**SUPPLEMENT 1**

**An Italian survey on the attitudes and beliefs of public health professionals towards mandatory vaccination: survey tool**

# SECTION I – SOCIO-DEMOGRAPHIC INFORMATION

* 1. **Gender:**
* Male
* Female
  1. **Birth year: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  2. **In which Province do you conduct your professional activity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
  3. **What is the highest educational degree obtained?**
* Triennal degree
* I level Master’s
* Master's degree
* II level Master’s
* Medical specialty/ PhD
  1. **Area of degree:**
* Medicine, specify medical specialty if achieved **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* Health professions, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* Biology
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Specialty:**

* Hygiene and Preventive Medicine
* Microbiology
* Clinical pathology
  1. **What sector do you work in?**
* Public hospital
* Private hospital
* Prevention department
* District
* Other territorial structure
* Accademy
* National Government (e.g., Ministry of Health)
* Local Government (e.g., Regional Agency)
* Technical/Research agency (e.g., Istituto Superiore di Sanità, Agenas)
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1.7 Years of professional experience in Hygiene and Preventive Medicine:** **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**1.8 Do you have children aged 0-16?**

* Yes
* No

# SECTION II – POLITICAL AND HEALTH SYSTEM ORIENTATION

* 1. **How would you define your political stance?**
* Right
* Center-right
* Center
* Center-left
* Left
* Populist movements
* Other, specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Do not want to answer
  1. **How would you rate the quality of the Italian National Health System?**
* Poor
* Inadequate
* Adequate
* Good
* Excellent

# SECTION III – PERSONAL AND PROFESSIONAL EXPERIENCE WITH VACCINATIONS

**3.1 Are you vaccinated or immunized against the following infectious diseases, as recommended for healthcare professionals by the National Vaccine Prevention Plan 2017-2019?**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes | No | Do not remember |
| **Hepatitis B** |  |  |  |
| **Influenza (year 2018-19)** |  |  |  |
| **Measles** |  |  |  |
| **Mumps** |  |  |  |
| **Rubella** |  |  |  |
| **Varicella** |  |  |  |
| **Pertussis** |  |  |  |

**3.2 How would you rate your knowledge about vaccinations?**

* Poor
* Inadequate
* Adequate
* Good
* Excellent

**3.3 Does your professional activity deal with vaccinations?**

* Yes
* No

**3.3.a If yes, does it deal particularly with:**

* Delivery of vaccines
* Organization of vaccination services
* Research
* Education
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**3.3.b If yes, years of professional experience in the field of vaccinations\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# SECTION IV – ATTITUDES AND BELIEFS TOWARDS MANDATORY VACCINATION

*ATTITUDES*

**4.1 In general, are you in favor of mandatory vaccination?**

* Yes
* No
* I do not know

**4.1.a If yes, why?**

* It protects the health of individuals and population
* It is a good strategy for achieving the European goals for immunization and control of vaccine-preventable diseases
* It is a good strategy for overcoming vaccine hesitancy
* It ensures equity (equal distribution of risks and benefits in the population)
* Others, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.1.b If no, why?**

* It is a coercive measure that harms people's freedom and rights
* It is a simplistic solution that does not take into account the complexity of the problem
* It strengthens anti-vaccine movements
* It is a paternalistic approach that disempowers people about their health
* Other, specify**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.2 Are you in favour of the 2017 Italian mandatory vaccination law?**

* Yes
* No
* I do not know

**4.3 Do yu think that the 2017 mandatory vaccination law should be repealed?**

* Yes, immediately
* Yes, gradually
* No
* I do not know

**4.4 Would you modify the 2017 mandatory vaccination law (multiple answers allowed)?**

* Yes, I would remove some mandatory vaccines
* Yes, I would add some mandatory vaccines
* Yes, I would modify the penalties
* Yes, I would modify the concerned age group
* No
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.5 Are you in favour of the legislative proposal for a “flexible” mandatory vaccination sponsored by the recent populist government, where vaccinations are made mandatory only when the rate of vaccination coverage falls markedly?**

* Yes
* No
* I do not know

**4.5 a If yes, why?**

* It represents the right balance between the protection of personal freedom and the protection of public health
* It limits the number of mandatory vaccines to those that are strictly necessary
* It is a good strategy for improving relationships with anti-vaccine movements
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.5 b If No, why?**

* Vaccinations are preventive measures that would lose effectiveness if used as reactive measures
* It would be very difficult to ensure adherence to mandatory vaccination in emergency situations
* There is still no information system capable of guaranteeing accurate monitoring of vaccination coverage in all Italian Regions (regional and national vaccination registries)
* At present, application of the "flexible" option would still be necessary, so it is worth keeping the current obligation in place
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.6 Would you make MMR vaccination mandatory in categories other than the 0-16 age group, in order to achieve the goal of eliminating endemic measles and rubella?**

* Yes
* No
* I do not know

**4.6 a If yes, for which of the following categories (multiple answers allowed)?**

* Healthcare professionals
* School staff
* Military personnel
* Public administration
* Other, specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*BELIEVES*

**4.7 How would you rate the importance of the following mandatory vaccinations?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Not important | Weakly important | Moderately important | Very important | Extremely important |
| **Poliomyelitis** |  |  |  |  |  |
| **Diphtheria** |  |  |  |  |  |
| **Anti-tetanus** |  |  |  |  |  |
| **Pertussis** |  |  |  |  |  |
| **Hepatitis B** |  |  |  |  |  |
| ***Haemophilus influenzae* b** |  |  |  |  |  |
| **Measles** |  |  |  |  |  |
| **Rubella** |  |  |  |  |  |
| **Mumps** |  |  |  |  |  |
| **Varicella** |  |  |  |  |  |

**4.8 What are the best strategies for ensuring optimal vaccination coverage in Italy (multiple answers allowed)?**

* Mandatory vaccination
* Promotion and information campaigns for the general population
* Information and education campaign for healthcare workers
* Organizational interventions aimed at strengthening vaccination services
* Implementation of the national vaccination registry
* Financial incentives for parents
* Financial incentives for healthcare professionals
* Other, specify **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**4.9 How hard is it to implement alternative strategies to mandatory vaccination in Italy?**

* Extremely
* Very
* Moderatly
* Slightly
* Not at all

**4.10 How hard is it to ensure vaccination coverage in the absence of mandatory vaccination in Italy?**

* Extremely
* Very
* Moderatly
* Slightly
* Not at all

**4 .11 What is the main barrier to the implementation of alternative strategies to mandatory vaccination in Italy?**

* Lack of resources
* Organizational issues
* Lack of political will
* Uncertain
* Other, specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# SECTION V – PERCEPTION OF THE IMPACT OF MANDATORY VACCINATION

**5.1 How far do you agree with the following statements**

EPIDEMIOLOGIC IMPACT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |
| **5.1a** Mandatory vaccination increases vaccination coverage for VPD |  |  |  |  |  |
| **5.1b** Mandatory vaccination reduces VPD morbidity |  |  |  |  |  |
|  |  |  |  |  |  |

SOCIAL IMPACT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |
| **5.1c** Mandatory vaccination increases citizens' confidence in vaccines |  |  |  |  |  |
| **5.1d** Mandatory vaccination encourages hesitant parents to vaccinate their children |  |  |  |  |  |
| **5.1e** Mandatory vaccination strengthens anti-vaccine movements |  |  |  |  |  |
| **5.1f** Mandatory vaccination damages relations between the State, health institutions and citizens |  |  |  |  |  |
| **5.1g** Mandatory vaccination represents a failure of the Italian public health system |  |  |  |  |  |
| **5.1h** Mandatory vaccination repeal would create confusion among citizens |  |  |  |  |  |

ECONOMIC IMPACT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |
| **5.1i** Mandatory vaccination has significantly increased the costs for vaccination services |  |  |  |  |  |
| **5.1l** Overall, mandatory vaccination will result in cost savings for the National Health Service |  |  |  |  |  |

IMPACT ON VACCINATION SERVICES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongy agree |
| **5.1m** The organizational effort for mandatory vaccination is unsustainable for vaccination services |  |  |  |  |  |
| **5.1n** Mandatory vaccination has resulted in an excessive workload for vaccination services staff |  |  |  |  |  |
| **5.1o** Mandatory vaccination has caused inconvenience to vaccination services users |  |  |  |  |  |
| **5.1p** Mandatory vaccination was sustained by increased resources devoted to vaccination services |  |  |  |  |  |
| **5.1q** Mandatory vaccination has diverted resources away from other vaccination related activities |  |  |  |  |  |