence that in spite of the progress achieved in women's integration into the labor market, and their increasingly higher educational level, women are still concentrated in lower-productivity activities, and therefore receive a lower income.

In the Region, most employed women and men are salaried, while others are self-employed. Among the unpaid family worker and domestic service categories, even if the percentage of the employed population is lower than those previously mentioned, differences between women and men are substantial, especially in domestic work. Domestic work, characterized as low-qualified labor, with low income, instability and bad working conditions, absorbs a great number of women, keeping them outside worker's protection systems and social protection systems. In other words, for many women, integrating into the labor market does not ensure access to insurance plans that include the right to health care as titleholders or contributors, and provides even less access to pension plans.

Required information

EAP working as employers, salaried employees, self-employed, unpaid family worker, domestic service, by sex

EAP, by sex

Sources of information

- Population censuses
- Employment surveys

This indicator is available for several countries in the Region on CEPAL's Women and Development Unit's Web page (4).

Suggested desegregation

- Zone of residency: urban and rural
- Age groups: 0-14, 15-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Population specific groups: ethnicity, migrants, displaced persons, refugees

Percentage distribution of economically active population (EAP) employed in low-productivity sectors of the labor market, by sex

Definition

Quotient of the number of women that are employed in each of the low-productivity sectors (micro-businesses, non-qualified independent workers, domestic service), divided by the female EAP employed, in a given period and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

% of women employed in micro-businesses =
$$\frac{\text{Number of women employed in micro-businesses}}{\text{Total number economically active women employed}} * 100$$

% of men employed in micro-businesses =
$$\frac{\text{Number of men employed in micro-businesses}}{\text{Total number economically active men employed}} * 100$$

(Same for non-qualified independent workers and domestic employment)

Relevance

Women's remunerated employment is a measurement of their ability to access financial resources that enable them to gain autonomy and negotiating and decision-making power. There is evidence in the Region indicating that in spite of progress in raising women's educational levels, their integration into the labor market still takes place at a disadvantage relative to men. A significant percentage of women are concentrated in low-productivity sectors, reducing their possibility of obtaining a better salary and social benefits to help them achieve better and healthier development.

In 16 out of the 17 countries for which CEPAL has information available, a higher percentage of women than men participate in low-productivity sectors. The greatest differences between women and men are observed in domestic employment; the percentage of employed men working in this sector does not reach 1.5% in any country, while for employed women in 1999, this percentage exceeds 20% in Brazil and Paraguay (4). That is, a great number of women work in sectors characterized by low productivity and qualification levels, which implies lower income, instability, and unfavorable working conditions, hindering their access to the benefits of worker's protection and social protection systems.

Required information

EAP employed in micro-businesses, non-qualified independent work, by sex
EAP, by sex

Sources of information

- Population censuses
- Employment surveys

This indicator is available for several countries in the Region on CEPAL's Women and Development Unit's Web page (4).

Suggested desegregation

- Zone of residency: urban and rural
- Age groups: 0-14, 15-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more

- Population specific groups: ethnicity, migrants, displaced persons, refugees

Weekly hours worked by employed women and men, by employment category

Definition

Quotient of the total weekly hours worked by women in each one of the employment categories (employers, salaried employees, self-employees, unpaid family worker, domestic service), divided by the number of women employed in the respective employment category. The equivalent figure for men is calculated in the same way.

Average weekly hours worked by women as employers =

$$\frac{\text{Total weekly hours worked by women as employers}}{\text{Total number of women working as employers}}$$

Average weekly hours worked by men as employers =

$$\frac{\text{Total weekly hours worked by men as employers}}{\text{Total number of men working as employers}}$$

(Same for the other employment categories)

Relevance

The need to reconcile the remunerated labor role with domestic work and child care causes a greater tendency of women to settle for less hours of paid work, leading to lower levels of remuneration, labor stability, opportunities for promotion and access to social and health benefits.

In the urban zone, the average number of hours worked by women in different employment categories is generally lower than the average number of weekly hours worked by men, except in the category of unpaid family work, where women work a greater number of hours in almost all the countries for which there is information available (4).

Several studies have shown that women's integration into the labor market does not necessarily entail a redistribution of reproductive work between women and men, generating a work overload that affects women's physical and mental health.

Required information

Number of weekly hours worked by men and women according to employment categories, by sex
 EAP employed according to employment category, by sex

Sources of information

- Employment surveys

Suggested desegregation

- Zone of residency: urban and rural
- Age groups: 0-14, 15-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Population specific groups: ethnicity, migrants, displaced persons, refugees

- Presence of children under 5 years old in the household

Percentage of women in decision-making positions within the government

Definition

Quotient of the number of women who have been elected or designated for positions as deputies, judges, ministers, major regional or local authorities, divided by the total of persons elected or designated for those positions, up until a given date and in a given territory, multiplied by 100.

$$\% \text{ of women in Parliament} = \frac{\text{Number of elected female deputies}}{\text{Total number of elected female and male deputies}} * 100$$

$$\% \text{ of women who are judges} = \frac{\text{Number of female judges designated}}{\text{Total number of female and male judges designated}} * 100$$

(Same for ministers, mayors, prefects, and governors)

Relevance

In general, women have remained under-represented in positions of power where priorities are defined, policies are formulated, and resources are allocated. In consequence, women's specific needs have not been considered in different governmental initiatives and interventions.

Member States have made a commitment through several international agreements to promote women's participation in decision-making positions, filled either by popular election or by appointment, in order to promote equitable development. It is expected that women's participation in decision-making positions will assure that women's agendas are present and their specific needs in each one of their life cycle stages will be taken into account in the creation of policies, programs, and projects, as well as in allocation of resources for their execution.

Several laws have been enacted in the Region to enforce this commitment, such as the law of political participation quotas that encourages women's political participation through positive actions. It is worth noting that for 2002, among the countries for which there is information available, the percentage of women in the Costa Rican Parliament reached 35% (4).

Required information

Number of women and men elected or appointed as deputies, judges, ministers, mayors, prefects, governors

Sources of information

- Election records
- Appointment records

Comments

Increases in women's level of participation in decision-making structures may be followed when this indicator is obtained for several periods. Likewise, values obtained for this indicator may be compared with those of more developed countries.

Distribution of time per day (in minutes) of total work (mercantile and unpaid domestic) between women and men

Definition

Time per day (in minutes) of total work (mercantile and unpaid domestic) by women, divided by time per day (in minutes) of total work by men and women, in a given period and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

$$\begin{aligned} & \% \text{ of time worked by women} = \\ & \frac{\text{Time per day (in minutes) of total work by women}}{\text{Time per day (in minutes) of total work by men and women}} * 100 \end{aligned}$$

$$\begin{aligned} & \% \text{ of time worked by men} = \\ & \frac{\text{Time per day (in minutes) of total work by men}}{\text{Time per day (in minutes) of total work by men and women}} * 100 \end{aligned}$$

Relevance

In general, women dedicate a greater amount of total time to work, taking into account both mercantile and unpaid work. However, the number of minutes of work related to the labor market is, according to empirical evidence, usually lower for women, because the load of reproductive labor that falls on women due to the sexual division of labor tends to lower the amount of time that they can dedicate to mercantile work. As a result, they face limitations of their possibilities to generate greater monetary income and access non-monetary resources.

Unpaid domestic work, mainly carried out by women, is considered women's natural work, and precisely because it lacks economic valuation, it has remained invisible in the context of actions concerning occupational health and the elaboration of a national accounting system.

In Colombia in 1983, according to the 2002 Human Development Report, women worked 399 minutes per day, as opposed to 356 minutes for men, i.e., women worked 12% more than men (22).

Required information

Time of mercantile work per day and time of unpaid domestic work per day (in minutes), by sex.

Sources of information

- Surveys about use of time
- Household surveys including a module on use of time

Suggested desegregation

- Zone of residency: urban and rural
- Age groups: under 20, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level

Comments

The following complementary indicators can be computed with information available about time per day in minutes that women and men dedicate to mercantile work and unpaid domestic work:

- Time per day (in minutes) of mercantile work by women, divided by time per day (in minutes) of mercantile work by men and women, multiplied by 100. The equivalent figure for men is calculated in the same way.

$$\frac{\text{Time per day in minutes of mercantile work by women}}{\text{Time per day in minutes of mercantile work by men and women}} * 100$$

- Time per day (in minutes) of unpaid domestic work by women, divided by time per day (in minutes) of unpaid domestic work by men and women, multiplied by 100. The equivalent figure for men is calculated in the same way.

$$\frac{\text{Time per day in minutes of domestic work by women}}{\text{Time per day in minutes of domestic work by men and women}} * 100$$

In Colombia in 1983, women dedicated 24% of their time to mercantile activities, while men dedicated 77% of their time to those activities; women spent 76% of their time in non-mercantile activities, while men spent 23% of their time in these activities (22).

In the Region, only a very few surveys measure use of time, and awareness of the value of such measurement has not yet been established; accordingly, values for that indicator are only available in a few countries. However, it is necessary to continue to emphasize it as a very important proposed indicator for analyzing gender equity in health.

Percentage of women and men with access to pension plans

Definition

Quotient of the number of women who have access to pension plans (as their own right or as dependants), divided by the female economically active population (EAP), in a given year and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

$$\% \text{ of women with pension plans} = \frac{\text{Number of women with access to pension plans}}{\text{Total number of economically active women}} * 100$$

$$\% \text{ of men with pension plans} = \frac{\text{Number of men with access to pension plans}}{\text{Total number of economically active men}} * 100$$

Relevance

In general, social health systems include pension plans. It is well known that those who have access to social health systems are mostly persons working in the formal sector of the economy. Since women are mainly working in the low-productivity sector, characterized by a lack of access to the social health system, they are significantly excluded from pension plans as titleholders.

This situation, along with women's greater life expectancy, implies that older women face great limitations to obtain resources that would allow them to have access to health services.

On the other hand, only a reduced number of women would have access to pension plans as dependants of their spouses, with very low income from retirement pensions, increasing their risk of not having access to health services and ending up in the population group living below the poverty line.

Required information

Number of persons with access to pension plans, by sex. EAP, by sex.

Sources of information

- Household surveys
- Statistics from the social health system

Suggested desegregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Employment categories: employers, salaried employees, self-employees, unpaid family worker, domestic service

3. ENVIRONMENTAL CONDITIONS

Percentage of households with access to potable water in the house

Definition

Quotient of the number of households with access to potable water (or water that is suitable for human consumption) within the house, divided by total number of households in a given period and territory, multiplied by 100.

$$\% \text{ of households with potable water} = \frac{\text{Number of households with access to potable water inside the house}}{\text{Total number of households}} * 100$$

Relevance

In some places where water for human consumption is far away from the house, women are the most responsible for collecting the necessary amount of water for daily use at home.

For women, who are in charge of the health of their household members and of domestic tasks, access to potable water at home represents a basic element that allows them to improve people's health conditions and control certain diseases, such as cholera. Likewise, access to drinkable water within the house reduces the time used by women for water collection, i.e., a reduction of their domestic work load.

In the Region, there are differences in access to potable water between the most developed and the less developed countries, as well as between regions within less developed countries. In 1998, while almost the entire population of Canada and the United States had drinkable water, 44% of the population of Paraguay had such access, and 46% of the population of Haiti. The population most affected by lack of access to drinkable water was that in rural zones. In Paraguay, 13% of the rural population had access to drinkable water, as opposed to 70% of the urban population (23).

Required information

Number of households. Number of households with access to potable water or suitable for human consumption inside the house.

Sources of information

- Housing censuses
- Household surveys including a module on characteristics of the home

Suggested disaggregation

- Zone of residency: urban and rural

Comment

With regard to environmental conditions, this indicator could be complemented with an indicator of the percentage of houses with access to basic sanitation, and another about different types of fuel used to cook, given that certain types of fuel affect women's health, who are in charge of domestic tasks.

4. POLITICAL AND LEGAL DIMENSION

Indicators regarding the political and legal dimension of the issue show the will of authorities to achieve compliance of the Member States' commitment to achieve gender equity. In general, these indicators will have a "YES" or "NO" answer and, if possible, an explanation of the indicator.

A first step to institutionalizing gender equity is to count on the political will of the respective authorities and corresponding basic legislation for implementation. In addition, there should be regulations to facilitate interventions and systematic allocation of resources in order to implement programs and projects aimed at achieving equal opportunities and/or gender equity. These indicators may be adjusted according to specific needs and information availability in each country.

4.1 GENDER EQUALITY

Existence of national policies supporting equal opportunities and/or gender equity

Relevance

Willingness of governments to comply with commitments for gender equity, as well as the priority they give to this issue, may be analyzed through the existence of national policies, and the corresponding systematic allocation of resources for this purpose.

Existence of official organizations in charge of national policies on gender equity

Relevance

Existence of governmental organizations in charge of following up the integration of the gender perspective into sectorial policies will ensure progress towards gender equality, to comply with commitments established in several international and national instruments to achieve gender equity.

Existence of legal quotas to promote women's political participation

Relevance

Historically, women have remained excluded from situations of decision making and resource allocation. To encourage greater political participation of women, proactive policies have been shown to be necessary. These included quota laws, whose application have led to a greater presence of women in the parliaments of several countries in the Region.

Existence of maternity leave laws

Relevance

If there are such laws, it would be important to know how many weeks of maternity leave are granted, who has the right to it and who is excluded, who pays for the leave (employer, social health system, without payment but with the consent of the employer) and the amount granted.

Existence of labor laws regarding child care

Relevance

Child care, which is mainly carried out by mothers, is in many cases an obstacle to women's integration into the labor market or forces them to interrupt their remunerated activities. Child care support, for instance through nurseries, included in legislation promotes women's access to financial resources, helping them to become empowered. If this legislation exists, information may be compiled indicating the sources of financing for operation and level of coverage.

Existence of regulations to allow paternal child care during a child's first year

Relevance

In order to promote men's participation in child care as well as better distribution of the responsibilities of this care between mothers and fathers, these regulations should exist to promote this change in social behavior.

Existence of regulations to guarantee retirement and pension plans for older women who did not participate in the labor market

Relevance

Unpaid domestic work, carried out mainly by women, is not considered productive work and those who perform it are therefore excluded from pension plans. Regulations to ensure a pension for women who did not participate in the labor market will allow them to have access to health services.

Existence of legislation to promote gender equality among adolescents

Relevance

Adolescents are a population group that has remained excluded. Currently, there are country-level initiatives aimed at promoting their participation and empowerment. However, these initiatives must be developed with a gender equity perspective.

Existence of media regulations aimed at avoiding sex discrimination and promoting gender equality

Relevance

Discrimination by sex in the media has been constant in the countries in the Region. Fortunately, there is an increasing awareness that the media may become an instrument to promote gender equality. This tendency may be reinforced with the existence of regulations on that respect.

Existence of legislation to prohibit gender stereotypes in school textbooks

Relevance

Gender equality must be promoted in all areas of socialization. The educational sector, starting from elementary school, plays a fundamental role in achieving gender equality. Legislation prohibiting gender stereotypes in school textbooks would contribute to the consideration of gender equality in socialization.

Existence of laws that consider attention to, and prevention and eradication of, intra-family violence and sexual abuse against women, and which provide resources from the public budget

Relevance

Recognizing intra-family violence and sexual abuse against women as a violation of Human Rights, and giving priority to this problem, will be assisted by the existence of laws that consider attention to and prevention and eradication of intra-family violence and sexual abuse, and which provide resources from the public budget.

Existence of initiatives to facilitate unpaid production of health care services at home

Relevance

Unpaid production of health care services at home is increasingly important, due mainly to population ageing, epidemiological changes, and policies that have transferred care of disease from the formal sector to homes and communities, and is one of the aspects that must be considered in health sector policies. This indicator may be complemented with information about the type of support provided and who benefits from it.

4.2 SEXUAL AND REPRODUCTIVE HEALTH

Existence of laws on sexual and reproductive rights

Relevance

Member States made a commitment in several international agreements to promote and facilitate exercise of sexual and reproductive rights– a fundamental dimension of achieving and maintaining good reproductive health. Willingness to comply with this commitment will result in national legislation and regulations.

Existence of regulations to allow voluntary sterilization

Relevance

Women’s decision-making about their own bodies is one of the fundamental rights that must be promoted by different sectors of society. Sterilization as a family planning method is seen as a women’s right, and they must make the decisions on this issue.

Existence of regulations to allow family planning upon request by women

Relevance

Just as in the previous case, national legislation would have to consider women’s access to family planning methods, without requiring permission or authorization from other persons. A regulation of this sort would promote respect of women’s reproductive rights, thus contributing to their better health.

Existence of regulations for voluntary interruption of pregnancy for therapeutic reasons, rape or incest

Relevance

Some countries in the Region include voluntary interruption of pregnancy for therapeutic causes, rape or incest among their regulations. If this regulation exists, it will be important to indicate

specifically those cases and circumstances in which voluntary interruption of pregnancy are allowed.

Existence of publicly-available emergency contraceptives

Relevance

This is an important indicator about women's access to a contraceptive option that allows them to prevent unwanted pregnancies – a fundamental aspect in the exercise of women's reproductive rights.

Existence of legislation on responsible parenthood

Relevance

Women's and men's participation in both the productive and reproductive spheres may be promoted by the existence of a law favoring men's participation in their children's care.

Existence of policies to integrate sexual education in middle education

Relevance

Exercise of sexual and reproductive rights implies access to information. A mechanism to diffuse information and promote knowledge about sexual health is the integration of this issue into middle education, which would support the development of the negotiating and decision-making capacities of adolescents, regarding sexual and reproductive health.

Existence of population policies that consider family planning a right

Relevance

Family planning must be considered a right of women and men to decide on their reproductive life. Contraceptive availability offers people and couples the possibility of exercising their right to freely decide on the number of children and birth spacing, as well as to enjoy a sexual life without fear of an unwanted pregnancy. Information about the integration of family planning into population policies shows the priority governments place on facilitating the exercise of reproductive rights.

5. DIMENSION OF HEALTH CARE SERVICES FINANCING

Public expenditure in specific health programs

Definition

Quotient of the magnitude of public expenditure in programs to take care of specific needs of women, divided by the total public expenditure on health, in a given period (usually one year) and territory, multiplied by 100.

These programs may be: maternal-infant service, detection and treatment of cancer of the cervix, prevention and attention of intra-family violence and sexual abuse, and reproductive health.

Public expenditure in maternal-infant service =
$$\frac{\text{Total public expenditure in maternal-infant service}}{\text{Total public expenditure in the health sector}} * 100$$

(Same for other programs)

Relevance

The greater emphasis on attention to the specific needs of women corresponds to their greater need for health services; their lower access and control over resources; their greater payment for health services in absolute and relative terms; their lower remuneration, prestige and autonomy in the formal health system; and the greater impact that increments and reductions in public services have on women.

Starting from an analysis of the health situation of different population groups, it is possible to identify specific needs women have in the different population sub-groups during the various stages of their life cycle, and therefore, the services required to take care of their needs related to health prevention, attention, and promotion.

Given the lack of information about the amounts required to take care of specific needs of women's health, it is possible to form an idea of the level of compliance with the commitments made by authorities regarding women's health by observing the emphasis that current governments place on the execution of initiatives for attention to women's specific needs.

It would be expected that the money allocated for this purpose in the budgets of the respective governments will match the priorities given to women's needs.

Required information

Public expenditure in the health sector for specific programs that respond to women's particular needs. Total public expenditure in the health sector.

Sources of information

- Budget of health sector, classified according to health programs.

Comment

Countries' health budgets are not often sub-divided according to specific programs; however, this indicator is recommended to obtain information about budgetary allocation to specific health programs.

Expenditure in primary health care

Definition

Quotient of the total public expenditure in primary health care programs, divided by the total public expenditure in the health sector, in a given period and territory, multiplied by 100.

Public expenditure in primary health care =
$$\frac{\text{Total public expenditure in primary health care}}{\text{Total public expenditure in health sector}} * 100$$

Relevance

Primary health care (PHC) is closely related to women's needs and problems, specifically in the spheres of maternal-infant health, family planning, nutrition, sanitary education, water supply in appropriate quantity and quality, immunization against the main infectious diseases, and participation in the community.

Experience with implementing PHC strategies in some countries in the Region has shown that more equitable access to health services can be achieved if, in addition to political willingness, among other commitments by governments, there are also: allocation of suitable financial resources and sustainable incentives that are consistent with objectives; mechanisms aimed at quantitative and qualitative improvement of expenditure in health and provision of health services to populations that have remained excluded; and application of health insurance plans, either for the population as a whole or for specific sub-groups (24).

Consequently, a reduction in public expenditures in PHC would have negative effects on women's health, since they are the main users of PHC as a service for their own benefit or as providers of health at home and in the community.

Required information

Public expenditure in health. Public expenditure of the health sector in PHC

Sources of information

- Ministry of Health budget

Comment

As a complement, per capita expenditure in PHC may be estimated.

II. STATE OF HEALTH

Gender equity in health status does not mean equal mortality and morbidity rates between men and women. In all countries of the Region, women live longer than men, but this does not mean that they enjoy better health conditions than men throughout the different stages of their life cycle. Given the same environmental conditions and the same level of attention, the greatest life expectancy of women is due to factors inherent to their sex, that make them more resistant to health risks.

Because of the roles socially assigned to men and women, risk factors play an important part in preventable mortality; for instance, for young adult males, mortality from external causes is more important than for women. Likewise, complications during pregnancy, delivery and puerperium are among the main causes of death in women of child-bearing age in less developed countries.

Due to the magnitude of mortality from malignant neoplasms, which could be prevented with timely detection and treatment, this document emphasizes some types of cancer. Information about mortality from cancers that are not included in this proposal may be obtained from the International Agency for Research on Cancer (IARC) database, according to the specifications of each country.

Regarding preventable morbidity, in spite of the limited information available, it is known that certain elements combine to affect mental health, in particular that of women, who have greater work burden and less opportunities to access and control resources due to the socially assigned gender roles. Women are also the most affected by intra-family violence. Other causes of morbidity may be considered in countries where information has been collected from administrative records.

As a risk factor, the increasing prevalence of tobacco addiction among women has increased their morbidity and mortality from causes related to this addiction, such as malignant neoplasms of the lung.

The right to reproductive health is a critical aspect of health in general, and in addition to being a fundamental issue of female adolescents and women of child-bearing age, it also affects men's and women's health beyond child-bearing age, and has inter-generational effects.

Some of the indicators presented may reflect more than one dimension of health, and are accordingly included in several sections.

1. LIFE EXPECTANCY

Life expectancy at birth, by sex

Definition

Average number of years estimated for a newly born to live, if during his or her life (s)he is exposed to specific mortality rates by age and sex, prevailing at the moment of birth, in a given place.

Relevance

This indicator is a combination of factors that have an effect on risks of death. In all countries of the Region, life expectancy for women is greater than it is for men. It seems that this differential is due to biological elements and environmental and social factors related to life styles, such as tobacco addiction, alcohol consumption, traffic accidents and accidents at work, and violence. Although the situation is changing, these are risk factors for men and protecting factors for women.

Greater women's longevity does not necessarily mean that they enjoy better health levels, because they are therefore more exposed to chronic diseases and disabilities. In cases where women's life expectancy does not exceed men's life expectancy, it could be assumed that women's advantages of survival have disappeared because of the serious mortality risks that surround them.

Required information

Number of deaths by age and sex. Population by age and sex.

Sources of information

- Population censuses
- Vital records systems

Information on life expectancy, by sex, for countries of the Region, is available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Socio-economic level
- Ethnicity

Comment

The United Nations Population Division regularly collects data on life expectancy at birth for men and women. Procedures, adjustments and assumptions used in its estimation vary with respect to other institutions; for this reason, it is advisable to use estimations from the same source when monitoring through time.

2. PREVENTABLE MORTALITY

2.1 MORTALITY PREVENTABLE THROUGH IMMUNIZATION

Mortality in 1-4 year-old children from causes of mortality preventable through immunization, by sex

Definition

Quotient of the number of deaths in girls between 1 and 4 years old, from measles, diphtheria, whooping cough, tetanus and poliomyelitis, in a given period, divided by the total number of girls of those ages in the middle of the period, for a given territory, multiplied by 1,000. The equivalent figure for boys is calculated in the same way.

Mortality from measles in 1-4 year-old girls =
 $\frac{\text{Number of deaths from measles in 1-4 year-old girls}}{\text{Total number of 1-4 year-old girls at mid-year}} * 1,000$

Mortality from measles in 1-4 year-old boys =
 $\frac{\text{Number of deaths from measles in 1-4 year-old boys}}{\text{Total number of 1-4 year-old boys at mid-year}} * 1,000$

(Same for diphtheria, whooping cough, tetanus and poliomyelitis).

Cause of death from measles corresponds to code B05, from diphtheria to code A36, from whooping cough to code A37, from tetanus to code A35 and from poliomyelitis to code A80 from the International Statistical Classification of Diseases and Related Health Problems (ICD)-10 (25).

Relevance

After the first year of life, risks of getting sick and dying are mainly related to infant care and environmental conditions, the complementing and reinforcement of vaccination plans, consumption of adequate food, effective prevention and treatment of major diseases in the age group (respiratory infections and acute diarrheal diseases), and prevention of accidents at home.

For genetic reasons, it is expected that mortality among children will be greater for girls, as is the case in all developed countries and in the greatest majority of less developed countries. The greater mortality detected among girls may be considered an important indicator of the existence of a social problem, such as discrimination.

Required information

Number of boys and girls that die between 12 and 59 months of age, in a given year; population between 1 and 4 years old at mid-year.

Sources of information

- Vital records systems and population estimations

Suggested disaggregation

- Zone of residency: urban, rural
- Socio-economic level
- Ethnicity

Comment

Children's mortality rate is generally estimated by departments of statistics in all countries of the Region, by the United Nations, and by PAHO.

2.2 MORTALITY PREVENTABLE THROUGH TIMELY DETECTION AND TREATMENT

Maternal mortality ratio

Definition

Number of deaths in women, in a given year and territory, while pregnant or within a 42-day period after delivery, regardless of duration and place of pregnancy, due to any cause related to or aggravated by the pregnancy itself, its interruption or attention, but not due to accidental or incidental causes, with respect to the total number of children born alive, in a certain territory and year, multiplied by 100,000 (14). ICD-10 also includes other two types of maternal death: *late maternal deaths* that occur after 42 days and before 365 days after delivery or abortion; and *pregnancy-related deaths*, which occur during pregnancy or within 42 days after delivery, regardless of the cause.

$$\text{Maternal mortality ratio} = \frac{\text{Number of maternal deaths}}{\text{Total number of children born alive}} * 100,000$$

Causes of mortality related to pregnancy, delivery and puerperium, correspond to codes O00-O99, A34 of the ICD-10 (25).

Relevance

This is a significant indicator of women's reproductive health risks. The disparity shown by this indicator between countries with different levels of development means that most of these deaths could be avoided if preventive and care measures are taken opportunely.

The fact that mortality from factors related to pregnancy, delivery and puerperium complications continues to appear among the primary causes of death in women of child-bearing age is an indisputable evidence of inequity, considering that these deaths are essentially preventable – the main causes and factors that determine them are well known, and the scientific knowledge and simple technology to avoid them has been available for many years. The possibility of cultural, economic, and geographic access to high-quality health services that can detect risk at an early stage may substantially reduce the number of maternal deaths through prenatal attention, availability of essential elements for obstetric attention, and suitable supply of information to avoid unwanted pregnancies.

Difficulties in determining the actual number of women that die during pregnancy, delivery and lactation shows the low relative priority that is still given to this issue. Important under-reporting has been detected in Latin America and the Caribbean, but in spite of this, complications of pregnancy, delivery and puerperium continue to be one of the main causes of mortality among 15-19-year old women in several countries of the Region. Notwithstanding this under-reporting, maternal mortality is an indicator of human development that shows significant differences between developed and less-developed countries. As a cause of death, abortion is even more under-reported than other maternal causes of death, because of the illegal nature of this procedure in most countries in the Americas.

Required information

Number of maternal deaths, late maternal deaths, and deaths related to pregnancy in a given period of time (usually one year). Number of children born alive in that same period.

Sources of information

- Vital records. These may be complemented with verbal autopsies or auditing of maternal mortality.

Information on maternal mortality ratios for countries of the Region, is available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 10-14, 15-19, 20-34, 35 - 49 years of age
- Ethnicity
- Specific causes of maternal mortality: hemorrhage, toxemia, abortion, infections, complications due to lactation and puerperium, and indirect maternal causes.

Comments:

Due to the high incidence of abortions without any safety guarantees at increasingly earlier ages, it is suggested that a complementary indicator be created for mortality rate from abortion without safety guarantees in the age group between 10 and 49 years.

The methodology to estimate maternal mortality rates reported by national health authorities may vary from one country to another and from one period to another, for which reason international comparisons are not feasible. For countries with an estimated annual number of children born alive lower than 10,000, estimation of maternal mortality rates is not recommended (14).

Mortality from malignant neoplasms of the uterus

Definition

Quotient of the number of deaths from malignant neoplasms of the uterus (neck and body) in women of a given age group, divided by the total of women in that age group, for a given year and territory, multiplied by 100,000.

Registered mortality rate from malignant neoplasms of the uterus, specific by age =
$$\frac{\text{Number of deaths from malignant neoplasms of the uterus in a given age group} * 100,000}{\text{Total of women in that age group}}$$

Causes of death in this category correspond to codes C53-C55 of the ICD-10 (25).

Relevance

In Latin America and the Caribbean, cancer of the uterus represents an even more extensive public health problem than breast cancer. This situation persists in spite of the fact that simple, efficient and low-cost technology to detect it in its early stages, with a high probability of cure, has existed for over 50 years: the vaginal smear test conceived by Papanicolaou.

The transcendence of this problem, in terms of public health, lies not only on the high frequency of this cancer, but also in the fact that women in the lowest socio-economic levels are the most affected.

In the countries of the Region where there is information available, the lowest estimated mortality rates from malignant neoplasms of the uterus are those of Canada, the United States, and Puerto Rico, and the highest are in Paraguay, Peru, and El Salvador (14). In Canada and the United States mortality rates from cervical uterine cancer have decreased substantially since the 1960s, due mainly to detection programs and timely access to services.

Required information

Deaths from malignant neoplasms of the uterus, by age group. Female population by age group.

Sources of information

- Vital records systems and population estimations

Estimated⁵ mortality rates from malignant neoplasms of the uterus for a great number of countries of the Region are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 20-29, 30-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Number of deaths from acute diarrheal diseases, registered in 1-4 year-old girls and boys

Definition

Number of deaths from acute diarrheal diseases (ADD), in girls between 1 and 4 years of age, for a given year and territory. The equivalent figure for boys is calculated in the same way.

Causes of mortality from ADD correspond to codes A00-A09 of the ICD-10 (25).

Relevance

After the first year of life, risks of getting sick and dying mainly depend on infant care and environmental conditions, the complementing and reinforcement of vaccination plans, consumption of adequate food, effective prevention and treatment of major diseases of the age group (respiratory infections and acute diarrheal diseases), and prevention of accidents at home.

The number of deaths in boys and girls between 1 and 4 years of age is generally greater for males. A greater number in girls could be an alarming sign of discrimination against them (except, possibly, when the number of deaths is very small). Differences in treatment by sex may

⁵ Estimated mortality rates are obtained based on recorded mortality rates, specific by age, applying an algorithm to adjust under-recording of deaths, and an algorithm to re-distribute deaths from badly defined causes. The estimation method used was published in Estadísticas de la Salud de las Américas (26).

be influenced by factors such as perception of cause of the disease and its severity, ideas about children's health, and gender-based discrimination (27).

According to Demographic and Health Surveys carried out in some countries of the Region, the percentage of girls that were taken to health service facilities seeking attention due to diarrhea during the two weeks previous to the survey was lower than that of boys in six out of the eight countries. Differences in treatment may possibly exist according to children's sex in seeking medical attention for treatment of diarrheas.

Required information

Number of deaths from ADD in 1-4 year-old boys and girls.

Sources of information

- Vital records systems

Suggested disaggregation

- Zone of residency: urban and rural
- Age of mother: less than 20, 21-40, 40 and older
- Years of education of mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level

Comment

In addition to environmental sanitation, mortality from ADD is related to other factors that depend on living conditions at home.

Number of deaths from acute respiratory infections, registered in 1-4 year-old girls and boys

Definition

Number of deaths in girls between 1 and 4 years of age from acute respiratory infections (ARI), for a given year and territory. The equivalent figure for boys is calculated in the same way.

Causes of mortality from ARI correspond to codes J00-J22 of the ICD-10 (25).

Relevance

After the first year of life, the risk of getting sick and dying mainly depend on infant care and environmental conditions, the complementing and reinforcement of vaccination plans, consumption of adequate food, effective prevention and treatment of major diseases in the age group (respiratory infections and acute diarrheal diseases), and prevention of accidents at home.

The number of deaths in girls and boys between 1 and 4 years of age is generally greater for males. A greater number for girls may be a possible alarming sign of significant social discrimination against them. Differences in treatment by sex may be influenced by factors such as perception of the cause of the disease and its severity, ideas about children's health, and gender-based discrimination (27).

According to Demographic and Health Surveys available for four countries regarding ARI, the percentage of girls that were taken to health service facilities for attention during the two weeks previous to the survey was lower than that of boys. This shows that there was a difference in treatment according to children's sex in this age group, in seeking medical attention for treatment of ARI.

Required information

Number of deaths from ARI in girls and boys between 1 and 4 years of age.

Sources of information

- Vital records system

Suggested disaggregation

- Zone of residency: urban and rural
- Age of mother: less than 20, 21-40, 40 and older
- Years of education of the mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level

Comment

As has been mentioned, not all socio-economic variables suggested are included in vital records, and it is therefore suggested that countries update those records to include additional socio-economic and demographic variables.

2.3 MORTALITY PREVENTABLE BY APPLYING A SET OF MEASURES

Number of deaths from AIDS, by sex

Definition

Total number of deaths from Acquired Immune Deficiency Syndrome (AIDS) in women, in a given period and territory. Total number of deaths from AIDS in men, in the same year and territory.

Mortality from AIDS corresponds to codes B20-B24 of the ICD-10 (25).

Relevance

HIV transmission is more effective from men to women than the other way around, due to biological and physiological factors. The role of gender relationships is another factor in determining risk of, and vulnerability in, HIV transmission.

Behaviors defined as feminine and masculine differentially affect women's and men's access to information and services, their sexual behavior and attitudes, and the way in which they face the situation once they are AIDS carriers. On the other hand, limitations in women's access to and control of material and non-material resources places them in a disadvantaged position in negotiating and making decisions to protect their reproductive health, reducing their possibilities of enjoying a risk-free sexual life.

In countries where there is information available, the proportion of number of deaths from AIDS in men compared to that in women goes from 10:1 in Costa Rica (i.e., for every 10 men dying from AIDS there is one woman who dies) to 1:1 in Haiti (i.e., for every man dying from AIDS there is one woman who dies) (14).

Required information

Number of deaths from AIDS, by sex.

Sources of information

- Vital records systems

Figures on deaths from AIDS by sex, for countries of the Region are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 12, 12-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition (remunerated work or unpaid domestic work)

Comments:

In many countries, there is a stigma associated with positive AIDS diagnoses; therefore, when somebody dies from AIDS, an imprecise medical certification is issued about the cause of death, resulting in a high under-recording of these deaths. For this reason, data on death records could be complemented with records of AIDS cases. This task, while not always possible, demands a verification of medical certifications about the cause of death for persons that are included in AIDS registers.

Not all socio-economic variables suggested above are included in vital records, and it is therefore suggested that countries update those records to include additional socio-economic and demographic variables.

Mortality from nutritional deficiencies and anemia, by sex

Definition

Quotient of number of deaths from nutritional deficiencies and anemia in women, by age group, divided by total number of women in that age group, for a given year and territory, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Registered mortality rate from nutritional deficiencies in women, specific by age =
$$\frac{\text{Number of deaths from nutritional deficiencies in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Registered mortality rate from nutritional deficiencies in men, specific by age =
$$\frac{\text{Number of deaths from nutritional deficiencies in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

(Same for anemia).

Causes of mortality from anemia correspond to codes D50-D53, D62, and D64.9, and those from malnutrition to codes E40-E46 of the ICD-10 (25).

Relevance

Malnutrition is perhaps the most important health problem affecting women, mainly in developing countries, due to two inequities – poverty, and being a woman. The cause of intake deficiencies lies in factors related to lack of family resources to fulfill basic needs, and on certain cultural practices related to consumption and intra-family food distribution. These practices are translated into a preferential treatment of men in intra-family food distribution; particularly foods derived from animal protein, due to the facts that men's roles are regarded as more valuable and make greater contributions to their home's finances.

Malnutrition has cumulative effects during different stages of the life cycle, and may have effects on the health of future generations. Between the first menstruation and menopause, women need to absorb iron in a proportion three times greater than that required by adult men, and even more when women use an intra-uterine device. During pregnancy, micro-nutrient deficiency – and among those, iron deficiency – places mothers' health and life in danger, increasing risks of perinatal mortality, as well as physical and mental problems in offspring.

As a result, anemia caused by iron deficiency has been recognized as women's greatest nutritional problem, in particular for pregnant women, both worldwide and at a regional level. More than one-fourth of women in the Region suffer iron-deficiency anemia; however, this problem is only given attention in prenatal services, whose coverage is very limited, while iron deficiency must be corrected starting in childhood. For Latin America it is estimated that 34% of women suffer anemia (19).

It is important to emphasize that, although malnutrition is rarely fatal in itself in the Region, in practice it considerably decreases life quality because it generates a predisposition to chronic fatigue, reduces productivity, and increases vulnerability to infections and mortality during delivery.

Required information

Number of deaths from nutritional deficiencies and anemia in men and women, by age group.
Population by sex and age group.

Sources of information

- Vital records systems and population estimations.

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 12, 12-19, 20-34, 35-49, 50 and more years
- Years of education: 0-5, 6-9, 10-12, 13 and more

- Socio-economic level

Mortality from lesions and intoxications of non-intentional origin, by sex

Definition

Quotient of number of deaths from lesions and intoxications of non-intentional origin in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Registered mortality rate from lesions and intoxications of non-intentional origin in women, by age =
$$\frac{\text{Number of deaths from lesions and intoxications of non-intentional origin in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Registered mortality rate from lesions and intoxications of non-intentional origin in men, by age =
$$\frac{\text{Number of deaths from lesions and intoxications of non-intentional origin in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Causes of mortality from lesions and intoxications of non-intentional origin correspond to codes V01-V99, W00-W99, X00-X59 of the ICD-10 (25).

Relevance

The causes for a greater predisposition of males towards risk behaviors are reinforced and perpetuated by opposing cultural definitions of masculinity and femininity that act as destructive factors for men and as protective factors for women. Differences in socialization to assume and develop certain forms of behaviors considered more appropriate for each sex are translated into differentials in health risks between women and men. In this way, men are more exposed to accidents than women, and differences in mortality rates between men and women are even wider in young adults. Other factors related to men running greater risks of accidents than women result from the larger proportion of men than women who work in production fields and work places with greater risk.

In all countries of the region for which there is information available on mortality from external causes (including lesions of non-intentional origin and those intentionally self-inflicted), estimated mortality rates from external causes is greater for men than for women; in 1997, in Colombia, the estimated mortality rate for men reached 232.6 per 100,000, while for women it was 39.7 (14).

Required information

Number of deaths from lesions and intoxications of non-intentional origin, by sex. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Suggested disaggregation

- Zone of residency: urban and rural

- Age groups: less than 5, 5-9, 10-14, 15-19, 20-34, 35-49, 50-64, 65 and older

- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity

Mortality from intentionally self-inflicted lesions, by sex

Definition

Quotient of number of deaths from intentionally self-inflicted lesions in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000. Male figures are calculated in the same way.

Registered rate of deaths from intentionally self-inflicted lesions in women, specific by age =

$$\frac{\text{Number of deaths from intentionally self-inflicted lesions in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Registered rate of deaths from intentional self-inflicted lesions in men, specific by age =

$$\frac{\text{Number of deaths from intentional self-inflicted lesions in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Causes of mortality from suicides and self-inflicted lesions correspond to codes X60-X84, Y87.0 of the ICD-10 (25).

Relevance

Differences in socialization to assume and develop certain forms of behaviors considered more appropriate for each sex, are translated into differentials in health risks between women and men. A greater predisposition of males towards aggressive, reckless, independent, violent and risk behaviors that may have a biological component (still a controversial issue), is reinforced and perpetuated by opposed cultural definitions of masculinity and femininity that act as destructive factors for men and protective factors for women.

Although the tendency points to the greatest male mortality from suicide, in some cases mortality from suicides is greater for women, as, for instance, among adolescents in Colombia and Brazil. In general, frequency of suicide attempts is greater among women than among men.

A slight increase in mortality rates from suicide and self-inflicted lesions in men was observed in the Americas between 1984 and 1994, going from 13.5 to 13.8, and a decrease was observed in women, whose rate went from 3.9 to 3.3. An increase in suicides among women in Mexico is noteworthy, going from 0.4 to 1.1 during the same period (28). The magnitude of estimated mortality rates from suicide and self-inflicted lesions in Cuba, Canada and Uruguay is interesting. For 1997, in Cuba, rates of 25.3 for men and 12.1 for women were estimated; in Canada, 10.7 for men and 5.4 for women; and in Uruguay, 21.3 for men and 5.4 for women (14).

Required information

Number of deaths from intentionally self-inflicted lesions, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated⁶ mortality rates from suicide and self-inflicted lesions, by sex, for countries of the Region, is available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 12-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity
- Employment condition

Mortality from homicides and lesions intentionally inflicted by another person, by sex

Definition

Quotient of the number of deaths from homicides and lesions intentionally inflicted by another person for women, divided by the total of women in the population, by age group, for a given year and territory, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Registered mortality rate from homicides and lesions intentionally inflicted by another person for women, by age =

$$\frac{\text{Number of deaths from homicides and lesions intentionally inflicted by another person for women of a given age group} * 100,000}{\text{Total of women in that age group}}$$

Registered mortality rate from homicides and lesions intentionally inflicted by another person for men, by age =

$$\frac{\text{Number of deaths from homicides and lesions intentionally inflicted by another person for men of a given age group} * 100,000}{\text{Total of men in that age group}}$$

Causes of mortality from homicides and lesions intentionally inflicted by another person correspond to codes X85-Y09, Y35, Y36 of the ICD-10 (25).

Relevance

Differences in socialization to assume and develop certain forms of behavior considered more appropriate for each sex, as is the case in solving problems through violence for men, are translated into differentials in health risks between women and men. In consequence, the greatest predisposition of males towards violent risk behaviors is translated into larger mortality rates from homicides and lesions intentionally inflicted by another person in men, as compared to women.

According to a study carried out by the World Bank (29) in 1990 in Latin America and the Caribbean, women lost 320,000 years of healthy life due to premature death and disability caused by homicide and violence, while men lost 3,080,000, i.e., 9.6 times more for men.

⁶ Idem

For countries for which there is information available, in 1997 Colombia had an estimated mortality rate from homicides and lesions intentionally inflicted by another person of 142.9 per 100,000 men, and 12.6 per 100,000 women; El Salvador had estimated rates of 87.5 and 9.1 for men and women respectively (14).

Required information

Number of deaths from homicide and lesions intentionally inflicted by another person, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated⁷ mortality rates from homicide and lesions intentionally inflicted by another person for several countries of the Region, by sex, are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 12, 12-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity

2.4 OTHER CAUSES OF PREVENTABLE MORTALITY (TO A LESSER DEGREE THAN THE ABOVE)

Mortality from malignant neoplasms of the lung, trachea and bronchial tubes, by sex

Definition

Quotient of number of deaths from malignant neoplasms of the lung, trachea and bronchial tubes in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000

Registered mortality rate from malignant neoplasms of the lung, trachea and bronchial tubes in women, specific by age =

$$\frac{\text{Number of deaths from malignant neoplasms of the lung, trachea and bronchial tubes in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Total of women in that age group

Registered mortality rate from malignant neoplasms of the lung, trachea and bronchial tubes in men specific by age =

$$\frac{\text{Number of deaths from malignant neoplasms of the lung, trachea and bronchial tubes in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Total of men in that age group

⁷ Idem

Causes of mortality from malignant neoplasms of the lung, trachea, and bronchial tubes correspond to codes C33-C34 of the ICD-10 (25).

Relevance

This type of cancer tends to cause higher mortality among men. The documented relationship between tobacco consumption and this type of cancer emphasizes the presence of sex-linked cultural factors supporting tobacco addiction among men, while discouraging this habit among women. Unfortunately, these protecting factors for women's health are losing their power in the face of role changes and expectations linked to the concept of femininity. During the last 30 years, cigarette consumption among men stabilized in industrialized countries, while in developing countries it has grown in both sexes, in particular among young women.

For 1997, the last year for which there is information available, the United States and Canada show high mortality rates from malignant neoplasms of the lung, trachea, and bronchial tubes for men and women. Currently, in Canada and the United States estimated women's mortality rates from cancer of the lung, trachea, and bronchial tubes are higher than those estimated for mortality from malignant neoplasms and breast cancer (14).

Required information

Number of deaths from malignant neoplasms of the lung, trachea, and bronchial tubes, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated⁸ mortality rates from malignant neoplasms of the lung, trachea, and bronchial tubes, by sex, for countries of the Region are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity

Mortality from cirrhosis and other chronic diseases of the liver, by sex

Definition

Quotient of number of deaths from cirrhosis and other chronic diseases of the liver in women, divided by total of women in the population, by age group, for a given age and territory, multiplied by 100,000. Male figures are calculated in the same way.

⁸ Idem

Registered mortality rate from malignant neoplasms of the lung, trachea, and bronchial tubes in women, specific by age =

Number of deaths from malignant neoplasms of the lung, trachea, and bronchial tubes in women of a given age group * 100,000

Total of women in that age group

Registered mortality rate from malignant neoplasms of the lung, trachea, and bronchial tubes in men, specific by age =

Number of deaths from malignant neoplasms of the lung, trachea and bronchial tubes in men of a given age group * 100,000

Total of men in that age group

Causes of mortality from cirrhosis and other chronic diseases of the liver correspond to codes K70, K73, 74, K76 of the ICD-10 (25).

Relevance

Differences between women and men in the way they organize their life patterns make them develop certain forms of behavior considered more appropriate for each sex, which are translated into differences in health risks between women and men.

The relationship between alcohol consumption and mortality from cirrhosis emphasizes the presence of sex-related cultural factors supporting alcohol consumption among men, while discouraging this habit among women. Unfortunately, these factors which protect women's health are losing their power in face of role changes and expectations linked to the concept of femininity; within this context, alcohol consumption among women is increasingly greater, although it still carries a greater stigma.

According to data available in the PAHO Web page(14), for 1997, Mexico and Chile showed the greatest estimated mortality rates from cirrhosis and other chronic diseases of the liver for men and for women.

Required information

Number of deaths from cirrhosis and other chronic diseases of the liver, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated⁹ mortality rates from cirrhosis and other chronic diseases of the liver for most countries of the Region, by sex, are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level

⁹ Idem

- Ethnicity

Mortality from breast cancer in women

Definition

Quotient of number of deaths from breast cancer in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000.

Registered mortality rate from breast cancer in women, specific by age =
$$\frac{\text{Number of deaths from breast cancer in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Mortality from malignant neoplasms of the breast corresponds to code C-50 of the ICD-10 (25).

Relevance

Breast cancer is increasingly affecting women in the Region. Mortality rates, although higher among women of more developed countries, are rapidly growing among relatively developed countries in the Region.

In addition to the hereditary component associated with breast cancer, there are other elements such as an early first menstruation, a late menopause, and delivering a first child after 30 years of age. There is also literature associating breast cancer with the presence of stress factors such as bad marital relationships, abandonment by the spouse, or death of a child; likewise, breast cancer may be related to other aspects such as environmental contamination, smoking habits, nutritional habits, and use of replacement hormone therapy during the climacteric stage.

Among estimated mortality rates from malignant neoplasms of the breast in women, available for almost all countries of the Region, the highest are in Uruguay (38.8), Canada (33), and the United States (30.5), and the lowest in El Salvador (4) and Nicaragua (5.8) (14).

Required information

Number of deaths from breast cancer in women, by age group. Female population in the different age groups.

Sources of information

- Vital records systems and population estimations

Estimated¹⁰ mortality rates from breast cancer in women, for countries of the Region are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more

¹⁰ Idem

- Socio-economic level
- Ethnicity

Mortality from prostate cancer

Definition

Quotient of number of deaths from prostate cancer, divided by total of men in the population, by age group, for a given year and territory, multiplied by 100,000

Registered mortality rate from prostate cancer, specific by age =

$$\frac{\text{Number of deaths from prostate cancer in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Mortality from malignant prostate cancer corresponds to code C61 of the ICD-10 (25).

Relevance

Prostate cancer may be detected and treated in a timely manner. However, due to gender socialization, men face barriers that limit their visits to health services, thus keeping them from prostate control examinations and losing the opportunity to receive timely treatment.

Mortality rates from prostate cancer show variations in different age groups, with a tendency to increase with age.

In a selected group of countries of the Region, there were only a few deaths from prostate cancer before 44 years of age, but in the age group of 75 years and older, rates reached 310.3 in Mexico and 570.4 in Cuba, for every 100,000 men (28).

Required information

Number of deaths from prostate cancer. Male population in the different age groups.

Sources of information

- Vital records systems and population estimations

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity

Mortality from hypertensive diseases, by sex

Definition

Quotient of number of deaths due to hypertensive diseases in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000.

Registered mortality rate from hypertensive diseases in women, specific by age =
$$\frac{\text{Number of deaths from hypertensive diseases in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Registered mortality rate from hypertensive diseases in men, specific by age =
$$\frac{\text{Number of deaths from hypertensive diseases in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Mortality from hypertensive diseases corresponds to codes I10-I15 of the ICD-10 (25).

Relevance

Among women, hypertension is more prevalent in groups with lower income and educational levels. Food seasoned with too much sodium chloride, as well as factors associated with the climacteric stage, are concrete reasons for hypertension symptoms to appear.

According to an analysis carried out by the PAHO with data from 1960-1994, available for 13 countries of the Region, rates of potential years of life lost (PYLL) from hypertensive disease increased only in Nicaragua. In Colombia, El Salvador, Mexico and Venezuela the PYLL rates remained stable; and in the other countries analyzed (the United States, Canada, Chile, Argentina, Trinidad and Tobago, Barbados, Costa Rica, and Cuba) the rates went down. In Barbados, Colombia, Mexico and Nicaragua, the PYLL rates for women were consistently higher than for men throughout the period studied. For the 1990-1994 quinquennium, the United States and Canada were the countries with the highest PYLL rates; in Canada for every potential year of life lost by women, men lost two years (28, p. 174).

Required information

Number of deaths from hypertension in men and women by age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Mortality from diabetes mellitus, by sex

Definition

Quotient of number of deaths due to diabetes mellitus in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000.

Registered mortality rate from diabetes mellitus in women, specific by age =
$$\frac{\text{Number of deaths from diabetes mellitus in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Registered mortality rate from diabetes mellitus in men, specific by age =
$$\frac{\text{Number of deaths from diabetes mellitus in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Causes of mortality from diabetes mellitus correspond to codes E10-E14 of the ICD-10.

Relevance

Diabetes mellitus is one of the main public health concerns in the Region. Increase in overweight, as well as sedentary life-styles and population ageing, contribute to the risk of developing diabetes mellitus; on the other hand, diabetes is a risk factor for the development of cardiovascular diseases, blindness and kidney damages, and loss of lower extremities. Many cases of diabetes may be prevented with a healthy diet and physical exercise, and complications may be reduced by maintaining a healthy weight, eating low-fat food high in fiber content, stopping smoking, exercising regularly, and keeping high-blood pressure under control.

Out of the 40 countries for which there is information available (last year available: 1992, 1997), 34 show greater estimated mortality rates from diabetes for women than for men (14). During the 1990s in North America, the ratio of mortality from diabetes in women and men was 1.33: 1, and in Latin America it was 1.2: 1 (ratios not adjusted by age) (28, p. 184). Between 1980 and 1994, the English Caribbean experienced a 147% increase in number of deaths from diabetes mellitus, being the third most important cause of potential years of life lost among women, and the tenth among men (28).

In consequence, the health sector must make special efforts to prevent diabetes and improve effectiveness of care of persons affected with this disease, especially considering that, according to projections from PAHO for the year 2010, an increase in cases of diabetes relative to that estimated for 1994 is expected, going up to 74% in the Caribbean Islands, 40% in South America and 25% in Canada and the United States (28, p. 184).

Required information

Number of deaths from diabetes mellitus, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated¹¹ mortality rates from diabetes mellitus, by sex, for the countries of the Region, are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 25-49, 50-64, 65 and older

¹¹ Idem

- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity
- Employment condition

Mortality from cerebrovascular diseases, by sex

Definition

Quotient of number of deaths from cerebrovascular diseases in women, divided by total of women in the population, by age group, for a given year and territory, multiplied by 100,000. Male figures are calculated in the same way.

Registered mortality rate from cerebrovascular diseases in women, specific by age =

$$\frac{\text{Number of deaths from cerebrovascular diseases in women of a given group age}}{\text{Total of women in that age group}} * 100,000$$

Registered mortality rate from cerebrovascular diseases in men, specific by age =

$$\frac{\text{Number of deaths from cerebrovascular diseases in men of a given group age}}{\text{Total of men in that age group}} * 100,000$$

These causes of mortality correspond to codes I60-I69 of the ICD-10.

Relevance

Hypertension and obesity are among the risk factors for cerebrovascular disease linked particularly to females, and these factors are aggravated by postmenopausal hormonal changes and oral contraceptive consumption during child-bearing age.

Although incidence of cerebrovascular diseases is considerably higher after 45 years of age, they start appearing among the five main causes of death in women starting at 25 years of age. Based on information available in the PAHO for the last few years, 30 out of the 40 countries for which there is information available present a higher estimated mortality rate from cerebrovascular diseases in women; for the United States in 1997, the estimated mortality rate from cerebrovascular diseases reached 70.8 for women and 46.7 for men, i.e., a 1.5:1 women:men proportion (14).

Required information

Number of deaths from cerebrovascular diseases, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated¹² mortality rates from cerebrovascular diseases, by sex, for the countries of the Region, are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

¹² Idem

- Zone of residency: urban and rural
- Age groups: 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Mortality from ischemic heart diseases, by sex

Definition

Quotient of number of deaths from ischemic heart disease in women, divided by total number of women in the population, by age group, for a given year and territory, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Registered mortality rate from ischemic heart diseases in women, specific by age =

$$\frac{\text{Number of deaths from ischemic heart diseases in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Registered mortality rate from ischemic heart diseases in men, specific by age =

$$\frac{\text{Number of deaths from ischemic heart diseases in men of a given age group}}{\text{Total of men in that age group}} * 100,000$$

Causes of death from ischemic heart disease correspond to codes I20-I25 of the ICD-10.

Relevance

At young ages, heart diseases are more common among men, but after child-bearing age differences between women and men are reduced and become a cause of mortality that justifies a warning for women.

In all sub-regions of the Americas, except in North America and the Southern Cone, mortality and potential years of life lost (PYLL) due to ischemic heart disease increased between 1980 and 1994. In spite of a reduction in North America, ischemic heart diseases continue to be the second cause of PYLL in men and women after malignant neoplasms (28).

Required information

Number of deaths from ischemic heart disease, by sex and age group. Population by sex and age group.

Sources of information

- Vital records systems and population estimations

Estimated¹³ mortality rates from ischemic heart diseases, by sex, are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

¹³ Idem

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity
- Employment condition

3. MORBIDITY AND PREVENTABLE LESIONS

3.1 NUTRITION

Prevalence of anemia in women of child-bearing age

Definition

Quotient of number of existing cases of women between 15 and 49 years of age with hemoglobin levels under 12 grams/100 ml of blood in those who are not pregnant, or under 11 grams/100 ml of blood in those who are pregnant, divided by total number of women between 15 and 49 years of age, multiplied by 100.

Another classification is: severe anemia: < 7.0g/100 ml; moderate anemia: 7.0-9.9g/100 ml; mild anemia: 10.0-11.0g/100 ml.

Prevalence of anemia in women of child-bearing age (WCBA) =
$$\frac{\text{Number of WCBA with anemia}}{\text{Total of WCBA}} * 100$$

Relevance

Iron deficiency in the majority of cases of anemia is the most common known form of nutritional deficiency. Its prevalence is high among boys and girls, and among women of child-bearing age, especially among pregnant women. Women develop macrocytic anemia from gastric deficiencies, severe stress and lack of complex B vitamins. Sickle cell anemia may increase as a result of several nutritional deficiencies.

With the onset of menstruation, women's iron requirements increase and are intensified during pregnancy and lactation. Between the beginning of menstruation and menopause, women need to absorb iron in proportions three times those of an adult man, and even more when women use intrauterine devices. In many cases, fulfilling these requirements is hindered by cultural patterns that perpetuate or aggravate the existing deficit. For instance, in poor sectors, women's nutritional deficit due to lack of resources is aggravated by patterns that grant privileges to men in intra-family food distribution, in particular the food that contains animal protein, the main source of iron.

Anemia from iron deficiency has been recognized at global and regional levels as women's greatest nutritional problem, in particular among pregnant women. More than one-fourth of women in the Region suffer iron-deficiency anemia; however attention is given to this problem only in prenatal services, whose coverage is limited, while iron deficiency and education about food nutritional value should start during childhood.

Required information

Number of women with iron deficiency, by age group. Female population by age group.

Sources of information

- Epidemiological and family health surveys
- Nutritional surveys
- Nutritional surveillance systems

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 15-19, 20-34, 35-49 years of age
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comment

Currently, there are clinical instruments to measure concentration of hemoglobin and red blood cells precisely and economically, and to determine the form of erythrocytes using venous or capillary blood. Yet in many countries this information is not recorded; however, given the indicator's usefulness, it is important to collect the necessary information for periodic estimations.

Prevalence of malnutrition (measured by body mass index) in women that have had one or more children in the period between the 2 last months and the last 5 years

Definition

Quotient of number of women who are not pregnant with children younger than 5 years old and older than 2 months, with a body mass index (BMI) lower than 18.5 and higher than 25, divided by the total of women that had children between the last 5 years and the last 2 months, multiplied by 100.

Prevalence of malnutrition in women who are not pregnant with children between 2 months and 5 years of age =

$$\frac{\text{Number of women who are not pregnant with children between 2 months and 5 years of age, with BMI} < 18.5 \text{ or } > 25}{\text{Total of women with children between 2 months and 5 years of age}} * 100$$

The BMI is an anthropometric measure defined as the quotient of weight (in kilograms) and height (in meters).

Relevance

Although use of the BMI as an indicator of reproductive risk is still under discussion, an association between BMI and low-weight at birth and perinatal mortality has been found.

Women's nutritional condition before and during pregnancy is one of the determinants of maternal mortality risks, as well as one of the possible causes of complications during pregnancy and delivery, and problems with the child's health and life.

The need for women to have better nutrition, especially before and during pregnancy and lactation, must be considered in efforts addressing maternal malnutrition problems. Among pregnant women, especially those affected by anemia, there are increases in risks of premature delivery, births of children with low weight, maternal morbidity and mortality, and physical and mental problems in offspring.

According to the Demographic and Health Survey carried out in Colombia in 2000, it was found that the older the mothers, the greater their BMI. By educational level, the difference was remarkable: among mothers with a BMI lower than 18.5, figures for those without formal education were twice as much as for the mothers with a university education. The greatest percentage of women with a BMI lower than 18.5 was found among women younger than 20 years of age (30).

Required information

Number of women with children between 2 months and 5 years of age. Age, weight and height of each woman.

Sources of information

- Demographic and Health Surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 20, 20-34, 35-49 years of age
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Prevalence of obesity, by sex

Definition

Quotient of number of women older than 14 years old affected by obesity (measured according to BMI) by age group, divided by total of women older than 14 years old in the population, for a given territory and period of time, multiplied by 100. The equivalent figure for men is calculated in the same way.

Prevalence of obesity in women older than 14 years old =
$$\frac{\text{Number of women } >14 \text{ years old with BMI } \geq 30}{\text{Total of women } > 14 \text{ years old}} * 100$$

Prevalence of obesity in men older than 14 years old =
$$\frac{\text{Number of men } >14 \text{ years old with BMI } \geq 30}{\text{Total of men } > 14 \text{ years old}} * 100$$

The BMI is an anthropometric measure defined as the quotient of weight (in kilograms) and height (in meters). For the WHO, a BMI = 30 is an indicator of obesity (greater than or equal to 25 would be overweight).

Relevance

Many countries are experiencing a marked increase in the prevalence of overweight and obesity, to such a degree that this ailment has become an epidemic in the Region. Overweight, in particular obesity in adults, increases risks of morbidity and mortality associated with hypertension, heart diseases, cerebrovascular diseases, diabetes mellitus, respiratory diseases, gallbladder ailments, some types of cancer, gout, arthritis and other chronic diseases.

There is evidence showing that obesity is more frequent in women than in men, and that the greatest incidence occurs among groups with the lowest income. In situations of economic hardship, women tend to eat more carbohydrates from different sources, according to habit and regional use.

In Uruguay, prevalence of obesity among women of low socio-economic levels was above the estimated prevalence for the group of higher socio-economic levels (28). In the United States, between 1997 and 2000, prevalence of obesity in the adult population went up 12%, from 19.4% to 21.8%; for the year 2000, one out of every four women, as well as one out of every four men, between 40 and 59 years old, said that they were affected by obesity, with the non-Hispanic black population being the most affected, of whom 35.8% declared themselves to be obese (31).

In addition to health problems, physical image affects women more than men, because they have to face greater limitations in opportunities, especially in the labor market, where employers frequently demand certain personal appearance stereotypes.

Required information

Weight and height of people over 15 years old. Population 15 years and older by sex and age.

Sources of information

- Nutritional surveillance systems

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 20, 20-34, 35-49 years of age
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comment

Pregnant women and those who have had a delivery in the last three months are excluded.

3.2 INTRA-FAMILY VIOLENCE AND SEXUAL ABUSE

Prevalence of intra-family violence, by sex
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Definition

Quotient of number of women who suffer intra-family violence (physical, psychological, sexual, and patrimonial), divided by total of women in the population, by age group, in a given year and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

Prevalence of intra-family violence in women of a given age group =
$$\frac{\text{Number of women of a given age group who suffer intra-family violence}}{\text{Total of women in that age group}} * 100$$

Prevalence of intra-family violence in men of a given age group =
$$\frac{\text{Number of men of a given age group who suffer intra-family violence}}{\text{Total of men in that age group}} * 100$$

Relevance

Violence is a violation of human rights. Intra-family violence affects women, boys and girls for the most part. Recognizing that violence against women is a public health problem is the result of a progressive understanding of the damage that domestic violence and rape cause to women's health. Physical and emotional violence has multiple effects on health, ranging from the loss of lives, to lesions and disabilities left by physical and psychological wounds, some of which are permanent. Among the pathologies and behaviors originating in intra-family violence are suicide, homicide, sexually transmitted diseases, spontaneous abortion, chronic pelvic pains, headaches, gynecological problems, abuse of harmful substances, self-destructive behaviors, irritable colon syndrome, partial or permanent disability, post-traumatic stress, depression, anxiety, sexual dysfunction, and eating, multiple personality and obsessive-compulsive disorders.

Evidence has shown that boys and girls who are witnesses or victims of violence at home are not healthy and have behavioral problems. And, if they have been sexually abused, boys and girls are traumatized and have problems with establishing relationships and trusting other people, essential aspects for healthy development.

Only a few countries have carried out surveys of intra-family violence to collect information on its prevalence. However, in local studies carried out in Latin America, between 25% and 50% of female respondents claimed to have been the object of physical abuse at some time by current or former partners. These investigations have made it possible to gather more information about the characteristics of violence. It is known that physical abuse against women comes from their partners between 70% and 90% of the times; the age group with the highest probability of suffering domestic violence is between 20 and 39 years of age; the group most vulnerable to sexual abuse is between 11 and 16 years of age; out of all women who are victims of homicide, between 45% and 60% were killed in family surroundings, most of them by their spouses; and a high percentage of aggressors and victims come from families in which there was domestic violence.

Demographic and Health Surveys carried out in Colombia and Peru show that 41% of women of child-bearing age have been victims at some time of physical violence inflicted by their husbands or partners. In Nicaragua the percentage reached 29%, and in Haiti 27% (32).

Although abuse appears as an important factor in determining diseases and lesions among women, boys and girls, medical professionals still continue to ignore it. For instance, in studies carried out in the United States, it was shown that between 17% and 25% of the total of cases

attended in emergency units were abused women. However, people who provided those services identified less than 5% of the lesions or diseases as derived from abuse (33).

Required information

Number of women and men who have suffered physical, psychological and sexual intra-family violence at some time, by age group. Population by sex and age group.

Sources of information

- Intra-family violence survey
- Surveys about gender-based violence
- Household surveys that include a module about intra-family violence

Suggested disaggregation

- Zone of residency: urban and rural
- Age group of the abused person: less than 11, 11-14, 15-19, 20-34, 35-49, 50-65, 65 and older
- Years of education of the abused person: 0-5, 6-9, 10-12, 13 and more
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Type of violence (physical, psychological, sexual and ancestral)
- Poverty condition of households (poor and non-poor)
- Relationship with the aggressor
- Place where the aggression occurred
- Level of severity of violence (measured by severity of lesions)
- Employment condition of abused person and aggressor (remunerated work or unpaid domestic work)
- Pregnancy status (pregnant and non-pregnant women who suffer from violence)
- First choice for seeking help.

Comment

Because intra-family violence mainly affects women, surveys and modules about violence included in the surveys have focused on this population group.

Rate of demand for care due to intra-family violence, by sex

Definition

Quotient of number of women who sought care due to intra-family violence (physical, psychological, sexual and patrimonial) during the last year, divided by the total of women in the population, by age group, multiplied by 1,000. The equivalent figure for men is calculated in the same way.

Rate of demand for care due to intra-family violence in women of a given age group =
$$\frac{\text{Number of women of a given age group who sought care due to intra-family violence}}{\text{Total of women in that age group}} * 1,000$$

Rate of demand for care due to intra-family violence in men of a given age group =
$$\frac{\text{Number of men of a given age group who sought care due to intra-family violence}}{\text{Total of men in that age group}} * 1,000$$

Relevance

Different actions implemented in the Region on the issue of intra-family violence have contributed to open public discussion of the subject, and have encouraged women – the most affected – and men to take advantage of the instances that have been created to help in these cases. Some of the attempts at solutions include: the promulgation and application of laws for preventing and taking care of intra-family violence, creation of models of attention including community participation for the attention and punishment of intra-family violence cases, training of health, education, police and judicial personnel. All this accumulation of solutions, promoted mostly by women's NGOs, has caused women to increasingly seek for help from appropriate sources to report cases of violence and to ask for psychological and legal support.

In Guayaquil, the largest city in Ecuador, the number of reports of intra-family violence registered in 1994 rose to 6,000, and in 1997 the number reached 16,400 (20). Protocols have also been integrated into the health sector to identify cases of intra-family violence and provide appropriate support.

The number of cases of intra-family violence reported, or identified and attended to in the health sphere, is not a measure of the prevalence or incidence of this type of violence, but on the one hand, it is a measure of the level of openness, availability and accessibility women and men have to file their reports, and on the other hand, of the effective demand of services due to intra-family violence. Information being collected about intra-family violence is critical for the formulation of policies aimed at focusing on and preventing violence.

Required information

Number of women and men that have filed reports and requested attention due to intra-family violence in the different governmental branches (judicial, police and sanitary) and in NGOs, by age group. Population by sex and age group.

Sources of information

- Record of charges reported to the police, the commissioner of families and the commissioner of women or other sources
- Health sector epidemiological records
- Records of specialized NGOs

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 15, 15-19, 20-29, 30-39, 40-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Poverty condition of households (poor and non-poor)
- Relationship with the aggressor
- Place where aggression occurred
- Severity of violence
- Employment condition (remunerated work or unpaid domestic work) of the person abused
- Situation regarding pregnancy (pregnant and non-pregnant women who suffer incidents of violence)
- Type of attention requested: judicial, sanitary, police

Comment

If it is possible to obtain relevant information, this data could be complemented with other indicators that measure demand for emergency calls and telephone counseling for attention to incidents of violence against women, in countries where such support measures exist.

Incidence of sexual abuse, by sex

Definition

Quotient of number of women that reported sexual abuse during the last year, divided by total population, by age group, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Incidence of sexual abuse in women of a specific age group =
$$\frac{\text{Number of new cases of sexual abuse of women in a given age group}}{\text{Total of women in that age group}} * 100,000$$

Incidence of sexual abuse in men of a specific age group =
$$\frac{\text{Number of new cases of sexual abuse of men in a given age group}}{\text{Total of men in that age group}} * 100,000$$

Relevance

This indicator refers only to sexual abuse, leaving aside other types of gender-based violence that is not generally reported or registered.

Women, boys and girls are the main victims of sexual abuse. In the case of boys and girls, sexual abuse in general is perpetrated by adults that take advantage of their condition, and in many cases are relatives or close friends of the family.

For children, the most common forms of sexual abuse are incest, rape, molestation, and sexual exploitation, with physical and psychological consequences or behaviors that affect their healthy development. For women, the forms of sexual abuse are rape, rape attempts, molestation and incest, sexual harassment, and forced prostitution.

Compiling and monitoring this indicator may provide a basis for the discussion of policies, in spite of acknowledging the fact that there is a high under-recording of the incidence of such activities because many cases are not reported.

Required information

Number of women and men who report being victims of sexual abuse, by age group. Population by sex and age group.

Sources of information

- Record of charges reported to the police, the commissioner of families and the commissioner of women or other sources
- Health sector epidemiological records

- Records of specialized NGOs

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 11, 11-14, 15-19, 20-29, 30-39, 40-49, 50-64, 65 and older
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Relationship with the aggressor

3.3 MENTAL HEALTH

Prevalence of depression, by sex

Definition

Quotient of number of women who have had depression episodes in a given territory and period of time, divided by total of women in the population, by age group, multiplied by 100. The equivalent figure for men is calculated in the same way.

Prevalence of depression in women of a given age group =

$$\frac{\text{Number of women of a given age group with depression episodes}}{\text{Total of women in that age group}} * 100$$

Prevalence of depression in men of a given age group =

$$\frac{\text{Number of men of a given age group with depression episodes}}{\text{Total of men in that age group}} * 100$$

Relevance

The most common of the mental ailments is depression, which may be mild or very severe, and it has particular importance in women's mental health, among whom its prevalence is greater than among men. According to the Global Burden of Disease 2000 (GBD), it has been estimated that the exact prevalence of unipolar depression among women is 3.2% and among men, 1.9%.

According to a study carried out by the World Bank in 1990, in Latin America and the Caribbean the number of years of healthy life lost from premature death and disability due to depressive disorders rose to 1,180,000 among women and 570,000 among men, i.e., two times more for women than for men (29).

According to the survey on Health, Wellbeing and Aging (HWA), prevalence of depression among the people interviewed ranged between 4% in Georgetown, Barbados and 18% in Montevideo, Uruguay (34).

As a result of these investigations, it has been suggested that there is a relationship between depression and infertility, a conflictive marital situation, a household without a spouse, physical violence and sexual abuse, poverty and, among older adult females, loneliness from abandonment by relatives, loss of their role, and the "empty nest" syndrome (19).

Required information

Number of women and men that have had depressive episodes, by age group. Population by sex and age group.

Sources of information

- Surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 10-14, 15-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Number and age of children
- Employment condition
- Involvement in social groups

Another mental health indicator is:

Mortality from intentionally self-inflicted lesions, by sex

which is included in the section regarding preventable mortality through application of a set of measures.

4. RISK BEHAVIORS

Prevalence of tobacco addiction, by sex

Definition

Quotient of number of women 12 years and older, who are current smokers (that have smoked at least one cigarette or similar product of tobacco during the 30 days previous to the survey), divided by total of women 12 years and older in the population, multiplied by 100. The equivalent figure for men is calculated in the same way.

Prevalence of tobacco addiction in women =

$$\frac{\text{Number of women 12 years and older who are current smokers}}{\text{Total of women 12 years and older}} * 100$$

Prevalence of tobacco addiction in men =

$$\frac{\text{Number of men 12 years and older who are current smokers}}{\text{Total of men 12 years and older}} * 100$$

Relevance

Although tobacco abuse is still more frequent in men than in women, in general the rate of increase in tobacco consumption is higher among women. Social conditions that reinforce and promote cigarette addiction among women are linked to women's participation in the public sphere, where one of the codes and symbols of the masculine world that may be adopted by

women is smoking. Also, women's access to financial resources has fostered their tobacco consumption. This tendency has made the gap in cigarette consumption between young men and women increasingly smaller, and in some countries it has even disappeared, with the added complication that habits developed during these years generally prevail throughout life.

In the United States for the year 2000, in the age group of between 12 and 17 years, 14.1% of women reported that they smoked, while the figure for men was 12.8% (31). According to data available in the PAHO for the last period in which information is available (1992-2002), prevalence of tobacco addiction in adolescent women (12-18 years old) was greater than that in adolescent men in Canada, Chile, Costa Rica, Cuba and Uruguay (14). It is important to note that in Latin America, prevalence of tobacco addiction in women increases as schooling increases, as opposed as to what happens with men.

Smoking habits entail serious risks for men's and women's health; some of the consequences for women's health are ischemic diseases of the heart, arteriosclerosis, severe hypertension, cancer of the lungs, larynx, esophagus, oral cavity and others, chronic diseases of the lungs, chronic bronchitis, and emphysema.

Required information

Number of women and men 12 years and older that smoke regularly. Total of women and men 12 years and older.

Sources of information

- Surveys about healthy habits and behaviors
- Surveys on prevalence of drugs and psychotropic consumption

Information on prevalence of tobacco addiction in the population between 12 and 18 years old, for several countries of the Region, is available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 12-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Situation regarding pregnancy for women

Prevalence of alcohol consumption, by sex

Definition

Quotient of number of women 12 years and older who consumed alcohol in the following categories: i) at least one drink during the last month (and year); ii) four or more drinks in the same occasion at least once during the last month (and year); iii) four or more drinks in the same occasion in at least five different days of the last month (and year), divided by the total of women 12 years and older in the population, multiplied by 100. For men, for sections ii) and iii), instead of four drinks, use a figure of five or more drinks.

Prevalence of alcohol consumption among women =

$$\frac{\text{Number of women 12 years and older who consumed at least one drink during the last month (and year)}}{\text{Total of women 12 years and older}} * 100$$

Prevalence of alcohol consumption among men =

$$\frac{\text{Number of men 12 years and older who consumed at least one drink during the last month (and year)}}{\text{Total of men 12 years and older}} * 100$$

(Same for other categories of alcohol consumption).

Relevance

Alcohol abuse has been considered a male problem. However, since alcohol consumption among women is becoming more and more acceptable through time, it has increased, and the difference with respect to men has been decreasing.

In general, men have a greater probability of becoming dependant of alcohol, to be affected by diseases related to excessive alcohol consumption, and to die of such diseases than women, while women are more likely to suffer from acute and chronic diseases associated with the vulnerability of their reproductive system and sexual dysfunction problems. Effects of alcohol consumption during pregnancy have also been related to a high risk of abortion, premature births, and fetal alcohol syndrome (35). Consumption of alcohol is also associated with cardiovascular problems, accidents, homicides and suicide, and with other problems such as gender-based violence, and abuse of minors.

At comparable levels of alcohol consumption women have a greater risk than men, since they fix a greater amount of alcohol in their blood, whose acute effects of greater intoxication in women may be explained by different water content, and corporal weight and fat content, in men's and women's bodies.

According to a study from the World Bank in 1990 in Latin America and the Caribbean, the years of healthy life lost due to premature death and disability from alcohol dependency were 1,410,000 for men and 200,000 for women, i.e., seven times more in men than in women (29). In the United States in the year 2000, 13.5% of women and 28.3% of men 12 years and older reported having had five or more alcoholic drinks on the same occasion during the month previous to the interview (31).

Required information

Number of women and men 12 years and older in each category of alcohol consumption. Total of persons 12 years and older, by sex.

Sources of information

- Surveys of drug and psychotropic consumption

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 12-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Comments:

To estimate this indicator, the number of drinks for women and men may be defined according to the degree of pure alcohol in the drinks. Due to different effects and risks from alcohol consumption for women and men, it is convenient to use 4 as the cut point for women and 5 for men.

A complementary indicator may be created about the percentage of women and men who have abstained from all their lives, which may be compared to those who have stopped drinking for some reason.

Prevalence of consumption of illicit drugs, by sex

Definition

Quotient of number of women 12 years and older who consumed one or more of the following drugs: marihuana, hashish, cocaine, hallucinogenic drugs, or inhalants, during the last year in a given territory, divided by total of women 12 years and older in the population, multiplied by 100. The equivalent figure for men is calculated in the same way.

Prevalence of marihuana consumption in women =

$$\frac{\text{Number of women 12 years and older who consumed marihuana during the last year}}{\text{Total of women 12 years and older}} * 100$$

Prevalence of marihuana consumption in men =

$$\frac{\text{Number of men 12 years and older who consumed marihuana during the last year}}{\text{Total of men 12 years and older}} * 100$$

(Same for the other drugs)

Relevance

In general, men are significantly more associated with drug use than women. However, women are frequently affected by drug consumption as partners, mothers and relatives of persons that consume these substances.

Initiation of drug consumption is occurring at an early age and with greater frequency. Although drug abuse still prevails among men, the pace of consumption is increasing rapidly among women, both in more developed countries and in those which are less developed. For the year 2000 in the United States, 18.9% of women between 12 and 17 years old, and 23.9% of women between 18 and 25 years old, reported having consumed some illicit drug during the year previous to the interview (31).

Because of the physiological differences between women and men, women tend to be less tolerant of illicit drugs. In pregnant women, drug consumption has effects on the fetus (35); likewise, it is known that alcohol amplifies the effects of marihuana, and that consumption of injectable drugs leads to a greater risk of HIV transmission.

With regards to policy, it is necessary to promote greater dissemination of information about the individual and social consequences of drug abuse. Likewise, the specific needs of women must be taken into account in rehabilitation services for the use of illicit drugs.

Required information

Number of women and men 12 years and older who have used illicit drugs during the last year.
Population 12 years and older, by sex.

Sources of information

- Surveys about consumption habits of psychoactive substances

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 12-19, 20-34, 35-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

5. SEXUAL AND REPRODUCTIVE HEALTH

Percentage of women with living partners who use modern contraceptives

Definition

Quotient of number of women of child-bearing age (WCBA) with living partners that use modern contraceptives, divided by the total number of WCBA with living partners, by age group, for a given territory, multiplied by 100. Calculated in the same way for WCBA in different age subgroups within the group between 15 and 49 years of age.

% of women between 15 and 49 years of age (WCBA) with living partners, using modern contraceptives =
$$\frac{\text{Number of WCBA with living partners using modern contraceptives}}{\text{Total of WCBA with living partners}} * 100$$

The following contraceptive methods are considered modern: the pill, intrauterine devices, injections, foams/jelly/ovules, condom, female sterilization, male sterilization, Norplant, emergency contraception, amenorrhea due to lactation.

Relevance

The ability to plan number of children and birth spacing is a fundamental right of individuals and couples, which has been recognized in some international documents. Access to information and the availability of a range of contraceptive methods and high-quality family planning services are crucial aspects for facilitating women's and men's exercise of their right to plan births.

Use of contraceptive methods is a fundamental element to ensure reproductive health care. There are a variety of preferences and ways to assess risks and benefits of each contraceptive method.

This indicator measures extent of use of contraceptive methods and distribution of methods used; for this reason, a strong concentration of users in one or two methods may be a sign of a limited offer or access.

From a gender perspective, supply of methods to provide men and women the possibility to share the responsibility of family planning is important. For this reason, it would be useful to estimate contraceptive use by groups of women-oriented and men-oriented methods. Those used by women are: the pill, intrauterine devices, injections, vaginal methods, female sterilization, and female condom; methods that involve men's cooperation are male sterilization and condoms.

In Latin America and the Caribbean, only 22% of couples use methods that require participation of the man (36). Most modern methods leave the responsibility of prevention of unwanted and high-risk pregnancies to women.

Required information

Number of women with living partners between 15 and 49 years of age who use modern contraceptives. Number of women with living partners between 15 and 49 years of age.

Sources of information

- Demographic and Health Surveys
- Records of family planning programs
- Household surveys including a module about reproductive health

Information about prevalence of any contraceptive method in women of child-bearing age, for several countries of the Region is available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 15-19, 20-34, 35-49
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Types of contraceptive methods

Comment

This indicator also relates to the extent of access to and use of health services, in part III of the list of indicators in this document.

Total fertility rate

Definition

Expected average number of children a woman would have in her life, if during her child-bearing years she experienced age-specific fertility rates, prevailing in a given country or geographic zone.

The total fertility rate is directly estimated as the sum of age-specific fertility rates, for women between 15 and 49 years of age; or as the sum of specific fertility rates corresponding to age groups in five-year intervals, multiplied by 5 (14).

Relevance

Excessive fertility has negative effects on women's health and that of their children. Therefore, strategies to regulate fertility are a very important preventive care measure to reduce maternal and infant mortality.

Fecundity has tended to decrease in the countries of the Region. However, differences in specific fertility rates have been related to differences in characteristics such as zone of residency (urban and rural) and different levels and types of education. These differences reflect knowledge and preferences, as well as access and differential use of family planning services.

Empirical evidence shows that fertility has an inverse relationship with women's educational level: the higher the level of education, the lower the fertility. In Peru, for the year 2000, with a total fertility rate of 2.9, a fertility rate of 5.1 was estimated for the group of women without any education, and 1.8 for the group of women with higher education; in Colombia, for the year 2000, a difference of 2.5 children among women without education and those with university studies was also observed, with 4 children for the former and 1.5 children for the latter (30, 37).

Likewise, there is evidence showing that access to contraceptive methods is an important factor to explain fertility reductions; for this reason, fertility rates are a sign of the extent to which women's needs regarding reproductive health are being fulfilled.

Required information

Specific fertility rates for 5-year age groups between 15 and 49 years of age.

Sources of information

- Vital statistics
- Population censuses

Total fertility rates for countries of the Region are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comments:

The total fertility rate is an early measure of the total fertility level in women, i.e., a hypothetical measure; therefore, it is possible that there will be differences between eventual family sizes of those women and specific fertility rates.

Fertility rate among adolescents

Definition

Quotient of annual number of births from women 15 to 19 years old, divided by the population of women of that age, in the same year, for a given territory, multiplied by 1,000.

$$\text{Fertility rate in adolescents} = \frac{\text{Annual number of births from 15-19 year-old women}}{\text{Total of 15-19 year-old women}} * 1,000$$

Population data are values estimated at mid-year, obtained through linear extrapolation from the corresponding United Nations population quinquennial projections that use the mean variance of fertility (14).

Relevance

Adolescents' reproductive health is a major issue, especially because of the social, economic and health consequences entailed by any unwanted pregnancy or abortion. In spite of the fact that fertility rates in adolescents have dropped during the last decades, it is still a highly important subject.

A pregnancy at a very early age is one of the main risks factors for maternal and infant mortality. Frequently, pregnancies among adolescents are unwanted pregnancies produced in unstable couples, and they have physical, emotional, and social complications. Adolescent mothers have to face obstacles that hinder their opportunities to continue studying, and interfere with their social integration – essential factors to promote their healthy development. And, if they choose to have an abortion, in most cases they are practiced without any guarantees of safety, placing women's health or life at risk.

One of the factors associated with fertility reduction is use of contraceptives. However, according to the Demographic and Health Surveys carried out between 1996 and 2001, in all countries for which there is information available, the group with the greatest unfulfilled need regarding family planning is exactly the group of youngsters between 15 and 19 years old. The percentage of adolescent women with living partners who did not want to have children or wanted to have spaced births, but who did not use any contraceptive method, varied between 58% in Haiti, and 18% in Colombia (32).

Adolescent fertility rates in the twenty countries for which CEPAL has information available range from 138.1 in Nicaragua to 43.6 in Chile, for the 2000-2005 period (4).

Required information

Number of births and mother's age. Female population between 15 and 19 years old.

Sources of information

- Vital statistics

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more

- Socio-economic level

Average age of mothers at birth of first child

Definition

Average age of mothers when their first child is born, in a given period and territory.

Relevance

Pregnancies at early ages, as well as late pregnancies, are risk factors for maternal and infantile mortality.

Aside from being associated with medical and demographic aspects, pregnancy during adolescence is linked to other aspects related to mothers' and children's life quality. Adolescent mothers face obstacles in their educational and social development, limiting their options to participate in economic, social and political spheres under better conditions. As a result, the age of mothers when their first child is born is a key indicator of opportunities to develop women's human capital.

Based on information available from the Demographic and Health Surveys carried out in the year 2000, it has been estimated that the average age of women between 25 and 49 years old when they had their first child was 21.9 in Peru and Haiti, and 22.1 in Colombia. Education has a decisive effect on this age. The highest the level of education, the older the mother is when she has her first child. In Colombia, the difference in average age of women when their first child is born, among women without education and those who have reached secondary or higher education was 3.1 years.

Required information

Mothers' age when they have their first child.

Sources of information

- Censuses
- Demographic and Health Surveys

Suggested disaggregation

- Zone of residency: urban, rural
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level

Percentage of births with high reproductive risk

Definition

Quotient of number of births of children whose mothers are very young (less than 18 years old) or older (above 34 years old), have had more than three children, or have given birth with little

spacing between their children (less than 24 months between births), divided by the total number of births in a given period and territory, multiplied by 100.

$$\frac{\% \text{ of births with high reproductive risk} = [\text{> 3 births}], \text{ or } [\text{birth intervals} < 24 \text{ months}], \text{ or } [18 > \text{mother's age} > 34 \text{ years}] * 100}{\text{Total number of births}}$$

Relevance

Rights to decide on number of children, birth spacing and birth timing have been consecrated as a basic right of the couple, in particular of women, on whom the biological consequences of pregnancy, delivery and breast-feeding fall, in addition to the responsibility of taking care of children.

In terms of impact of fertility on women's health, it has been proven that numerous births, closely-spaced births, or births at the extremes of the reproductive cycle are preventable risks for health and survival of both the mother and the child. In addition, these risks are multiplied by adverse socio-economic conditions that hinder access to good nutrition and adequate obstetric care.

These risk categories can be considered separately, and two or more of them can be combined. According to the Demographic and Health Surveys in Colombia for the year 2000, considering births during the 5 years previous to the survey, 42.4% of births were classified in some of the categories of reproductive risk; in Peru for the year 2000, the percentage reached 48.3%. Considering several combinations of reproductive risk factors, Colombia reached 10.7%, and Peru 16.4% (30, 37).

With respect to pregnancies at extreme ages, risk of obstetric complications is higher in adolescents, among whom the possibility of dying during pregnancy and delivery are between five and seven times more than that of women between 20 and 24 years old.

Required information

Number of births in a specific period of time, classified by age, number of deliveries of mother and interval between births.

Sources of information

- Demographic and Health Surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education of the mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Ethnicity
- Employment condition

Percentage of 15-19 year-old women who are pregnant or have had at least one child

Definition

Quotient of the number of adolescent women between 15 and 19 years old, who are pregnant or have had at least one child, in a given period and territory, divided by the total of women in that same age group in the same period and territory, multiplied by 100.

% of 15-19-year-old women who are pregnant or have had at least one child =
$$\frac{\text{Number of 15-19-year-old women who are pregnant or have had at least one child in a given period}}{\text{Total of 15-19-year-old women in the middle of the period}} * 100$$

Relevance

Maternity among adolescents is associated with possible complications during pregnancy and delivery, and as a consequence, it contributes to higher maternal mortality, which is aggravated by the fact that adolescents usually neither seek nor receive necessary prenatal care.

Pregnancy during adolescence may have a devastating effect – young mothers may lose their autonomy by asking for help from their parents or other persons, and are often forced to interrupt their studies, hindering their personal and social development and their future economic progress. Particular risks include anemia, malnutrition, delays in fetal growth, premature delivery, and complications during delivery. In addition, children of adolescent mothers are usually more exposed to diseases, traumas, and abuse, and may later show other complications, such as deficient infant nutrition and a greater frequency of infectious diseases, especially in groups of at lower socio-economic levels.

According to Demographic and Health Surveys carried out in several Latin America and Caribbean countries, the percentage of adolescent women that had a child or were pregnant before 20 years of age, as compared to the total of adolescent women, shows ranges between 27% in Nicaragua (2001), and 13% in Peru (2000).

Required information

Number of 15-19-year-old women who are pregnant or have had at least one child in the period and territory under study. Female population between 15 and 19 years old.

Sources of information

- Demographic and Health Surveys
- Vital records systems

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education of the mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Percentage of 15-19 year-old women who are pregnant or have had at least one child

Definition

Quotient of the number of 35-49-year-old women who are pregnant or have had at least one child, in a given period and territory, divided by the total of women of that same age group in the same period and territory, multiplied by 100.

% of 35-49-year-old women who are pregnant or have had at least one child =
$$\frac{\text{Number of 35-49-year-old women who are pregnant or have had at least one child in a given period}}{\text{Total of 35-49-year-old women in the middle of the period}} * 100$$

Relevance

Late child bearing, as with child bearing during adolescence, has greater possibilities to produce complications during pregnancy and delivery, with negative impacts on mothers' health and life; accordingly, this is one of the contributing factors to greater maternal mortality.

A pregnancy at a late age is one of the reproductive risk categories. According to Demographic and Health Surveys for the year 2000, the percentage of births from mothers between 35 and 49 years of age was 3.7% in Peru and 4.3 in Colombia (37, 30).

Required information

Number of 35-49-year-old women who are pregnant or have had at least one child during the period and territory under study. Female population between 35 and 49 years old.

Sources of information

- Demographic and Health Surveys
- Vital records systems

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education of the mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Percentage of women with living partners who use contraceptives for birth-spacing purposes

Definition

Quotient of the number of women of child-bearing age (WCBA) with living partners who use contraceptives for birth-spacing purposes, divided by the total of WCBA with living partners who use contraceptives, for a given period and territory, multiplied by 100.

% of WCBA with living partners who use contraceptives for birth-spacing purposes =
$$\frac{\text{Number of WCBA who use contraceptives for birth-spacing purposes}}{\text{Total of WCBA with living partners who use contraceptives}} * 100$$

Relevance

A short interval between child births is another one of women's and children's health risks, and it causes the maternal weariness syndrome. It is known that the body needs between two and three years to completely recover from pregnancy and breast-feeding, in order to prepare for the next pregnancy.

In addition to helping to decide the number of children and when to have them, family planning lets individuals and couples decide on birth spacing between their children, improving women's and children's health. Contraceptive availability offers persons and couples the possibility to exercise their right to freely decide the number of children they want to have, the moment, and birth-spacing between them, and to enjoy their sexual life without any fear of an unwanted pregnancy.

During the last 15 years, frequency of contraceptive use has increased markedly in most Latin American and Caribbean countries. However, according to data obtained through Demographic and Health Surveys, there are differences between planning with the purpose of limiting the number of children, and planning for birth-spacing purposes, with the greatest use of contraceptive methods for limiting the number of children.

Required information

Number of WCBA with living partners who use contraceptives for birth-spacing purposes.
Number of WCBA with living partners who use contraceptives.

Sources of information

- Demographic and Health Surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comments:

An indicator of total demand of planning for birth-spacing purposes could be created, which would be the number or proportion of WCBA with living partners who wish to postpone birth of their first child for a specific time. This indicator would be the sum of the number of WCBA with living partners who wish to delay the next pregnancy using contraceptive methods, plus the number of WCBA with living partners who wish to delay the next pregnancy and are not using contraceptive methods, plus the number of pregnant or amenorrheal women with living partners whose pregnancy occurred earlier than planned and were not using contraceptives, plus the number of pregnant or amenorrheal women with living partners whose pregnancy occurred earlier than wished due to a failure of the contraceptive method (38).

Percentage of women who have had 4 deliveries or more

Definition

Quotient of the number of women who have had 4 or more deliveries, divided by the total of women that had at least one delivery, for a given age group, period and territory, multiplied by 100.

$$\% \text{ women who have had 4 or more deliveries} = \frac{\text{Number of women who have had 4 or more deliveries in a given period}}{\text{Total of women who had at least one delivery during the same period}} * 100$$

Relevance

One of the reproductive risk factors is more than three deliveries. This risk factor may present complications during pregnancy and delivery, placing mothers and children's health at risk.

This indicator shows the proportion of women who have faced high-risk pregnancies, and in addition it shows the coverage of family planning programs to limit the number of children, facilitating the exercise of sexual and reproductive rights. Availability of contraceptive methods helps persons and couples exercise their sexual and reproductive rights.

Although women have shown a tendency to reduce the number of children they have, the desired fertility rate is generally lower than that observed. The greatest differences are in rural zones among women with less education, with a number of births usually greater than 3. According to the Demographic and Health Surveys carried out in Colombia in the year 2000, the total fertility rate observed in rural zones was 3.8, and in the group of women without any education it was 4, while the total desired fertility rate was 2.3 for rural areas and 2 for those without education. The percentage of births greater than 3 in Colombia was 3.9% and in Peru 15.1%.

Required information

Number and age of women who have had at least one delivery; number of deliveries of each woman.

Sources of information

- Household surveys
- Demographic and Health Surveys
- Vital records systems

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Registered incidence of HIV/AIDS, by sex

Definition

Quotient of the number of registered new cases of women who are carriers of HIV/AIDS during a given year and territory, divided by the total of women in that population, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Registered incidence of HIV/AIDS in women =
$$\frac{\text{Number of registered new cases of HIV/AIDS in women}}{\text{Total number of women}} * 100,000$$

Registered incidence of HIV/AIDS in men =
$$\frac{\text{Number of registered new cases of HIV/AIDS in men}}{\text{Total number of men}} * 100,000$$

Relevance

Although in general most cases of HIV/AIDS occur among men, its spread is rapidly increasing among women, reaching higher proportions among women of the English-speaking Caribbean, the Latin Caribbean and the Central American isthmus and, within the latter, particularly in Honduras, especially in the group of youngsters between 15 and 24 years old. A decreasing men:women ratio has been observed in several Latin American countries with respect to new cases of HIV/AIDS (39).

Transmission of the epidemic has gone from groups considered to have high-risk practices (drug injectors, men having sex with men) to the general population. From a social point of view, an unequal distribution of power determined by gender relationships, and mediated by race, social class, age and certain cultural practices, prevents many women from protecting themselves, and rather places them in a situation of greater risk of sexual transmission of HIV/AIDS. This greater vulnerability of women to HIV/AIDS transmission is partially explained by biological characteristics associated with a greater exposure of the vaginal mucous during intercourse, especially at young ages; but it is also due to limitations in access to information about sexual and reproductive health, and to the lack of negotiating capacity about risk-free sexual relationships.

In addition to this greater vulnerability of women to HIV/AIDS transmission, they are also subjected to greater discrimination and stigmatization than men when they become carriers of the virus, and the probability of becoming victims of intra-family violence may increase.

HIV/AIDS is also a factor in developing long-term diseases and disabilities, and for women, the main producers of health services at home and in the community, it represents an additional unpaid work load, with consequences for their physical and emotional health.

Required information

Number of registered new cases of AIDS, by sex. Population by sex.

Sources of information

- Epidemiological surveillance systems

Annual figures of new cases of AIDS for countries of the Region, by sex, are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 15, 15-24, 25-34, 35-49, 50-64, 65 years and older
- Years of education: 0-5, 6-9, 10-12, 13 and more

- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Transmission vectors
- Employment condition

Comment

An indicator of HIV/AIDS prevalence may be added.

Reported incidence of sexually transmitted diseases, by sex

Definition

Quotient of the number of reported new cases of sexually transmitted diseases (STD) in women, divided by the total of women in the population, during a given year and territory, multiplied by 100,000. The equivalent figure for men is calculated in the same way.

Usually includes gonorrhea, syphilis, chlamydiosis and trichomonas. For women, it is also important to include the human papilloma virus, an important cause of cancer of the cervix.

Incidence of STD in women =

$$\frac{\text{Number of reported new cases of STD in women}}{\text{Total number of women}} * 100,000$$

Incidence of STD in men =

$$\frac{\text{Number of reported new cases of STD in men}}{\text{Total number of men}} * 100,000$$

Relevance

Although STDs are rather common in women and men, women show greater vulnerability due to biological factors associated with a greater exposure of the vaginal mucous during intercourse. Likewise, consequences for women are more severe than for men, because infected women do not show symptoms and therefore do not seek treatment in a timely manner; for this reason they may become victims of chronic ailments. In addition, cultural factors that stigmatize more heavily women affected by STD, make it more difficult for them to overcome the obstacles to obtain timely diagnosis and treatment.

In women, untreated STDs produce pelvic inflammations, chronic pain, infertility, ectopic pregnancies, cervical uterine cancer and spontaneous abortion; likewise, they cause perinatal mortality and congenital infection. As a result of chronic physical pain, weakness and interference with a normal sexual life, STDs reduce women's life quality. On the other hand, children born from mothers with STDs that survive may develop permanent disabilities or die young.

Women not only get infected through sexual contact, but also from the insertion of certain items in their vagina in order to prevent pregnancies, induce abortions, for having abortions without any safety guarantees, or from use of non-hygienic implements during menstruation.

With regard to sexual behavior, it is important to note that women's vulnerability to STD does not depend so much on their own behavior as that of their sexual partners, from whom

promiscuity is accepted in many societies. In addition, there is a power imbalance between women and men which hinders women's capacity to exercise their sexual and reproductive rights, including their capacity of decision about when, with whom and how a sexual relationship is to take place.

According to estimates from the World Bank, in Latin America and the Caribbean for 1990, the number of years of life lost due to premature death or disability as a result of STD was 240,000 for men and 2,160,000 for women; i.e., in average each woman loses 9 years of healthy life for every year a man loses (29). In spite of the magnitude of these figures, these infections tend to receive minimal attention from sanitary authorities, under the false assumption that they are not fatal, and that they affect a reduced number of women with promiscuous sexual behavior.

Required information

Number of STD reported cases, by sex. Population by sex.

Sources of information

- Epidemiological surveillance systems

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 15, 15-24, 25-34, 35-49, 50-64, 65 years and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Comment

It is important to recognize that there is an under-reporting of cases which leads to an underestimation of STD incidence, because a great proportion of affected persons do not seek treatment or go to providers who report the cases.

Incidence of malignant neoplasms of the breast

Definition

Quotient of the number of reported new cases of malignant tumors of the breast in women, divided by the total of women in the population, by age group, for a given year and territory, multiplied by 100,000.

Incidence rate of malignant neoplasms of the breast in women of a given age group =
$$\frac{\text{Number of new cases of malignant tumors of the breast in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Relevance

Malignant neoplasms of the breast have become one of the main causes of death from cancer among women. There is evidence showing differentials in the incidence of malignant neoplasms

of the breast among women who live in more developed countries and those living in less developed countries, with higher incidences among women of the more developed countries. Incidence of breast cancer, of an epidemic magnitude in North American countries, shows an increasing tendency in more developed countries of Latin America and the Caribbean.

According to data from PAHO, in the year 2000, Canada and the United States showed the highest incidence rates of breast cancer among the countries for which there is information available; Uruguay follows them very closely. The lowest rates occurred in El Salvador, Haiti, Nicaragua and Mexico (14).

There are also important differences within each country in the incidence rates of breast cancer at different socio-economic levels, which, according to an investigation carried out in Argentina, doubled the rates in the most prosperous provinces of the Central and Eastern parts of the country, compared to less-developed provinces in the North and South (40).

Required information

Number of new cases of malignant neoplasms of the breast, by age group. Female population by age group.

Sources of information

- Population records for cancer

Incidence of malignant neoplasms of the breast in women, for countries of the Region, is available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age group: 35-49, 50-64, 65 years and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comment

Not all countries of the Americas have wide-coverage population records for cancer; it is recommended that countries develop these records.

Incidence of malignant neoplasms of the cervix

Definition

Quotient of the number of reported new cases of malignant tumors of the cervix, divided by the total of women in the population, by age group, for a given year and territory, multiplied by 100,000.

Incidence of malignant neoplasms of the cervix in women of a given age group =
$$\frac{\text{Number of new cases of malignant tumors of the cervix in women of a given age group}}{\text{Total of women in that age group}} * 100,000$$

Relevance

Cancer of the cervix is an important public health problem that persists in spite of the fact that the smear test conceived by Papanicolaou has existed for over 30 years, and is a simple, effective and low-cost test to detect such cancer in its early stages, which provides a high probability of successful cure. In addition, there are relatively simple technologies to treat cancer of the cervix during the early pre-invasive stages, which are generally available in all countries, while the technology required to treat more advanced forms of the disease is more complicated and costly.

The most affected population is that of lower socio-economic levels, precisely because they face greater limitations on access to health services and gynecological attention for early detection of cancer of the cervix and uterus. For the year 2000 Canada and the United States reported the lowest incidence rates, with 7.8 and 8.2 per 100,000 women, respectively; while the highest rates were in Haiti, with 93.9 and Nicaragua, with 61.1 (14). This inverse relationship between frequency of cancer of the cervix and socio-economic level is also reproduced inside countries. According to several studies, it has been shown that in the United States incidence rates of invasive cancer are higher among black women than among white women.

Risk factors that are commonly associated with cervical uterine cancer are female and male sexual promiscuity, sexual initiation at an early age, a high number of deliveries, and, still under discussion, consumption of oral contraceptives.

Required information

Number of new cases of malignant neoplasms of the cervix, by age group. Female population by age group.

Sources of information

-Population records of cancer

Incidence rates of malignant neoplasms of the cervix for countries of the Region are available in the Health Analysis and Information Systems Area of PAHO's web page (14).

Suggested disaggregation

- Zone of residency: urban and rural
- Age group: 30-49, 50-64, 65 years and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comment

Not all countries of the Americas keep wide-coverage population records of cancer; it is recommended that countries develop these records.

III. HEALTH CARE

ACCESS TO AND USE OF SERVICES

Women have greater health care needs, mainly related to their reproductive health and chronic diseases, which are more prevalent in women than in men.

Differentiated gender roles are combined with socio-economic factors to determine use of health services. On one hand, access to these services is influenced by gender relationships, availability of economic resources, access to health insurance, zone of residency, ethnicity, service availability, access to transportation and child care facilities. However, the lack of cultural sensitivity and inhuman treatment by a great number of health care personnel has caused many women to be reluctant to use the services.

Studies carried out in the Region have shown that poor and minority groups are the most affected by lack of economic and cultural opportunities to access and use health services. This violates the equality principle in health services provision, which includes the concepts of use of health services according to the specific needs of each population group, and economic contribution from the groups according to their capacity to pay.

It is important that policies take into account the different needs of women and men in the different stages of their life cycle, as well as barriers that must be eliminated to favor equity in access to, and use of, health services, financial contribution, and participation in health administration.

1. COVERAGE

1.1 Coverage of insurance plans

Percentage of adult population affiliated with health insurance plans, by sex

Definition

Quotient of the number of women who have access to health insurance as contributors or policyholders, divided by the total of women, by age group, in a given period and time, multiplied by 100. The equivalent figure for men is calculated in the same way.

% of adult women affiliated with a health insurance plan as contributors, of a given age group =
$$\frac{\text{Number of adult women affiliated with a health insurance plan as contributors}}{\text{Total of women in that age group}} * 100$$

% of adult men affiliated with a health insurance plan as contributors, of a given age group =
$$\frac{\text{Number of adult men affiliated with a health insurance plan as contributors}}{\text{Total of men in that age group}} * 100$$

(Same for affiliation with a health insurance plan as beneficiaries or dependents)

Relevance

In many countries, only a minority of the population – in particular people related to the formal labor market – has access to health care coverage through insurance plans. In this case, women are less covered than men, because they work mostly in the informal sector of the labor market, predominantly in domestic work and as unpaid relatives, where access to insurance plans is almost absent. Access to insurance plans with health coverage may provide financial protection against impoverishment due to the expenses that could be caused by need of attention in the face of an incident requiring health services.

Access to an insurance plan as a dependent of the policyholder means that the person would not have by her- or himself the right to access health services and, as a result, the dependent would be vulnerable, subject to the policyholder's and couple's stability. Many women are in this situation, which is aggravated by the fact that some insurance plans offer different services for policyholders and dependents, with dependents receiving lower quality services.

Required information

Number of men and women 15 years and older with health insurance with information about their status as policyholders or dependents. Population 15 years and older, by sex.

Sources of information

- Household surveys
- Insurance systems

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 15-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Type of insurance plan: private, public, armed forces, maternal, and others
- Employment condition

Comments:

To compute this indicator, attention must be paid to identifying whether the insurance plan is a general insurance or maternity insurance. Many countries have maternal insurance, which only covers pregnancy and delivery care, and in some cases attention for children up to a certain age.

For a gender analysis, additional information could be included about the relationship between coverage and premiums based on employees' remuneration; payment of higher insurance premiums by women due to their reproductive health needs; coverage of family members other than spouses of contributors.

Family planning coverage in insurance plans

Definition

Quotient of the number of women of child-bearing age (WCBA) who access insurance plans including family planning, divided by the total number of WCBA insured, by age group, in a given period and territory, multiplied by 100.

% of women of child-bearing age with an insurance plan including family planning =
$$\frac{\text{Number of WCBA, who access insurance plans including family planning, of a given age group}}{\text{Total of WCBA with access to an insurance plan in that age group}} * 100$$

Relevance

Responsibilities and costs of reproductive health, particularly of family planning, generally fall on women only, not taking into account that human reproduction is social and therefore must be shared by different sectors of society.

Many insurance plans exclude family planning as a component of sexual and reproductive health, because their coverage focuses on pregnancy, delivery and puerperal care.

In addition to attention during pregnancy, delivery and puerperium, existing maternal insurance plans in several countries of the Region in many cases include children care up to certain ages. For instance, in Ecuador attention is provided to children up to 5 years of age, and in addition, includes sexual and reproductive health programs, with timely detection of cervical-uterine cancer, and access to family planning methods.

Required information

Number of women of child-bearing age who access insurance plans with family planning coverage. Number of women of child-bearing age who have access to insurance plans.

Sources of information

- Household surveys
- Insurance systems

Suggested disaggregation

- Socio-economic level
- Age groups: 15-19, 20-34, 35-49 years old
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Nature of insurance: policyholder or dependent/beneficiary

Comment

This indicator may be complemented with information about time required to have access to certain insurance plan services. For instance, it is known that in Brazil, all private insurance plans demand a two-year affiliation period in order to be able to use the plan for deliveries.

2. USE OF SERVICES

2.1 Promotion and prevention

Percentage of women who had at least 4 health care appointments during their last pregnancy

Definition

Quotient of the number of women who were examined by qualified health personnel at least four times, divided by the total of pregnant women, for a given period and territory, multiplied by 100.

$$\% \text{ of women who had at least 4 control appointments during their last pregnancy} = \frac{\text{Number of women who had 4 health care appointments or more with qualified health personnel during their last pregnancy}}{\text{Total of pregnant women}} * 100$$

Relevance

Based on results from studies carried out by the WHO, it is recommended that qualified health personnel perform at least four control appointments during pregnancy. It has been established that with 4 or more control appointments during pregnancy, substantial improvements can be achieved in identifying complications, thus preventing many maternal deaths.

Pregnancy care through periodic health care control appointments is one of the determinants associated with healthy results for mothers and children. Control visits during pregnancy make it possible to identify indications of conditions that may be present during pregnancy and require special attention, as well as to obtain vaccinations against tetanus, and treatment against malaria and anemia. It also makes it possible to detect and deal with high-risk cases that may arise during pregnancy and delivery.

This indicator shows the usefulness of health services in providing a healthy maternity for mothers and children, thus preventing unfair death, and contributing, in addition, to the achievement of the Millennium Development Goals regarding maternal mortality, which is a commitment of all the member states.

Required information

Number of women who were examined at least 4 times by qualified health personnel during their last pregnancy. Total of pregnant women.

Sources of information

- Household surveys with a module about reproductive health
- Demographic and Health Surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Age of mother: less than 20, 20-34, 35-49 years old
- Years of education of mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Comment

This indicator could be complemented with others about the point in the pregnancy when women start attending prenatal care programs, and weight of pregnant women. Likewise, indicators showing the average number of prenatal appointments by health sub-sector and women's age, the number of medical visits during puerperium, and some characteristics of maternal nursing may be computed.

Percentage of women attended by qualified health personnel during delivery

Definition

Quotient of the number of women attended by qualified¹⁴ health personnel during their last delivery, divided by the total of women who had at least one delivery, by age group, in a given period and territory, multiplied by 100.

% of women in an age group who were attended by qualified health personnel during their last delivery = Number of women in an age group who were attended by qualified health personnel during their last delivery * 100

Total of women in that age group who had at least one delivery

Relevance

Some hard-to-prevent complications of a pregnancy may occur at the moment of delivery, and the presence of qualified health personnel is vital to handle these complications. Personnel properly qualified to take care of these emergencies may save mothers' and children's lives during delivery, and their services could be provided in small health centers or facilities if the woman cannot make it to the hospital.

Marked differences in access to qualified health care during delivery may be observed within countries between groups of different socio-economic levels or zones of residency. In Ecuador, between 1993 and 1998, during the latest delivery, 94% of urban women who had at least one delivery were attended by a physician, obstetrician or nurse, while in the rural zone the equivalent percentage was 57% (20). Policies to promote greater attention of deliveries by qualified health personnel must take into account not only availability of services, but also cultural and geographical accessibility.

Required information

Number of women whose last delivery in a given period of time was attended by qualified health personnel, by age group. Total number of women who had at least one delivery during that same period, by age group.

Sources of information

- Household surveys with a module about reproductive health
- Demographic and Health Surveys

Suggested disaggregation

¹⁴ Excluding all qualified empirical midwives

- Zone of residency: urban and rural
- Age of mother: less than 20, 20-34, 35-49 years old
- Years of education of mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Comments:

This indicator may be complemented with another one about percentage of deliveries in health institutions. Likewise, the percentage of women attended by qualified midwives could be included separately.

Percentage of pregnant women who were vaccinated against tetanus

Definition

Quotient of the number of women of child-bearing age (WCBA) who during their last pregnancy were vaccinated against tetanus, divided by the total of WCBA who had a pregnancy, in a given period and territory, multiplied by 100.

$$\% \text{ of WCBA who were vaccinated against tetanus during their last pregnancy} = \frac{\text{Number of WCBA who were vaccinated against tetanus [during a period of reference]} * 100}{\text{Total of WCBA who had a pregnancy during the same period of reference}}$$

Relevance

A key element in prenatal care is immunization against neonatal tetanus. Dosages of tetanus toxoids help to protect children against this disease, which is one of the main causes of infant mortality, caused mainly by unsanitary conditions during delivery.

Two doses of this vaccine provide total protection. However, if a woman was vaccinated during a previous pregnancy, she may only need one booster shoot for total protection. Five doses would provide protection for life.

This is an indicator of the quality of prenatal attention, and information provided by this indicator suggests that an important proportion of pregnant women who receive some prenatal care – sometimes up to two-thirds of them – have not been vaccinated.

Required information

Number of women who received at least one dosage of the anti-tetanus vaccine during their last pregnancy occurring during a given reference period. Total of pregnant women during that reference period.

Sources of information

- Demographic and Health Surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education of mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comments:

This indicator should be interpreted carefully, because in some countries the vaccine is only applied in high-risk zones, for which reason coverage may seem low.

In addition, the percentage of women who were vaccinated twice during the last five years, and the percentage that received five dosages throughout their life, could be included.

Percentage of women 30 years and older who have had a Pap smear in the last three years

Definition

Quotient of the number of women 30 years and older who have had a Papanicolaou test during the last 3 years, divided by the total of women 30 years and older, for a given territory, multiplied by 100.

$$\frac{\% \text{ of women 30 years and older who have had a Papanicolaou test during the last 3 years} = \text{Number of women 30 years and older who have had a Papanicolaou test during the last 3 years} * 100}{\text{Total number of women 30 years and older}}$$

Relevance

Cancer of the cervix is one of the most common types of cancer affecting women. In general, it grows slowly and is treatable if detected in its early stages; it can be detected in a timely manner through a vaginal cytology, or Pap, test.

In countries with effective screening programs, mortality from cervical uterine cancer has decreased between 50% and 60%. The main barriers to implementation of effective programs include lack of an appropriate infrastructure to perform the Pap tests, lack of services to treat pre-cancers and cancers, and costs of implementing the programs. Treatment of cervical uterine cancer during its pre-invasive stages has high chances of success, and is not expensive, while treatment required in its advanced stages usually involves some kind of surgery or radiation, and is more expensive. In general, in Latin America and the Caribbean programs to control this cancer are characterized by a low coverage of cytological exams, aggravated by inefficiency in processing the tests within an appropriate period of time to make the diagnosis and provide timely treatment. Women in higher economic levels in urban zones have greater access to Pap tests, which deepens existing inequities due to lack of attention to specific groups of women.

One of the main causes of cancer of the cervix is the human papilloma virus that infects uterine cells. Women are usually infected with this virus during adolescence and the following two decades, and the disease may take 20 years to develop, so that risk of developing cervical uterine cancer is higher among 30-50-year old women.

Required information

Number of women 30 years and older who have had a Pap vaginal cytology test during the last 3 years. Female population 30 years and older.

Sources of information

- Health surveys
- Household surveys with a module about reproductive health

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 30-49, 50-64, 65 and older
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comment

This indicator must be adjusted according to national guidelines for vaginal cytology tests. For instance, some programs to detect cervical-uterine cancer have decided to focus on 35-39-year old women; other programs focus on all adult women at least once in their life; and other programs focus on women with the highest risk of cervical cancer.

Unmet need for family planning

Definition

Quotient of the number of women of child-bearing age (WCBA) with living partners, pregnant or amenorrheal whose last pregnancy was unwanted or wanted later, plus the number of women of child-bearing age not pregnant nor amenorrheal who do not want to have children, or who want to have them later and do not use contraceptive methods, divided by total of women of child-bearing age, in a given period and territory, multiplied by 100.

% of women of child-bearing age with unmet need for family planning =
Number of WCBA with living partners, a) whose last pregnancy was unwanted, b) who do not want to have children, c) who want to have children later, but do not use contraceptives * 100
Total number of WCBA with living partners

Relevance

This indicator provides information about the proportion of WCBA who need family planning services, shown through their wish to limit or space future births, but who do not use contraceptive methods. This information will be very useful in focusing efforts on programs to improve women's access to family planning.

Availability of family planning methods allows individuals and couples to exercise their right to freely decide on the number and spacing of their children. Likewise, family planning offers the possibility of enjoying sexual relationships without the fear of an unwanted pregnancy. It may therefore be said that use of contraceptive methods entails important benefits for women's health; an unwanted pregnancy may bring about serious consequences, placing a woman's health or life at risk.

Regarding policy, it is important to consider strategies aimed at improving access to family planning services so as to offer women the option of preventing unwanted pregnancies that many times end up in abortions without any safety measures.

Required information

Number of WCBA with living partners, pregnant, amenorrheal, not pregnant, not amenorrheal who expressed their wish to become pregnant later, or who do not want to have more children, and do not use contraceptive methods. Number of WCBA with living partners.

Sources of information

- Demographic and Health Surveys
- Household surveys with a module about reproductive health

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: 15-19, 20-34, 35-49 years old
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees

Comments:

This indicator excludes pregnant or amenorrheal women who were using contraceptive methods, since in that case we would be dealing with a demand for more effective family planning methods.

2.2 Therapeutic

Percentage of women and men with lesions or health problems who used health services

Definition

Quotient of the number of women that suffered some type of disease or lesion during the period of reference of the survey and used health services because of this problem, divided by the total of women in the population who declared to have had some type of disease or lesion, in a given period of reference and territory, multiplied by 100. The equivalent figure for men is calculated in the same way.

% of women with lesions or health problems who used health services because of that problem =
$$\frac{\text{Number of women who had some lesion or health problem and used health services because of that problem}}{\text{Total of women who had some lesion or health problem}} * 100$$

% of men with lesions or health problems who used health services because of that problem =
$$\frac{\text{Number of men who had some lesion or health problem and used health services because of that problem}}{\text{Total of men who had some lesion or health problem}} * 100$$

Relevance

This indicator evaluates differences between women and men regarding use of health services when they suffer a disease or lesion. The decision of these persons with a disease or a lesion to seek health services is a complex subject, because it could depend on resources available at home, service availability and quality, service accessibility, and perception of the severity of the disease or lesion. In cases of poverty, when women's health is underestimated, or where women give priority to the attention of children or other members of the household or other needs, they may be less prone to seek health attention than men (41).

The distribution of power inside the household which determines decision-making dynamics, and access to and control of financial resources, can also determine preferences about which members of the household have access to health services.

Required information

Number of women and men that had some lesion or health problem during the period of reference and sought attention or treatment in health centers because of that problem. Total of women and men who declared some lesion or health problem during the period of reference.

Sources of information

- Household surveys focused on perceived morbidity

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: less than 5, 5-14, 15-19, 20-34, 35-49, 50-64, 65 years and older
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Employment condition

Comment

This indicator could also be calculated according to type of disease or lesion.

3. QUALITY

Waiting time to receive health care, by sex

Definition

Quotient of the total time, measured in minutes, that women had to wait to receive health services, divided by the total of women who went to health-care centers, for a given period and territory. The equivalent figure for men is calculated in the same way.

Average time (in minutes) that women waited to receive health services =
$$\frac{\text{Number of minutes women had to wait to receive health services}}{\text{Total number of women who went to health services}}$$

Average time (in minutes) that men waited to receive health services =

Number of minutes men had to wait to receive health services
Total number of men who went to health services

Relevance

Waiting time to receive health services is a key indicator of health services quality. Several studies have shown that the long hours male and female users have to spend to obtain service, the time interval between the date they request the services and the date of the appointment, and/or the waiting time to be attended, represent severe problems that discourage users from seeking formal health attention, rather than promoting its use.

The time required to access health services is a particular obstacle for women, mainly due to the multiple responsibilities they have to fulfill in both the reproductive and productive spheres.

In the Region, modules about health in household surveys and health surveys collect data that make it possible to create indicators regarding waiting time to receive health services. The time will vary depending on the type of services and the sector covered by the health system, being longer in the public sector, which receives mostly people from less privileged sectors. And even if waiting time for women is not longer than that for men, women are the most affected, because they access health services in larger proportions, in particular due to their reproductive role and because their work day, which includes both paid and unpaid work, is longer.

Required information

Waiting time for women and men to receive attention in health care facilities. Total of women and men who visited health services facilities.

Sources of information

- Household surveys with a module about health
- Health surveys

Suggested disaggregation

- Zone of residency: urban and rural
- Sectors of the health system

Comment

As complements to the waiting time to receive attention in health centers, other indicators could be computed to show the time people have to wait to get an appointment, as well as the time interval between the date the appointment is requested and the actual date of the appointment (waiting lists).

Percentage of births by c-section

Definition

Quotient of number of births by c-section, divided by total number of births, in a given period and territory, multiplied by 100.

$$\% \text{ of births by c-section} = \frac{\text{Number of births by c-section in a given period of time}}{\text{Total number of births in that same period}} * 100$$

Relevance

Based on studies carried out by the WHO, the percentage of births by c-section should not be greater than 15%. A larger percentage means that inappropriate practices are being used for attention to deliveries.

There is evidence that one of the factors contributing to maternal mortality from complications during puerperium is indiscriminate practice of c-sections, because the relative risk of maternal mortality is up to 12 times higher in deliveries by c-section compared to vaginal deliveries.

Information from the Demographic and Health Surveys carried out in several countries of the Region during the 1990s shows that the percentage of births by c-section are concentrated in mothers with higher educational levels; in seven out of the nine countries, this percentage exceeded the recommended maximum value, reaching 46% among women with high school and higher education in Brazil.

Required information

Number of births by c-section and number of vaginal births in a given period and territory.
Total number of births in the given period and territory.

Sources of information

- Health surveys
- Household surveys with a module about reproductive health
- Statistical records of health centers and services

Suggested disaggregation

- Years of education of mother: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level
- Public or private sector

Availability of emergency obstetric services for every 100,000 women

Definition

Quotient of the number of facilities that provide emergency obstetric services (EOS), divided by the total number of women, multiplied by 100,000 women.

$$\text{EOS availability} = \frac{\text{Number of facilities that provide EOS}}{\text{Total number of women}} * 100,000$$

Relevance

Women's access to health care facilities with basic and comprehensive EOS will ensure adequate attention in case of complications during delivery, thus reducing the number of maternal deaths. Policies and actions must seek improved EOS coverage for all women.

In order to achieve a reduction in maternal mortality, the necessary resources must be allocated to properly equip EOS, train health personnel in basic attention to obstetric emergencies, and inform women about the true importance of taking advantage of qualified health services, taking into account their beliefs and cultural practices.

Required information

Number of facilities that offer basic and specialized EOS. Total female population.

Sources of information

- Health Ministries

Suggested disaggregation

- Geographic zone: urban and rural

Comments:

Facilities that offer EOS are those that provide at least four of the basic EOS (antibiotic administration, oxytocin-like drugs, antispasmodic medicines for cases of pre-eclampsia and eclampsia, manual extraction of the placenta, vaginal deliveries) and one of the two specialty EOS (surgery and transfusions).

Due to characteristics of countries in the Region, lack of transportation for emergencies may be a cause of death for poor women. The inclusion of an indicator that shows the presence of means of transportation for women with obstetric emergencies is therefore recommended; it could be average time for transportation during obstetric emergencies.

4. SERVICE EXPENDITURES

Out-of-pocket health expenditures, by sex

Definition

Amount in current US\$ of household average expenses in women's health, in a given period and territory. Amount in current US\$ of household average expenses in men's health, in a given period and territory.

Relevance

Financing for health care comes from public sector funds, and an important percentage from out-of-pocket expenses. Since the latter mostly affects women, it is considered a barrier to achieving equity in health.

From the gender equity perspective, contributions to finance the health care system should match people's economic capacity, and not their differential needs or risks by sex. This equity principle in health for women is not fulfilled; it has been shown that women

pay more in non-solidary systems, and that their capacity to pay is lower than that of men.

On one hand, a lower capacity to pay by women – mostly located in less recognized positions and with lower salaries in the labor market – does not relate to out-of-pocket expenses, which are generally greater for women. On the other hand, the cost of women's greater need for health care because of their reproductive role falls mainly on them, contradicting the equity principle that tries to distribute this cost of reproduction of the labor force.

In four countries of Latin America and the Caribbean in 1996 and 1997, out-of-pocket expenses in health were between 16% and 40% higher for women than for men (32).

Required information

Household expenses in health care for men and for women.

Sources of information

- Income and expenses surveys
- Household surveys, with modules about health including expenses

Suggested disaggregation

- Zone of residency: urban and rural
- Age groups: younger than 15, 15-49, 50-64, and 65 years and older
- Socio-economic level
- Specific population groups: ethnicity, migrants, displaced persons, refugees
- Types of expenses: appointments, examinations, medicines, other

IV. HEALTH CARE MANAGEMENT

In general, women's participation in health care, in a wider sense, is greater than that of men. However, in the health and medical care systems, their participation is equal to that of men. Decision-making, research and delivery of services is predominantly in the hands of men, while women are mostly concentrated among nurses and assistants, which are positions of less influence in decision-making and remuneration.

Given the gender roles, women have traditionally assumed responsibilities in production of health care services for other members of the household and the community. However, in spite of the sustained and crucial contribution of women to health, this contribution continues to be invisible, under-valued, and lacking support, because it is considered an intrinsic function of being female, a duty inherent in their condition, and an extension of their unpaid domestic work.

Women also contribute unpaid formal labor in the health sector, but this work is recognized in the sector. Female health promoters, for example, form squads to perform voluntary work.

In order to achieve equity in health management, a fair distribution of the actual cost of health services is required, not only between women and men, but also within families, the community, the government and the market. Equal participation of men and women is also required – and in particular the participation of sectors with less resources – in decision-making, defining priorities, and allocating resources for health.

1. PARTICIPATION IN THE LABOR MARKET

1.1 Formal

Women's participation in the health sector labor force

Definition

Quotient of the number of women working as physicians, odontologists, pharmacists, nurses, and hospital staff (assistants and technicians) on a salaried basis, divided by the total of persons employed in each one of the corresponding professions, multiplied by 100.

$$\% \text{ of women working as physicians} = \frac{\text{Number of women working as physicians}}{\text{Total number of women and men working as physicians}} * 100$$

(Same for odontologists, pharmacists, nurses, and hospital staff).

Relevance

In general, women have a greater predisposition to choose service employment, because the socialization process differentially motivates women and men to select certain activities, occupations and functions considered to be in accordance with stereotypes that culturally define their gender. This causes a high proportion of the female labor force working in the area of health, especially as assistants.

There are differences in terms of professions and specializations in the health sector, as well as in terms of levels of autonomy, decision-making and remuneration between women and men, also due to gender inequalities. In this sector, women have traditionally been under-represented in

positions of more power and decision-making capacity, a situation that places them at a disadvantage with regard to definition of priorities and allocation of resources, and in decisions about reduction of personnel.

In the Region, women represent approximately 80% of the total amount of workers in the health sector, but they are concentrated in the positions with lower salaries, decision-making power, and prestige. In Argentina in 1999, 27% of the total of women employed in the public and private health sectors were health professionals, while the rest were technicians, operators and non-qualified personnel (42).

Required information

Number of women and men working in the health sector as physicians, odontologists, nurses and hospital staff.

Sources of information

- Employment surveys with records about profession and sex
- Administrative records of services and health care facilities
- National records of professionals

Suggested disaggregation

- Sub-sector of health: public, private, social health system

Percentage of women enrolled in the different branches of medical sciences

Definition

Quotient of the number of women enrolled in schools of medicine, odontology, pharmacy and nursing, divided by the total population enrolled in these schools, for a given territory, multiplied by 100.

$$\% \text{ of women enrolled in medical schools} = \frac{\text{Number of women enrolled in medical schools}}{\text{Total number of women and men enrolled in medical schools}} * 100$$

(Same for odontology, pharmacy, nursing).

Relevance

Choosing service-related university careers has been a constant for women. Statistics from universities have systematically shown that there are a greater proportion of women enrolled in professions oriented toward the care of others. The health sector is no stranger to this phenomenon – a high proportion of women enroll every year in health schools, especially in those that demand less time to finish, such as nursing. However, every day there are more women who enroll in medical schools.

In the United States between 1999 and 2000, 44% of the persons enrolled in medical schools were women, while between 1980 and 1981 they represented only 6.5%. In nursing schools

during 1999-2000, 89.8% of students were women – a reduction of 4.5% with respect to 1980-1981. In public health and pharmacy, women represented 67% and 65% of students respectively in 1999-2000 (31).

Limited existing information in most countries of the Region about the path of persons enrolled in universities and higher education centers, does not allow us to know the percentage of women enrolled who were able to finish their studies, and what percentage carried out remunerated activities in their profession.

Required information

Number of women and men enrolled in schools of medicine, odontology, pharmacy and nursing.

Sources of information

- Statistics from universities and higher education centers

Suggested disaggregation

- Public and private universities

Percentage of women graduates in the different branches of medical sciences

Definition

Quotient of the number of women graduates in medicine, odontology, pharmacy and nursing, divided by the total number of graduates in the corresponding professions, multiplied by 100.

$$\% \text{ of women graduated from medical schools} = \frac{\text{Number of women graduated from medical schools}}{\text{Total number of women and men graduated from medical schools}} * 100$$

(Same for odontology, pharmacy and nursing).

Relevance

Women's greater tendency to choose service employments results in a high proportion of the female labor force dedicated to activities in the health sphere, especially as health assistants. There is evidence showing differences in terms of professions and specializations and in the levels of autonomy, decision-making and remuneration of women in the formal health sector.

It is essential to know the proportions of women who graduate in different branches of medical sciences in universities, as a way to predict their participation in the health formal sector; especially because women have traditionally been less represented in occupations in the health sector with more power and decision-making capacity, placing them at a disadvantage in defining priorities and allocating resources, and making decisions about reduction of personnel. In the Region, women represent approximately 80% of health workers, but are concentrated in the less well-paid positions, with less decision-making responsibilities and prestige.

Required information

Number of women and men graduated as physicians, odontologists, pharmacists, nurses and hospital staff.

Sources of information

- Statistics from universities and higher education centers

Suggested disaggregation

- Public and private universities

Women's participation in unpaid work in the formal health sector

Definition

Quotient of the number of unpaid women that are not part of health care personnel, but carry out health administration activities recognized by the health sector, divided by the total number of persons who carry out these activities without any remuneration, multiplied by 100.

$$\text{Women's participation in unpaid work in the formal health sector} = \frac{\text{Number of unsalaried women who carry out activities recognized by the health sector}}{\text{Total number of unsalaried women and men who carry out activities recognized by the health sector}} * 100$$

Relevance

Health promotion, teams and voluntary work are considered fundamental factors within health administration. In most Latin American and Caribbean countries official health systems are supported by the work of health promoters, mostly women who lend their services in their communities voluntarily, without any remuneration.

Policies of different sectors must be formulated taking into account the fact that the time women dedicate to health promotion, teams and voluntary work is not unlimited. Therefore, continuation of policies that rely on women's unpaid work does not ensure long-term sustainability. On the other hand, such policies must seek to include men in health administration, contributing to gender equity in health matters.

Required information

Records of local health committees, statistics of voluntary work in the health sector.

Sources of information

- Ministry of Health

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more

1.2 Informal

Daily time (in minutes) that women and men dedicate to health services production at home, without remuneration

Definition

The number of minutes per day that women dedicate to take care of the diseased, disabled, persons that cannot look after themselves, and to take members of the household to receive health services, as part of their unpaid domestic activities. The equivalent figure for men is calculated in the same way.

Relevance

Women are the main providers of primary care – the ones who fetch water, prepare food, feed children, take care of the diseased, children, the elderly and disabled; it is the mothers who in general take their children to receive health care, and the ones that teach their family basic notions about hygiene and cleanliness. It has been estimated that in Canada 90% of health care takes place at this informal level, and that three-fourths of all diseases are tended to outside of the formal health system. This unpaid production of health services is frequently carried out by women, sacrificing their free time, which they could otherwise dedicate to paid work or, if they are already in the labor market, to find a better job.

A great deal of the achievements of primary health care programs in the fields of nutrition, family planning and children care, has traditionally been the result of unpaid work carried out by women. Many activities in the health sector have essentially been designed to rely on women's participation. Moreover, policies for health sector reform, which are being implemented in several countries of the Region, consider moving some functions of the formal health system to households, which would entail an additional work load for women.

On the other hand, population ageing and a greater prevalence of chronic diseases also means a greater demand for care services at home, which represents a physical and emotional overload for women.

Measuring and valuing unpaid work of taking care of the diseased, disabled and those who cannot look after themselves, taking place in households, will make it possible to specify a satellite account for this unpaid contribution within the framework of a National Accounts System, contributing to sectorial decision-making with a gender perspective.

Required information

Time in minutes that men and women dedicate, within their households and without remuneration, to take care of the diseased, disabled and those who cannot look after themselves, and to take them to receive health services.

Sources of information

- Surveys about use of time
- Household surveys with a module about use of time
- Case studies

Suggested disaggregation

- Zone of residency: urban and rural
- Years of education: 0-5, 6-9, 10-12, 13 and more
- Socio-economic level of household
- Activity condition of care givers

Comment

It is recommended that surveys about use of time (or modules of surveys that capture information about use of time) include disaggregations of time dedicated to attention of the diseased and disabled, and time spent taking them to health care facilities.

Daily time (in minutes) that women and men dedicate to the production of health services in the community, without remuneration

Definition

The number of minutes per day that women dedicate to caring for the diseased, disabled and those who cannot look after themselves, and to take other members of the community (excluding relatives) to receive health services, as part of their unpaid domestic activities. The equivalent figure for men is calculated in the same way.

Relevance

In addition to being the main providers of primary care, and care for children, the elderly, the disabled and those who cannot look after themselves within households, women are also the main providers of health care in the community. In order to fulfill this socially assigned responsibility, they have to find a way to accommodate these activities with their daily tasks, many times sacrificing their free time, which they could dedicate to salaried work, or to finding a better job. As a result, many women, in addition to their reproductive and productive roles, play a third role in community work.

Gender equity-based actions must take into account the joint responsibility of men in the production of health care services, and establish incentives such as mechanisms of acknowledgement for those who produce health care services without remuneration.

This unpaid work has remained invisible and unrecognized. Its measuring and corresponding valuation would make it possible to include this unpaid contribution within the National Accounts System through a satellite account, enabling integration of this element of health management into the formulation of public health sector policies.

Required information

Time in minutes that men and women dedicate to take care of the diseased, disabled, and those who cannot look after themselves, and to take other members of the community (excluding relatives) to receive health services, without remuneration.

Sources of information

- Surveys about use of time
- Household surveys with a module about use of time
- Case studies

Suggested disaggregation

- Zone of residency: urban and rural
- Activity condition of care givers
- Level of education of the persons who provide care

Comment

It is recommended that surveys about use of time (or modules of surveys that capture information about use of time) include disaggregations of time dedicated to attention of the diseased, and disabled, and taking other members of the community (excluding relatives) to health care facilities.

2. PARTICIPATION REGARDING REMUNERATION

Salary differences between women and men in the health sector

Definition

Number of women who work in the health sector as physicians, odontologists, pharmacists, nurses, hospital staff, according to the following salary ranges (measured in Minimum Salaries-MS): up to 3 MS, +3 to 10 MS, +10 to 20 MS, +20 to 30 MS, +30 MS. The equivalent figure for men is calculated in the same way.

Relevance

In general, women are greatly over-represented in the areas of health with lower salaries, such as nursing, and under-represented in the levels and specializations of more prestige and higher salaries.

Within the health sector in Brazil in 1980, 11,361 female nurses represented 94% of the total number of nurses; 252,253 women working as nursing assistants represented 84% of the total in that area; in pharmacy, 2,210 women represented 37.7%; in odontology, 15,542 female professionals represented 28.2%; and in medicine, 20,992 women represented 20.6%. This means that the great majority of women were concentrated in the levels of nursing, in the lower salary ranks, i.e., up to 10 MS; while men predominated starting from the third salary scale group, i.e., 10 MS or more (40).

Required information

Specific remunerations and occupations of women and men employed in the health system.

Sources of information

- Household surveys
- Records of remunerations of health sector personnel

Comments:

In many countries it will be very difficult to obtain this indicator for the general health system; it will be possible to estimate differences in the public health sector.

Other groups of professionals could be included, such as educators in medical careers, according to availability of information.

This indicator could also be calculated as a proportion between average salaries of women in each one of the health professions, with respect to average salaries of men in the corresponding professions.

3. PARTICIPATION REGARDING POWER

Women's participation in the spheres of political and financial decisions

Definition

Quotient of the number of women participating in decision-making levels in the health system, divided by the total of persons working in the corresponding levels, multiplied by 100.

Decision-making levels would be:

- Parliamentary commissions on health and budget
- The three highest levels of the ministry of health
- Primary provincial authorities on health
- The three highest levels of the ministry of economy

Women's participation in the Parliament's Health Commission =
$$\frac{\text{Number of Women in the Parliament's Health Commission}}{\text{Total number of women and men that are part of the Parliament's Health Commission}} * 100$$

(Same for other levels).

Relevance

Women's participation in decision-making levels of the political and economic spheres is one of the commitments mentioned in several international agreements. Processes to promote women's presence in popularly elected positions have been launched in the different countries of the Region, especially by means of quota laws for women's political participation.

In levels where health policies are formulated at national and local levels, and in the spheres where budgets are elaborated, there are still some shortcomings that must be addressed in order to ensure that policies and budgets are made and executed taking women's specific needs into account.

This indicator makes it possible to observe women's degree of participation in levels where priorities are decided and resources allocated, as well to monitor the progress or regression of women's participation in the decision-making spheres.

Required information

Number of women and men in health and budgetary commissions in Parliament. Number of women and men in the three highest levels of the ministry of health. Number of men and women as primary provincial authorities in health. Number of women and men in the three highest levels of the ministry of economy.

Sources of information

Official records of designations. Personnel statistics of the ministries of health and other health institutions of the same level.

Suggested disaggregation

National and provincial level, depending on the case.

V. SELECTED INDICATORS

1. SELECTED INDICATORS FOR GENDER EQUITY ANALYSIS IN HEALTH¹⁵

The indicators proposed for gender equity analysis in health will help to make clear existing differences in various population groups regarding basic aspects of health, such as accessibility to health services, financing of services, and health care management.

Twenty-eight indicators have been selected from those proposed in this document, taking into account the possibility of obtaining information for their construction in most of the Region's countries. In the sphere of health, emphasis has been given to diseases that affect only women or subgroups of women; are more prevalent among women or subgroups of women; more serious among women or subgroups of women; and diseases for which risk factors differ between women and men.

Furthermore, indicators about mortality from causes that have traditionally affected men more than women, but are becoming more and more important among women or subgroups of women, have been included, based on suggestions from female experts about issues of health and gender in the Region.

Indicators related to the use of reproductive health care services have been included in health care. Financing of health care services includes an indicator about differences in contributions of men and women; and in health management, there is an indicator about women's participation in the different health professions.

This list of selected indicators may be adapted according to the needs and reality of each country, either by adding other indicators, or by including new disaggregations, depending on the availability of information.

The following is the list of 28 the indicators selected to carry out a gender equity analysis in health. For each indicator, we provide the page number in which its definition, information required for its estimation, possible sources of information, and suggested disaggregations can be found.

¹⁵ Indicators in this list were selected from the basic indicators for analysis of gender equity in health.

STATE OF HEALTH

1. Life expectancy at birth, by sex

Relevance

This indicator is a combination of factors that have an effect on risks of death. In all countries of the Region, life expectancy for women is greater than it is for men. It seems that this differential is due to biological elements and environmental and social factors related to life styles, such as tobacco addiction, alcohol consumption, traffic accidents and accidents at work, and violence. Although the situation is changing, these are risk factors for men and protecting factors for women.

Greater women's longevity does not necessarily mean that they enjoy better health levels, because they are therefore more exposed to chronic diseases and disabilities. In cases where women's life expectancy does not exceed men's life expectancy, it could be assumed that women's advantages of survival have disappeared because of the serious mortality risks that surround them.

More information: page 50.

PREVENTABLE MORTALITY

MORTALITY PREVENTABLE THROUGH IMMUNIZATION

2. Mortality in 1-4 year-old children from causes of mortality preventable through immunization, by sex

Relevance

After the first year of life, risks of getting sick and dying are mainly related to infant care and environmental conditions, the complementing and reinforcement of vaccination plans, consumption of adequate food, effective prevention and treatment of major diseases in the age group (respiratory infections and acute diarrheal diseases), and prevention of accidents at home.

For genetic reasons, it is expected that mortality among children will be greater for girls, as is the case in all developed countries and in the greatest majority of less developed countries. The greater mortality detected among girls may be considered an important indicator of the existence of a social problem, such as discrimination.

More information: page 51.

MORTALITY PREVENTABLE THROUGH TIMELY DETECTION AND TREATMENT

3. Maternal mortality ratio

Relevance

This is a significant indicator of women's reproductive health risks. The disparity shown by this indicator between countries with different levels of development means that most of these deaths could be avoided if preventive and care measures are taken opportunistically.

The fact that mortality from factors related to pregnancy, delivery and puerperium complications continues to appear among the primary causes of death in women of child-bearing age in the Region is an indisputable evidence of inequity, considering that these deaths are essentially preventable – the main causes and factors that determine them are well known, and the scientific knowledge and simple technology to avoid them has been available for many years. The possibility of cultural, economic, and geographic access to high-quality health services that can detect risk at an early stage may substantially reduce the number of maternal deaths through prenatal attention, availability of essential elements for obstetric attention, and suitable supply of information to avoid unwanted pregnancies.

Difficulties in determining the actual number of women that die during pregnancy, delivery and lactation shows the low relative priority that is still given to this issue. Important under-reporting has been detected in Latin America and the Caribbean, but in spite of this, complications of pregnancy, delivery and puerperium continue to be one of the main causes of mortality among 15-19-year old women in several countries of the Region. Notwithstanding this under-reporting, maternal mortality is an indicator of human development that shows significant differences between developed and less-developed countries. As a cause of death, abortion is even more under-reported than other maternal causes of death, because of the illegal nature of this procedure in most countries in the Americas.

More information: page 53.

4. Mortality from malignant neoplasms of the uterus

Relevance

In Latin America and the Caribbean, cancer of the uterus represents an even more extensive public health problem than breast cancer. This situation persists in spite of the fact that simple, efficient and low-cost technology to detect it in its early stages, with a high probability of cure, has existed for over 50 years: the vaginal smear test conceived by Papanicolaou.

The transcendence of this problem, in terms of public health, lies not only on the high frequency of this cancer, but also on the fact that women in the lowest socio-economic levels are the most affected.

In the countries of the Region where there is information available, the lowest estimated mortality rates from malignant neoplasms of the uterus are those of Canada, the United States, and Puerto Rico, and the highest are in Paraguay, Peru, and El Salvador (14). In Canada and the United States mortality rates from cervical uterine cancer have decreased substantially since the 1960s, due mainly to detection programs and timely access to services.

More information: page 54.

MORTALITY PREVENTABLE BY APPLYING A SET OF MEASURES

5. Mortality from lesions and intoxications of non-intentional origin, by sex

Relevance

The causes for a greater predisposition of males towards risk behaviors are reinforced and perpetuated by opposing cultural definitions of masculinity and femininity that act as destructive factors for men and as protective factors for women. Differences in socialization to assume and develop certain forms of behaviors considered more appropriate for each sex are translated into differentials in health risks between women and men. In this way, men are more exposed to accidents than women, and differences in mortality rates between men and women are even wider in young adults. Other factors related to men running greater risks of accidents than women result from the larger proportion of men than women who work in production fields and work places with greater risk.

In all countries of the Region for which there is information available on mortality from external causes (including lesions of non-intentional origin and those intentionally self-inflicted), estimated mortality rates from external causes is greater for men than for women; in 1997, in Colombia, the estimated mortality rate for men reached 232.6 per 100,000, while for women it was 39.7 (14).

More information: page 60.

6. Mortality from intentionally self-inflicted lesions, by sex

Relevance

Differences in socialization to assume and develop certain forms of behaviors considered more appropriate for each sex, are translated into differentials in health risks between women and men. A greater predisposition of males towards aggressive, reckless, independent, violent and risk behaviors that may have a biological component (still a controversial issue), is reinforced and perpetuated by opposed cultural definitions of masculinity and femininity that act as destructive factors for men and protective factors for women.

Although the tendency points to the greatest male mortality from suicide, in some cases mortality from suicides is greater for women, as, for instance, among adolescents in Colombia and Brazil. In general, frequency of suicide attempts is greater among women than among men.

A slight increase in mortality rates from suicide and self-inflicted lesions in men was observed in the Americas between 1984 and 1994, going from 13.5 to 13.8, and a decrease was observed in women, whose rate went from 3.9 to 3.3. An increase in suicides among women in Mexico is noteworthy, going from 0.4 to 1.1 during the same period (28). The magnitude of estimated mortality rates from suicide and self-inflicted lesions in Cuba, Canada and Uruguay is interesting. For 1997, in Cuba, rates of 25.3 for men and 12.1 for women were estimated; in Canada, 10.7 for men and 5.4 for women; and in Uruguay, 21.3 for men and 5.4 for women (14)

More information: page 61.

7. Mortality from homicides and lesions intentionally inflicted by another person, by sex

Relevance

Differences in socialization to assume and develop certain forms of behavior considered more appropriate for each sex, as is the case in solving problems through violence for men, are translated into differentials in health risks between women and men. In consequence, the greatest predisposition of males towards violent risk behaviors is translated into larger mortality rates from homicides and lesions intentionally inflicted by another person in men, as compared to women.

According to a study carried out by the World Bank (29) in 1990 in Latin America and the Caribbean, women lost 320,000 years of healthy life due to premature death and disability caused by homicide and violence, while men lost 3,080,000, i.e., 9.6 times more for men.

For countries for which there is information available, in 1997 Colombia had an estimated mortality rate from homicides and lesions intentionally inflicted by another person of 142.9 per 100,000 men, and 12.6 per 100,000 women; El Salvador had estimated rates of 87.5 and 9.1 for men and women respectively (14).

More information: page 62.

OTHER CAUSES OF PREVENTABLE MORTALITY (TO A LESSER DEGREE THAN THE ABOVE)

8. Mortality from breast cancer in women

Relevance

Breast cancer is increasingly affecting women in the Region. Mortality rates, although higher among women of more developed countries, are rapidly growing among relatively developed countries in the Region.

In addition to the hereditary component associated with breast cancer, there are other elements such as an early first menstruation, a late menopause, and delivering a first child after 30 years of age. There is also literature associating breast cancer with the presence of stress factors such as bad marital relationships, abandonment by the spouse, or death of a child; likewise, breast cancer may be related to other aspects such as environmental contamination, smoking habits, nutritional habits, and use of replacement hormone therapy during the climacteric.

Among estimated mortality rates from malignant neoplasms of the breast in women, available for almost all countries of the Region, the highest are in Uruguay (38.8), Canada (33), and the United States (30.5), and the lowest in El Salvador (4) and Nicaragua (5.8) (14).

More information: page 66.

9. Mortality from hypertensive diseases, by sex

Relevance

Among women, hypertension is more prevalent in groups with lower income and educational levels. Foods seasoned with too much sodium chloride, as well as factors associated with the climacteric, are concrete reasons for hypertension symptoms to appear.

According to an analysis carried out by the PAHO with data from 1960-1994, available for 13 countries of the Region, rates of potential years of life lost (PYLL) from hypertensive disease increased only in Nicaragua. In Colombia, El Salvador, Mexico and Venezuela the PYLL rates remained stable; and in the other countries analyzed (the United States, Canada, Chile, Argentina, Trinidad and Tobago, Barbados, Costa Rica, and Cuba) the rates went down. In Barbados, Colombia, Mexico and Nicaragua, the PYLL rates for women were consistently higher than for men throughout the period studied. For the 1990-1994 quinquennium, the United States and Canada were the countries with the highest PYLL rates; in Canada for every potential year of life lost by women, men lost two years (28, p. 174).

More information: page 67.

10. Mortality from diabetes mellitus, by sex

Relevance

Diabetes mellitus is one of the main public health concerns in the Region. Increase in overweight, as well as sedentary life-styles and population ageing, contribute to the risk of developing diabetes mellitus; on the other hand, diabetes is a risk factor for the development of cardiovascular diseases, blindness and kidney damages, and loss of lower extremities. Many cases of diabetes may be prevented with a healthy diet and physical exercise, and complications may be reduced by maintaining a healthy weight, eating low-fat food high in fiber content, stopping smoking, exercising regularly, and keeping high-blood pressure under control.

Out of the 40 countries for which there is information available (last year available: 1992, 1997), 34 show greater estimated mortality rates from diabetes for women than for men (14). During the 1990s in North America, the ratio of mortality from diabetes in women and men was 1.33: 1, and in Latin America it was 1.2: 1 (ratios not adjusted by age) (28, p. 184). Between 1980 and 1994, the English Caribbean experienced a 147% increase in number of deaths from diabetes mellitus, being the third most important cause of potential years of life lost among women, and the tenth among men (28).

In consequence, the health sector must make special efforts to prevent diabetes and improve effectiveness of care of persons affected with this disease, especially considering that, according to projections from PAHO for the year 2010, an increase in cases of diabetes relative to that estimated for 1994 is expected, going up to 74% in the Caribbean Islands, 40% in South America and 25% in Canada and the United States (28, p. 184).

More information: page 68.

MORBIDITY AND PREVENTABLE LESIONS

NUTRITION

11. Prevalence of anemia in women of child-bearing age

Relevance

Iron deficiency in the majority of cases of anemia is the most common known form of nutritional deficiency. Its prevalence is high among boys and girls, and among women of child-bearing age, especially among pregnant women. Women develop macrocytic anemia from gastric deficiencies,

severe stress and lack of complex B vitamins. Sickle cell anemia may increase as a result of several nutritional deficiencies.

With the onset of menstruation, women's iron requirements increase and are intensified during pregnancy and lactation. Between the beginning of menstruation and menopause, women need to absorb iron in proportions three times those of an adult man, and even more when women use intrauterine devices. In many cases, fulfilling these requirements is hindered by cultural patterns that perpetuate or aggravate the existing deficit. For instance, in poor sectors, women's nutritional deficit due to lack of resources is aggravated by patterns that grant privileges to men in intra-family food distribution, in particular the food that contains animal protein, the main source of iron.

Anemia from iron deficiency has been recognized at global and regional levels as women's greatest nutritional problem, in particular among pregnant women. More than one-fourth of women in the Region suffer iron-deficiency anemia; however attention is given to this problem only in prenatal services, whose coverage is limited, while iron deficiency and education about food nutritional value should start during childhood.

More information: page 72.

12. Prevalence of obesity, by sex

Relevance

Many countries are experiencing a marked increase in the prevalence of overweight and obesity, to such a degree that this ailment has become an epidemic in the Region. Overweight, in particular obesity in adults, increases risks of morbidity and mortality associated with hypertension, heart diseases, cerebrovascular diseases, diabetes mellitus, respiratory diseases, gallbladder ailments, some types of cancer, gout, arthritis and other chronic diseases.

There is evidence showing that obesity is more frequent in women than in men, and that the greatest incidence occurs among groups with the lowest income. In situations of economic hardship, women tend to eat more carbohydrates from different sources, according to habit and regional use.

In Uruguay, prevalence of obesity among women of low socio-economic levels was above the estimated prevalence for the group of higher socio-economic levels (28). In the United States, between 1997 and 2000, prevalence of obesity in the adult population went up 12%, from 19.4% to 21.8%; for the year 2000, one out of every four women, as well as one out of every four men, between 40 and 59 years old, said that they were affected by obesity, with the non-Hispanic black population being the most affected, of whom 35.8% declared themselves to be obese (31).

In addition to health problems, physical image affects women more than men, because they have to face greater limitations in opportunities, especially in the labor market, where employers frequently demand certain personal appearance stereotypes.

More information: page 74.

INTRA-FAMILY VIOLENCE AND SEXUAL ABUSE

13. Prevalence of intra-family violence, by sex

Relevance

Violence is a violation of human rights. Intra-family violence affects women, boys and girls for the most part. Recognizing that violence against women is a public health problem is the result of a progressive understanding of the damage that domestic violence and rape cause to women's health. Physical and emotional violence has multiple effects on health, ranging from the loss of lives, to lesions and disabilities left by physical and psychological wounds, some of which are permanent. Among the pathologies and behaviors originating in intra-family violence are suicide, homicide, sexually transmitted diseases, spontaneous abortion, chronic pelvic pains, headaches, gynecological problems, abuse of harmful substances, self-destructive behaviors, irritable colon syndrome, partial or permanent disability, post-traumatic stress, depression, anxiety, sexual dysfunction, and eating, multiple personality and obsessive-compulsive disorders.

Evidence has shown that boys and girls who are witnesses or victims of violence at home are not healthy and have behavioral problems. And, if they have been sexually abused, boys and girls are traumatized and have problems with establishing relationships and trusting other people, essential aspects for healthy development.

Only a few countries have carried out surveys of intra-family violence to collect information on its prevalence. However, in local studies carried out in Latin America, between 25% and 50% of female respondents claimed to have been the object of physical abuse at some time by current or former partners. These investigations have made it possible to gather more information about the characteristics of violence. It is known that physical abuse against women comes from their partners between 70% and 90% of the times; the age group with the highest probability of suffering domestic violence is between 20 and 39 years of age; the group most vulnerable to sexual abuse is between 11 and 16 years of age; out of all women who are victims of homicide, between 45% and 60% were killed in family surroundings, most of them by their spouses; and a high percentage of aggressors and victims come from families in which there was domestic violence.

Demographic and Health Surveys carried out in Colombia and Peru show that 41% of women of child-bearing age have been victims at some time of physical violence inflicted by their husbands or partners. In Nicaragua the percentage reached 29%, and in Haiti 27% (32).

Although abuse appears as an important factor in determining diseases and lesions among women, boys and girls, medical professionals still continue to ignore it. For instance, in studies carried out in the United States, it was shown that between 17% and 25% of the total of cases attended in emergency units were abused women. However, people who provided those services identified less than 5% of the lesions or diseases as derived from abuse (33).

More information: page 76.

14. Rate of demand for care due to intra-family violence, by sex

Relevance

Different actions implemented in the Region on the issue of intra-family violence have contributed to open public discussion of the subject, and have encouraged women – the most affected – and men to take advantage of the instances that have been created to help in these

cases. Some of the attempts at solutions include: the promulgation and application of laws for preventing and taking care of intra-family violence, creation of models of attention including community participation for the attention and punishment of intra-family violence cases, training of health, education, police and judicial personnel. All this accumulation of solutions, promoted mostly by women's NGOs, has caused women to increasingly seek for help from appropriate sources to report cases of violence and to ask for psychological and legal support.

In Guayaquil, the largest city in Ecuador, the number of reports of intra-family violence registered in 1994 rose to 6,000, and in 1997 the number reached 16,400 (20). Protocols have also been integrated into the health sector to identify cases of intra-family violence and provide appropriate support.

The number of cases of intra-family violence reported, or identified and attended to in the health sphere, is not a measure of the prevalence or incidence of this type of violence, but on the one hand, it is a measure of the level of openness, availability and accessibility women and men have to file their reports, and on the other hand, of the effective demand of services due to intra-family violence. Information being collected about intra-family violence is critical for the formulation of policies aimed at focusing on and preventing violence.

More information: page 77.

MENTAL HEALTH

15. Prevalence of depression, by sex

Relevance

The most common of the mental ailments is depression, which may be mild or very severe, and it has particular importance in women's mental health, among whom its prevalence is greater than among men. According to the Global Burden of Disease 2000 (GBD), it has been estimated that the exact prevalence of unipolar depression among women is 3.2% and among men, 1.9%.

According to a study carried out by the World Bank in 1990, in Latin America and the Caribbean the number of years of healthy life lost from premature death and disability due to depressive disorders rose to 1,180,000 among women and 570,000 among men, i.e., two times more for women than for men (29).

According to the survey on Health, Wellbeing and Aging (HWA), prevalence of depression among the people interviewed ranged between 4% in Georgetown, Barbados and 18% in Montevideo, Uruguay (34).

As a result of these investigations, it has been suggested that there is a relationship between depression and infertility, a conflictive marital situation, a household without a spouse, physical violence and sexual abuse, poverty and, among older adult females, loneliness from abandonment by relatives, loss of their role, and the "empty nest" syndrome (19).

More information: page 80.

SEXUAL AND REPRODUCTIVE HEALTH

16. Percentage of women with living partners who use modern contraceptives

Relevance

The ability to plan number of children and birth spacing is a fundamental right of individuals and couples, which has been recognized in some international documents. Access to information and the availability of a range of contraceptive methods and high-quality family planning services are crucial aspects for facilitating women's and men's exercise of their right to plan births.

Use of contraceptive methods is a fundamental element to ensure reproductive health care. There are a variety of preferences and ways to assess risks and benefits of each contraceptive method. This indicator measures extent of use of contraceptive methods and distribution of methods used; for this reason, a strong concentration of users in one or two methods may be a sign of a limited offer or access.

From a gender perspective, supply of methods to provide men and women the possibility to share the responsibility of family planning is important. For this reason, it would be useful to estimate contraceptive use by groups of women-oriented and men-oriented methods. Those used by women are: the pill, intrauterine devices, injections, vaginal methods, female sterilization, and female condom; methods that involve men's cooperation are male sterilization and condoms.

In Latin America and the Caribbean, only 22% of couples use methods that require participation of the man (36). Most modern methods leave the responsibility of prevention of unwanted and high-risk pregnancies to women.

More information: page 85.

17. Percentage of 15-19 year-old women who are pregnant or have had at least one child

Relevance

Maternity among adolescents is associated with possible complications during pregnancy and delivery, and as a consequence, it contributes to higher maternal mortality, which is aggravated by the fact that adolescents usually neither seek nor receive necessary prenatal care.

Pregnancy during adolescence may have a devastating effect – young mothers may lose their autonomy by asking for help from their parents or other persons, and are often forced to interrupt their studies, hindering their personal and social development and their future economic progress. Particular risks include anemia, malnutrition, delays in fetal growth, premature delivery, and complications during delivery. In addition, children of adolescent mothers are usually more exposed to diseases, traumas, and abuse, and may later show other complications, such as deficient infant nutrition and a greater frequency of infectious diseases, especially in groups of at lower socio-economic levels.

According to Demographic and Health Surveys carried out in several Latin America and Caribbean countries, the percentage of adolescent women that had a child or were pregnant before 20 years of age, as compared to the total of adolescent women, shows ranges between 27% in Nicaragua (2001), and 13% in Peru (2000).

More information: page 90.

18. Average age of mothers at birth of first child

Relevance

Pregnancies at early ages, as well as late pregnancies, are risk factors for maternal and infantile mortality.

Aside from being associated with medical and demographic aspects, pregnancy during adolescence is linked to other aspects related to mothers' and children's life quality. Adolescent mothers face obstacles in their educational and social development, limiting their options to participate in economic, social and political spheres under better conditions. As a result, the age of mothers when their first child is born is a key indicator of opportunities to develop women's human capital.

Based on information available from the Demographic and Health Surveys carried out in the year 2000, it has been estimated that the average age of women between 25 and 49 years old when they had their first child was 21.9 in Peru and Haiti, and 22.1 in Colombia. Education has a decisive effect on this age. The highest the level of education, the older the mother is when she has her first child. In Colombia, the difference in average age of women when their first child is born, among women without education and those who have reached secondary or higher education was 3.1 years.

More information: page 89.

19. Registered incidence of HIV/AIDS, by sex

Relevance

Although in general most cases of HIV/AIDS occur among men, its spread is rapidly increasing among women, reaching higher proportions among women of the English-speaking Caribbean, the Latin Caribbean and the Central American isthmus and, within the latter, particularly in Honduras, especially in the group of youngsters between 15 and 24 years old. A decreasing men:women ratio has been observed in several Latin American countries with respect to new cases of HIV/AIDS (39).

Transmission of the epidemic has gone from groups considered to have high-risk practices (drug injectors, men having sex with men) to the general population. From a social point of view, an unequal distribution of power determined by gender relationships, and mediated by race, social class, age and certain cultural practices, prevents many women from protecting themselves, and rather places them in a situation of greater risk of sexual transmission of HIV/AIDS. This greater vulnerability of women to HIV/AIDS transmission is partially explained by biological characteristics associated with a greater exposure of the vaginal mucous during intercourse, especially at young ages; but it is also due to limitations in access to information about sexual and reproductive health, and to the lack of negotiating capacity about risk-free sexual relationships.

In addition to this greater vulnerability of women to HIV/AIDS transmission, they are also subjected to greater discrimination and stigmatization than men when they become carriers of the virus, and the probability of becoming victims of intra-family violence may increase.

HIV/AIDS is also a factor in developing long-term diseases and disabilities, and for women, the main producers of health services at home and in the community, it represents an additional unpaid work load, with consequences for their physical and emotional health.

More information: page 94.

HEALTH CARE

ACCESS TO AND USE OF SERVICES

COVERAGE

20. Percentage of adult population affiliated with health insurance plans, by sex

Relevance

In many countries, only a minority of the population – in particular people related to the formal labor market – has access to health care coverage through insurance plans. In this case, women are less covered than men, because they work mostly in the informal sector of the labor market, predominantly in domestic work and as unpaid relatives, where access to insurance plans is almost absent. Access to insurance plans with health coverage may provide financial protection against impoverishment due to the expenses that could be caused by need of attention in the face of an incident requiring health services.

Access to an insurance plan as a dependent of the policyholder means that the person would not have by her- or himself the right to access health services and, as a result, the dependent would be vulnerable, subject to the policyholder's and couple's stability. Many women are in this situation, which is aggravated by the fact that some insurance plans offer different services for policyholders and dependents, with dependents receiving lower quality services.

More information: page 100.

21. Family planning coverage in insurance plans

Relevance

Responsibilities and costs of reproductive health, particularly of family planning, generally fall on women only, not taking into account that human reproduction is social and therefore must be shared by different sectors of society.

Many insurance plans exclude family planning as a component of sexual and reproductive health, because their coverage focuses on pregnancy, delivery and puerperal care.

In addition to attention during pregnancy, delivery and puerperium, existing maternal insurance plans in several countries of the Region in many cases include children care up to certain ages. For instance, in Ecuador attention is provided to children up to 5 years of age, and in addition, includes sexual and reproductive health programs, with timely detection of cervical-uterine cancer, and access to family planning methods.

More information: page 101.

USE OF SERVICES

22. Percentage of women who had at least 4 health care appointments during their last pregnancy

Relevance

Based on results from studies carried out by the WHO, it is recommended that qualified health personnel perform at least four control appointments during pregnancy. It has been established that with 4 or more control appointments during pregnancy, substantial improvements can be achieved in identifying complications, thus preventing many maternal deaths.

Pregnancy care through periodic health care control appointments is one of the determinants associated with healthy results for mothers and children. Control visits during pregnancy make it possible to identify indications of conditions that may be present during pregnancy and require special attention, as well as to obtain vaccinations against tetanus, and treatment against malaria and anemia. It also makes it possible to detect and deal with high-risk cases that may arise during pregnancy and delivery.

This indicator shows the usefulness of health services in providing a healthy maternity for mothers and children, thus preventing unfair death, and contributing, in addition, to the achievement of the Millennium Development Goals regarding maternal mortality, which is a commitment of all the member states.

More information: page 103.

23. Percentage of women attended by qualified health personnel during delivery

Relevance

Some hard-to-prevent complications of a pregnancy may occur at the moment of delivery, and the presence of qualified health personnel is vital to handle these complications. Personnel properly qualified to take care of these emergencies may save mothers' and children's lives during delivery, and their services could be provided in small health centers or facilities if the woman cannot make it to the hospital.

Marked differences in access to qualified health care during delivery may be observed within countries between groups of different socio-economic levels or zones of residency. In Ecuador, between 1993 and 1998, during the latest delivery, 94% of urban women who had at least one delivery were attended by a physician, obstetrician or nurse, while in the rural zone the equivalent percentage was 57% (20). Policies to promote greater attention of deliveries by qualified health personnel must take into account not only availability of services, but also cultural and geographical accessibility.

More information: page 104.

24. Percentage of women 30 years and older who have had a Pap smear in the last three years

Relevance

Cancer of the cervix is one of the most common types of cancer affecting women. In general, it grows slowly and is treatable if detected in its early stages; it can be detected in a timely manner through a vaginal cytology, or Pap, test.

In countries with effective screening programs, mortality from cervical uterine cancer has decreased between 50% and 60%. The main barriers to implementation of effective programs include lack of an appropriate infrastructure to perform the Pap tests, lack of services to treat pre-cancers and cancers, and costs of implementing the programs. Treatment of cervical uterine cancer during its pre-invasive stages has high chances of success, and is not expensive, while treatment required in its advanced stages usually involves some kind of surgery or radiation, and is more expensive. In general, in Latin America and the Caribbean programs to control this cancer are characterized by a low coverage of cytological exams, aggravated by inefficiency in processing the tests within an appropriate period of time to make the diagnosis and provide timely treatment. Women in higher economic levels in urban zones have greater access to Pap tests, which deepens existing inequities due to lack of attention to specific groups of women.

One of the main causes of cancer of the cervix is the human papilloma virus that infects uterine cells. Women are usually infected with this virus during adolescence and the following two decades, and the disease may take 20 years to develop, so that risk of developing cervical uterine cancer is higher among 30-50-year old women.

More information: page 106.

QUALITY

25. Waiting time to receive health care, by sex

Relevance

Waiting time to receive health services is a key indicator of health services quality. Several studies have shown that the long hours male and female users have to spend to obtain service, the time interval between the date they request the services and the date of the appointment, and/or the waiting time to be attended, represent severe problems that discourage users from seeking formal health attention, rather than promoting its use.

The time required to access health services is a particular obstacle for women, mainly due to the multiple responsibilities they have to fulfill in both the reproductive and productive spheres.

In the Region, modules about health in household surveys and health surveys collect data that make it possible to create indicators regarding waiting time to receive health services. The time will vary depending on the type of services and the sector covered by the health system, being longer in the public sector, which receives mostly people from less privileged sectors. And even if waiting time for women is not longer than that for men, women are the most affected, because

they access health services in larger proportions, in particular due to their reproductive role and because their work day, which includes both paid and unpaid work, is longer.

More information: page 109.

26. Percentage of births by c-section

Relevance

Based on studies carried out by the WHO, the percentage of births by c-section should not be greater than 15%. A larger percentage means that inappropriate practices are being used for attention to deliveries.

There is evidence that one of the factors contributing to maternal mortality from complications during puerperium is indiscriminate practice of c-sections, because the relative risk of maternal mortality is up to 12 times higher in deliveries by c-section compared to vaginal deliveries.

Information from the Demographic and Health Surveys carried out in several countries of the Region during the 1990s shows that the percentage of births by c-section are concentrated in mothers with higher educational levels; in seven out of the nine countries, this percentage exceeded the recommended maximum value, reaching 46% among women with high school and higher education in Brazil.

More information: page 110.

SERVICE COSTS

27. Out-of-pocket health expenditures, by sex

Relevance

Financing for health care comes from public sector funds, and an important percentage from out-of-pocket expenses. Since the latter mostly affects women, it is considered a barrier to achieving equity in health.

From the gender equity perspective, contributions to finance the health care system should match people's economic capacity, and not their differential needs or risks by sex.

This equity principle in health for women is not fulfilled; it has been shown that women pay more in non-solidary systems, and that their capacity to pay is lower than that of men.

On one hand, a lower capacity to pay by women – mostly located in less recognized positions and with lower salaries in the labor market – does not relate to out-of-pocket expenses, which are generally greater for women. On the other hand, the cost of women's greater need for health care because of their reproductive role falls mainly on them, contradicting the equity principle that tries to distribute this cost of reproduction of the labor force.

In four countries of Latin America and the Caribbean in 1996 and 1997, out-of-pocket expenses in health were between 16% and 40% higher for women than for men (32).

More information: page 112.

HEALTH CARE MANAGEMENT

PARTICIPATION IN THE LABOR MARKET

28. Women's participation in the health sector labor force

Relevance

In general, women have a greater predisposition to choose service employment, because the socialization process differentially motivates women and men to select certain activities, occupations and functions considered to be in accordance with stereotypes that culturally define their gender. This causes a high proportion of the female labor force working in the area of health, especially as assistants.

There are differences in terms of professions and specializations in the health sector, as well as in terms of levels of autonomy, decision-making and remuneration between women and men, also due to gender inequalities. In this sector, women have traditionally been under-represented in positions of more power and decision-making capacity, a situation that places them at a disadvantage with regard to definition of priorities and allocation of resources, and in decisions about reduction of personnel.

In the Region, women represent approximately 80% of the total amount of workers in the health sector, but they are concentrated in the positions with lower salaries, decision-making power, and prestige. In Argentina in 1999, 27% of the total of women employed in the public and private health sectors were health professionals, while the rest were technicians, operators and non-qualified personnel (42).

More information: page 114.

2. SELECTED INDICATORS FOR MONITORING GENDER INEQUALITIES IN HEALTH¹⁶

In order to achieve gender equity in health, it is necessary to periodically examine progress or the lack thereof in women's health, since actions are being undertaken in the health sphere to promote greater equity between the different population groups. It is fundamental to know about progress towards achieving gender equity in health in the areas of women's health, their role as users of services, their contributions to finance health services, and their participation as health care providers.

This list of 17 indicators selected to monitor progress may be extended according to the needs and reality of each country to measure changes in gender inequalities in health. These changes can occur as a result of actions or omissions related to the main health problems and their determining factors, and also as a consequence of the resources allocated for attaining and maintaining health.

On the other hand, it is convenient to consider a small number of indicators that are important and easy to obtain, instead of extending the range of the existing ones too much, with the attendant risk of obtaining data only for a few countries.

In general, mortality indicators are not highly recommended for monitoring, due to the delays before they are published. However, given that they are one of the few solid sources of relevant information in the Region, and taking into account suggestions from female experts in several countries of the Americas, some such indicators have been included.

The following is the list of 17 selected indicators for monitoring gender inequalities in health. The page number in which its definition, information required for its estimation, possible sources of information, and suggested disaggregations are provided will be indicated for each indicator.

¹⁶ Indicators in this list were selected from the basic indicators for analysis of gender equity in health.

STATE OF HEALTH

PREVENTABLE MORTALITY

MORTALITY PREVENTABLE THROUGH TIMELY DETECTION AND TREATMENT

1. Maternal mortality ratio

Relevance

This is a significant indicator of women's reproductive health risks. The disparity shown by this indicator between countries with different levels of development means that most of these deaths could be avoided if preventive and care measures are taken opportunistically.

The fact that mortality from factors related to pregnancy, delivery and puerperium complications continues to appear among the primary causes of death in women of child-bearing age is an indisputable evidence of inequity, considering that these deaths are essentially preventable – the main causes and factors that determine them are well known, and the scientific knowledge and simple technology to avoid them has been available for many years. The possibility of cultural, economic, and geographic access to high-quality health services that can detect risk at an early stage may substantially reduce the number of maternal deaths through prenatal attention, availability of essential elements for obstetric attention, and suitable supply of information to avoid unwanted pregnancies.

Difficulties in determining the actual number of women that die during pregnancy, delivery and lactation shows the low relative priority that is still given to this issue. Important under-reporting has been detected in Latin America and the Caribbean, but in spite of this, complications of pregnancy, delivery and puerperium continue to be one of the main causes of mortality among 15-19-year old women in several countries of the Region. Notwithstanding this under-reporting, maternal mortality is an indicator of human development that shows significant differences between developed and less-developed countries. As a cause of death, abortion is even more under-reported than other maternal causes of death, because of the illegal nature of this procedure in most countries in the Americas.

More information: page 53.

2. Mortality from malignant neoplasms of the uterus

Relevance

In Latin America and the Caribbean, cancer of the uterus represents an even more extensive public health problem than breast cancer. This situation persists in spite of the fact that simple, efficient and low-cost technology to detect it in its early stages, with a high probability of cure, has existed for over 50 years: the vaginal smear test conceived by Papanicolaou.

The transcendence of this problem, in terms of public health, lies not only on the high frequency of this cancer, but also in the fact that women in the lowest socio-economic levels are the most affected.

In the countries of the Region where there is information available, the lowest estimated mortality rates from malignant neoplasms of the uterus are those of Canada, the United States, and Puerto Rico, and the highest are in Paraguay, Peru, and El Salvador (14). In Canada and the United States mortality rates from cervical uterine cancer have decreased substantially since the 1960s, due mainly to detection programs and timely access to services.

More information: page 54.

OTHER CAUSES OF PREVENTABLE MORTALITY (TO A LESSER DEGREE THAN THE ABOVE)

3. Mortality from breast cancer in women

Relevance

Breast cancer is increasingly affecting women in the Region. Mortality rates, although higher among women of more developed countries, are rapidly growing among relatively developed countries in the Region.

In addition to the hereditary component associated with breast cancer, there are other elements such as an early first menstruation, a late menopause, and delivering a first child after 30 years of age. There is also literature associating breast cancer with the presence of stress factors such as bad marital relationships, abandonment by the spouse, or death of a child; likewise, breast cancer may be related to other aspects such as environmental contamination, smoking habits, nutritional habits, and use of replacement hormone therapy during the climacteric.

Among estimated mortality rates from malignant neoplasms of the breast in women, available for almost all countries of the Region, the highest are in Uruguay (38.8), Canada (33), and the United States (30.5), and the lowest in El Salvador (4) and Nicaragua (5.8) (14)

More information: page 66.

4. Mortality from hypertensive diseases, by sex

Relevance

Among women, hypertension is more prevalent in groups with lower income and educational levels. Foods seasoned with too much sodium chloride, as well as factors associated with the climacteric, are concrete reasons for hypertension symptoms to appear.

According to an analysis carried out by the PAHO with data from 1960-1994, available for 13 countries of the Region, rates of potential years of life lost (PYLL) from hypertensive disease increased only in Nicaragua. In Colombia, El Salvador, Mexico and Venezuela the PYLL rates remained stable; and in the other countries analyzed (the United States, Canada, Chile, Argentina, Trinidad and Tobago, Barbados, Costa Rica, and Cuba) the rates went down. In Barbados, Colombia, Mexico and Nicaragua, the PYLL rates for women were consistently higher than for men throughout the period studied. For the 1990-1994 quinquennium, the United States and Canada were the countries with the highest PYLL rates; in Canada for every potential year of life lost by women, men lost two years (28, p. 174).

More information: page 67.

MORBIDITY AND PREVENTABLE LESIONS

NUTRITION

5. Prevalence of anemia in women of child-bearing age

Relevance

Iron deficiency in the majority of cases of anemia is the most common known form of nutritional deficiency. Its prevalence is high among boys and girls, and among women of child-bearing age, especially among pregnant women. Women develop macrocytic anemia from gastric deficiencies, severe stress and lack of complex B vitamins. Sickle cell anemia may increase as a result of several nutritional deficiencies.

With the onset of menstruation, women's iron requirements increase and are intensified during pregnancy and lactation. Between the beginning of menstruation and menopause, women need to absorb iron in proportions three times those of an adult man, and even more when women use intrauterine devices. In many cases, fulfilling these requirements is hindered by cultural patterns that perpetuate or aggravate the existing deficit. For instance, in poor sectors, women's nutritional deficit due to lack of resources is aggravated by patterns that grant privileges to men in intra-family food distribution, in particular the food that contains animal protein, the main source of iron.

Anemia from iron deficiency has been recognized at global and regional levels as women's greatest nutritional problem, in particular among pregnant women. More than one-fourth of women in the Region suffer iron-deficiency anemia; however attention is given to this problem only in prenatal services, whose coverage is limited, while iron deficiency and education about food nutritional value should start during childhood.

More information: page 72.

6. Prevalence of obesity, by sex

Relevance

Many countries are experiencing a marked increase in the prevalence of overweight and obesity, to such a degree that this ailment has become an epidemic in the Region. Overweight, in particular obesity in adults, increases risks of morbidity and mortality associated with hypertension, heart diseases, cerebrovascular diseases, diabetes mellitus, respiratory diseases, gallbladder ailments, some types of cancer, gout, arthritis and other chronic diseases.

There is evidence showing that obesity is more frequent in women than in men, and that the greatest incidence occurs among groups with the lowest income. In situations of economic hardship, women tend to eat more carbohydrates from different sources, according to habit and regional use.

In Uruguay, prevalence of obesity among women of low socio-economic levels was above the estimated prevalence for the group of higher socio-economic levels (28). In the United States, between 1997 and 2000, prevalence of obesity in the adult population went up 12%, from 19.4% to 21.8%; for the year 2000, one out of every four women, as well as one out of every four men, between 40 and 59 years old, said that they were affected by obesity, with the non-Hispanic black population being the most affected, of whom 35.8% declared themselves to be obese (31).

In addition to health problems, physical image affects women more than men, because they have to face greater limitations in opportunities, especially in the labor market, where employers frequently demand certain personal appearance stereotypes.

More information: page 74.

INTRA-FAMILY VIOLENCE AND SEXUAL ABUSE

7. Rate of demand for care due to intra-family violence, by sex

Relevance

Different actions implemented in the Region on the issue of intra-family violence have contributed to open public discussion of the subject, and have encouraged women – the most affected – and men to take advantage of the instances that have been created to help in these cases. Some of the attempts at solutions include: the promulgation and application of laws for preventing and taking care of intra-family violence, creation of models of attention including community participation for the attention and punishment of intra-family violence cases, training of health, education, police and judicial personnel. All this accumulation of solutions, promoted mostly by women's NGOs, has caused women to increasingly seek for help from appropriate sources to report cases of violence and to ask for psychological and legal support.

In Guayaquil, the largest city in Ecuador, the number of reports of intra-family violence registered in 1994 rose to 6,000, and in 1997 the number reached 16,400 (20). Protocols have also been integrated into the health sector to identify cases of intra-family violence and provide appropriate support.

The number of cases of intra-family violence reported, or identified and attended to in the health sphere, is not a measure of the prevalence or incidence of this type of violence, but on the one hand, it is a measure of the level of openness, availability and accessibility women and men have to file their reports, and on the other hand, of the effective demand of services due to intra-family violence. Information being collected about intra-family violence is critical for the formulation of policies aimed at focusing on and preventing violence.

More information: page 77.

MENTAL HEALTH

8. Prevalence of depression, by sex

Relevance

The most common of the mental ailments is depression, which may be mild or very severe, and it has particular importance in women's mental health, among whom its prevalence is greater than among men. According to the Global Burden of Disease 2000 (GBD), it has been estimated that the exact prevalence of unipolar depression among women is 3.2% and among men, 1.9%.

According to a study carried out by the World Bank in 1990, in Latin America and the Caribbean the number of years of healthy life lost from premature death and disability due to depressive disorders rose to 1,180,000 among women and 570,000 among men, i.e., two times more for women than for men (29).

According to the survey on Health, Wellbeing and Aging (HWA), prevalence of depression among the people interviewed ranged between 4% in Georgetown, Barbados and 18% in Montevideo, Uruguay (34).

As a result of these investigations, it has been suggested that there is a relationship between depression and infertility, a conflictive marital situation, a household without a spouse, physical violence and sexual abuse, poverty and, among older adult females, loneliness from abandonment by relatives, loss of their role, and the "empty nest" syndrome (19).

More information: page 80.

SEXUAL AND REPRODUCTIVE HEALTH

9. Percentage of women with living partners who use modern contraceptives

Relevance

The ability to plan number of children and birth spacing is a fundamental right of individuals and couples, which has been recognized in some international documents. Access to information and the availability of a range of contraceptive methods and high-quality family planning services are crucial aspects for facilitating women's and men's exercise of their right to plan births.

Use of contraceptive methods is a fundamental element to ensure reproductive health care. There are a variety of preferences and ways to assess risks and benefits of each contraceptive method. This indicator measures extent of use of contraceptive methods and distribution of methods used; for this reason, a strong concentration of users in one or two methods may be a sign of a limited offer or access.

From a gender perspective, supply of methods to provide men and women the possibility to share the responsibility of family planning is important. For this reason, it would be useful to estimate contraceptive use by groups of women-oriented and men-oriented methods. Those used by women are: the pill, intrauterine devices, injections, vaginal methods, female sterilization, and female condom; methods that involve men's cooperation are male sterilization and condoms.

In Latin America and the Caribbean, only 22% of couples use methods that require participation of the man (36). Most modern methods leave the responsibility of prevention of unwanted and high-risk pregnancies to women.

More information: page 85.

10. Percentage of 15-19 year-old women who are pregnant or have had at least one child

Relevance

Maternity among adolescents is associated with possible complications during pregnancy and delivery, and as a consequence, it contributes to higher maternal mortality, which is aggravated by the fact that adolescents usually neither seek nor receive necessary prenatal care.

Pregnancy during adolescence may have a devastating effect – young mothers may lose their autonomy by asking for help from their parents or other persons, and are often forced to interrupt their studies, hindering their personal and social development and their future economic progress. Particular risks include anemia, malnutrition, delays in fetal growth, premature delivery, and complications during delivery. In addition, children of adolescent mothers are usually more exposed to diseases, traumas, and abuse, and may later show other complications, such as deficient infant nutrition and a greater frequency of infectious diseases, especially in groups of at lower socio-economic levels.

According to Demographic and Health Surveys carried out in several Latin America and Caribbean countries, the percentage of adolescent women that had a child or were pregnant before 20 years of age, as compared to the total of adolescent women, shows ranges between 27% in Nicaragua (2001), and 13% in Peru (2000).

More information: page 90.

11. Registered incidence of HIV/AIDS, by sex

Relevance

Although in general most cases of HIV/AIDS occur among men, its spread is rapidly increasing among women, reaching higher proportions among women of the English-speaking Caribbean, the Latin Caribbean and the Central American isthmus and, within the latter, particularly in Honduras, especially in the group of youngsters between 15 and 24 years old. A decreasing men:women ratio has been observed in several Latin American countries with respect to new cases of HIV/AIDS (39).

Transmission of the epidemic has gone from groups considered to have high-risk practices (drug injectors, men having sex with men) to the general population. From a social point of view, an unequal distribution of power determined by gender relationships, and mediated by race, social class, age and certain cultural practices, prevents many women from protecting themselves, and rather places them in a situation of greater risk of sexual transmission of HIV/AIDS. This greater vulnerability of women to HIV/AIDS transmission is partially explained by biological characteristics associated with a greater exposure of the vaginal mucous during intercourse, especially at young ages; but it is also due to limitations in access to information about sexual and reproductive health, and to the lack of negotiating capacity about risk-free sexual relationships.

In addition to this greater vulnerability of women to HIV/AIDS transmission, they are also subjected to greater discrimination and stigmatization than men when they become carriers of the virus, and the probability of becoming victims of intra-family violence may increase.

HIV/AIDS is also a factor in developing long-term diseases and disabilities, and for women, the main producers of health services at home and in the community, it represents an additional unpaid work load, with consequences for their physical and emotional health.

More information: page 94.

12. Incidence of malignant neoplasms of the cervix

Relevance

Cancer of the cervix is an important public health problem that persists in spite of the fact that the smear test conceived by Papanicolaou has existed for over 30 years, and is a simple, effective and low-cost test to detect such cancer in its early stages, which provides a high probability of successful cure. In addition, there are relatively simple technologies to treat cancer of the cervix during the early pre-invasive stages, which are generally available in all countries, while the technology required to treat more advanced forms of the disease is more complicated and costly.

The most affected population is that of lower socio-economic levels, precisely because they face greater limitations on access to health services and gynecological attention for early detection of cancer of the cervix and uterus. For the year 2000 Canada and the United States reported the lowest incidence rates, with 7.8 and 8.2 per 100,000 women, respectively; while the highest rates were in Haiti, with 93.9 and Nicaragua, with 61.1 (14). This inverse relationship between frequency of cancer of the cervix and socio-economic level is also reproduced inside countries. According to several studies, it has been shown that in the United States incidence rates of invasive cancer are higher among black women than among white women.

Risk factors that are commonly associated with cervical uterine cancer are female and male sexual promiscuity, sexual initiation at an early age, a high number of deliveries, and, still under discussion, consumption of oral contraceptives.

More information: page 98.

HEALTH CARE

ACCESS TO AND USE OF SERVICES

USE OF SERVICES

13. Percentage of women attended by qualified health personnel during delivery

Relevance

Some hard-to-prevent complications of a pregnancy may occur at the moment of delivery, and the presence of qualified health personnel is vital to handle these complications. Personnel properly qualified to take care of these emergencies may save mothers' and children's lives during delivery, and their services could be provided in small health centers or facilities if the woman cannot make it to the hospital.

Marked differences in access to qualified health care during delivery may be observed within countries between groups of different socio-economic levels or zones of residency. In Ecuador, between 1993 and 1998, during the latest delivery, 94% of urban women who had at least one delivery were attended by a physician, obstetrician or nurse, while in the rural zone the equivalent percentage was 57% (20). Policies to promote greater attention of deliveries by qualified health personnel must take into account not only availability of services, but also cultural and geographical accessibility.

More information: page 104.

14. Percentage of women 30 years and older who have had a Pap smear in the last three years

Relevance

Cancer of the cervix is one of the most common types of cancer affecting women. In general, it grows slowly and is treatable if detected in its early stages; it can be detected in a timely manner through a vaginal cytology, or Pap, test.

In countries with effective screening programs, mortality from cervical uterine cancer has decreased between 50% and 60%. The main barriers to implementation of effective programs include lack of an appropriate infrastructure to perform the Pap tests, lack of services to treat pre-cancers and cancers, and costs of implementing the programs. Treatment of cervical uterine cancer during its pre-invasive stages has high chances of success, and is not expensive, while treatment required in its advanced stages usually involves some kind of surgery or radiation, and is more expensive. In general, in Latin America and the Caribbean programs to control this cancer are characterized by a low coverage of cytological exams, aggravated by inefficiency in processing the tests within an appropriate period of time to make the diagnosis and provide timely treatment. Women in higher economic levels in urban zones have greater access to Pap tests, which deepens existing inequities due to lack of attention to specific groups of women.

One of the main causes of cancer of the cervix is the human papilloma virus that infects uterine cells. Women are usually infected with this virus during adolescence and the following two

decades, and the disease may take 20 years to develop, so that risk of developing cervical uterine cancer is higher among 30-50-year old women.

More information: page 106.

QUALITY

15. Percentage of births by c-section

Relevance

Based on studies carried out by the WHO, the percentage of births by c-section should not be greater than 15%. A larger percentage means that inappropriate practices are being used for attention to deliveries.

There is evidence that one of the factors contributing to maternal mortality from complications during puerperium is indiscriminate practice of c-sections, because the relative risk of maternal mortality is up to 12 times higher in deliveries by c-section compared to vaginal deliveries.

Information from the Demographic and Health Surveys carried out in several countries of the Region during the 1990s shows that the percentage of births by c-section are concentrated in mothers with higher educational levels; in seven out of the nine countries, this percentage exceeded the recommended maximum value, reaching 46% among women with high school and higher education in Brazil.

More information: page 110.

SERVICE EXPENDITURES

16. Out-of-pocket health expenditures, by sex

Relevance

Financing for health care comes from public sector funds, and an important percentage from out-of-pocket expenses. Since the latter mostly affects women, it is considered a barrier to achieving equity in health.

From the gender equity perspective, contributions to finance the health care system should match people's economic capacity, and not their differential needs or risks by sex. This equity principle in health for women is not fulfilled; it has been shown that women pay more in non-solidary systems, and that their capacity to pay is lower than that of men.

On one hand, a lower capacity to pay by women – mostly located in less recognized positions and with lower salaries in the labor market – does not relate to out-of-pocket expenses, which are generally greater for women. On the other hand, the cost of women's greater need for health care because of their reproductive role falls mainly on them, contradicting the equity principle that tries to distribute this cost of reproduction of the labor force.

In four countries of Latin America and the Caribbean in 1996 and 1997, out-of-pocket expenses in health were between 16% and 40% higher for women than for men (32).

More information: page 112.

HEALTH CARE MANAGEMENT

PARTICIPATION IN THE LABOR MARKET

17. Women's participation in the health sector labor force

Relevance

In general, women have a greater predisposition to choose service employment, because the socialization process differentially motivates women and men to select certain activities, occupations and functions considered to be in accordance with stereotypes that culturally define their gender. This causes a high proportion of the female labor force working in the area of health, especially as assistants.

There are differences in terms of professions and specializations in the health sector, as well as in terms of levels of autonomy, decision-making and remuneration between women and men, also due to gender inequalities. In this sector, women have traditionally been under-represented in positions of more power and decision-making capacity, a situation that places them at a disadvantage with regard to definition of priorities and allocation of resources, and in decisions about reduction of personnel.

In the Region, women represent approximately 80% of the total amount of workers in the health sector, but they are concentrated in the positions with lower salaries, decision-making power, and prestige. In Argentina in 1999, 27% of the total of women employed in the public and private health sectors were health professionals, while the rest were technicians, operators and non-qualified personnel (42).

More information: page 114.

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