



*The vaccination issue in healthcare workers: **nudging** as a strategy to manage hesitancy and reflections on decision-making autonomy*



Dr. Ft. Erica Albizzati
Dr. Claudio Trotti
Ing. Beatrice Pagani



A.S.L. V.C.O.
Azienda Sanitaria Locale
del Verbano Cusio Ossola

Centro Ortopedico
di Quadrate
Ospedale Madonna del Popolo - Omegna



Objectives

- Evaluate the impact of **cognitive biases** and heuristics on choice architecture related to **vaccine hesitancy**;
- Present existing proposals for **managing HCWs' hesitancy**;
- Evaluate the effectiveness of **nudging*** in reducing HCWs' vaccine hesitancy;
- Analyze the impact of nudges on **individual autonomy of choice**.

* "gentle pushes" that can predictably influence the decision-making process, bypassing the physiological cognitive biases of human beings (*Thaler R. and Sunstein C., 2008*)

Methodology

The stated objectives have been achieved by means of a
scoping review

(Pubmed, Embase and gray literature sources)

***Main Reference Book: Thaler R.H., Sunstein C.R. *Nudge: improving decisions about health, wealth and happiness*. New Haven, CT: Yale University Press, 2008.**

Results

✓ Impact of cognitive biases on choice architecture related to vaccine hesitancy

- Due to cognitive economy, humans **do not behave as perfect rational decision makers**, especially under conditions of risk and uncertainty (*Kahneman D., 2013*);
- Biases occur **predictably** in particular circumstances: **frequency estimation, causal inferences** versus temporal *consecutio* (*Kahneman D., 2013*);
- Cognitive biases can **unconsciously influence HCWs' arguments** against vaccination, even in a population of «experts» (*De Vries R. et al., 2022*).

Results

✓ Present existing proposals for HCWs hesitancy's management

- **Structured information campaigns**, to counter false beliefs and build more awareness (Zuo C. *et al.*, 2022) → slightly increase (5-10%) vaccination adherence if carefully planned (Zhao X. *et al.*, 2021);
- **Mandatory vaccination**: sharply increases (+80%) vaccination coverage (Plutino M., 2017), but → sense of threat to individual freedom, distrust in hospitals' health policies, repercussions on professional belonging feelings (Okpani A. *et al.*, 2024);
- **Economic Incentives**: moderately increases (15-20%) vaccination coverage (Doherty T. *et al.*, 2024), but → important ethical implications, for example economic needs as a lever (Mohapatra S., 2017).

Results

✓ Evaluate the effectiveness of nudging in reducing HCWs' vaccine hesitancy

- **Nudging campaigns** increase (about 50%) vaccination adherence with a good degree of acceptance by HCWs (*De Vries R. et al., 2022*), but → ethical implications (*Zorzetto S. e Ferraro F., 2019*: stealth manipulation of people's behavior?);
- Interventions of great sustainability and feasibility (*Benartzi S. et al., 2017*): arrows and signage, technological reminders (*Munscher R., 2016*), **mobile vaccination stations** in the wards, **peer vaccination** (*De Vries R., 2022*), narrative videos and testimonials (*Renosa M. et al., 2021*).

Results

✓ Analyze the impact of nudges on individual autonomy of choice

- **Liberal paternalism** of nudging is not coercion, but rather an invitation to follow a certain behavior to **optimize individual choice**, for oneself and for others, in conditions of information complexity and risk of biases (*Thaler R. and Sunstein C., 2008*);
- Liberal paternalism does not exercise manipulation on freedom of choice, provided that the **"Principle of Publicity"** (*John Rawls, 1971*) is not violated;
- There is no doubt that people can make mistakes and learn from them, but this is permissible only when **no harm is caused** to oneself or others (*John Stuart Mill, 1859*).



THANK YOU

