



## Health literacy, emotionality, scientific evidence: Elements of an effective communication in public health

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### ABSTRACT

The importance of healthcare providers' communication abilities is still underestimated. Informing the population on the basis of documented evidence is essential but not enough to induce a change in the beliefs of who is doubtful or does not accept preventive interventions, such as vaccination. Lining up the offer of prevention to the knowledge of the citizens, also improving Health Literacy skills, is a critical step toward their empowerment and behavior change. The 2017 Erice Declaration was drafted to propose to the Institutions and the scientific community the main goals to improve communication and counteract Vaccine Hesitancy, at a very critical time, when mandatory vaccination was introduced in Italy.

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Literacy is defined as the generic ability to read, write and use arithmetics, while “Health Literacy” refers to the specific capacity to retrieve, understand, apply and use medical information, interacting with the health system: “it concerns the knowledge and competencies of persons to meet the complex demands of health in modern society”.<sup>1</sup>

Informing the population on the basis of documented evidence is helpful and necessary, but it is not enough to induce a change in the convictions and in the behaviors of those who are doubtful or do not accept preventive interventions, such as vaccination.<sup>2</sup>

On the contrary, documented data risk to be self-defeating if the interlocutor is saturated with emotional rejections, as the mistrust toward decision-makers, or he/she receives conflicting information from the health providers. Moreover, debates among experts, organizations, and individuals strongly active on the web and in the social media, often produce – and induce in the public – conflicting opinions.

Collaboration between all actors is required to contribute to the conception and sharing of a new partnership among health operators and citizens. At present, it seems that health care settings do not consider the real abilities of understanding of the population, taking for granted the good outcome of the transmission of information, relying on the good ability of reading and writing of almost all individuals. Whereas the percentage of “functional analphabetism” (i.e. the incapability to efficiently read, write and use arithmetic in the daily life) remains quite high.<sup>3</sup>

Therefore, it is essential to line up the offer of cares and prevention to the knowledge and the abilities of understanding of the public, keeping into account that still high is the portion of the population with low Health Literacy skills, according to a self-reported evaluation conducted in some European

Countries<sup>4</sup> and in Italy.<sup>5</sup> High levels of education do not always correspond to suitable abilities of critical interpretation of the information: most educated people, with appropriate levels of functional and interactive literacy, can risk incurring in errors of evaluation, due to an overload of information.

Moreover, it has to be taken into account the difficulty of part of the population to manage the “e-Health Literacy”, that is the ability to look for, find, understand and use health information from electronic sources. It cannot be underestimated the kind of fruition, often partial and uncritical of the material found online, the lack of a serious culture of informatics and the presence of “fake news” on sanitary themes making lever on the emotions and the perplexities of the people. Neither must be neglected the fact that almost one third of the Italian population don't have Internet access from their own domicile, mainly among the elderly people.<sup>6</sup>

Therefore, Health Literacy represents a priority strategic area, in particular when new preventive interventions – such as the recent introduction in Italy of the obligation, from four to ten pediatric vaccines<sup>7</sup> – put to a hard test the health organization and the single operators. At the same time, this obligation involves the necessity to strengthen the health knowledge of the citizens, particularly in terms of risk/benefit, through interventions planned by the Institutions and the Scientific Societies. The notion of “Vaccine Literacy” should also be developed.<sup>8</sup>

In the context of a health system increasingly technological and of the switch from a medical “paternalism” to a patient-physician collaboration, it is recommended by the WHO<sup>9</sup> and the scientific community the importance to develop the operator's communication abilities, until now underestimated. It is necessary to promote education about the correct interaction skills of those people who, for their profession, are in contact

with the public and of others whose opinion is requested on controversial themes.

All things considered, the choice of the strategies of communication and “counselling” can be facilitated by the synthesis of three main achievements:

- Improvement of the Health Literacy skills in the population;
- Understanding of the emotions hindering the communication;
- Suitable exploitation of the medical evidence.

Today these elements often represent barriers toward the empowerment of the population and changes in attitudes. Removing or lowering these obstacles may ease the path.

As a contribution to the ongoing discussion on these subjects, the 2017 Erice Declaration was drafted to transfer to the national level the main goals for a better communication in the field of vaccination and transform them into measures to counteract Vaccine Hesitancy.

As in 2014 and 2016 – when the priorities and challenges of the Italian immunization system and communication about vaccination were discussed<sup>10,11</sup> – this declaration arose out of an intensive residential, independent 5-day workshop organized in Erice, Sicily, by the International School of Epidemiology and Preventive Medicine “G. D’Alessandro” in collaboration with the Italian Societies of Public Health (SItI) and Pediatrics (SIP). Faculty included representatives of the Italian Ministry of Health, the Academia, operators involved in immunization programs, psychologists and media experts. International specialists also attended.

During the workshop, participants were engaged in debates and proposals. The 2017 Erice Declaration summarizes the workshop’s conclusions; it has been endorsed by participants and circulated to key stakeholders at a very critical time, when obligation for ten vaccinations was introduced.

The following proposals of priority objectives were drawn, to be considered for a Country as Italy, where Health Literacy activities are starting-up:

1. Implement activities of an Italian collaborative group for the promotion of Health Literacy and for the development of the Vaccine Literacy;
2. Spread the knowledge of Health and Vaccine Literacy among Scientific Societies, Medical Federations, Regional and Local Health Providers and National Institutions, getting the media involved;
3. Promote the research in the field of the Health and Vaccine Literacy;
4. Develop and employ analogical and digital tools to facilitate the steps forward the empowerment and the behavior change of citizens, through the integration of multi-disciplinary competencies;
5. Solicit the evaluation of population-based interventions and measures of Health Literacy skills;
6. Stimulate communication campaigns and education of citizens to encourage healthy lifestyles;
7. Promote the teaching of prevention and health in the primary schools;
8. Stimulate the development of materials for the realization of educational programs for experienced trainers both in health as well as scholastic fields;
9. Increase the provision of training for health personnel on communication and counselling, with particular reference to the new technologies;

10. Influence the individual skills of care and prevention through the family physicians and pediatricians by the diffusion of Health Literacy measures.

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## References

1. Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H, (HLS-EU) Consortium Health Literacy Project European. Health Literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health*. 2012; 12:80. doi:10.1186/1471-2458-12-80. PMID:22276600.
2. Nyhan B, Reifler J, Richey S, Freed GL. Effective messages in vaccine promotion: a randomized trial. *Pediatrics*. 2014; 133(4):e835–42. doi:10.1542/peds.2013-2365. PMID:24590751.
3. OECD. Skills Matter: Further Results from the Survey of Adult Skills, OECD Skills Studies, Paris: OECD Publishing; 2016.
4. HLS-EU. The European Health Literacy Project 2009–2012 [accessed 2017 Dec 28]. [https://docs.wixstatic.com/ugd/76600e\\_4899bb3c9c8e4a8db213d60e3a2de16f.pdf](https://docs.wixstatic.com/ugd/76600e_4899bb3c9c8e4a8db213d60e3a2de16f.pdf).
5. Palumbo R, Annarumma C, Adinolfi P, Musella M, Piscopo G. The Italian Health Literacy Project: Insights from the assessment of Health Literacy skills in Italy. *Health Policy*. 2016;120:1087–1094. doi:10.1016/j.healthpol.2016.08.007. PMID:27593949.
6. ISTAT. Cittadini, imprese e ICT 2016 [accessed 2017 Dec 29] [https://www.istat.it/it/files/2017/12/ICT\\_Anno2017.pdf?title=Cittadini%2C+imprese+e+ICT+-+21%2Fdic%2F2017+-+Testo+integrale+e+nota+metodologica.pdf](https://www.istat.it/it/files/2017/12/ICT_Anno2017.pdf?title=Cittadini%2C+imprese+e+ICT+-+21%2Fdic%2F2017+-+Testo+integrale+e+nota+metodologica.pdf).
7. Italy Law 31st July 2017, n. 119. Published on the Italian Official Gazette, August 5th 2017 [accessed 2017 Dec 28]. <http://www.gazzettaufficiale.it/eli/id/2017/08/5/17G00132/sg>.
8. Ratzan SC. Vaccine Literacy: A New Shot for Advancing Health. *J Health Commun*. 2011;16(3):227–229. doi:10.1080/10810730.2011.561726. PMID:21391044.
9. WHO. Addressing Vaccine Hesitancy 2016. [accessed 2017 Dec 28] [http://www.who.int/immunization/programmes\\_systems/vaccine\\_hesitancy/en/](http://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/).
10. Odone A, Fara GM, Giammaco G, Blangiardi F, Signorelli C. The future of immunization policies in Italy and in the European Union: The Declaration of Erice. *Hum Vacc Immunother*. 2015;11(5):1268–1271. doi:10.1080/21645515.2015.1019980.
11. Biasio LR, Corsello G, Costantino C, Fara GM, Giammaco G, Signorelli C, Vecchio D, Vitale F. Communication about vaccination: A shared responsibility. *Hum Vacc Immunother*. 2016;12(11):2984–2987. doi:10.1080/21645515.2016.1198456.