# THE USE OF THE "VULNERABILITY" CONCEPT IN THE NURSING AREA

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*The objective of this article was to briefly retrieve the meaning of the vulnerability concept, which has been used in the healthcare area; also, to discuss how it has been used in the Nursing area. Amidst several different focuses and objects, studies have been attempting to overcome the classical reasoning of risk in epidemiology, advancing towards the discussion of the social determinants for the production of health problems.*

*DESCRIPTORS: nursing; vulnerability*

## LA UTILIZACIÓN DEL CONCEPTO "VULNERABILIDAD" POR ENFERMERÍA

*Este artículo tuvo por objetivo hacer un breve rescate del concepto de vulnerabilidad que viene siendo utilizado en el área de la salud y discutir como viene siendo utilizado por la enfermería. Los estudios, en medio de la diversidad de enfoques y objetos, han buscado superar el raciocinio clásico de riesgo en epidemiología, avanzando para la discusión de los determinantes sociales en la producción de los agravantes de las enfermedades.*

*DESCRIPTORES: enfermería; vulnerabilidad*

## A UTILIZAÇÃO DO CONCEITO "VULNERABILIDADE" PELA ENFERMAGEM

*Este artigo teve por objetivo realizar breve resgate do conceito de vulnerabilidade que vem sendo utilizado na área da saúde e discutir sua utilização pela enfermagem. Os estudos, em meio à diversidade de enfoques e objetos, têm buscado superar o raciocínio clássico de risco em epidemiologia, avançando para a discussão dos determinantes sociais na produção dos agravos.*

*DESCRITORES: enfermagem; vulnerabilidade*

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## INTRODUCTION

The term *vulnerability* is recurrently used in scientific healthcare literature with several meanings. Since the 1980s, increasingly more studies dealing with vulnerability as a concept have been observed. The present study discusses, based on the scientific literature, how research in the nursing area has used the concept of *vulnerability*. The literature review was performed in Medline and CINAHIL, since these are the two main databases in the healthcare and nursing areas. The keywords *vulnerability* and *vulnerable* were used, associated to *nursing*, in queries on titles and abstracts. The 1996-2006 period was considered.

In Medline, the use of *vulnerability* and *nursing* yielded 150 articles, and *vulnerable* and *nursing* yielded 374. In CINAHIL, *vulnerability* and *nursing* yielded 204 articles. Since this is a review article, it was restricted to 25 references.

An important consideration about the literature research is that several publications, such as books, journals, theses and others, are not indexed in these databases. Therefore, the scientific production about vulnerability addressed in this literature review should not be considered as the existent totality.

## REVIEW OF THE VULNERABILITY CONCEPT

The term vulnerability is frequently used in general literature, applied in the sense of disaster and danger. It is derived from the Latin verb *vulnerare,* which means "to cause damage or injury"[1].

According to the keywords used in the Bireme database, which is the Collaborating Center of the Pan-American Health Organization for updating the terminology related with the healthcare sciences, *vulnerability* is defined as: a) degree to which a given population is exposed to susceptibility or risk of damage caused by natural disasters; b) relation existing between the intensity of the resulting damage and the magnitude of a threat, adverse event or accident; and c) probability that a given community or geographic area has of being affected by a potential threat or risk of disaster, established in technical studies (Material III – Ministry of Social Action, 1992). Degree of loss (0 to 100%) is a result of a potentially harmful phenomenon.

In turn, *vulnerable*: a) A sector of the population, especially children, pregnant or nursing women, the elderly, the homeless, who are more prone to disease and nutritional deficiencies. They are the ones who suffer the most in disaster situations, and b) a group of people whose possibility of choice is severely limited, frequently subject to coercion in their decision.

In these definitions, there are references to people who present some alteration of a situation of biologic "normalcy", referred to their life cycle or their social condition. As such, the groups they belong to are understood as deficitary, or somehow damaged in how they lead their lives. The keywords also mention the ethical dimension, in the sense of protection and defense of these groups.

These keywords have very comprehensive definitions. The term vulnerability, in this sense, is not different from the concept of risk, being used as synonyms in several studies.

Epidemiology has traditionally considered risk as the core of its studies. Overall, the epidemiology studies attempt to identify characteristics in people who place them at higher or lower risk of exposure, jeopardizing them physically, psychologically and/or socially. The probability and higher or lower chances of population groups falling ill or dying due to some health problem are also calculated[2].

When differences between vulnerability and risk are discussed, it is considered that they are closely related, but still distinct. As such, risk has a very solid identity in traditional epidemiology studies, with an eminently analytical character. Vulnerability, in turn, as an emerging concept, is focused on the synthetic character[2].

Theoretical instruments have been built in the epidemiological concept of risk, capable of identifying associations among events or conditions, pathological or not. Studies in this perspective search for "phenomenological isolation", i.e. isolating the phenomenon, associating the dependent and independent variables, through a strict control of the degree of uncertainty about the non-randomness of the established associations[2].

Therefore, it is an analytical process, seeking to produce objective knowledge based on probabilistic associations. As such, epidemiological risk is the probability that an individual of any group exposed to a given aggravation or condition has of also belonging to another group, the "affected"[2-3].

On the other hand, the purpose of vulnerability is to seek the "synthesis", i.e. bringing

the associated and associable abstract elements to the processes of falling ill to theoretical elaboration levels that are more concrete and particular, where the nexus and mediations between such phenomena become the object of knowledge about vulnerability. Unlike the studies about risk, it seeks universality, not the increased reproducibility of its phenomenology and inference. According to the authors, "vulnerability means the potentials of falling ill/not falling ill related to *each* and *every* individual living in a given set of conditions"[3-4].

In the vulnerability perspective, exposure to health problems and even diseases that lead to death results both from individual aspects and collective contexts and conditions which produce a higher susceptibility to aggravations and death and, simultaneously, the possibility and resources for coping with it[3-4].

The onset of the AIDS epidemic was a determining phenomenon for researchers and healthcare professionals to rethink the concept of risk and advance the discussions about vulnerability.

It is proposed that the epidemic can be interpreted according to the interaction of three dimensions: individual, programmatic and social. According to the authors, the chance of people's exposure to disease is understood as resulting from a group of aspects, not only individual, but also collective, contextual, causing higher susceptibility to infection and disease and, concomitantly, higher or lower availability of resources of all orders to become protected from both[5].

The ability of individuals and groups to fight and recover from vulnerability can be found in the same process[6-7]. It is suggested that vulnerability should be understood as the integration of three dimensions[8], these being: *entitlement*, the rights that people have; *empowerment*, their political and institutional participation; and *economic policy*, referring to historical-structural organization of society and its consequences.

In the concept of vulnerability, there is no way to avoid considering its interdisciplinary character. In the analytic model based on the identification of three levels to identify the vulnerability of people to the HIV virus, the intersection sought is between the socio-structural and socio-symbolic dimensions of people with their levels of social course, interaction and social context. In the socio-structural dimension, in the intersection with the social course, the life cycle, social mobility and social identity are taken into consideration, among others. The characteristics of the partner can be found in this same dimension of the intersection with the level of interaction (such as age, serologic status, etc), the space where this interaction occurs, etc. Finally, still in the socio-structural dimension, in its intersection with the social context, the current social standards, institutional norms, gender relations, inequities are considered, among others[8].

The socio-symbolic dimension, in its intersection with the social course, contains the subjectivities, life projects, perception of the future, etc. The intersection between this dimension and the level of interaction refers to the subjective representation one has about the partner, the use of condoms due to the serologic status, etc. In addition, the interaction between the symbolic dimension and the social context comprehends the subjective perception of the norms, the personal interpretation and expectation of punishment, etc.

This model offers important contributions to make the social and subjectivity dimensions visible in the issue of the vulnerability of men to HIV/AIDS, even to the extent of noting some intervention possibilities.

It is worth noting that the term vulnerability, in Brazil, originated in the area of International Human Rights Advocacy, and denominates, in its origin, groups or individuals who have become legally or politically fragile, regarding the promotion, protection or guarantee of their rights of citizenship[2-3].

Therefore, for the interpretation of the health-disease process, it is considered that, whereas risk represents probabilities, vulnerability is an indicator of social inequity and inequality. According to the authors, vulnerability precedes risk and determines the different risks of being infected, falling ill and dying[3].

The expansion of AIDS in the 1980s and the not-so-effective interventions to control it provoked the questioning of the epidemiologic models of that age – which had individual risk as the core element of their analysis – and the models of prevention, based on a behavioral approach, centered on the individual.

Considering that the path that leads the individual to become infected is determined by a set of conditions, among which behavior is only one, there is no way to conceive interventions focused on the individual only, without considering situations that

interfere in their private behaviors or accessing external elements – political, economic, cultural and healthcare service offered – which can support and direct people in a perspective of greater or lesser self-protection.

The concept of HIV/AIDS vulnerability has been developed since the late 1980s, and expresses the effort to produce and make knowledge available, as well as debates and actions about the different degrees and types of susceptibility of individuals and groups to infection, falling ill and death by HIV, according to their particular situation, considering the integration of the social, programmatic and individual aspects that relate them with the problem and the resources for coping[3-4].

Vulnerability, in this aspect, can be analyzed according to three interdependent dimensions: individual, programmatic and social. a) Individual vulnerability regards individual preventive actions in the face of a situation of risk. It involves aspects related to personal characteristics (age, gender, ethnicity, etc), emotional development, risk perception and attitudes towards the adoption of self-protection measures, as well as personal attitudes towards sexuality, acquired knowledge about transmittable diseases and AIDS, experiences of sexuality and skills to negotiate safe sexual practices, religious beliefs, etc; b) Programmatic vulnerability regards public policies of coping with HIV/AIDS, the proposed goals and actions in the STD/AIDS programs and organization and distribution of the resources for prevention and control; and c) Social vulnerability regards the economic structure, public policies, especially those focused on education and health, culture, ideology and gender relations, which define individual and programmatic vulnerabilities.

Perhaps the greatest contribution to the debate and actions related to the distinction between the concepts of risk and vulnerability lies in the effort of relocating the notion about individual risk towards a new perception of social vulnerability[9]. By considering that every human being is biologically susceptible to HIV infection, or that transmission can really occur due to behavioral acts of specific individuals, in the perspective of improving knowledge about the epidemic, such behaviors place individuals and groups in higher vulnerability situations. This permits a greater perception of how inequality and injustice, prejudice and discrimination, oppression, exploitation and social violence accelerate the dissemination of the epidemic in different countries. Social vulnerability is related with exclusion, discrimination or weakening processes of the social groups and their ability to react[9].

## THE UTILIZATION OF THE VULNERABILITY CONCEPT AND THE CONTRIBUTION OF NURSING

Vulnerability is an important concept for nursing research, because it is intrinsically connected to health and health problems[10].

For the nursing area, the relevance of knowledge about vulnerability to health problems, such as HIV/AIDS infection, lies in the implications it produces for the health of vulnerable people and, consequently, in the identification of their healthcare needs, so that increased protection can be guaranteed[11].

The utilization of the vulnerability concept to understand its object by researchers in the nursing area has the purpose of better responding to the goals of nursing work.

The term vulnerability is frequently used in nursing research[10]. However, it is not often defined adequately, and there is no consensus about its meaning and utilization.

Indeed, in the literature review about vulnerability, in the past 10 years, most articles referring to the term were observed to deal with research reports, and few bring discussions about vulnerability in the theoretical perspective of knowledge production about its definition or concept.

Several nursing studies use vulnerability as the identification of people or groups with some sort of deficiency, exposed to aggravations. Vulnerability is usually referred to as the dimension of the individual, i.e. they bring about little, or do not deal with the social dimension and relations[12].

Some studies characterize women, adolescents, handicapped people and other socially excluded groups as vulnerable[13-14]. Some of the most recent nursing studies were noticed to address notions of violence, experienced either by nurses or by patients and populations[15-16]. Others specifically address issues about occupational risk[17]. More recently, there are studies in the perspective of advocacy[18] and ethics[19].

Vulnerability is defined as a dynamic process, established by the interaction among its component elements, such as age, ethnicity, poverty, education, social support and presence of health aggravations. Each person is admitted to have a vulnerability threshold which, when crossed, results in falling ill[20].

Broadening the discussion, some studies consider that some segments of society are more vulnerable to diseases and death than others, such as young or elderly people, women, ethnic minorities, people with low social support, limited or no access to education, low income and unemployed, and that their vulnerability is greatly affected by the perception that each possesses about the health-disease process and about life[11].

Other studies propose that age, gender, ethnicity, social support, education, income, lifestyle and modifiable/non-modifiable risk factors can be used as variables for analysis. Vulnerability is defined not only by personal characteristics, but also by conditions acquired through life or resulting from a given lifestyle, strategy development and skills to cope with trauma and disease[11].

The degree of vulnerability is considered to change, depending on the modification of the social or environmental condition. As such, the analytical model proposed by the author, represented by an equilateral triangle, is based on the identification of the individual and social components of vulnerability.

The assessment of vulnerability can be useful to identify characteristics or conditions to potentialize the available resources to cope with the disease[21]. The identification of conditions, characteristics and situations of protection and strengthening individuals and groups against disease are one of the differentials in the concept of vulnerability[4].

Even though some studies broaden the discussion of a collective dimension of health phenomena, most still emphasize the individual dimension. Besides, despite this greater comprehension of the social issues, it is considered that several studies in the nursing area do not deal with this dimension critically enough, since this dimension is understood in the perspective of another element, *social support*. This fragility refers to how social phenomena are analyzed, such as violence, the social role of the women, the influence of the media over the culture, holding a discussion about these phenomena that is considered superficial, being limited to an analysis about the appearance of these phenomena, and not discussing their production essence adequately. The studies do not highlight, for example, health service actions in the scope of public healthcare policies[4].

Research in North America, especially in the nursing field, tends to use methods like phenomenology and symbolic interactionism, and this type of epistemological approach ends up favoring the focus on the individual. Since Latin American research is influenced by Marxist theoretical bases, studies tend to focus on social issues more critically[22].

Some nursing research in Brazil has used the concept of HIV infection vulnerability, even if in different perspectives, to discuss the process of falling ill and dying in relation to other health phenomena[23-25].

The relevance of knowledge contribution is undeniable, built upon vulnerability in renewing AIDS prevention measures, especially due to their "practical aspirations"[2].

The analysis of vulnerability permits knowing and understanding the differences experienced in the health-disease process, both individually and collectively. The construction of markers that could be used to evaluate the life and health conditions of individuals and groups is proposed, so that it can support the interventions oriented towards the determiners of the state of vulnerability[4].

One of the scopes of the concept is yielded by its potential of increasing over the compression of the health phenomena, resulting of the crossing of behaviors with individual and subjective experiences; social, political and cultural conditions, along with healthcare actions focusing on prevention and aggravation control.

Another scope is the possibility of conferring greater integrality to healthcare actions, by strengthening intervention proposals that consider the three dimensions of vulnerability, incorporating the influences exerted by its components.

The multidisciplinary character is implied in the social determination perspective of health-disease and vulnerability, which is fundamental when dealing with health problems or necessities, as the complexity of the health object complexity requires different theoretical-methodological views. If that does not happen, the actions can be reduced to punctual, emergency "tasks", which do not change the structure of the web of causality[2,4].

The operationalization of the vulnerability concept can contribute to renew the nursing practices. By presenting different models to discuss vulnerabilities, it is understood that nursing needs to

have instruments and theoretical models to direct their practices of research and health intervention. However, such theoretical models should not be understood as a "rigid and immutable" structure. From a dialectic perspective, the theoretical models are instruments the study objects can be drawn from, which are always under construction.

By adopting vulnerability as the concept reference framework in a research study, it is important to keep it from turning into a reproduction of the *status quo* due to the naturalization of oppression, since research must produce knowledge for the emancipation of people and groups. It is indispensable that the pole of "debility" is not emphasized. Likewise, it is important to emphasize the pole of resistance and creative capacity of the individuals[2,4].

Suggesting that the nursing area use some of the aforementioned theoretical models would contribute to a wider sharing of debating of the vulnerability concept.

The utilization of similar theoretical models would make it possible to share knowledge about vulnerability among nurses/researchers of several countries, with the objective of improving knowledge and nursing practice.

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