

Is randomization fair?

A common concern from new partners on our projects is whether it is fair to deny the benefits from a program to some participants (in order to establish a control group). This question really rests on how many resources we have. Do we have enough money to vaccinate every child on the planet with this project? If not, we have to choose which people benefit and which don't anyway. Randomization is often one of the fairest and most transparent ways of doing this.

This was recognized as early as Ancient Greece, as noted in a recent biography of Socrates;

We learn, for example, about the workings of the mechanical device that randomly selected, from 6,000 names, the jury of 500 Athenian citizens (yes, 500) that assembled at the law court to hear the case. This *kleroterion*, a replica of which can be viewed at the Agora Museum in Athens, was a proto-computer that used carved slots to send metal disks down a chute. "Every means possible has been thought of to prevent corruption," Hughes writes. "Alphabetical blocks of seats, secret ballots, random-selection machines."

What about when we DO have the resources to serve every village in a region, is all hope of evaluation lost? Not quite; there are a couple of common work-arounds.

1. Are we doing everything all at once, or will some villages have to wait until year 2? If so, randomize who goes first and who waits!
2. Often the problem is not the availability of a service, but people actually wanting to use it. This goes for a whole range of cheap and easy public health solutions such as chlorine solution for clean water, and vaccinations. What we can do here is make the product or service available to everyone, but randomize different marketing techniques to test the best way of encouraging people to use the product. Everyone's happy!

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