SHORT PAPER

Reflections on an interview with the late Prof Maria Antonia Modolo

V. Gianfredi¹

Key words: Health Education, Health Promotion, Prevention, Primary Health Care Parole chiave: Educazione sanitaria, Promozione della Salute, Cure Primarie

Abstract

The Author, now a Research Assistant at the Department of Public Health of the University of Milan, Italy, in the period she was a Resident of the School of Public Health of the University of Perugia, had the occasion to interview Prof Maria Antonietta Modolo, one of the most significant pioneers of Health Education and Health Promotion both in Europe and in this Country, and her mentor at that time. Prof Modolo, who recently passed away, in that occasion explained in detail all the goals of these disciplines, and the impact they can show on the life of the population of developed and developing countries, if applied within a robust public health framework.

Foreward

Maria Antonia Modolo, who died on 26 November 2020, was a well-known Public Health Professor at the University of Perugia School of Medicine and a distinguished researcher in Health Education at international level. She directed, from its foundation in 1954 until 2009 the Experimental Center for Health Education (Centro Sperimentale per l'Educazione Sanitaria - CSES), more recently, in 2014, renamed as Experimental Center for Health Promotion and Health Education (Centro

Sperimentale per la Promozione della Salute e l'Educazione Sanitaria - CeSPES) (1). CSES and CeSPES represented, and still represent, one of the most advanced environments for research and teaching Health Education a Health Promotion in this country (Italy).

Prof Modolo's scientific curriculum has been recently revisited in a full issue (N 281, Jan-Mar 2021) of "La Salute Umana" (ISSN 0391-223), a Journal she edited for many years (till 2020) (2), and also in the Section "Celebrating Public Health Lives" of "Annali di Igiene: Medicina Preventiva e

Annali di Igiene : Medicina Preventiva e di Comunità (Ann Ig) ISSN 1120-9135 https://www.annali-igiene.it

Copyright © Società Editrice Universo (SEU), Roma, Italy

¹ School of Medicine, Vita-Salute San Raffaele University, Milan

di Comunità" (ISSN 1120-9135), the journal where the present paper is published (3).

The interview

During the course of my residency at the University of Perugia, as a degree-seeker at the School in Hygiene and Preventive Medicine, I had the great opportunity to know Professor Maria Antonia Modolo personally: tireless and generous woman, physician and teacher. Despite her retirement, she almost daily attended, with her proactive nature, the Department of Hygiene devotedly, continuing to engage in new health education and promotion projects, and conveying, by word and example, all her passion to students and residents like me (4). From my perspective, she was a great example of professional and human dedication and passion. It is in this context, and thanks to her willingness, that this interview, performed in 2017, was made possible and that today, a year after her death (26th November 2020), I think it is right to make public (Figure 1). I'm so thankful for her valuable teachings and inspiring speeches.

Individual, subject and person. In your opinion, what is the meaning of these three terms in defining the human being?

According to the dictionary definition, individuals are those identified by DNA. Having this in mind, both humans, animals and plants should be considered as individuals. In other words, the fusion of two DNAs that come from two individuals gives rise to a new individual. It means that DNA is something that comes behind us and that we share. On the other hand, the subject is something that comes from the personal experiences of one's own life. The individual builds and models himself according to his subjectivity. In light of this, it is not possible for a mother to say "I know my child because I delivered him/

her". This is not possible, because they only share a similar DNA, but have completely different life experiences. Actually, we share approximately 99% of our genome with monkeys. Consequently, even though the amount of DNA shared among relatives is absolutely higher, it does not mean they are similar subjects. The latest is the **person**. In Etruscan, the term person means mask or actor, and it is linked to the relationship among subjects. Today, we can call it communication among persons. The person is the model of communication between subjects. In our socio-cultural context, I believe the most important thing is the communication between subjects. We live in a highly connected and interconnected world, in which communication among persons is fundamental. I developed this theory thinking about the Godhead: Father, Son and Holy Spirit. The Father is the DNA, the Son represents life experiences, and the Holy Spirit is communication. Indeed, the Father is something above and behind everything, the Son was born in a manger and died on the cross, lastly the Holy Spirit communicates with everyone.

On the basis of your professional experience, how do you think health education can contribute to health equality?

First of all, it must be clear that health education should be part of general education. What I mean is a type of education that allows us to understand the needs of our body and of our person, in both physiological and psychological terms. A type of education that makes us aware of the choices available to us. That makes us feel satisfied with ourselves, and appreciated for who we are. That type of education that prepares us to be citizens. A citizenship able to manage changes and the future, as well as to evaluate novelties, researches, and new ways of life. In this view, health education cannot be merely a flow of information from the expert to the subject. It cannot be viewed as a recipe of what should V. Gianfredi

be done or avoided. On the contrary, health education is something much more complex. Health education is based on a trustful and deep communicative relationship between experts/professionals and subjects. What I have in mind is a communication that connects principles, researches, and practices leading to training/information relationships between professionals and population/ stakeholders. This communication shares knowledge, scopes and tools with the final aim of increasing citizens' skills. Clearly, communication is a two-way process, in which also the professional listens to the subject's needs, opening up to the evaluation of possible solutions. In this view, communication should be an integral part of the health services provided to a subject as it is and to a citizen as a member of the community. However, citizens not only need to be informed but they need to really understand. This is especially true nowadays, where there is a growing complexity of acquired knowledge about health and health promotion. And that it is not all. Indeed, another relevant topic is the large number of sources of information now available and among which citizens should be able to orient themselves. And now I come to your question about health equality. Thinking about vulnerable people, what should we ask ourselves is: what is the most important parameter when talking about health and health equality? For me, the fundamental aspect is not (or it is only partially) the economic status, but mainly education. This is the reason why I started my discussion specifying that health education should be part of general education. It is now well known that poorly educated people are those with the highest morbidity of related to both acute and chronic diseases, as for instance cardiovascular diseases, cancers, obesity, diabetes and so on. This aspect is a call to action. In my view, the action needed is the education of the new generations. Therefore, schools play a central role, or rather, we should say health-promotion

within schools. In regard of this, I agreed with the idea of *overcoming* the "old" school medicine service ("medicina scolastica"), but it had to be positively overcome, and not just abolished, as it has happened. The same role should also be given to Universities. I can never forget the experience that I had with my medical students during their fifth year of the curriculum. What I noticed was that they were surprised to hear about health and prevention. They were only used to talk about diseases and therapy. For this reason, in the early '90s, we (at the University of Perugia) were pioneers introducing an experimental course (optional) on the concepts of health, prevention and health promotion. It was a great experience but it was not easy, because not even the Faculty was ready for this epochal change. To conclude, I believe that the right to health education is one of the central rights, not only for promotion and prevention, but also for treatment and rehabilitation.

In Italy, sex education has often been considered as a means to women's health promotion. Can it still be considered valid today?

It would be interesting in the context of sex education to address issues related to the role of male and female. What is sex? When does it begin and how does it end? What is the role of the woman in procreation? And what happens after the childbearing age? Instead, associating sex education with women's health is certainly reductive. Sex education promotes both women's and men's health. Sex education, if is not considered a mere teaching of contraceptive techniques or prevention of individual venereal diseases - which, however, remain important topics - leads to the health of the couple and therefore of both man and woman. Sex education should not only be referred to the reproductive sphere, and this is even more true today if we think that the average life span has lengthened a lot. So, today, a woman is likely to spend a large period of her life in the post-reproductive phase. And

we should take this aspect into account. I want to tell you my experience as a child. The example of a woman I received during my First Holy Communion was that of Our Lady: a virgin but a mother. At that time, I understood what motherhood could mean, because I had the experience of my own mother who had 7 pregnancies but only 5 children. Every time I saw her belly grow; a baby born. I didn't know anything about the term virgin, so I was racking my brain. Then there was Saint Joseph who was a putative father and who entered into this motherchild couple. I consulted the dictionary to understand the meaning of putative father. Thus, the confusion I had between the hypothetical father and the virgin mother was great. These doubts as a 10-year-old girl remained for many years, because, in my time, sex education was not something you would hear of. Often, even in the medical program, when studying anatomy, it was asexual. So again, sex education cannot be a flow of information, but a trustful relationship that allows the subject to understand him/herself, and his/her body. A communicative relationship that allows us to understand how we want to interpret who we are and how we are, the role of male and female, the role of having two initial cells that form an individual, whose interaction with the environment, forms a person and then a subject. Within sex education, we should identify a way to insert the knowledge of ourselves, developed depending on age, in order to develop not only the knowledge related to the simple sexual act, but including the emotional aspect. It is through this that we reach the World Health Organization's definition of health based on physical (prevention of venereal diseases) but also social and relational well-being.

Throughout this discussion, we must not forget the role of the family. We were five sisters, three of whom were married, but two of these were later divorced and remarried. In this short time, many things have changed.

At my time, sex education was based on the information that moms or doctors gave about menstruation. The discussion was aimed to explain what they were and how they worked, but neither boys were mentioned in the process, nor they were part of the discussion. The concept behind this was that women were allowed sexuality only for procreative purposes. Today contraceptives are available, but at that time they were not. Contraceptives were not allowed until 1975, because of a Fascist law introduced in 1930. During that period, I was a resident in Public Health, and I noticed a still high child mortality rate. It made me curious and I engaged some of my colleagues more expert in legislation, and we discovered the "Title X - Crimes against the integrity and health of the race" of the Penal Code, that banned the use of contraceptives, as well as abortion. In those years, Professor Seppilli was a member of the Superior Health Council (Consiglio Superiore di Sanità, CSS) and became the spokesperson for this proposal. We thus obtained important results. Firstly, the abrogation of this law, and on July 29th, 1975, the approval of the Law n. 405. This law instituted family and maternity care services (counsellors - consultorio) and allowed the use of contraceptives. So, we need to figure out how sex is interpreted in women. This law was followed by Law n. 194 issued on May 22th, 1978. These laws offer us a first interpretation, allowing the use of contraceptives, but also introducing the "conscientious objection" for the gynaecologists of the National Health Service, which means that they can choose not to perform abortions because of ethical or religious beliefs. We are aware that an exceptionally high number of gynaecologists declared themselves as conscientious objectors and, consequently, we are witnessing an inevitable reintroduction of illegal abortions. According to the LAIGA (Libera Associazione Italiana Ginecologi Per Applicazione Legge 194 - Free Italian V. Gianfredi

Association of Gynaecologists For Law n. 194 Enforcement) in Italy, there are clinics where illegal abortions are performed. Despite this big issue, there are no studies that talk about it... we accept that it is so. As happened in the past, we passively accept the situation. And we accept it because there is this cultural taboo problem around sex. Then there is the problem of feminicide. What does it mean? It is still not clear. Why do husbands kill their own wives? Why do husbands beat their own wives? There are many of them. We are now in January 2017 and there are already 4 cases of women killed or scarred with acid by their own husbands. Why? What do these women do? I don't know! In my graduation class, I've never heard of anything like this. Instead, it would be very current, just think of gender medicine. I heard something during the health education course that I attended in 1953 in London or in some conferences. The context in which we live today is made up of different phases of acceptance of our sexuality. We find ourselves recognizing civil unions, each with their own sexuality. Sexuality that does not result from a rule, but it is subjective. This is what I believe subject/ subjectivity, as a subject who depends on the experiences he/she had.

On this point, I wish to ask: do you think that maternal mortality could be still considered an appropriate indicator of good/bad health care service quality?

Maternal mortality in Italy has been greatly reduced over the years, especially with the increasing use of contraceptives. But the reasoning around women's health cannot be limited only to this aspect. As stated before, women are fertile from 12 to 45-50 years of age. But after the first 50 years, they still have another 50 years of life, so there are some things that need to be reconsidered. A current issue is the so called "fertility day". Can this be considered an educational campaign? Personally, I do not agree. Comparing a woman to a hourglass

brings her back to her merely procreative purpose. We took a dip into the past. In this campaign, where are human rights? Where are children's rights? The child is not considered at all. The relationship between a child and his/her parents is not taken into consideration. A child cannot be seen as an individual that only needs to eat and sleep till the age of 2 or 3, and only start a relationship with the others after that age. The growth process is based on a relationship that should start from delivery. What has been the meaning, the sense of this fertility day? It was not an educational campaign. It did not bring any knowledge. The goal of that campaign was to have children. And then what? It did not open a discussion on the issues that affect birth rate the most. With that law, Mussolini needed soldiers to be sent to the front. We do not need soldiers; we now need thoughtful minds. The value of women today is not only in making children, but it is also given by their profession, by their education. We are outlining a very complex landscape.

What are the external factors that affect women's health on a daily basis?

I'll tell you just one, from which everything else arises. A woman spends the first half of her life believing she was born to procreate. But then she gets to 50 years of age realizes that it is not like that. What happens to women's hormones over the next 50 years? On the contrary, a man can have children up to the age of 80-100 years. So, you see that it's a different way of valuing one sex over the other. And that deserves a closer reasoning.

Based on your experience, why, even in the presence of a good health knowledge, incorrect practices are adopted? And what needs to be done so that people not only learn healthy lifestyles, but also act collectively as enlightened citizens?

That is a very difficult question. Of course, as we said before, health education is not

just about knowledge. The correct lifestyles arise not only from the knowledge, but also from the application of these practices. In my view, a basic but collective educational path should be implemented. In this, the role of the physician is essential. For instance, when a clinician prescribes a drug, he/she should not only explain the therapy, but also make the subject aware of the aetiology of disease. I am thinking especially of diseases for which lifestyles play an important role. It's an educational pathway that requires more roads. You should understand how we work and how to do maintenance, as we do for machines. Regarding the second part of your question, I think that in this case the type of communication used is fundamental. As stated before, I strongly believe in a bidirectional communication. It means that just showing slides, full of scientific content, does not work. On the contrary, communication within working groups is much more efficient. In this case, professionals and citizens are at the same level, sharing the same goals: identifying real problems and finding solutions.

One of the WHO's priorities is "Health for all". Accordingly, "Ensuring universal health coverage without impoverishment is the foundation for achieving the health objectives of the Sustainable Development Goals – because when people are healthy, their families, communities and countries benefit. Our top priority must be to support national health authorities' efforts to strengthen all the building blocks of health systems and to enact policies aimed at ensuring that healthcare is equitable and affordable for all (5)". Based on this, what is it possible to do in order to be also able to speak about Health education for all?

In my opinion, there are two possible interventions. The first point is to generate new ideas, based on which we should focus on where and how to promote health education. Referring to where, and considering it just

as an example, I think schools are valuable locations, whereas referring to the modalities I believe that writing around these topics is extremely useful as well as organizing training meetings. However, all professionals involved in these activities should follow the same educational framework in order to be consistent and follow the same educational path. From this perspective, during the '60s, each year in Perugia we organized a summer course lasting approximately two weeks. It was a multi-professional course, during which the several topics covered were addressed using a bidimensional approach. On one hand, we stimulated participants to think how professionals could integrate health education topics within their routine. On the other hand, we spoke and experienced communicative tools through puppets with scenes or role play. We did it for 25 years and there are still attendees that thank me for the usefulness of these courses. This is a sign that there is still a necessity to go ahead with these courses. And what is the best place to do it? Probably, it is hygiene classes, mainly because hygiene is really broad.

The second point is politics. Today, there is a very serious deficiency in democracy. Democracy is the government of the people, but the people never meet to discuss. Rather they wait for someone to solve the problems. I was part of the socialist party, and for me the most productive years were between the '50s to the '70s. During those years, I had weekly meetings with my party. Today, I'm still part of a party, but I can no longer have such periodic meetings. During those years we debated abortion laws, contraception laws, the reform of the healthcare service, the psychiatric illness and the laws against smoking. And so, the healthcare professional must have 4-5 clear ideas with which to address the political problem. The healthcare provider, both as a citizen and as an expert, needs to advocate communities and politicians.



Figure 1 - One of the inspiring meeting that the Author had with Professor Maria Antonia Modolo.

What follows is a personal reflection of the interviewer on all the content of the interview

The power, the foresight and the topicality of these words lead us to reflect on how much there is still to be done in the field of health education and, more generally, of public health. "Know yourself", already inscribed in the temple of Apollo at Delphi, is still relevant today and useful to better define the conceptual basis of health education and promotion. Deep knowledge of ourselves, as recalled by Prof Maria Antonia Modolo, is crucial to act in favour of a basic balance of well-being. Well-being that goes to the root of problems and choices, and that requires a cultural and political commitment on the part of health professionals as well as the general population and its representatives (6). Health can no longer be only a personal matter, but a matter of the social community. In this perspective, the current COVID-19 pandemic has reminded us of this at length.

Moreover, Prof Modolo's words underline once again the central role of the health professional in establishing an empathic communication, but - above all - a real bidirectional communication. This type of communication should be ready to welcome health needs and to give back knowledge

able to consciously and durably modify the behaviour related to health (7). However, too often, even today, this important role is neglected or even delegated to others. Advertising is, in fact, one of the systems of communication and persuasion that often takes the place of the healthcare professional's educational role (8, 9). Advertising has the ability, through a manipulation of information, to orient, in an underhand way, consumption - and consequently attitudes and behaviours - to the point of satisfying the needs of consumption instead of more important and immediate needs, especially health needs (10). Frequently, the strong persuasive charge of advertising messages threatens the credibility of healthcare professionals (11). In this context, it is clear that communication skills, even including new tools, and counselling skills alone are no longer sufficient (12). These competencies must be complemented by leadership skills (13). In fact, distrust of institutions is just one of the threats that healthcare providers must be able to address today (14). This is accompanied by an aging population (15), inequality of access to health services (16, 17), the continuation of unhealthy lifestyles (18-20), antimicrobic resistance (21), vaccine hesitancy (22, 23) and the risk of epidemics from emerging and re-emerging agents (24-27).

These are just a few of the reflections and insights that the conversations with Prof Modolo have inspired in the time I have known her. Her death was a great loss to her mentees, and to the entire world of Public Health. Thank you, professor Modolo! With infinite gratitude!

Riassunto

Considerazioni su di un'intervista alla Prof Maria Antonia Modolo, recentemente scomparsa

L'Autrice, ora Assistente di Ricerca presso il Dipartimento di Sanità Pubblica dell'Università degli Studi di Milano, Italia, nel periodo in cui è stata Residente presso la Scuola di Sanità Pubblica dell'Università degli Studi di Perugia, ha avuto occasione di intervistare la Prof. ssa Maria Antonietta Modolo, una delle più significative pioniere dell'Educazione alla Salute e della Promozione della Salute sia in Europa che in questo Paese, e suo mentore in quel momento. La Prof Modolo, recentemente scomparsa, in quell'occasione ha spiegato in dettaglio tutti gli obiettivi di queste discipline e l'impatto che possono avere sulla vita della popolazione dei paesi sviluppati e in via di sviluppo, se applicate all'interno di un solido quadro di salute pubblica.

References

- Centro Sperimentale per la Promozione della Salute e l'Educazione Sanitaria (CeSPES). Breve storia. 2014. Available on: http://cespes.unipg. it/storia.htm [Last Accessed: 20th April 2021].
- 2. La salute Umana. Cultura e Salute 2021. Available on: https://www.edizioniculturasalute.com/la-salute-umana/ [Last Accessed: 27th July 2021].
- 3. Fara GM. Celebrating Public Health lives. Ann Ig. 2021 Jan-Feb 2021; **33**(1): 105-6. doi: 10.7416/ai.2021.2413.
- 4. Centro Sperimentale per la Promozione della Salute e l'Educazione Sanitaria (CeSPES). Centro Sperimentale per la Promozione della Salute e l'Educazione Sanitaria. 2015. Available on: https://www.youtube.com/ watch?v=5N8FxM4Y-7g&t=304s [Last Accessed: 4th June 2021.].

- World Health Organization (WHO). WHO priorities. 2021. Available on: https://www.who. int/dg/priorities/en/ [Last Accessed: 30th May 2021].
- Modolo MA, Figà-Talamanca I. Interaction between consumers and providers of health services: new roles and their implications. Int J Health Educ. 1977; 20(1): 41-4.
- Gianfredi V, Grisci C, Nucci D, Parisi V, Moretti M. La comunicazione in Sanità [Communication in health]. Recenti Prog Med. 2018 Jul-Aug; 109(7): 374-83. Italian. doi: 10.1701/2955.29706.
- Nucci D, Rabica F, Dallagiacoma G, Fatigoni C, Gianfredi V. Are the Italian Children Exposed to Advertisements of Nutritionally Appropriate Foods? Foods. 2020 Nov 8; 9(11): 1632. doi: 10.3390/foods9111632.
- 9. Modolo MA. Communication and the media: health and public messages. J Hum Hypertens. 1995 Jan; **9**(1): 11-4.
- Nucci D, Momi M, Realdon S, Gianfredi V. Television advertising and children's food choices. Salute e Società. 2019; 18(3): 131-45.
- Firenze A, Santangelo OE, Gianfredi V, et al. Violence on doctors. An observational study in Northern Italy. Med Lav. 2020 Feb 24; 111(1): 46-53. doi: 10.23749/mdl.v111i1.8795.
- Gianfredi V, Monarca S, Moretti M, Villarini M. Educazione sanitaria, quale ruolo per il farmacista? Risultati di uno studio trasversale in Umbria [Health education, what is the role for pharmacist? Results from a cross sectional study in Umbria, Italy]. Recenti Prog Med. 2017 Oct; 108(10): 433-41. Italian. doi: 10.1701/2802.28356.
- Gianfredi V, Balzarini F, Gola M, et al. Leadership in Public Health: Opportunities for Young Generations Within Scientific Associations and the Experience of the "Academy of Young Leaders". Front Public Health. 2019 Dec 17; 7: 378. doi: 10.3389/fpubh.2019.00378.
- 14. Gianfredi V, Odone A, Fiacchini D, Rosselu R, Battista T, Signorelli C. Trust and reputation management, branding, social media management nelle organizzazioni sanitarie: Sfide e opportunity per la comunita igienistica italiana. J Prev Med Hyg. 2019; 60(3 Suppl 1): E108-E9. doi: 10.15167/2421-4248/jpmh2019.60.3s1.
- 15. Gianfredi V, Albano L, Basnyat B, Ferrara P. Does age have an impact on acute mountain sickness? A systematic review. J Travel Med.

- 2020 Sep 26; **27**(6): taz104. doi: 10.1093/jtm/taz104.
- Paciullo F, Giannandrea D, Gianfredi V, et al. Epidemiology of emergency calls for time-dependent acute illnesses during COVID-19 outbreak in Umbria region (Italy). Ann Ig. 2021 Mar-Apr; 33(2): 198-200. doi: 10.7416/ai.2020.2392. Epub 2020 Dec 3.
- 17. Amerio A, Aguglia A, Odone A, et al. Covid-19 pandemic impact on mental health of vulnerable populations. Acta Biomed. 2020 Jul 20; **91**(9-S): 95-6. doi: 10.23750/abm.v91i9-S.10112.
- Ranucci C, Pippi R, Buratta L, et al. Effects of an Intensive Lifestyle Intervention to Treat Overweight/Obese Children and Adolescents. Biomed Res Int. 2017; 2017: 8573725. 8573725. doi: 10.1155/2017/8573725. Epub 2017 Jun 5.
- Gianfredi V, Koster A, Odone A, et al. Associations of Dietary Patterns with Incident Depression: The Maastricht Study. Nutrients. 2021 Mar 23; 13(3): 1034. doi: 10.3390/nu13031034.
- Gianfredi V, Monarca S, Peverini M, Villarini M. [Medicine and legal psychoactive drug consumption among Perugia University students. Cross-sectional study]. Consumi di farmaci e psicofarmaci tra studenti dell Università di Perugia. Studio cross-sectional. G Ital Farmacia Clinica. 2017; 31(2): 70-87. Italian. doi: 10.1721/2716.27721.
- Prestinaci F, Pezzotti P, Pantosti A. Antimicrobial resistance: a global multifaceted phenomenon. Pathog Glob Health. 2015; 109(7): 309-18. doi: 10.1179/2047773215Y.0000000030. Epub 2015 Sep 7.
- 22. Cella P, Voglino G, Barberis I, et al. Resources for assessing parents' vaccine hesitancy: a systematic review of the literature. J Prev Med Hyg. 2020 Oct 6; **61**(3): E340-E73. doi: 10.15167/2421-4248/jpmh2020.61.3.1448.
- 23. Gianfredi V, Moretti M, Lopalco PL. Countering vaccine hesitancy through immunization information systems, a narrative review. Hum Vaccin Immunother. 2019; **15**(11): 2508-26. doi: 10.1080/21645515.2019.1599675. Epub 2019 Jun 21.
- Signorelli C, Odone A, Gianfredi V, et al. COVID-19 mortality rate in nine high-income metropolitan regions. Acta Biomed. 2020 Jul 20; 91(9-S): 7-18. doi: 10.23750/abm.v91i9-S.10134.
- 25. Signorelli C, Odone A, Gianfredi V, et al. The spread of COVID-19 in six western metropolitan

- regions: a false myth on the excess of mortality in Lombardy and the defense of the city of Milan. Acta Biomed. 2020 May 11; **91**(2): 23-30. doi: 10.23750/abm.v91i2.9600.
- 26. Provenzano S, Gianfredi V, and Santangelo OE. Insight the data: Wikipedia's researches and real cases of arboviruses in Italy. Public Health. 2021 Mar; 192: 21-9. doi: 10.1016/j. puhe.2020.12.010. Epub 2021 Feb 16.
- Gianfredi V, Moretti M, Fusco Moffa I. Burden of measles using disability-adjusted life years, Umbria 2013-2018. Acta Biomed. 2020 Apr 10; 91(3-S): 48-54. doi: 10.23750/abm.v91i3-S.9412.

ADDENDUM

Prof Maria Antonia Modolo's biography

Biography

Maria Antonia Modolo was born in 1929 in Spoleto (Perugia) (1). She graduated in Medicine and Surgery at the Perugia University in 1954 defending her thesis titled "Organizzazione dietetica degli ospedali di prima categoria - Dietary organization of primary care hospitals"; and immediately after her graduation, she began to attend the Institute of Hygiene, then directed by professor Alessandro Seppilli (2). After gaining her diploma in Practical Hygiene (Igiene Pratica) in 1955 at the Perugia University, she attended the "Content and Methods of Health Education" course at the University of London, and specialized in Hygiene, Preventive Medicine and Public Health in 1961 at the University of Perugia (2). She held numerous and prominent positions over her career: Aggregate professor in Hygiene from 1964 to 1966, Assistant professor in Hygiene from 1966 to 1972, Associate professor from 1972 to 1991, and lastly full professor (2). Her principal areas of activity were in health education (3, 4), health promotion (5, 6), behaviours and lifestyles (7-11) and health policy (1216). In 1956, she was elected director of the Experimental Center for Health Education (Centro Sperimentale per l'Educazione Sanitaria - CSES) from its foundation (1954) till 2009. More recently, in 2014, the CSES was renamed as Experimental Center for Health Promotion and Health Education (Centro Sperimentale per la Promozione della Salute e l'Educazione Sanitaria - CeSPES) (17). She was a pioneer of health education and health promotion in Italy and abroad. Beginning 1958, and for the following 25 years, she directed the annual "Summer course on principles, methods and techniques of health education - Corso estivo sui principi, metodi e tecniche dell'educazione sanitaria". These courses attracted participants from all over the world, and in 1973 the CSES hosted its highest attended course (2). She also founded the "Associazione Italiana Educatori Sanitari" (Italian Association of Health Educators), where most of the summer course attendees enrolled. In 1959, on the initiative of CSES, Professor Maria Antonia Modolo, in collaboration with 28 European and non-European countries, organized the "International Exhibition of health education posters" (Mostra Internazionale del Manifesto nell'Educazione Sanitaria) (2). During her career she was an active member of the executive board of the "Union Internationale d'Education pour la Santé", and responsible for the technical committee for Methodology as a member of the Technical Development Board (2). For several years (since 1995), she was the Editor in chief of the "La Salute Umana", a bimonthly journal of health education and promotion, still published by CeSPES. Moreover, until the end, she was head of the Scientific Committee of the "Sistema Salute" a bimonthly peer review scientific journal (at the beginning known as "L'Educazione sanitaria", founded and directed by her mentor, Prof. Seppilli). At the end of the '70s and beginning of '80s she collaborated with the World Health Organization as Advisor in health education,

health care professionals training and against cigarettes smoking. In 1985, and until 1991. Professor Maria Antonia Modolo was elected to the Board of Directors of the European Regional Office of the International Union for Health Promotion and Education (IUPHE). During her mandate, she actively promoted important collaborations between CSES and the Department of Cooperation of the Italian Ministry of Foreign Affairs and carried out multi-year programs of health education and health promotion in Somalia, Ecuador, Nicaragua and Bolivia (17). In 1987, in strict collaboration between CSES and the European Office of IUPHE 1990. she organized the 1st European Conference on Health Education and Promotion in Madrid, and then, in 1990, the 2nd European Conference in Warsaw. At the end of these six years as Director of the European Office of the IUPHE, she was honoured with the Parisot Medal, as recognition of her scientific and promotional work in Italy and for her magistral conduction of the European Office (18). Thanks to her very close collaboration with Prof. Seppilli and to her patient and mediating activity, Maria Antonia Modolo was among the major figures in the background of the Italian healthcare reform (Law 833/78), which resulted in a synthesis approved by the vast majority of the Italian Parliament (19). During the same years, she actively supported and promoted the law on voluntary termination of pregnancy in Italy, as well as the related confirmatory referendum (1982). In 1992, Professor Maria Antonia Modolo, in collaboration with Professor Briziarelli and Professor Mori, constituted the European Centre for Primary Health Care at the Department of Hygiene of the University of Perugia (17). The purpose of the Centre was to allow the exchange of experiences and theoretical and methodological elaborations in the field of primary healthcare. She ran in the political elections of 1994 and was elected to the Senate of the Republic for the 12th legislature



Figure 2 - On April 9, 2003 Prof Modolo was awarded the Gold Medal for merits in the field of education, culture and art (Medaglia d'oro ai benemeriti della scuola, della cultura e dell'arte) by the President5 of the Italian Republic, Carlo Azeglio Ciampi

(20). She was a member of two Permanent Commissions, the 12th on Hygiene and Health and the 13th (Territory, Environment, Environmental Heritage). In 2001, the book written by Professor Maria Antonia Modolo in collaboration with Joyce Mamon, "A long way to health promotion, through IUHPE Conferences 1951-2001", was presented at the Sorbonne. On April 9, 2003, Professor Modolo was awarded the Gold Medal for merits in the field of education, culture and art (Medaglia d'oro ai benemeriti della scuola della cultura e dell'arte) by the Presidency of the Italian Republic, for her merits in the field of education, school and in the diffusion and enrichment of culture, obtained through works of recognized value (21) (Figure 2).

References

- De Fiore L. Maria Antonia Modolo. Recenti Prog Med. 2020 Dec; 111(12): 790. Italian. doi: 10.1701/3509.34973.
- Modolo MA. Curriculum vitae. Notizie sulla operosità scientifica e sulla carriera didattica della Prof.ssa Maria Antonia Modolo. Perugia, 1974.
- 3. Modolo MA. Promozione della salute ed educazione: un approccio storico [Health promotion

- and education: an historical approach]. Ann Ig. 2002 Jan-Feb; **14**(1 Suppl 1): 41-52. Italian.
- 4. Modolo MA. Training of health educators. Hygie. 1992; **11**(2 Suppl): 80-1.
- Modolo MA. Educazione sanitaria, prevenzione, promozione della salute: presente e futuro [Health education, prevention, health promotion]. Recenti Prog Med. 2006; 97(10): 533-9. Italian.
- 6. Davies JK, Colomer C, Lindstrom B, et al. The EUMAHP project--the development of a European masters programme in health promotion. Promot Educ. 2000; 7(1): 15-8, 62. doi: 10.1177/102538230000700107.
- 7. Ranocchia D, Minelli L, Modolo MA. Cigarette smoke and the hormonal receptors status in breast cancer. Eur J Epidemiol 1991 Jul; **7**(4): 389-95. doi: 10.1007/BF00145005.
- Modolo MA, Vitali R, Greco M, Minelli L, Battista G, Corvetti R. Pressione arteriosa negli alunni delle scuole elementari di Perugia [Blood pressure of elementary school children in Perugia]. Ann Ig. 1990 Nov-Dec; 2(6): 395-404. Italian.
- 9. Donato F, Casadidio A, Monarca S, et al. Inchiesta sui consumi di alcol e di psicofarmaci in un campione di studenti delle scuole medie superiori delle usl n. 9 e n. 19 della Regione Marche [Survey of alcohol and psychoactive drug consumption in a sample of high school students of the 9th and 19th local health units in the Marche Region]. Ann Ig. 1989 May-Aug; 1(3-4): 693-708. Italian.

- 10. Modolo MA. La salute mentale degli studenti [The mental hygiene of students]. Riv Ital Ig. 1962 Jan-Apr; **22**: 1-4. Italian.
- 11. Minelli L, Panella V, Modolo MA, Pioppo M, Tonato M, Minotti V. Uno studio caso-controllo: fumo di sigarette, tinture per capelli e cancro della mammella. Acta Oncologica. 1984; 5(3): 235-41.
- 12. Marazzi MC, Bartolo M, Emberti Gialloreti L, et al. Improving adherence to highly active anti-retroviral therapy in Africa: the DREAM programme in Mozambique. Health Educ Res. 2006 Feb; **21**(1): 34-42. doi: 10.1093/her/cyh039. Epub 2005 Jun 9.
- 13. Modolo MA. Communication and the media: health and public messages. J Hum Hypertens. 1995 Jan; **9**(1): 11-4.
- 14. Modolo MA. Un servizio per la famiglia: l'assistente sanitario visitatore [A service for the family: the health assistant visitor]. Ann Ig. 1990 Nov-Dec; **2**(6): 405-10. Italian.
- 15. Modolo MA. Riflessioni sulla riforma sanitaria [Health services' reorganization]. Prof Inferm. 1980 Apr-Jun; 33(2): 77-9. Italian.
- 16. Seppilli A, Modolo MA, Mori M. Indagine preliminare sulle conoscenze e gli atteggiamenti della popolazione nei confronti della tubercolosi realizzata in provincia di Terni [Preliminary survey of public knowledge and attitudes towards tuberculosis conducted in Terni Province]. Lotta Tuberc. 1959 Oct; 29: 1425-41. Italian.

- 17. Centro Sperimentale per la Promozione della Salute e l'Educazione Sanitaria. Breve storia. 2014. Available on: http://cespes.unipg.it/storia. htm [Last Accessed: 20th April 2021].
- Briziarelli L. La Signora dell'Educazione Sanitaria. La Salute Umana 2021 Gen-Mar; 281: 4-6.
- 19. Fara GM. Il ricordo di Gaetano Maria Fara. La Salute Umana 2021 Gen-Mar; 281: 24.
- Senato della Repubblica Italiana. Scheda attività Maria Antonia Modolo. XXII Legislatura. 1994. Available on: http://www.senato.it/leg/12/BGT/ Schede/Attsen/00001611.htm [Last Accessed: 5th April 2021].
- 21. Presidenza della Repubblica Italiana. Modolo Prof.ssa Maria Antonia, Medaglia d'oro ai benemeriti della scuola, della cultura e dell'arte. 2003. Available on: https://www.quirinale.it/onorificenze/insigniti/277872 [Last Accessed: 15th April 2021].

Acknowledgments: I am grateful to Prof Liliana Minelli for helping me in retrieving biographical documents and for providing important details. Prof Liliana Minelli was one of the main and devoted mentees of Prof Maria Antonia Modolo at the beginning of her career (the 1980's), then she was coordinator of the CeSPES from 2014 to 2017.

Thanks to Andrea Buccino (PhD student at Manchester Metropolitan University) for the preliminary correction of the English text.

Corresponding author: Vincenza Gianfredi, School of Medicine, Vita-Salute San Raffaele University, Via Olgettina 58, 20132 Milan, Italy

e-mail: gianfredi.vincenza@hsr.it