

## Annex 1: Research Methods

Briefly discussed below are other types of epidemiological studies that make it possible to evaluate interventions, obtain more detailed information, or analyze data obtained from an ESS.

**1. Surveys.** Surveys use closed or open questions to obtain certain information or describe a given population. They can lead to the generation of causal hypotheses.

**2. Studies of knowledge, attitudes, and practices (KAP).** KAP studies usually seek to uncover the types of thinking, attitudes, and behavior that characterize a given population, in order to be able to evaluate possible barriers to and advantages of implementing a particular policy measure or teaching a behavior.

**3. Descriptive studies.** These can be quantitative or qualitative, and they frequently lead to generation of hypotheses in relation to a problem. They are an excellent mechanism for making data reports based on an ESS, and they provide information on weaknesses and strengths of an ESS, permitting a better evaluation. They are used to describe the incidence and prevalence of the problem of injuries. They permit simple comparisons between numbers for different places or different times. They give an idea of the magnitude of a problem, and reveal differences between groups at high and low risk. The costs are usually small. These studies are important in the initial phases of development of an area of knowledge.

**4. Cross-sectional studies.** These are used to show the state of a given problem at a given point in time. They can be used as a tool for evaluating variations in the acquisition of information through an ESS. They have the limitation of not providing data on causality and time sequence, because they focus on one precise moment. They are also used to obtain an idea of the magnitude of a problem.

**5. Case and control studies.** These are part of what are called observation studies. They compare two population groups: one group (the cases) has a defined diagnosis, while the other group (the controls) does not have that diagnosis but is comparable with regard to other characteristics. This type of study attempts to correlate the occurrence of a diagnosis with exposure to one or more risk factors. It is a methodology that is useful for uncommon events, its cost is usually low, it permits the evaluation of several possible causes (previous exposures), and it is important in the initial phases of development of knowledge. These studies are limited, however, in that they can have information biases leading to false conclusions, they cannot demonstrate relations of causality, and they appear to be affected by inconsistencies in information systems.

**6. Cohort studies.** In these studies, a population group that has been exposed to one or more risk factors is followed over time, and researchers observe the different rates of occurrence of certain events among those who were exposed to a risk factor and those who were not exposed. This study design gives a better idea of causal relations between exposure to a risk factor and a later event. Cohort studies are an appropriate way to evaluate multiple effects of a given exposure or risk factor. They are limited with regard to costs and duration of time between the appearance of a risk factor and the occurrence of an event. They can reach biased conclusions through gradual attrition of participants (the population under study) or by erroneous classification of the risk factors.

**7. Analysis of time series.** These are used to establish the effectiveness of measures that affect population groups, taking into account natural variations that can occur over time. They are commonly used to evaluate the effects of laws on a population. They offer a partial picture of the cause-effect relationship, but the findings cannot be extrapolated from the population to specific individuals.

**8. Quasi-experimental studies.** These are studies in which the risk factors and the possibility of being exposed to them are slightly more controlled. For example, a police unit that only works in a specific area of the city and whose principal task is to identify individuals driving intoxicated during a given time. Specification of the police unit is controlled in time and space, and effects on the number of accidents caused by drunk drivers can be observed subsequently. These studies provide a better idea of cause and effect; they can be applied in many different scenarios, and thus they can be generalized. A disadvantage is that they do not completely clarify the cause-effect relation between one or more risk factors and an event (for example, injuries).

**9. Controlled random studies.** These are the best for examining cause-effect relations, since statistical techniques of random grouping make it possible to compare groups while avoiding other possible information biases. These studies permit a clearer comparison between individuals exposed to one or more risk factors and unexposed individuals, in relation to a given effect. They have as a disadvantage high costs and limitations of time for establishing causal relations.

## Annex 2: Glossary of Terms – Proposed Definitions

**Abusive sexual contact.** Intentional touching directly, or through the clothing, of the genitalia, anus, groin, breast, inner thigh, or buttocks of any person against his or her will, or of any person who is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to be touched (e.g., because of illness, disability, or the influence of alcohol or other drugs, or due to intimidation or pressure)<sup>58</sup>.

**Assault.** Intentional application of strength against a person, directly or indirectly and without that person's consent<sup>59</sup>.

**Case.** In epidemiology, a person in the population or group being studied who is identified as having a disease, injury, or condition being researched. A variety of criteria and sources of information can be used to define a case. The epidemiological definition is not necessarily equivalent to the medical or legal definition<sup>60</sup>.

**Child abuse or neglect.** Includes every form of physical or emotional mistreatment, sexual abuse, negligence or negligent treatment, and commercial or other exploitation, that results in actual or potential harm to the health, survival, development, or dignity of a child, in a context of relations of responsibility, confidence, or power<sup>66</sup>.

**Complaint.** Notification to the responsible authority of a violation of the law<sup>61</sup>.

**Death (or injury) in traffic accident or unintentional injury.** This is a consequence of a collision or of being struck by a vehicle. Although there can be aggravating elements such as consumption of alcohol or other drugs, it is usually unintentional<sup>15</sup>.

**Disability.** Impairment resulting in some restriction or lack of ability to perform an action or activity in the manner or within the range considered normal<sup>58</sup>.

**Epidemic.** The occurrence of cases of a disease or health condition in a community in greater proportion than usually expected during a specific period and in a defined place<sup>60</sup>.

**Gender violence.** Any act of verbal or physical force, or deprivation that threatens life, directed towards persons of one sex, that causes physical or psychological harm, humiliation, or arbitrary deprivation of freedom or that perpetuates subordination<sup>15</sup>.

**Homicide.** Act in which one person kills another. It is usually carried out illegitimately and with violence<sup>64</sup>.

**Human rights.** The traditional vision limits them to civil and political rights, including the right to life, liberty, and security, and to nondiscrimination by color, sex, language, religion, social class, or political opinion. It also includes the right to vote, freedom of expression and the press, respect for privacy, home, and family, and the right to be judged fairly and with the presumption of innocence. Also accepted today are rights to adequate welfare and standard of living, education, and fair wages, and the right of minorities to preserve their culture<sup>62</sup>.

**Incidence.** The number of new cases that occur during a given period in a defined population<sup>60</sup>.

**Injury.** Any intentional or unintentional harm to the body due to acute exposure to thermal, mechanical, electrical, or chemical energy or to the absence of heat or oxygen that results in physical or mental damage, that can be temporary or permanent, fatal or nonfatal<sup>65</sup>.

**Internal validity.** The study group and the control groups are selected and compared in such a way that the differences observed among them in relation to the variables being studied are (apart from errors of sampling), due to the hypothesis being studied<sup>60</sup>.

**Motive, reason.** Possible or confirmed reason the violent act took place<sup>15</sup>.

**Pattern of violence.** The way that violence is distributed over time in terms of frequency, severity, or type of violent episode (i.e., physical violence, sexual violence, threat of physical or sexual violence, psychological/emotional abuse)<sup>58</sup>.

**Perpetrator.** Person who inflicts violence or abuse or causes violence or abuse to be inflicted on the victim<sup>58</sup>.

**Physical violence.** The intentional use of physical force with the potential for causing death, disability, injury, or harm. Physical violence includes, but is not limited to: scratching, pushing, shoving, throwing, grabbing, biting, choking, shaking, poking, hair-pulling, slapping, punching, hitting, burning, use of a weapon (gun, knife, or other object), and use of restraints or one's body, size, or strength against another person. Physical violence also includes coercing other people to commit any of the above acts<sup>58</sup>.

**Prevalence.** Total number of cases of a specific condition during a period of time in a defined population. Usually refers to the number of cases at a given point in time<sup>60</sup>.

**Psychological/Emotional abuse.** Trauma to the victim caused by acts, threats of acts of violence, or coercive tactics. Other behaviors may be considered emotionally abusive if they are perceived as such by the victim. Some of the behaviors on the list may not be perceived as psychologically or emotionally abusive by all victims. Psychological/emotional abuse can include, but not limited to: humiliating the victim, disregarding what the victim wants, isolating the victim from family and friends, destroying property or abusing the economic resources of the victim (look for more examples in the reference)<sup>58</sup>.

**Rape, sexual violence.** Every act in which a person in a position of power, by means of physical force, coercion, or psychological intimidation, compels another person to engage in a sexual act against her/his will or to participate in sexual interactions that lead her/his victimization and from which the perpetrator attempts to obtain gratification is considered sexual violence<sup>69</sup>.

**Sexual act.** Contact between the penis and the vulva or the penis and the anus involving penetration, however slight; contact between the mouth and the penis, vulva, or anus; or penetration of the anal or genital opening of another person by a hand, finger, or other object<sup>58</sup>.

**Suicide.** Action and effect of ending one's life or eliminating oneself<sup>67</sup>.

**Threat of physical or sexual violence.** The use of words, gestures, or weapons to communicate the intent to cause death, disability, injury, or physical harm. Also the use of words, gestures, or weapons to communicate the intent to compel a person to engage in sex acts or abusive sexual contact when the person is either unwilling or unable to consent<sup>58</sup>.

**Tolerance.** Attitude of respect toward the opinions, thinking, beliefs, customs, and actions of others<sup>61</sup>.

**Victim.** Any person who individually or collectively has suffered physical, mental, emotional, economic, or substantial harm to his or her fundamental rights, due to acts or omissions that violate the laws applying in the State<sup>68</sup>.

**Victimization survey.** Survey that seeks to describe the characteristics of crimes, victims, and victimizers, with respect to a violent event and trends that exist for different violent events<sup>63</sup>.

**Violence.** The threat or intentional use of force, coercion, or power, which may be physical, psychological, or sexual, against another person, group, or community, or against oneself, and that causes, or has a high probability of causing, harm to the victim's physical, psychological, or sexual integrity, personality, or freedom of movement<sup>70</sup>.

**Violent episode.** A single or series of acts of violence that are perceived to be connected to each other and that may persist over a period of minutes, hours, or days. A violent episode may involve single or multiple types of violence (e.g., physical violence, sexual violence, threat of physical or sexual violence, psychological/emotional abuse)<sup>58</sup>.

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