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Unbiased Information Provision Increases Public Support for the Principle of Saving More Lives During a Pandemic

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UNBIASED INFORMATION PROVISION INCREASES PUBLIC SUPPORT FOR THE PRINCIPLE OF SAVING MORE LIVES DURING A PANDEMIC

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Executive summary

Public health strategies to deal with the COVID-19 pandemic are primarily guided by the principle of saving more lives. Public opposition towards the recommendations and directives of health authorities suggests that a sizeable fraction of the population may subscribe to a different principle, such as the principle of saving more life-years. Our randomised controlled experiment identifies one rectifiable source of this tension between the general public and health authorities. Providing unbiased information about the competing ethical considerations that guide public health strategies dramatically increases the individual-level support for saving more lives, and the likelihood of social agreement on this principle.

Key messages

- **In the absence of information about the competing ethical considerations that guide public health strategies, decisions by the majority of the participants are inconsistent with the principle of saving more lives.**
- **Unbiased information about these competing considerations significantly increases decisions consistent with the principle of saving more lives.**
- **Incentives to coordinate on some principle increase the fraction of decisions consistent with saving more lives, but not as much as unbiased information about the competing considerations.**



Introduction

Most public health strategies during the Covid-19 pandemic are guided primarily by the principle of saving more lives. One prominent example is the protocols for allocating scarce life-saving medical resources such as ventilators and ICU beds. Arguably, strict lockdown measures to ‘flatten the curve’ are also motivated by the principle of saving more lives.

Although widely accepted among health authorities, anti-lockdown demonstrations and public outcry against some guidelines for allocating ventilators suggest that a sizeable fraction of the population may not accept the primacy of the principle of saving more lives, and may instead prefer some other principle such as saving more life-years. Understanding the source of this potential tension between the public and health authorities is crucial because strategies derived from a principle that people personally subscribe to, and believe others will also subscribe to, are likely to incentivise individuals to act in the desired ways to overcome the Covid-19 pandemic.

Our randomised controlled experiment suggests that providing unbiased information that contains the competing ethical considerations behind public health strategies dramatically increases public support for the principle of saving more lives. The results underscore the importance of devising simple ways of communicating the competing ethical considerations in an unbiased manner to achieve social agreement on saving as many lives as possible during a pandemic.

Data, Methodology and Results

Data and Methodology

We conducted a randomised controlled experiment involving 100 individuals residing in California and Texas, the two states with the highest numbers of cumulative confirmed Covid-19 cases in the United States of America in September 2020. The participants were recruited via Prolific, a crowdsourcing survey and research platform, to participate in an online experiment during the last week of September 2020.

During Stage 1 of the experiment, participants were presented with five hypothetical scenarios (one at a time). Each scenario describes eight patients who have contracted Covid-19. Each patient needs a ventilator to survive Covid-19, but there is a shortage of ventilators. Patients differ in their chances of surviving Covid-19 conditional upon receiving a ventilator. In each scenario, participants chose a specified number of patients out of the eight patients who they thought should receive the available ventilators.

The five scenarios differ in how many and which of the patients have co-morbidities. A patient with co-morbidities is expected to die within two years even if the patient survives Covid-19 upon receiving a ventilator. A patient without co-morbidities is expected to live for the remainder of their natural term of life, conditional on receiving a ventilator and surviving Covid-19.

We construct the scenarios such that a participant's choice of patients for receiving ventilators allows us to infer whether the participant personally subscribes to the principle of saving more lives, saving more life-years, or some other principle.

During Stage 2 of the experiment, participants were again presented with the same five scenarios. In each scenario, a subject earned a bonus if and only if their choice of patients was identical to the patients most frequently chosen by all the participants in that scenario. This incentive structure implies the Stage 2 interaction is a coordination game. The choices here allow us to infer which principle is socially focal, i.e., the most likely principle upon which an agreement among people may emerge despite differences in their personally preferred principles.

Half of the participants were randomly assigned to the treatment (informed) group. Before making their choices in Stage 1, the informed group was provided the core arguments for and against utilising four criteria discussed in ventilator allocation protocols – age, occupation as a critical care worker, presence or absence of comorbidities, and low or high survival chances conditional on receiving a ventilator – to determine who should receive the available ventilators. The other half of participants were assigned to the control (uninformed) group that was not provided any information about the prioritisation criteria.

We provided arguments both for and against each of these four prioritisation criteria to prevent priming participants for or against the principle of saving more lives. This unbiased communication aims to ensure the participants understand that there exist competing ethical considerations and a variety of principles (e.g., saving more life-years, saving lives that are instrumental to keep the economy and healthcare system functioning), each with different implications for who lives and who dies.

Key message 1: In the absence of unbiased information about the competing ethical considerations behind public health strategies, the majority of participants do not support the principle of saving more lives.

No principle receives majority support among the uninformed participants. The principle of saving more lives is the modal personally preferred principle, as the decisions by nearly 44% of the uninformed participants indicate (Figure 1). The principle of saving more life-years is a distant second (~29%). There exists a sizeable minority of participants (~27%) whose choices are inconsistent with saving more lives or life-years.

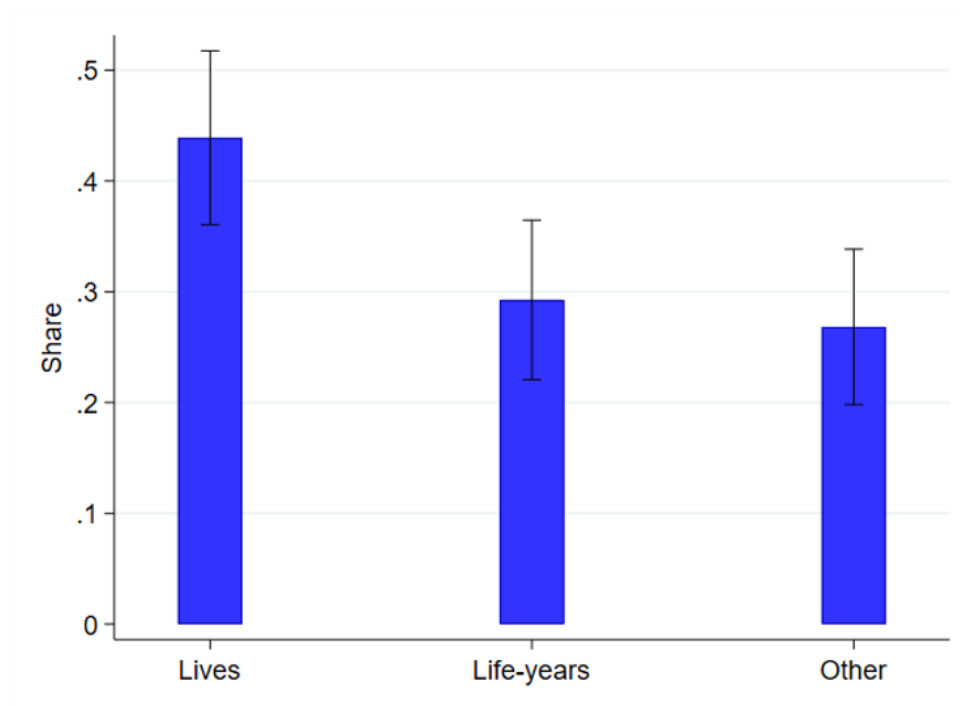


Figure 1: Decisions consistent with various principles among uninformed participants

Key message 2: Unbiased information about competing ethical considerations significantly increases decisions consistent with the principle of saving more lives.

When participants are provided the arguments for and against using the main criteria that health authorities consider in developing their guidelines for the allocation of scarce medical resources during a pandemic, the share of participants whose decisions are consistent with the principle of saving more lives increases from 44% to almost 63% (Figure 2A).

Our experimental design does not preclude the possibility that providing unbiased information may increase support for multiple principles. However, the evidence suggests that unbiased information increases support only for the principle of saving more lives, while unbiased information seems to decrease the support for the principle of saving more life-years (Figure 2A).

Figure 2B shows that the inclination to save more lives is primarily due to the tendency to save healthy-lives (i.e., patients without co-morbidities) among both the uninformed and the informed participants.

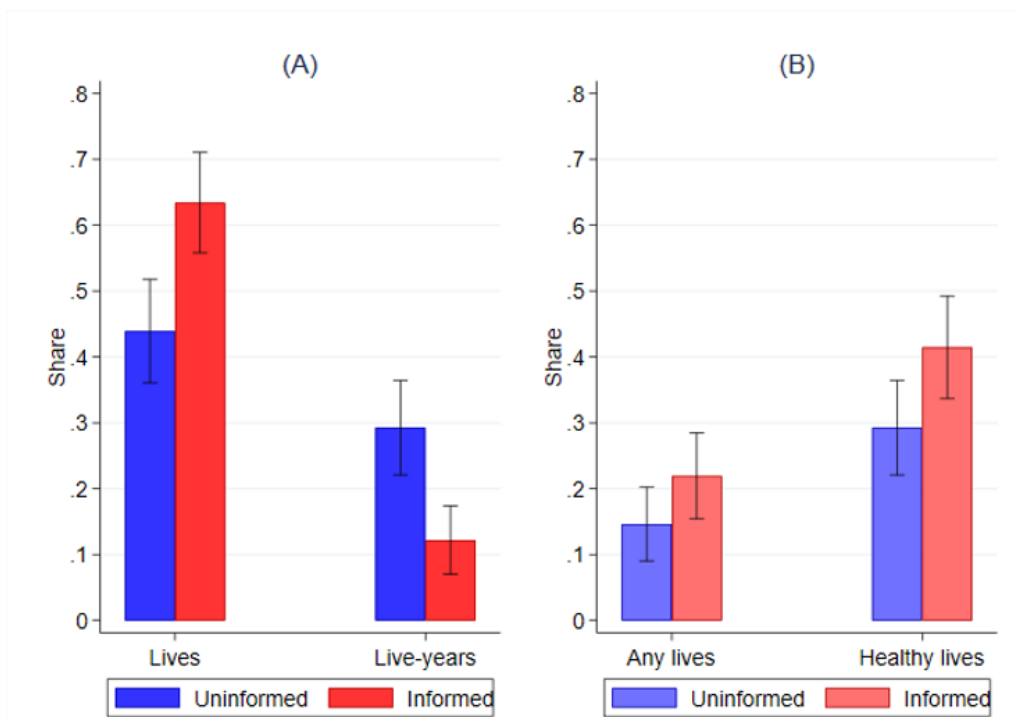


Figure 2: Unbiased information increases decisions consistent with the principle of saving more lives

Key message 3: Incentives to coordinate on some principle increase the fraction of decisions consistent with saving more lives, but not as much as unbiased information

The coordination game provides participants the incentive to carefully think about which principle others are likely to follow, and arrive at an implicit agreement upon some principle. Almost 54% of uninformed participants make choices consistent with the principle of saving more lives (Figure 3, navy blue bar). This highlights it is the most likely principle on which social agreement may exist among uninformed participants, despite differences in the principles that individuals personally subscribe to. However, coordination incentives seem less effective than unbiased information about competing ethical considerations, which increases support for the principle of saving more lives to nearly 63% (Figure 3, red bar). Coordination incentives have no marginal impact among the informed participants on their tendency to make decisions consistent with the principle of saving more lives (Figure 3, red bar v. purple bar).

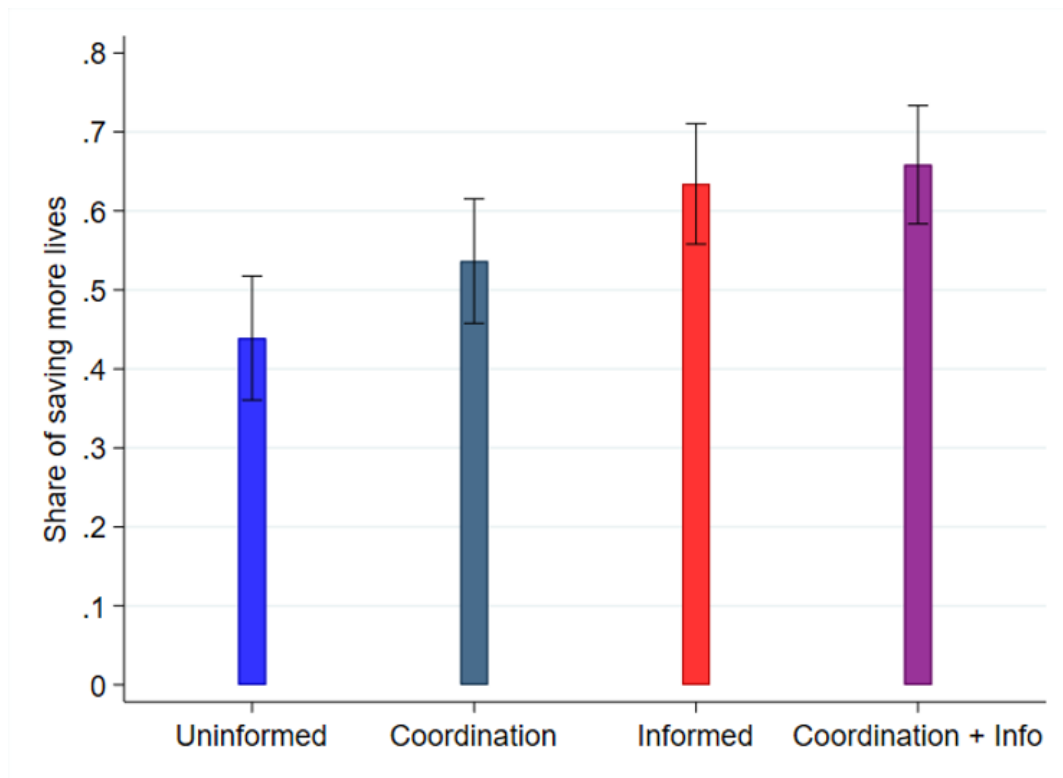
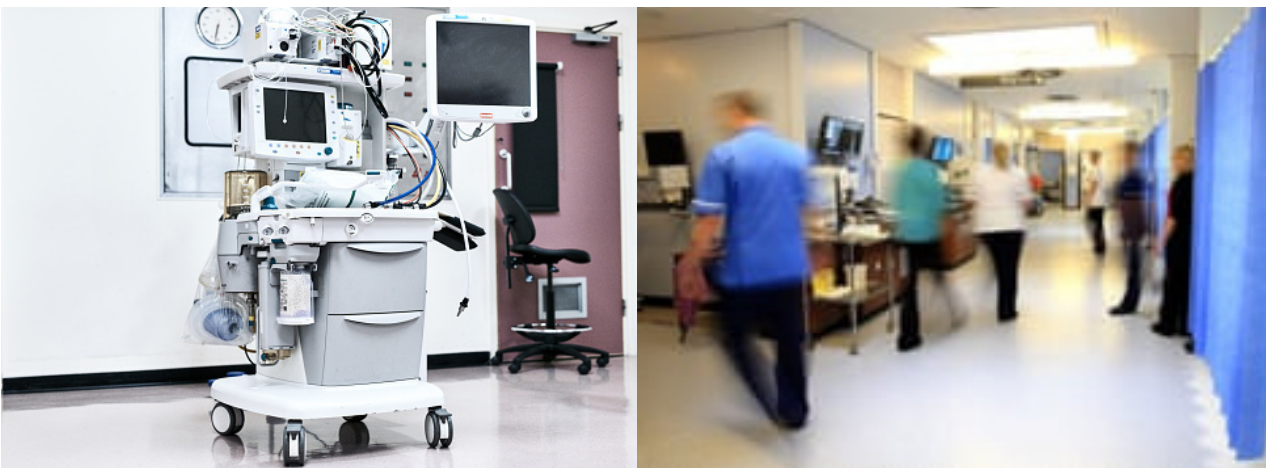


Figure 3: Unbiased information is more effective than coordination incentives in increasing the share of decisions consistent with the principle of saving more lives

Conclusions

Our choice experiment indicates that although only a minority of (uninformed) participants subscribe to the principle of saving more lives, it is the most likely principle on which social agreement may exist. The inclination for individuals to save more lives is primarily driven by their inclination to save lives of individuals without co-morbidities. More importantly, the evidence demonstrates that by providing unbiased information about the competing ethical considerations behind public health strategies, we can effectively orient the majority to personally subscribe to the principle of saving more lives. The efficacy of disseminating unbiased information about competing ethical considerations to build public support for the principle of saving more lives is further highlighted by the finding that incentives to coordinate on some principle seem less effective than unbiased information.



Policy recommendations

Because the cooperation and trust of the general public are critical for public health strategies that aim to end a pandemic, it is vital for health authorities to communicate competing ethical considerations that underpin their strategies and recommendations to the general public. By communicating unbiased and balanced information that highlights the arguments and counter-arguments used in the deliberation of their public health strategies and recommendations, health authorities may reduce opposition towards public health strategies that seek to save as many lives as possible.

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