



The legacy of COVID-19

Health Management in action:
Fostering health systems' resilience

— An EHMA Webinar Series —

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This webinar is co-funded by the EU4Health Programme of the European Union under Grant Agreement no. 101082904.



Our speaker

Dr Paolo Lauriola

ISDE Modena's President and Scientific Responsible for the "Italian Network of Sentinel Physicians for the Environment"



This webinar is co-funded by the EU4Health Programme of the European Union. Views and opinions are of the speakers only.



Agenda

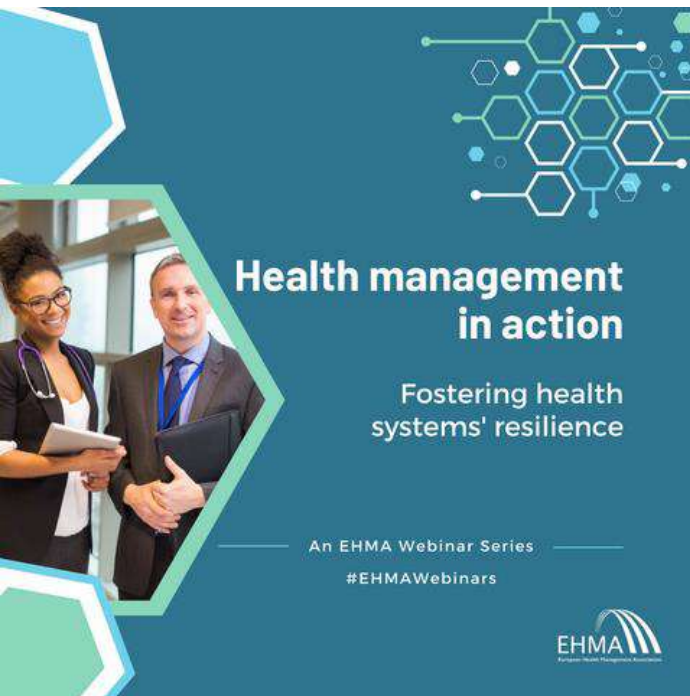


- **13.30- 13.40 (10 minutes):** Welcome and introduction
- **13.40 - 14:00 (20 minutes):** Presentation on ‘The Legacy of COVID-19’ with Dr Paolo Lauriola
- **14.00 - 14.15 (15 minutes):** Q & A



About this webinar series

Our webinar series, 'Health Management in action: fostering health systems' resilience', discusses **health management topics** that are crucial **to improve health systems preparedness and response**.




The graphic features a dark teal background with a network of hexagons and lines in light blue and green. On the left, a photo shows a woman in a white lab coat and glasses holding a tablet, and a man in a dark suit holding a laptop. The text is white and positioned to the right of the photo.

**Health management
in action**

Fostering health
systems' resilience

An EHMA Webinar Series

#EHMAWebinars



EHMA
European Health Management Association





About EHMA

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#EHMAWebinars
November 30th 2022



The role of Family Doctors in measuring and counteracting global environmental-health threats at the local level: *The Legacy of COVID-19*

Paolo Lauriola



Map of the presentation

1. Introduction
 - *Environment and health: which data?*
 - *How doctors can close the gap?*
2. Sentinel Physicians for the Environment: Who? Why? Where?...
3. The Italian experience
4. Criticalities/Opportunities
5. LMICs Challenge
6. The Legacy of COVID-19
7. Conclusions

Environmental Impacts on Health

WHAT IS THE BIG PICTURE?

FACT:

23%

of all global deaths are linked to the environment.

That's roughly **12.6 million** **deaths** year.



World Health
Organization

Health impact of Climate Change.

Between 2030 and 2050 climate change is expected to cause

250 000 ADDITIONAL DEATHS PER YEAR

due to malaria, malnutrition, diarrhoea and heat stress.



World Health
Organization

**Counting
deaths..**



**but not
only!**



Wonca

World family doctors. Caring for people.

EUROPE

BACKGROUND PAPER

The Research Agenda for General Practice/Family Medicine and Primary Health Care in Europe. Part 1. Background and methodology¹

Background

General practice/family medicine is the core discipline of primary medical care and the cornerstone of many healthcare systems in Europe. It's potential is large: the large majority of European citizens have a general practitioner (GP) and regular contact with him or her. In healthcare systems where the GP acts as a gate keeper, 90–95% of all patient complaints remain in long time primary care (even when specialists are temporarily involved). Of all reasons for encounters, 80% can definitely be solved in primary care (3,4).



Why targeting FDs is so important?

There are many other diseases linked to different kind and level of exposures to climate change, characterized **by moderate symptoms** and **solved within Primary Care (80%)**

These conditions **should not be ignored**, because they may represent an **early indicator** of environmental-related critical health issues, as:

- ★ Allergic diseases, asthma;
- ★ Endocrine and metabolic diseases;
- ★ Panic attacks and alteration of the neurocognitive development;
- ★ Modifications in spermatic quality and concentration
- ★and some local specific concerns such as arthropod-borne infectious diseases, in particular, those transmitted by *Aedes albopictus*, a permanently present vector throughout Italy..... **“focal diseases”**

A delay in quantifying all these conditions could yield **disarrangement** of the overall health organization and healthcare systems, with **remarkable effects on individual and public health.**

Why targeting FDs is so important? (cnt'd)

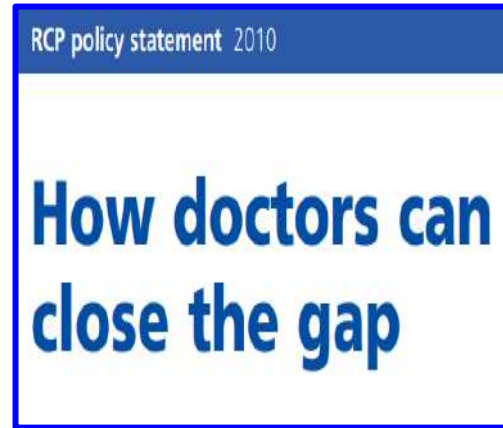
The Environment as a determinant of health

A gap still exists between the activities of clinical doctors with regards to the relationship between **health and the environment**:

- ★ **FDs totally embedded** in the local socio-economic and cultural/historical setting



- ★ **The influential role of GPs and PEDs**, both on individual patients and communities;
- ★ GPs and PEDs could really play a helpful role in **connecting global concerns with local actions**;





World Federation of
Occupational Therapists



PLANETARY HEALTH & PRIMARY HEALTH CARE

STATEMENT ON SESSION 5 (B): IMPROVING ENVIRONMENT AND HEALTH IN THE CONTEXT
OF HEALTH 2020 AND THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

As professionals of the primary health care team:

- a) we can use **our position of having access to most of the population** to increase our patients' awareness of problems which threaten both individual health and the planet, promote behaviour changes, and empower them to live a healthier and more sustainable lifestyle;
- b) we can play an active role in **supporting the educational efforts** of general educational institutions, and in shaping training curricula and continuous professional development to include Planetary Health;
- c) we call upon Member States to develop and implement evidence-based, integrated policy solutions that address environmental sustainability together with human health and development goals.

Primary health care is the “green medicine”. We see the potential of being a significant social actor, addressing the need for improved societal conditions for good and equal health in ways that simultaneously promote sustainability.

Planetary Health & Primary Care – 67th Session of the WHO
Regional Committee for Europe. 1/3/2020

...but

- Nonetheless, FDs are often unaware of the Health impacts due to Environmental threats.
- **And their potential role in tackling such a global challenge through their local influence on individual and collective attitudes and policies is not considered.**

Sentinel Physician role in relation to global health threats

- **Public education and raise of awareness**
- **Day-by-day involvement in local/regional/national strategies to tackle antimicrobial resistance within a One-health approach**
- **Early alert systems: impending weather extremes, infectious disease outbreaks**
- **Disaster preparedness, including increasing the health system's 'surge' capacity to respond to emergencies**
- **Enhanced infectious disease control programmes**
 - food safety, vaccine programs, case detection and treatment
- **Improved surveillance**
 - vector control
 - risk indicators (e.g., aeroallergen concentration)
 - health outcomes (e.g. infectious diseases outbreaks, rural suicides, seasonal asthma peaks)
- **Appropriate health workforce training, including continuing professional development (e.g. updated understanding of climatic influences on health, training in public health)**

Lauriola, 2021

Sentinel Physicians for the Environment

Some significant anecdotes



In 1993, Dr. Gardner published on a child leukaemia cluster around a nuclear power plant located in Sellafield (UK). Afterwards, local authorities admitted that a military nuclear waste site had once existed in the area, later transformed into a nuclear power plant. After some years the Sellafield power plant was closed

In 2016, huge concern over Perfluoroalkylated substances (PFAS) in drinking water raised following some early observations of Vincenzo Cordiano, haematologist. Owing to a wide and trenchant popular pressure, many legislative and technological measures have been implemented and the factory, which discharged such substances, closed



...but

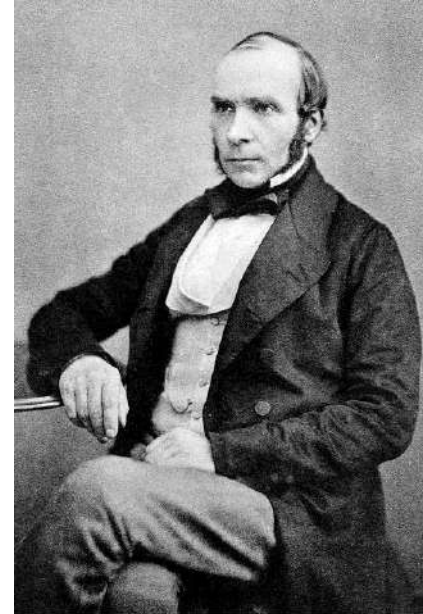
- In 1854 an anaesthesiologist named J. Snow described the mortality rates due to Cholera in different neighbourhoods in London

Tab. 2.3 Morti da colera per 10,000 case e per fonte di approvvigionamento idrico, Londra 1854.

Approvvigionamento idrico	Numero di case	Morti per colera	Morti per 10,000 case
Southwark e Vauxhall Company	40,046	1,263	315
Lambeth Company	26,107	98	37
Resto di Londra	256,423	1,422	59

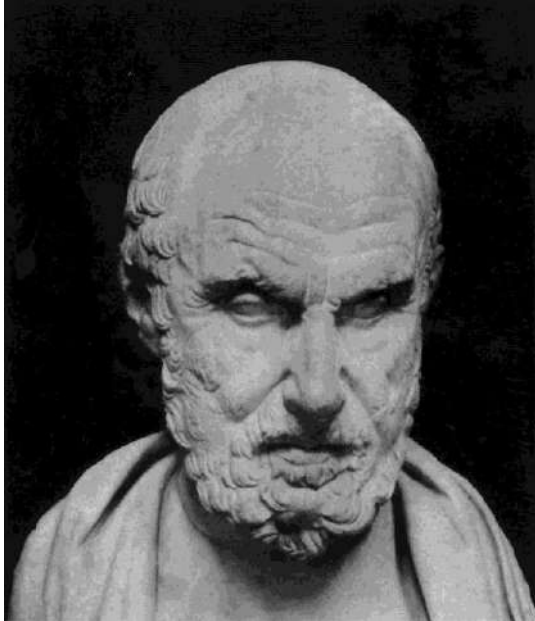
Fonte: Snow (55).

- Following these observations, in 1857 all London drinking water supply companies were obliged to filter Thames water.



John Snow

...but..but!



Whoever wishes to investigate medicine properly, should proceed thus: in the first place to consider the seasons of the year, and what effects each of them produces because they are not at all alike, but differ much from themselves regarding their changes. Then the winds, the hot and the cold, especially such as are common to all countries, and then such as are peculiar to each locality. We must also consider the qualities of the waters, for as they differ from one another in taste and weight, so also do they differ much in their qualities. In the same manner, when you come to a city to which you are a stranger, you ought to consider its situation, how it lies as to the winds and the rising of the sun; for its influence is not the same whether it lies to the north or the south, to the rising or to the setting sun. These things one ought to consider most attentively, and concerning the waters which the inhabitants use, whether they be marshy and soft, or hard, and running from elevated and rocky situations, and then if saltish and unfit for cooking; and the ground, whether it be naked and deficient in water, or wooded and well watered, and whether it lies in a hollow, confined situation, or is elevated and cold; and the mode in which the inhabitants live, and what are their pursuits, whether they are fond of drinking and eating to excess, and given to indolence, or are fond of exercise and labor, and not given to excess in eating and drinking.

Hippocrates, 400 BC



PREPARATORY PROCESS

G7 Health Experts Working Group (G7-HEWG)

Towards the
DECLARATION OF THE G7 HEALTH MINISTERS'
5 – 6 NOVEMBER 2017 IN MILAN

*Global Strategy for action
to reduce the effects of Climate Change on Global Health*

CLIMATE AND HEALTH COUNTRY PROFILE
ITALY



United Nations
Framework Convention on
Climate Change



Main Italian project objectives

To develop a GPs and PEDs structured **Surveillance System** named **RIMSA (Rete Italiana Medici Sentinella per l'Ambiente/Italian Network of Sentinel Physicians for the Environment)**, a project has been carried out aiming at developing:

- **EPIDEMIOLOGICAL SURVEILLANCE:** to study and monitor the effects of critical environmental issues on **the health and attitudes** of the population;
- **ADVOCACY DUTIES:** to raise awareness and inform citizens about the connection between health and the environment and **sustainable lifestyles**.



Secondary goals:

- Promote in Italy a more «**effective**» profile of GPs and PEDs in the perspective of an **Environmental Health prevention activity**, especially in the **areas of most significant impacts of Climate Change**



- Reaffirm the role of GPs and PEDs in **promoting healthy habits and sustainable lifestyles**, not only in terms of individual health (*micro*) but also within a **collective (meso) perspective of Planetary Health (macro)**.



Sentinel General Practice

A sentinel general practice network, or sentinel network of general practitioners can be defined **as a system that keeps a watchful eye on a sample of the (overall) population** by supplying regular and standardized reports on the incidence and the main epidemiological characteristics of specific diseases and of procedures in primary health care.

Vivian Van Casteren (1993)

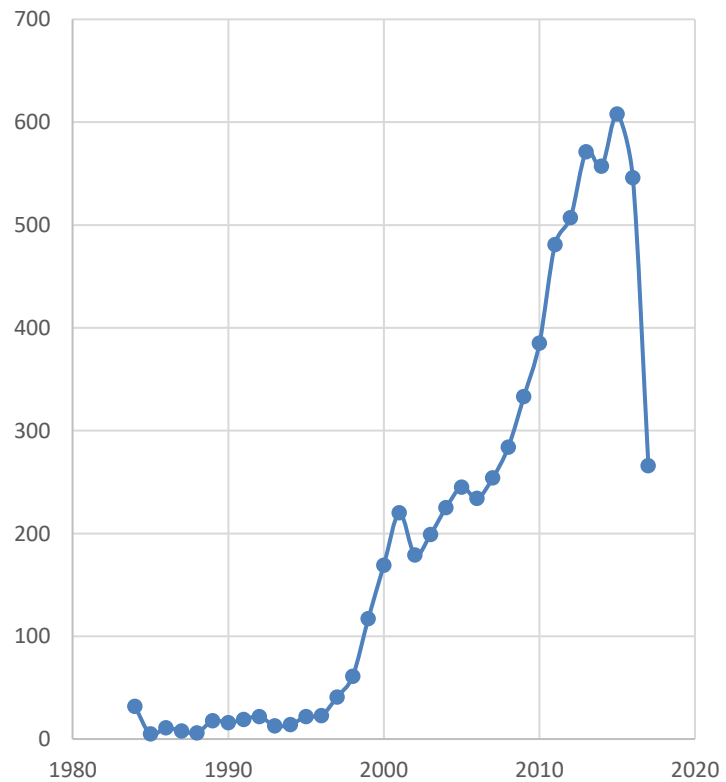


The screenshot shows the CORDIS (Community Research and Development Information Service) website. The page is titled "EUROSENTINEL" and provides details for a project with ID MR4*0063, funded under FP2-MHB_SC. The project duration is from 1988-06-01 to 1991-06-30. The project details section includes:

Total cost: Not available	Topic(s):
EU contribution: Not available	Funding scheme: CON - Coordination of research actions
Coordinated in: Belgium	

The **Objective** section states: "The purpose of the project was to coordinate activities in the field of sentinel practices with GPs in the EC-member countries (COST-countries included). The ultimate goal was to establish a real European network of sentinel practices. Activities in the field of sentinel practices have been coordinated with general practitioners (GP) in order to establish a real European network of sentinel practices. An international surveillance on measles."

Fig. 2 Number of scientific publications dealing with Sentinel Physicians all over the world



Author/s	Year	Country	Topic
BS. Levy ²⁰	1996	USA	Editorial: Holistic Approach to Surveillance
I Devoux ²¹	2001	France	Wastewater reuse raises the question of health risk and the epidemiological surveys needed.
J Litt et al. ²²	2004	USA	Survey of public health and environmental practitioners to uncover state and local health tracking needs and priorities
A Husa et al. ²³	2004	Switzerland	Estimates the scale of environmental medicine counselling in Switzerland by using two different data sources. The main source was the frequency of medical consultations due to environmental exposures in general practice the second using medical, psychological and environmental tools
BS Schwartz et al. ²⁴	2005	USA	Editorial: community-based primary care providers must possess biomedical, epidemiologic, and environmental medicine skills,.
A Flahault et al. ²⁵	2006	France	Description of <i>Réseau Sentinelles</i> : Database linkage with environmental information (e.g., remote sensing, surface variables, environmental factors) will be facilitated, allowing for the evaluation of the role of climate change, or pollution involvement in disease.
FH Johnston et al. ²⁶	2006	Australia	Investigates the relationship between particulate matter (PMPM10 and PM2.5) generated by vegetation fires and daily health outcomes in 251 adults and children with asthma over a 7-month period also recruited by GPs
AJ Elliot et al. ²⁷	2006	UK	Investigates the association between impetigo, insect bites and air temperature: a retrospective 5-year study (1999-2003) using morbidity data collected from a sentinel general practice network database.
SC Chen et al. ²⁸	2010	Taiwan	How to use a probability-based transmission modeling approach to examine the influenza risk of infection virus in indoor environments. This was based on 10 years of data gathered from influenza-like illness sentinel physician and laboratory surveillance, and experimental viral shedding data in Taiwan.
A Kolovos et al. ²⁹	2010	France	Development of model within an environmental health context which can be particularly important for prediction and decision-making in environmental health and risk studies, management, and planning, etc. Based on aggregated observations recorded by general physicians through the <i>Réseau Sentinelles</i>
S. Medina ³⁰	2014	France	The analysis of drug consumption estimated an excess of about 5000 treatments by psychotropic drugs as a consequence of the explosion of a chemical plant (AZF) in Toulouse (2001)
K Sebec et al ³¹	2014	USA	This experience allowed exploring the strengths and weaknesses of ambulatory Electronic Health Record (EHR) data in post-disaster settings. Data from ambulatory EHR networks can augment existing surveillance streams by providing sentinel population snapshots on clinically available indicators in near real time.
GL Nichols ³²	2014	Europe	They describe the surveillance systems (GP ones included), tracking tools, communication channels, information exchange and outputs in the light of environmental and climatic drivers of infectious diseases
C Klier et al. ³³	2016	Europe	This overview is aimed at providing current data on the incidence of Tick Borne Disease on longitudinal trends according to the environmental settings. Based on Sentinel physician results e.g. France, Netherlands, Switzerland. They indicate high reliability of collected data
F Giroud et al ³⁴	2017	Madagascar	This study describes a system using various environmental and meteorological data with the support of new technologies to improve the performance of a sentinel Malaria-related data from 21 sentinel sites collected by Short Message Service which are automatically analysed to detect and forecast malaria trends and malaria outbreak alerts with automated feedback reports

A scoping review on Family and Climate Change



- GPs' investigations concerning the environment and health most frequently deal with Vector-Borne Diseases;
- Many VBDs are strongly linked to CC;
- Some of the most interesting experiences have been carried out in LMICs because:
 - the biggest challenges relating to environmental and climate change are experienced in LMICs, and by the poorest communities globally.
 - FDs have been recognized to integrate environmental and climate threats with local needs to face such emergencies.

Some examples of Practice Based Research Network:



What has been done:

obtained results and employed methods

1. **Funding** of the first RIMSA project: Italian Ministry of Health ✓
1. **Selection** of the Scientific Committee, Teaching Faculty and Organizational and Scientific Staff (O/S Staff): ✓
 1. Selection of the **participants** and beginning of the **training process**: ✓
 1. Promotion of the project: [website](#) ✓
 1. Gathering of information about the participants to offer a tailored formation plan: **survey!** ✓
 1. Training consolidation: a **Moodle platform** ✓
 1. Definition of the **Professional Profile** of the Sentinel Physician for the Environment (SPE): ✓
1. **Manual** of Sentinel Physicians for the Environment. ✓

Project Strenghtening

Website

Social Media

Scientific meetings

Scientific articles

The collage features several overlapping elements:

- Website:** A screenshot of a website with a navigation menu (Home, Program, Registration, Abstract Submission, General Information, Sponsors, Contact) and a banner for "23RD WONCA EUROPEAN CONGRESS" held from August 24th-27th in Kraków, Poland.
- Social Media:** A Facebook post from "ISDE - Associazione Medici per l'Ambiente" dated June 5, 2017, with the text "Parie il progetto italiana-di-medi".
- Scientific Meetings:** A poster for the "On Airs" event, featuring a globe and the text "On Airs".
- Scientific Articles:** Two overlapping journal articles. The top one is from "Journal of Family Medicine & Community Health" (SciMedCentral), titled "The Role of General Practices for Monitor the Environ Results and Italian Proj an 'Italian Physicians". The bottom one is from "BMJ Global Health" (Wiley), titled "On the importance of primary and community healthcare in relation to global health and environmental", with a subtitle "Family doctors to connect global concerns due to climate change with local actions: State-of-the art and some proposals".

What must be done?

Expected results and planned methods

1. Consolidation, development, and spreading of the **training process**:
2. Creation of a **national working group** and start with some **pilot experiences**
3. **Definition of the work plan to forward relevant health data via EMR packages** which will be integrated with **environmental/ occupational/ meteorological ones**



= a lot of work!

AT PRESENT



Upcoming activities: research

- Dietary Counseling Versus Antidepressants In Treatment Of Depression
- Longcovid and Environmental Pollution
- Ambulatory Care Sensitive Conditions (ACSCs): Effectiveness And Quality Of Primary Care Assessment at The Time Of COVID-19



Criticalities/opportunities

- The health effects of environmentally-driven phenomena are highly complex to be interpreted;
- To integrate with other organisations/ disciplines: environment, meteorology, occupation (collect/understand data).
- To couple the epidemiological mission with the influential role of FDs;

Italy/Europe, next steps , 1

- To set up a uniform data collection process, defining protocols, standards, and core dataset, taking into due account ethical issues;
- we are aiming to create an International network, which should support, develop and share experiences and proposals in terms of training, data analyzing and reporting;
- we are also committed to focusing on concerns that involve low-middle income countries (WHO Department of Public Health).

Italy/Europe, next steps, 2

- development and application of guidelines.
- a capacity building which must be: consistent with the role of SPE, sustainable and effective.
- transfer of knowledge from a more developed system to the less developed



- 12:30-13:00 Press meeting
by Tuscany Region, ISDE Italy and CUAMM
- Intro by IEAL on COP24 aspirations from health community (Annie Spautzer, Genex)
- Italian MEPs (ENVA) to be present
- 13:00 Buffet lunch offered by ISDE Italy and CUAMM

The Health and Environment Alliance (HEAL) gratefully acknowledges the financial support from the European Union (EU)



Low-Middle Income Countries challenge

Such an initiative aims to forerunner concerns involving LMICs:

- as it is essentially based on the socioeconomic capacity and cultural/historical **features in which the sentinel physicians operate**
- It could be implemented aiming at coping with: **malnutrition, waterborne disease, infectious diseases,**
- and also **migration decision** (vulnerability/ context)

And it is necessary

- specific, practical, and motivating **training of GPs in these fields, to create a professional profile** based on epidemiological and advocacy duties.
- **sound science by** providing to GPs support in research and data;
- clear and **effective communication strategies** among GPs, their patients, communities, and policymakers.

The legacy of Covid-19, The origin of SARS-CoV-2

- Understanding how severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in 2019 **is critical to preventing future zoonotic outbreaks** before they become the next pandemic.
- Although there is insufficient evidence to define upstream events, and exact circumstances remain obscure, our analyses indicate **that the emergence of SARS-CoV-2 occurred through the live wildlife trade** in China and show that the Huanan market was the epicenter of the COVID-19 pandemic

(Worobey et al., Science 26 August 2022)

RESEARCH

CORONAVIRUS

The Huanan Seafood Wholesale Market in Wuhan was the early epicenter of the COVID-19 pandemic

Michael Worobey^{1*}, Joshua I. Levy², Lorena Malpica Serrano¹, Alexander Crits-Christoph³, Jonathan E. Pekar^{4,5}, Stephen A. Goldstein⁶, Angela L. Rasmussen^{7,8}, Moritz U. G. Kraemer⁹, Chris Newman¹⁰, Marion P. G. Koopmans^{11,12}, Marc A. Suchard^{13,14,15}, Joel O. Wertheim¹⁶, Philippe Lemeay^{17,18}, David L. Robertson¹⁹, Robert F. Garry^{18,20,21}, Edward C. Holmes²², Andrew Rambaut²², Kristian G. Andersen^{2,24}

Understanding how severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in 2019 is critical to preventing future zoonotic outbreaks before they become the next pandemic. The Huanan Seafood Wholesale Market in Wuhan, China, was identified as a likely source of cases in early reports, but later this conclusion became controversial. We show here that the earliest known COVID-19 cases from December 2019, including those without reported direct links, were geographically centered on this market. We report that live SARS-CoV-2-susceptible mammals were sold at the market in late 2019 and that within the market, SARS-CoV-2-positive environmental samples were spatially associated with vendors selling live mammals. Although there is insufficient evidence to define upstream events, and exact circumstances remain obscure, our analyses indicate that the emergence of SARS-CoV-2 occurred through the live wildlife trade in China and show that the Huanan market was the epicenter of the COVID-19 pandemic.

One-Health, (*cont'd*)

- The concept of One Health is the **unity of multiple practices** that work together locally, nationally, and globally to help achieve **optimal health for people, animals, and the environment**.
- When the people, animals, and environment are put together, they make up the **One Health Triad**



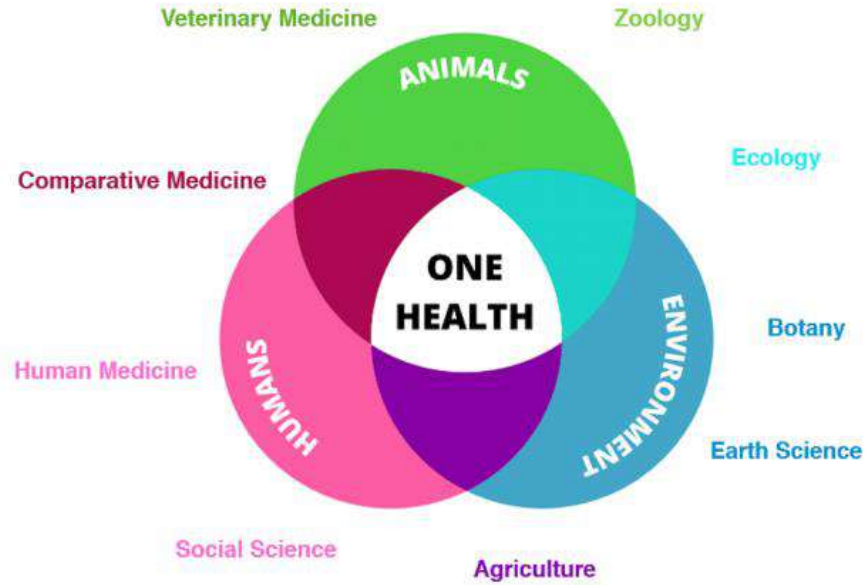
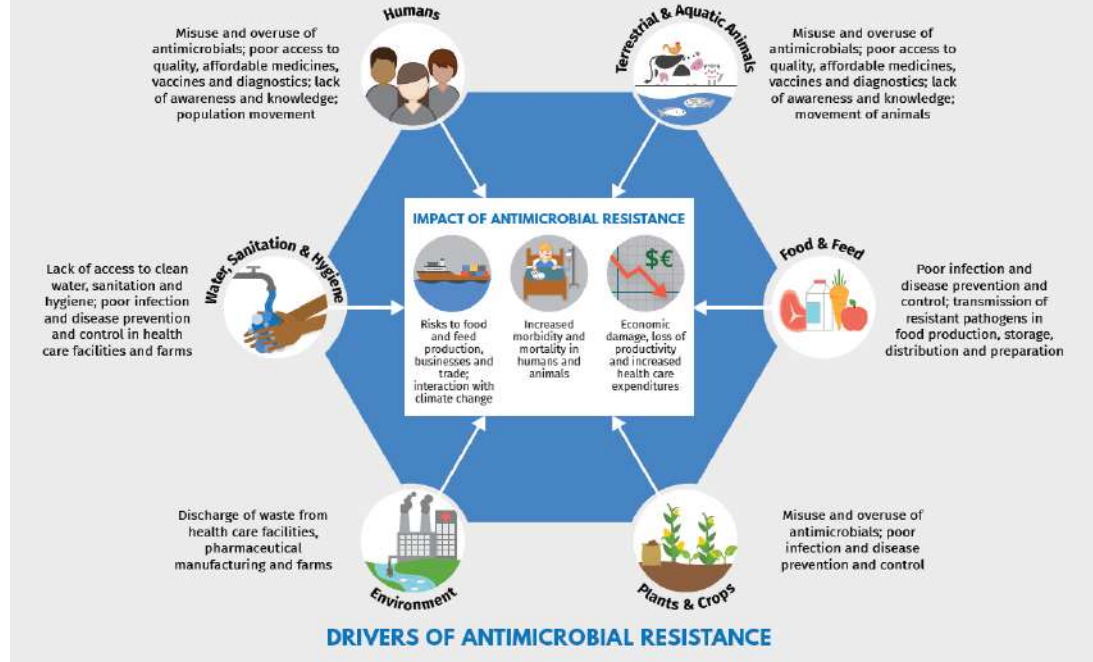


Fig 1. A One Health response to address the drivers and impact of antimicrobial resistance

"One Health" refers to designing and implementing programmes, policies, legislation and research in a way that enables multiple sectors and stakeholders engaged in human, terrestrial and aquatic animal and plant health, food and feed production and the environment to communicate and work together to achieve better public health outcomes.



Source: IAGC 2019

Global vs local, (cont'd)

The way in which the COVID-19 crisis developed in time and space made clear that the distinction between local and global has largely become superficial.

- The local ecological wild and human interactions in Wuhan (China), is the origin of the SARS-COV-2 spillover spread across the globe (so far..!);
- **Regional and local political and economic decisions** causing deforestation, intensive farming, unsustainable energy production, air pollution, deterioration of water and soil contribute further to the global climate crisis;
- **The role of a globalised economic order that prioritises short-term profits of private interests**, often benefitting actors in wealthy countries, and elites in low-and-middle-income countries (LMICs), while dismissing environmental and social fallout as 'negative externalities', are clearly recognised.

COVID-19 lessons for PHC, (cont'd)

Analysis

BMJ Global Health

On the importance of primary and community healthcare in relation to global health and environmental threats: lessons from the COVID-19 crisis

Piolo Lauriola ¹,^{*} Piedad María-Olmedo,² Giovanni S. Leonardi ³, Catherine Boulard ⁴,^{*} Robert Verheij,⁵ Michel L. A. Dieckers ⁶,^{*} Mieke van Tongeren,⁷ Ferdinando Luzzi,⁸ Peter von dem Hagen,⁹ Ozden Gokdemir ¹⁰, Evelyn Sogredo,¹¹ Ruth A. Etzel,¹² Alan Abolmorgo,¹³ Fabrizio Bianchi,¹⁴ Roberto Pionzi,¹⁵ Giuseppe Misegritti,¹⁶ Francesco Fiorini,¹⁷ Paolo Bonanni,¹⁸ Emanuele Virani,¹⁹ Guido Giustolisi,²⁰ Mariagrazia Santamaria,²¹ Alice Sarrafini ²²,^{*} Samantha Pappasoa,²³ Raymond Agley,²⁴ Aislinn Zekia ²⁵

ABSTRACT

In the course of the COVID-19 pandemic, it has become clear that primary healthcare systems play a critical role in clinical care, such as patient screening, triage, physical and psychological support and also in promoting good community advice and awareness in coordination with secondary healthcare and preventive care. Because of the role of social and environmental factors in COVID-19 transmission and burden of disease, it is essential to ensure that there is adequate coordination of population-based health services and public health interventions. The COVID-19 pandemic has shown the primary and community healthcare (P&CH) system to be undervalued worldwide. In many instances, P&CH played only a vital role, but struggled to cope with health and welfare care needs. This was compounded by political failures, in supporting local community resilience. Many community building, social cohesion and resilience at the forefront of dealing with the COVID-19 crisis can help shape solutions that provide a vision of 'planetary health'. This can be achieved by making local work being and operating in the face of an pervasive health and environmental crisis, including other zoonotic and transposable zoonotic zoonoses. This paper proposes that P&CH should take on two critical roles: first, to support local problem-solving efforts and to support a more proactive approach to addressing community well-being and, second, to enhance the local environment and health care in the context of the global health perspective. We see this as an opportunity of knowledge value and broad consensus beyond the control of the COVID-19 pandemic.

INTRODUCTION AND OBJECTIVES

The novel SARS-CoV-2 and its resultant COVID-19 disease is the most challenging

Summary box

- In 1978, the Alma Ata Declaration (2) defined health as the strategic importance of high-quality primary healthcare in the provision of effective and equitable healthcare systems, unfortunately, 42 years later this vision has not been attained.
- In October 2018, health reports and publications met in London (1) to agree the consensus need for comprehensive available healthcare to all, realising the commitments in the Alma Ata time perspective.
- The lack of involvement of the primary and community healthcare (P&CH) systems during the COVID-19 pandemic has highlighted their crucial role in clinical and public health services such as diagnostic diagnosis, high contact tracing and in the short-term and long-term physical and psychological monitoring and management of patients.
- The current emergency has also shown the central role of P&CH in close coordination with other healthcare and public health organisations at the community level.
- There is an urgent need for environmental public health systems with environmental and global perspective acknowledging the influence of the environment and the need to act at the community level.
- Besides the traditional focus on the individual, it is essential that public health approaches encourage and promote the involvement of P&CH within the framework of community and environmental health.
- The vision of this has been highlighted by the response to COVID-19, but it is equally essential to the management of other crises affecting communities.

Check for updates

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BMJ

Lauriola P et al. *BMJ Global Health* 2021;6:e002811. <https://doi.org/10.1136/bmjgh-2021-002811>

- The COVID-19 pandemic has emphasised **the crucial role of PHC** in diagnosis, screening and triage, as well as in the short and long-term monitoring of the physical and psychological conditions of those affected;
- The current emergency has also **highlighted the need for GPs to work in coordination with P&CH and hospitals;**
- A **multidisciplinary workforce** can play a vital role in **recognising and managing environmental and social factors** of community health..

Conclusion

All work and not play
...all together!!!



Essential bibliography

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