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BRIEFS

The Role and Importance of Disaster Risk Communication in Disaster Risk Reduction

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Disaster Risk Communication

Despite the immense economic, technological, and scientific advancements it has made, humanity is still incapable of preventing the rise of disasters against a backdrop of deepening ecological crisis and social injustice. Disasters continue to emerge in varying forms, and become widely impactful following an earthquake, heavy rainfall, or an epidemic. The reasons why our wealth of knowledge in engineering, planning and management remains futile in reducing disaster losses are plentiful and one of them is the lack of communication. The communication model defined as disaster risk communication is one of the main components of disaster risk reduction and is often described along the lines of sharing critical information with the public and relevant parties during and after a disaster. However, the meaning of disaster risk communication goes beyond that single feature. This communication model aims to explain and create an accurate understanding of risk reduction activities, encourage people to integrate the concept of risk into their lives, and make the risk reduction approach a priority policy by turning it into a societal norm.

The reliability of information and its sources, which form the basis of communication, are essential in disaster risk communication, as in other types of communication. Sources of information for disasters are often the academia and sometimes the public sector. It can be argued that the public's perception of academic community is that it is relatively more objective and reliable as it generally tends to remain outside the realm of daily politics. Furthermore, public institutions' communication is less effective despite the myriad of data in their possession because of the restrictions they impose on information-sharing (TESEV, 2021). Therefore, it would be beneficial to put the academic community—as the producer of scientific information—at the forefront of sharing such information.

As with other communication models, disaster risk communication aims to convey the information to the target audience using the right message and tools for the audience to create the desired result. The purpose and audience of communication determine the content of the message. In this regard, the principal feature and challenge separating disaster risk communication from other forms of communication is the necessity of having all parties to understand an information with a sensitive, technical, and scientific nature. In other words, risk information must be understood with all its dimensions not only by experts in the field, but all parties to whom this information is conveyed and who need to take action. (Shaw et al., 2013).

To achieve this, four basic objectives/stages of disaster risk communication may be mentioned: Awareness-raising, Understanding, Decision Support and Implementation.

Awareness-raising is the first step in the risk reduction process, and as such, informs subsequent steps. Care must be taken to keep awareness-raising messages short, concise, and engaging. Such messages do not need to be information-dense as they mainly seek to arouse curiosity and garner people's interest on the subject. Once awareness is created and curiosity is aroused, the next step , that is understanding follows where parties are expected to develop a better grasp of the subject thanks to messages facilitating their comprehension. Such an understanding forms the basis of making the right decisions. At this stage, messages should contain clear information and underline some basic scientific facts on the subject. The third objective is to support the decision-making processes, which consists of providing opinions on the consequences of various decisions. It is thus expected to lead to right decisions regarding risk reduction. The fourth objective, which affects the content of the message, centers on implementation.

The implementation stage is where concrete activities are put into practice, and messages in this stage should contain information on actions to be taken through clear, understandable, and concrete suggestions (EPA, 2003).

Once the content and format of the messages are determined, the medium to be used should be selected. Although communication primarily brings to mind such media as television, radio, the internet and social media, effective tools of communication may also include short meetings, workshops, and casual conversations.

The important point here is to choose a tool that will ensure the most effective transfer and understanding of the message that is fit for the objective as well as the target audience.

The quality and effectiveness of the communication would further be bolstered by the continuous access to data and information throughout the disaster risk communication process, development of a science and media literacy capacity, and the continuous provision of feedback to improve the process. In this context, a diagram of the proposed disaster risk communication model is presented in Figure-1.

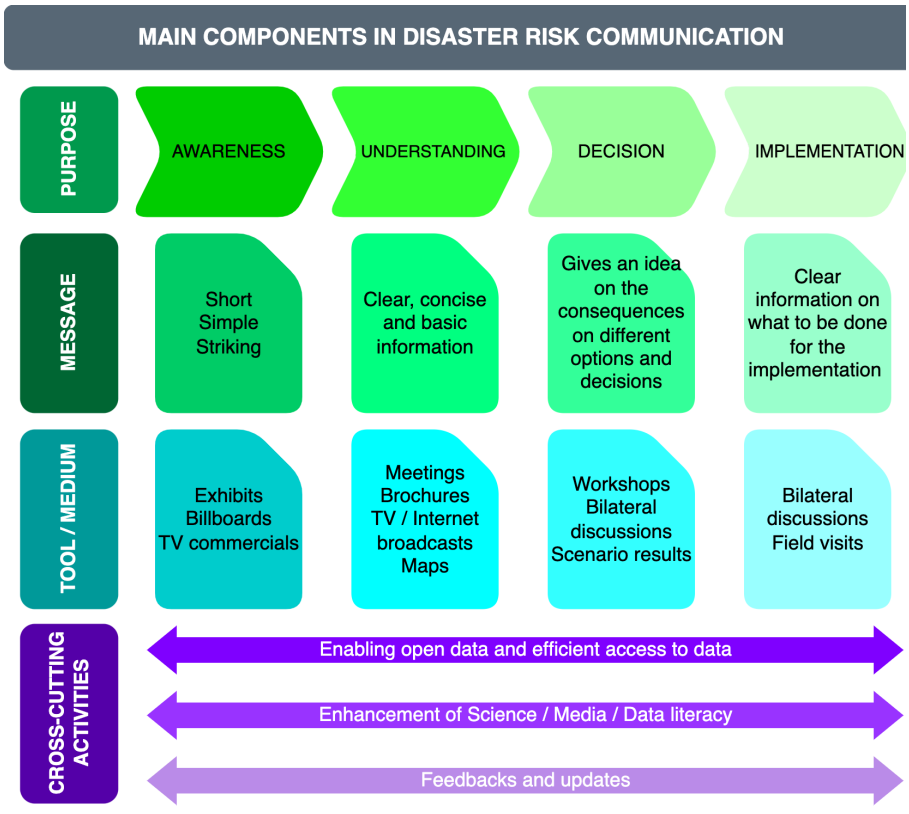


Figure 1: Main components in disaster risk communication

What further makes it challenging for disaster risk communication to achieve its goal, that is to reduce risks, is the fact that there are many economic, technical, social, psychological, and legal subcomponents involved in the context of disasters. Therefore, disaster risk communication could be successful if built upon a holistic approach that involves multiple stakeholders and enables interdisciplinary coordination.

An issue to be considered is that disaster risk communication has a complex, multi-stakeholder structure, and should be modeled in a way that it includes a range of different stakeholders instead of being solely community oriented. This is one of the challenges that distinguishes disaster risk communication from other models of communication. While many forms of communication are often community oriented, disaster risk reduction process seeks to reach out to public institutions, the private sector, non-governmental organizations, media, academia, and international actors. What further makes it challenging for disaster risk communication to achieve its goal, that is to reduce risks, is the fact that there are many economic, technical, social, psychological, and legal subcomponents involved in the context of disasters. Therefore, disaster risk communication could be successful if built upon a holistic approach that involves multiple stakeholders and enables interdisciplinary coordination.

To put it briefly, the environment must be technically, economically, socially, psychologically, and legally primed for the target groups to act; various actors mobilized around a common strategy must come together in order for disaster risk communication to reach the desired goal in an environment as such.

Mistakes Made in Disaster Risk Communication

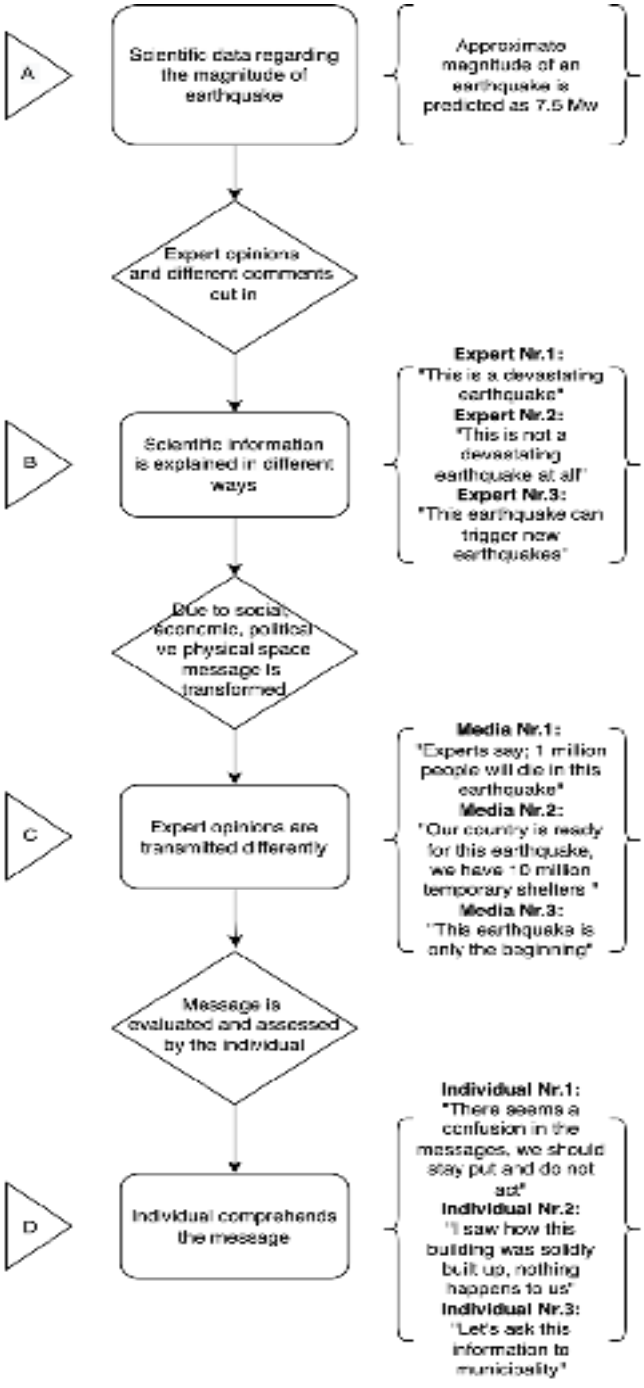
Prof. Ahmet İnam, points at a 4-step process in defining communication. The process begins with a thought in the mind of the person who initiates communication and is referred to as A. This thought that is processed cognitively, and through the elocutionary skills of the person, is uttered as B. It reaches the recipient as C by virtue of the environment in which it has been transmitted, and the recipient perceives this message as D due to his/her own cognitive capacity, experiences, and personality. Hence, while one party is talking about thought A, the other is responding to thought D, and this process continues reciprocally (Url-1).

This is a frequently occurring situation, particularly in regard to subjects with a scientific component, a prime example of which is the subject of disasters.

To map it onto the model that Prof. İnam mentions, scientific knowledge represents thought "A." Indeed, scientists often think that scientific knowledge will be understood just as they perceive it, and build all their comments, criticisms and discourses based on this assumption. Yet, just as technical information is difficult to understand, so is the reliability of message, which is the basis of communication, undermined when expressed differently by different experts (expressing idea A as B).

Information and ideas thus uttered reach the audience in a completely different way due to the impact of the social and political climate (information B turns into C). It must also be noted, that people act by their values and beliefs instead of scientific data and facts (information C turns into D) in case such uncertainties are in place within messages (Stewart, 2021). Therefore, with respect to disaster risk communication, having a public discussion on a bulk of very detailed information packed with uncertainties may cause more harm than benefit. A sample flowchart of how this process works is provided in Figure-2.

Figure 2 : A sample flow of risk communication



Another mistake in disaster risk communication is that public institutions tend to assume the society as a homogeneous whole. However, people of different socio-economic status perceive disasters differently (Kalaycıoğlu et al., 2018). Molded by the environment, the message "C" may be perceived as "D" by some, but other segments of the society may very well understand it as "E", "F" or "G". Expecting a message to create the same impact on the entire society is thus a misguided expectation. Moreover, different perceptions may lead to different reactions and turn into a reason for disagreement on such subjects as disasters, which impact the entire society. A concrete example would be urban transformation, which runs the same course for all segments of the society but is considered as a blessing for some and a profit-seeking operation for others.

As mentioned before, disaster risk reduction is a process with multiple actors, and therefore, disaster risk communication has a multi-stakeholder structure. However, other actors in the risk reduction process (i.e. the private sector, NGOs, media, other public stakeholders) are often left out and cannot develop a significant level of awareness. Nevertheless, communication models need to incorporate the relationship among all stakeholders. To illustrate, the private sector is of critical importance because disasters deal the biggest blow to the private sector, and the damages it suffers have a direct social impact as they result in the loss of jobs. Therefore, it is also important for the public sector, which has the principal responsibility in disaster risk reduction activities, to develop an approach in its communication with the private sector.

Another mistake is to equate disaster risk communication with other communication models that are tailored to launch a product/service or communication in political elections.

The aim in such types of communication is to motivate the audience to recognize and try a product/service or vote for a candidate running in an election. It is sufficient that the product is on the shelves/the service is accessible, or that the election has been fair, to say that such communication has achieved its goals. Backed by an enabling system, the awareness and demand created by such communication efforts turn into action. However, currently there are no mechanisms to support individual actions in disaster risk communication. Therefore, creating an awareness and demand for disaster risk communication does not guarantee results. In this process, individual actions should be bolstered by public policies and actions, and solutions must be found to drive individuals into action. To illustrate this claim with another example, it would be meaningless for a public institution to declare that "Istanbul will go through urban renewal" unless this declaration is supported by appropriate financial and legal conditions.

However, currently there are no mechanisms to support individual actions in disaster risk communication. Therefore, creating an awareness and demand for it does not guarantee results. In this process, individual actions should be bolstered by public policies and actions, and solutions must be found to drive individuals into action.

Against this backdrop, the presence of a target audience, message, and media channel alone is of no significance in disaster risk communication. It is futile to have a message shared and liked by millions on print, visual, or social media, or a poster/billboard seen by millions, unless accompanied by a holistic risk reduction approach.

Translating Knowledge into Action: Istanbul

Whenever the subject of disasters comes up on Turkey's agenda, Istanbul receives the greatest attention. This is because many scientific studies have now proven that a possible earthquake in Istanbul would cause a crisis at a national scale. An earthquake that affects Istanbul also affects Turkey in general. So, what should be the kind of communication strategy to follow regarding a potential earthquake in Istanbul, a disaster in the true sense of the word?

This is certainly not a question to be answered in a short article. Yet, the current scientific data and basic communication strategies discussed earlier in this article may inform the approach to be taken. First of all, it should be emphasized that access to information is the basis of this process. Accurate information should be accessible in a transparent way (UN, 2015).

We know that there are very detailed studies at present, providing Istanbul-specific disaster risk information, some of which are shared by relevant institutions on the internet (TESEV, 2021). Although publishing such information has the benefit of raising awareness and is useful especially for expert practitioners (such as engineers, urban planners, etc.), these reports are mostly scientific in nature, and as such, difficult to conceive for the public in general, or the private sector, who do not have detailed information on the subject.

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Moreover, it is known that inter-institutional data/information sharing policies are still very strict. This situation poses an important problem particularly for institutions that must work in coordination. Apart from the legal aspect of the problem, the lack of a culture of inter-institutional collaboration also plays an important role. It should be emphasized at this point that institutions would benefit greatly from open data platforms. The Open Data Portal of the Istanbul Metropolitan Municipality is one of the best and latest examples of such portals, despite its need for improvement in many respects. Having more of such platforms may improve the quality of access to data.

The fact that television is the primary tool for accessing information calls for a discussion on the media outlets of disaster as a subject. Rather than a focus on raising consciousness and awareness, the media has a headlines and ratings oriented view of disaster in Turkey. It can be seen that the most frequently used headlines on earthquakes merely seek to attract attention (such as: "Expert reveals scary earthquake information", "Istanbul earthquake knocking on the door", "The warning of the great Istanbul earthquake") and offer only some basic scientific information. This attitude of the media causes scientists to distance themselves from it, leading to a widening gap between science and the media. On the other hand, media circles complain of reserved scientists, arguing that they must report with what little information they have at hand (Menteşe et al., 2020). One might argue that to mend the gap between science and the media, the scientific community should develop media-literacy skills while the media circles must hone their science-literacy skills.

Increasing the number of open data platforms and improving the cooperation between academia and media may form the basis of, and enable rapid and transparent access to accurate information, an essential requirement in disaster risk communication. Providing access to the right messages through the cooperation of media and academia may help realize the first two objectives of disaster risk communication, that is cultivating social awareness and understanding.

While Istanbul's disaster risk communication strategy should be able to facilitate this medium-term approach, it must fundamentally have a long-term approach.

The fundamental message to base all awareness and understanding on is that disasters affect the entire society; everyone has a responsibility, and there are things that all segments of the society can do to reduce risks in any way possible. Impact starts to amplify when everyone starts owning up their role in disaster risk reduction. Disaster risk arises due to human activities. Nature is not the culprit and there is no such thing as a natural disaster. Disaster risk reduction is the shared responsibility of individuals, societies, companies, and governments.

Nevertheless, translating information into action, or in other words, reducing the risk of disasters requires mechanisms that venture beyond raising awareness and understanding. These mechanisms should be supported by an effective communication strategy and have a very broad coverage including physical risk reduction (i.e. possible losses in the superstructure and infrastructure); eradication of social vulnerabilities; cognitive, psychological, economic, and academic support for the community; and, elimination of problems arising from the administrative structure and legislation (primarily, data/information sharing).

The public sector has an undeniable role to play in the solution of problems, but not in a top-down approach; instead, there must be a horizontal orientation across the board with the academia, private sector, media, and NGOs. The approach is also important for fruitful communication and accurate sharing of responsibilities (Shaw et al., 2013).

The current legal, economic, and social conditions coupled with Istanbul's disaster risk make it challenging to achieve considerable disaster risk reduction in Istanbul in the short term, no matter how effective the communication strategy may be.

In the medium term, implementing small-scale examples of good practices may be an effective form of strategy. As a first step, site-specific awareness-raising campaigns may be organized, starting from districts and neighborhoods that stand out as high-risk areas in scientific studies. These could be backed with participatory meetings and workshops to develop an understanding of the issue's importance.

In parallel with these activities, carrying out social, technical, legal, and economic studies of the pilot area with a participatory approach may increase the effectiveness of communication activities, establishing trust between stakeholders.

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This would make it easier for the parties involved to adopt the solutions offered as well as their implementation. In summary, sustainable, and site-specific actions that contribute to the inhabitants' sense of belonging may be much more practical instead of a standard and sweeping solution to all of Istanbul's issues; a single successful practice may become a source of inspiration to many others.

While Istanbul's disaster risk communication strategy should adopt this medium-term approach, it must fundamentally develop a long-term approach. Actions must aim at risk ownership and calculate for the future. The crucial question must be, "What will our urban legacy look like in fifty years?" Disaster risk is everyone's responsibility, and as such, should be shared through social consensus. We must be aware that solving the problems of the day should not lead to the problems of the future: We cannot save the day at the expense of tomorrow.

When this long-term communication process—starting with the reinforcement of the individuals' awareness—evolves into a social culture in time, the public system as well as the city we live in will change on their own and become more resilient and sustainable.

We must keep in mind that the cities we live in are reflections of the individuals and communities inhabiting them. We must address disaster risk reduction through individual and community oriented, holistic, and participatory urbanization policies rather than focusing on urban transformation. Otherwise, living in resilient and sustainable cities will continue to be a dream for future generations and disasters will continue to be "natural".

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