

RISK COMMUNICATION AND THE PRECAUTIONARY PRINCIPLE

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Abstract. The perception of risks for environment and health deriving from globalization processes and an uncontrolled use of modern technologies is growing everywhere. The greater the capacity of controlling living conditions, the larger is the possibility of misusing this power. In environmental and occupational health research we tend to reduce the complexity of the observed phenomena in order to facilitate conclusions. In social and political sciences complexity is an essential element of the context, which needs to be continuously considered. The Precautionary Principle is a tool for facing complexity and uncertainty in health risk management. This paper is aimed at demonstrating that this is not only a problem of technical risk assessment. Great attention should also be paid to improve risk communication. Communication between the stakeholders (experts, decision makers, political and social leaders, media, groups of interest and people involved) is possibly the best condition to be successful in health risk management. Nevertheless, this process usually runs up against severe obstacles. These are not only caused by existing conflicts of interest. Differences in values, languages, perceptions, resources to have access to information, and to express one's own point of view are other key aspects.

Key words:

Risk communication, Precautionary Principle, Health risk management, Uncertainties, Partnership

INTRODUCTION

The role of communication in the evaluation and management of environmental risks for health is already well known. A large literature, mostly North-American, is available for wider information. The WHO Regional Office for Europe promoted the publication of a volume on these themes [1].

The following pages are mainly taken from a volume recently edited by the author [2] and from his intervention at the Annual National Meeting organized by the Italian Association of Epidemiology in Venice, October 2001 [3]. The focus is on three main aspects of risk communication that should be considered when dealing with the precautionary principle, as they could greatly modify its perspectives:

- the possibility to consider risk communication as a technique, a right, or a condition necessary to guarantee a successful risk evaluation and management;

- the role of public administrations in enhancing exchanges between stakeholders, experts, and non-experts;
- the interesting analogies between communication of environmental health risks and health risks.

HOW MANY UNCERTAINTIES

Before dealing with the three aspects mentioned above, it is useful to note that much risk communication moves on uncertain grounds. Edgar Morin [4] includes facing uncertainties among “the seven knowledges necessary for education in the future”; he also observes that “sciences allowed us to acquire many certainties, but in the 20th century they also revealed many uncertainties. ... Strategic principles to face risks, unexpected and uncertain situations and to modify their evolution thanks to information acquired should be taught. It is necessary to learn to

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navigate in an ocean of uncertainties across archipelagos of certainties”.

Actually, our rationalist culture is not afraid of scientific uncertainties. We usually accept the limitations of specificity and sensibility in our methods, and we have developed good techniques to control measurement errors. We cannot do much when methods themselves and paradigms do not work and ignorance covers any error, but we are confident that a scientific revolution is sooner or later approaching.

In many situations, however, political uncertainties are more relevant, in particular for decision makers, and there is not yet a unique definition of them. Funtowicz and Ravetz [5] suggest the following classification:

- General situational uncertainty – it characterizes a specific circumstance and should be faced at the moment. It results from different aspects, in particular from informative inadequacy on decisions that have to be taken, and can have a variable intensity.

- Legal-moral uncertainty – it is connected with the possible consequences of the decision that will or will not be taken. The possibility to be prosecuted for a particular action, or anyway to face one’s own sense of guilt in case of negative evolution influences decisions and often leads to defensive and dilatory attitudes and to a handicapped spreading of information.

- Social uncertainty – it is caused by the degree of cohesion, or vice versa of conflict, in a community and by the level of integration with institutions.

- Institutional uncertainty – it results from a scarce ability to communicate, comprehend, collaborate among the different organisms, especially public institutions, that have to manage a problem, and it is enhanced by traditional jealousy, competition, and secrecy typical of some bureaucracies.

- Uncertainties determined by rights/interests of property and privacy – they are the consequence of regulations that control the possibility to divulgate or hide information, and concern citizens, professionals, enterprises, organizations and institutions.

There are many examples of the possible intersecting of these uncertainties. In the Seveso accidental release of dioxin in 1976, consistent scientific uncertainties and industrial secrecy

led to a communication mainly characterized by silence. On the contrary, in case of an imminent flood, the sharing of problems and the need to amplify communication as much as possible prevail. This exercise has useful descriptive goals, but even more it can orient communicative actions.

COMMUNICATION IS A TECHNIQUE

Communication is a science and relies on techniques adapted for different scenarios. In a recent period, non yet ended, successes were believed to be consequence of a convincing communication, of the efficacy of messages meant to persuade listeners of the correctness of a particular point of view. Attention was focused on the characteristics of an efficacious communication, on message clarity, on the appropriate use of professional tools.

The push in this direction came from the development of marketing communications, which demonstrated that an efficacious strategy was linked to listeners’ characteristics, legitimacy of situational perception, communicative techniques adopted, and most of all, to trust the message source, to its credibility, and to the belief that the whole process was honestly conducted. The focus was on informing, prescribing, creating an image, and convincing.

This path often generates conflicts. On the contrary, communication has to be a bi-directional process: people talk, but they also have to listen. Unfortunately, at least in health risk communication, the listening function – that is, tools to gather opinions, protests, judgements, requests – is much less developed.

COMMUNICATION IS A RIGHT

Communication is not only a technique: in our legal system, citizens’ right to information is guaranteed, including some specific aspects on health. The development of the legal system is not fully coherent, and it has not yet been completed, but we cannot deny that there is some attention to the problem. Three main rights are considered:

- to be informed,
- to have access to information,

■ to have the possibility to express one's own opinion in order to influence decision-making.

The first right, and up to now the most considered, is based on the principle that obliges those who create risks to inform exposed people. It is a field highly influenced by other rights, often stronger, for example, industrial secrecy. It is also distorted by vigorous resistance through different techniques: from reticence to informative flooding (essential information is drowned in many meaningless details), or from smoke-screens created with incomprehensible languages to judicial cavils.

Initially, this principle was entirely considered within the relationship between citizens and the public administration in charge of health. It was regulated through a system of authorizations and controls: to build a house, to open an enterprise, etc.

The first new regulations, also in Italy, concerned work, including the obligation for employers to inform their employees on risks and prevention measures. In 1970 the Statute of Workers' Rights (Italian Law No. 300/1970) was approved; it also recognizes an asymmetric situation on an information level and guarantees workers the right to refer to their own experts. The National Health Service (Italian Law No. 833/1978) widened the perspective to a local geographical dimension and to drawing risk maps, and obliged enterprises to inform populations about substances in the production cycle, their toxicological features, and the possible effects on health and environment. The influence of European Directives started at the beginning of the 1980s also included many regulations on labeling, information to consumers (in general and on specific aspects, as food and drugs), information to citizens living close to high risky industrial plants, and others.

The second approach is more recent and arises from the need to bring public administration closer to citizens, to make it more transparent, and to recognize the right of access – within limits – to available information (Italian Law No. 241/1990). In Italy this meant, in particular, access to administrative documents and specific and more in-depth information on environment situations.

The chart of rights is not complete if it does not also include the possibility to express one's own opinion. In the

1970s the first regional Statutes in Italy were approved; some of them include indications for citizens' participation in legislative processes and others activities through specific informative tools and the organization of meetings. In the founding law of the Italian Environment Department, the right to express written opinions is present, but only when a work subject applies to environmental impact evaluation.

Material on this topic is scarce. Public administrations resist the idea of a more participative approach, afraid of losing power. Enterprises prefer having stricter and more expensive environmental restraints than being obliged to subject their activity to evaluations and negotiations with all the stakeholders, with probable lengthening of times and costs and more opposition.

At least for some environmental problems, a synthesis of the above mentioned rights is presented in the European Convention, which was adopted on June 25, 1998, during the 4th Pan-European Conference of Environment Ministers in Aarhus (Denmark). The Aarhus Convention gives citizens access to environmental information, participation in decision making, and access to justice in environmental matters.

Only considering communication in work contexts, it is possible to find a recognition of the right of (representatives of) workers to express their opinion, in particular in risk evaluation; in this way it becomes a key tool for prevention program and for communication among all people entitled to participation in decision making.

As in the technical approach, also in the field of rights, focus is on the access to information rather than on listening. To express one's own opinion is a fundamental right, recognized in the main charters of human beings' rights. Like the right to health, this right is not always guaranteed and is being only partially applied in decisional processes.

COMMUNICATION IS A CONDITION

However, the belief is spreading that in order to make choices about a community's development and health, it is necessary to favor communication among stakeholders. A "negotiated" approach allows one to consider

different points of view and interests, to create conditions for an advantageous dialogue, or at least to reduce pre-conceived opposition. Communication among stakeholders is probably the best condition in which to find the most appropriate solution. This is also true for environmental risks, as for example, Bobbio and Zeppetella [6] demonstrate when facing the problem of local reactions to the construction of important works of public interest. Some new concepts and tools were introduced in the institutional system, in order to realize interventions that require coordination among public boards, or to favor an agreement between local authorities, social partners and other subjects for financing projects, increasing employment, etc.

Also, the Italian 1998–2000 National Health Plan should be seen in this logic. It had the meaningful title “Solidarity pact for health”. Health objectives proposed had to be pursued not only with the support of health services, but also with the engagement of all the institutional, social, and economic forces through shared health policies.

In its 1999–2001 Regional Health Plan, the Emilia-Romagna Region attached even more importance to this element and proposed the development of Health Plans that are: “long term action plans worked out and realized by a plurality of social actors through human and financial resources, coordinated by the local government, aimed at improving population health also through the improvement of health services”.

Communication is then a condition offering great opportunities, but needs to be organized, promoted, and facilitated. Situations are potentially conflicting, and interlocutors might not understand each other and could head toward opposite directions.

Experts share languages and codes, and have techniques and opportunities that facilitate communication among themselves. They constitute a community united by technical assessment of risk, even if sometimes with different opinions. The others, non-experts, interested population groups, and the community united by perceived risk, have more serious communication difficulties and do not share the same cultural and economic resources. Asymmetries

are widespread and the mass media do not necessarily solve them also because this is not their function.

Public authorities could bring interlocutors nearer, as they are the only subjects with the role, authority (unfortunately not always), and means to give voice to everyone and to help find solutions.

AN ANALOGY TO DEVELOP

To communicate means to allow everyone to have access to information, to exchange opinions, and to express their choices in decision making.

To give voice to the different interlocutors, also to those who do not have sufficient forces, requires specific techniques. Sometimes it is set by law, more often it is a moral obligation, but it is the best condition to find solutions to complex and uncertain problems that society is now facing. Health is a central aspect in the life of a community and should also become a guiding criterion for policy decisions (social, environmental, economic, etc.). When dealing with decision-making process, political science is much closer than expected, as the debate on the precautionary principle clearly demonstrates.

Relationships aimed at environmental risk management can be extended in general to health risk management. This reflects, for example, the relationship between a patient and his/her physician. Partnership is the contribution of both interlocutors to the definition and sharing of assistance processes, even with one's own different subjective and objective knowledge. This approach largely increases the probability of intervention success, as many medical journals demonstrate nearly every week in various medical fields. It is also true that if we did not have the possibility to be listened to, we would probably exercise our right to find an alternative.

This analogy between risk communication in different contexts could be studied in order to improve decision making in health care as in environmental health risk management.

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