

## Italy and Disaster Risk Management: Complete Failure or is there Hope?

Chiara Lodi\*

*London School of Hygiene and Tropical Medicine, Emergency nurse practitioner, University of West England, LEAP master, Medical Team Leader MSF (doctors without borders), International nurse EMERGENCY NGO, Nurse Emergency Medical Unit and Medical Triage medical unit, RD&E Hospital, Italy, via Latemar 3, 41012, Carpi, Modena*

**\*Corresponding author:** Chiara Lodi, London School of Hygiene and Tropical Medicine, Emergency nurse practitioner, University of West England, LEAP master, Medical Team Leader, *MSF (doctors without borders)* International nurse EMERGENCY NGO, Nurse Emergency Medical Unit and Medical Triage medical unit, RD&E Hospital, Italy, via Latemar 3, 41012, Carpi, Modena, Tel: +393925419390, E-mail: [chiola@hotmail.it](mailto:chiola@hotmail.it)

**Citation:** Chiara Lodi (2022) Italy and Disaster Risk Management: Complete Failure or is there Hope? *J Emergency Med Care* 4: 102

### Introduction

During the last three decades, natural and manmade disasters in Italy have been worryingly increasing and chronologically predictable [1, 2].

The rapid escalation of disaster frequency caused by climate change together with the carelessness, negligence and lack of competences of the Italian political leadership led to the country losing human life and economic assets.

Furthermore, according to Coscelli A. (2009), the Italian geological and geographical composition together with not well regulated urbanisation and corruption can be compared with a “Third World country” [2].

Clearly, with good Disaster Risk Reduction (DRR) plans and an upright and knowledgeable political leadership, all of the major disasters could have been avoided or mitigated.

The most recent and explicit example of mismanagement is the Italian response to the Covid-19 pandemic that hit Italy hard in early 2020.

The author has for the last 10 years been working in humanitarian settings as Project Medical Referent (PMR) before with EMERGENCY NGO and after (also now) with *Medicins Sans Frontieres (MSF)* Spain, particularly in responding to natural and man-made disasters.

In this essay, the author will briefly list and explain the major Italian disasters and analyse and compare the Sendai Framework for DRR with the Italian way to prepare for disasters.

It will analyse what brought Italy to the Covid-19 disaster and compare the Italian pandemic and disaster preparedness plan with the major lessons learned during this module, ending with a personal opinion and possible solutions.

## **Italy: from floods, landslides, manmade disasters and earthquakes to the recent Covid-19 pandemic**

In Italy, extreme natural hazards due to climate change are predicted to become more frequent and damaging causing terrible consequences to society.

This, together with demographic and urban area growth, deforestation, exploitation of natural resources (including lands for intensive agriculture) combined with the chain of omissions, delays and errors by the different governments, is making it more and more urgent to review, update and implement a new DRR strategy in all of Europe, but especially in Italy. [2, 3, 4, 5].

Finding a precise and updated chronology of the major Italian disasters during the last three decades has been very difficult as qualitative and quantitative disaster data is not homogenous, not well recorded and unreliable.

This is probably due to the enormous number of events for which information has been very difficult to properly collect and store [3].

1990: earthquake in Sicily

1992: flood in the north of Italy

1995: flood in Lombardia and Sicily

1997: earthquake in Umbria

1998: flood in most of the south of Italy

2000: flood in Piemonte, Valle d'Aosta, Liguria, Lombardia

2005: train accident in Emilia Romagna and flood in Lazio

2007: flood in Veneto

2009: explosion at a train yard in Tuscany and flood in Sicily

2009: earthquake in Abruzzo and mudslide in Sicily

2012: two earthquakes in Emilia Romagna

2015: tornado in Veneto and mudslides in the north of Italy

2016: train accident in Puglia and mudslides in the north of Italy, tornado in Liguria

2018: train accident in Lombardia and mudslides in the north of Italy

2019: storms and floods in different parts of Italy

2020: Covid-19 pandemic

2021: storms in different parts of Italy and Covid-19 pandemic [6, 7].

## **Italian disaster preparedness: Sendai Framework for DRR and the need to be prepared**

According to the original text, the Sendai Framework (2015) pursues the goal: "Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience." (UNISIDR, 2015)

The Framework clearly recognises that strong commitment and engagement of the political leadership are crucial: in Italy the government is so worried and involved that the WHO report released in 2020 found that Italy's pandemic plan had not been updated since 2006.

Briefly analysing the 4 action priorities of the Framework and comparing them with the Italian DRR, it stands out that the Italian political leadership seems not even to be aware of them.

### • **Understanding disaster risk**

The Framework emphasises that early understanding and identification of potential risks are crucial to be able to develop a good prevention, preparedness and response plan.

The central authorities need to implement institutional measures to minimise risk to the population. (UNISIDR, 2015)

Despite Italy always having had a disaster taskforce and specialists, after each disaster, institutions but also the affected population have the tendency to quickly forget about the lessons of the past disasters and the casualties.

Meyer and Kunruether described this phenomenon in the book “The Ostrich Paradox: Why We Underprepare for Disasters” (2017) as *amnesia* and Italy is a very typical example of this bias: every year many disasters occur and Italy has not invested in understanding and preparing for them.

Every disaster seems to be a “new disaster” that surprises the institutions, central government and population.

In the same book, Meyer and Kunruether (2017) discuss a bias they call **optimism** that is “the tendency to underestimate the likelihood that losses will occur from future hazards”.

Again, the Italian political leadership, as well as local authorities, once the danger has passed, optimistically have faith that it will not happen again or they will escape the worst.

The most relevant examples are the recurrent earthquakes that frequently hit Italy: the Italian government and local institutions forget that they can happen and they are optimistic that it will not be as bad as the last one. (Israely J. 2009)

### • **Strengthening disaster risk governance to manage disaster risk**

In the Framework it is highlighted that it is the responsibility of the state/government to understand the importance of partnering and cooperating with other stakeholders such as local governments, other governments or the private sector/non-state actors, enhancing risk reduction, addressing prevention, preparedness and cooperation in the event of a disaster. (UNISIDR, 2015)

The Italian government normally delegates, does not partner or cooperate with other stakeholders, normally carries out surveillance and control but does not work synergically with other actors.

A typical example is the continuing rain storms in Southern Italy and in Liguria: the Italian government only delegates the local authority to prepare and prevent but does not cooperate and leaves them to deal with the issue that continues to create enormous damages. (Roea A., 2011)

### • **Investing in disaster risk reduction for resilience**

Financial and non-financial means need to be invested in order to ensure the implementation of disaster risk reduction. It is important to demonstrate implementation of the operation related to disaster risk reduction, cooperation across all actors involved to ensure and strengthen resilience. (UNISIDR, 2015)

In the same book, Meyer and Kunruether (2017) describe another bias: **myopia** “a tendency to focus on overly short future time horizons when appraising immediate costs and the potential benefits of protective investments”.

They outline that bureaucratic processes are the reason for this bias as political leaders need to use funds for things that have immediate tangible benefits instead of using them for disaster risk reduction investments because the benefits are long-term and the probability that they will occur are very low.

Nevertheless, if they occur, the consequences in terms of casualties and assets will be enormous.

Myopia leads decision-makers to procrastinate and miss the opportunity to invest in protective measures.

Meyer and Kunruether (2017) also discuss **inertia**, “a tendency to maintain the status quo or adopt a default option when there is uncertainty about the potential benefits of investing in alternative protective measures”.

According to Edoardo Zanchini (Israely J. 2009) “In Sicily, in Calabria, and other parts of the South, you have entire towns built in zones with a hydrogeological dynamic that is very delicate” and the local authorities together with the central government are not investing in rebuilding or moving towns but they prefer to keep the status quo.

Zanchini also highlighted the fact that the Italian bad governance is due to the power of the Mafia, corruption and the general lack of attention to the well-being of the Italian population: money and power will always be more important than human lives. (Israely J. 2009)

• **Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction**

Worldwide experience indicates that the population and relevant authorities must be trained in preparedness and response. Only by strengthening these two elements can we ensure solid and effective recovery, rehabilitation and reconstruction.

As the Sendai Framework requires, it is crucial to: “Prepare, review and periodically update disaster preparedness and contingency policies, plans and programmes, ensuring the participation of all sectors and stakeholders, in particular when preparing on- and off-site contingency plans” [8].

According to [11] “current local Emergency planning instruments resulted not adequate to face the frequent emergencies caused by a very vulnerable territory, exposed to increasingly extreme natural events”, referring to the Italian territory.

The article also underlines the necessity of implementing real and ad hoc contingency plans for the most vulnerable areas using technology and experts that will continuously review data and update those plans.

It also introduces the concept of the importance of community involvement in planning and follow-up contingency plans.

The unpreparedness of the Italian government in disaster risk reduction, preparedness, recovery and reconstruction led to the 2020 Covid-19 disaster.

According to Giuffrida A. and Boseley S., in an article published in The Guardian in April 2020, the Italian “flu pandemic plan” was created in 2006 and later updated, the last time in December 2016.

## Covid-19 pandemic: the Italian scandal

In May 2020, the World Health Organization (WHO) published a report investigating Italy's pandemic preparedness.

At that time, the first Covid-19 wave was at its peak: the population was terrified and the Italian government had no idea what to do, why this was happening and healthcare workers were battling with thousands of patients and deaths.

The aim of the report was to provide a lesson/guide for nations not yet affected by the virus.

In the report, produced by the WHO scientist Francesco Zambon and 10 colleagues across Europe, it was found that the Italian pandemic plan had not been updated since 2006 and highlighted that, due to this, the initial response of the hospital in Lombardia was "improvised and chaotic". [12, 13].

WHO withdrew the report the next day for unknown reasons despite the fact that its findings could have helped other countries to prepare for the pandemic.

A few months later, the scientist Zambon stated that "The report did not criticise the Italian government but highlighted the criticalities faced in the management of the pandemic, starting from the premise of the old pandemic plan, which was only 're-confirmed' and not updated in 2017. The team thoroughly checked this and found that all the plans that came after 2006 were just copied and pasted – not a word or comma was changed in the text." [12].

In addition to this, the Italian health system was not prepared to quickly supply what was needed to hospitals and health facilities and no supply plan has ever been in place.

Especially in Lombardia, the epicentre of the pandemic, healthcare workers very quickly ran out of basic medical and personal protection material and the Italian government was not able to support them [14].

Furthermore, the Italian Superior Institute of Health blamed the Lombardia region leadership of having provided incomplete virus data that led to a delay in declaring the region a "red zone", resulting in the rapid spread of the virus to all of Italy and consequently thousands of deaths and millions of euros in loss of assets and business.

The governor of the Lombardia region accused the central government of not providing, investing and updating the monitor mechanism that could have accelerated the provision of the right data.

Another key element that the Italian government completely underestimated was the importance of good communication.

During times of crisis:

1. Communication must be perfectly planned, consistent and have a clear goal targeted at the audience.
2. Communication has to be in the interest of the audience/affected population, not in the interest of the political leadership. The population needs to feel listened to, establishing an emotional connection.
3. The message must be delivered by trustful sources that have been tested and confirmed before the release of the communication.

Nowadays people can autonomously cross check information so only an upright source can be trusted.

4. The explanation of the risk must be clear, accurate and sincere and options/solutions to reduce the risk must be offered in a clear manner as disasters always bring chaos. [15, 16].

During the Covid-19 crisis, communication of the Italian political leadership with the population was scattered with the aim of covering their mistakes: messages were not clear, options/solutions were blurry and the population was not listened to.

## **Conclusion**

Due to its geographical features, Italy is a land prone to disasters and year after year it has been the victim of many natural and manmade disasters.

Despite this being well known, especially to the political leadership, very weak and scattered measures and attempts to implement the disaster risk management plan have been made.

Community-based and participatory disaster risk reduction are not even taken under consideration while it is well known that community input and engagement is an important factor for a disaster risk reduction plan to be effective.

Partnerships and involvement of different stakeholders, including local authorities, is a critical component of the implementation of disaster risk reduction projects and strategies but the Italian central government does not take this under consideration and has the tendency to centralise decisions and discussions.

Corruption and mismanagement lead to investing in immediate tangible benefits instead of in long-term protective measures. From my point of view, as humanitarian medical coordinator specialised in working in disaster settings, the most worrying, shocking and sad element is the lack of accountability.

After every disaster, everyone involved (political leadership, local authorities, other stakeholders) blames each other, the fault making a never-ending circle that can last months, even years, as is happening with the Covid-19 scandal.

There is no space and intention to analyse and understand what happened to “Build Back Better”.

Until the Italian political leadership takes responsibility and is accountable for their decision-making, but especially their mistakes, Italy will continue to strike and suffer under disasters.

## References

1. Stevens R (2022) Italian Natural Disasters Timeline. Available at: [Italian Natural Disasters Timeline- Rachel Stevens | Timetoast](#)
2. Israely J (2009) Why Do Italian Disasters Kill So Many People? TIME on line. Available at: [Why Do Italy's Disasters Kill So Many People? - TIME](#)
3. Paprotny D et al. (2018) Trends in flood losses in Europe over the past 150 years. *Nature Communications* volume 9, Article number: 1985. Available at: [Trends in flood losses in Europe over the past 150 years | Nature Communications](#)
4. Forzieri G. et al. (2016) Multi-hazard assessment in Europe under climate change. *Clim. Change* 137, 105–119.
5. Rummukainen M (2012) Changes in climate and weather extremes in the 21st century. *WIREs Clim. Change* 3, 115–129.
6. Internazionale (2016) I peggiori terremoti in Italia dal 1976 a oggi. Available at: [I peggiori terremoti in Italia dal 1976 a oggi - Internazionale](#)
7. Della Gatta A (2021) I peggiori disastri ambientali avvenuti in Italia negli ultimi 10 anni. *Ecocultura*. Available at: [I peggiori disastri ambientali avvenuti in Italia negli ultimi 10 anni \(ecocultura.it\)](#)
8. UNISDR (2015) Sendai Framework for Disaster Risk Reduction 2015 – 2030. Available at: [Sendai Framework for Disaster Risk Reduction 2015 - 2030 \(unisdr.org\)](#)
9. Meyer R, Kunreuther H (2017) *The Ostrich Paradox: Why We Underprepare for Disasters*. Wharton Digital Press: Philadelphia.
10. Roe A (2011) Man Behind Italy's Natural Disasters. *Italy Chronicles*, November 7. Available at: [Man Behind Italy's Natural Disasters - Italy Chronicles](#)
11. Pilone E et al. (2016) Municipal Emergency Plans in Italy: Requirements and drawbacks. *Safety Science* 85 163–170
12. Giuffrida A, Boseley S (2020) Italy's pandemic plan 'old and inadequate', Covid report finds. *The Guardian*. Available on line: [Italy's pandemic plan 'old and inadequate', Covid report finds | Italy | The Guardian](#)
13. Press transparency (2021) *Blowing A Whistle At The World Health Organization: Lessons For Italy And Beyond*. Transparency International. Available at: [Blowing a whistle at the World Health... - Transparency.org](#)
14. Winfield N (2021) Probe into Italy virus response looks into preparedness plan. *AP NEWS*. Available at: [Probe into Italy virus response looks into preparedness plan | AP News](#)
15. Covello VT (1988) *The EPA's Seven Cardinal Rules of Risk Communication*. U.S. Environmental Protection Agency. Available at: [orau.gov/cdcynergy/erc/Content/activeinformation/resources/EPA\\_Seven\\_Cardinal\\_Rules.pdf](#)
16. Cone J (2008) *Expand Your View: Insights for Public Communicators from Behavioral Research*. Oregon Sea Grant. [seagrant.oregonstate.edu/files/sppubs/onlinepubs/h08006.pdf](#)