Better than what?: embryo selection, gene editing, and evaluative counterfactuals

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McMahan and Savulescu argue that gene editing 'out' a genetic disorder like cystic fibrosis

> is, in one respect, morally better than selecting an embryo that does not have that disorder. This is because editing out the disorder would be *better for* the subsequent person, whereas selecting the unaffected embryo would not be (McMahan and Savulescu forthcoming, 7, my italics).

In other words,

> whereas gene editing improves the condition of one and the same individual relative to certain alternatives, embryo selection only causes a better-off individual to exist rather than a different, less well-off individual (McMahan and Savulescu forthcoming, 1; see also Gyngell and Savulescu 2017).

According to McMahan and Savulescu's "*Two-Tier View*," an action that makes somebody *well off* by virtue of making them *better off* is, *ceteris paribus*, morally better than an action that makes somebody well off by virtue of *bringing them into existence* (McMahan and Savulescu forthcoming, 2).

As McMahan and Savulescu (forthcoming, 2) themselves point out, "better" and "worse" are comparative terms. Thus, their claim that gene editing makes a person's life *better* for her invites the question: better than what? What is the "implicit, normatively salient alternative" or alternatives (McMahan and Savulescu forthcoming, 8) in comparison to which one should evaluate the possible world in which one engages in gene editing, in order to decide how much – if at all – it benefits the person whose genes are edited?

According to one possible answer to this question,

> the correct alternative for determining whether an act was better or worse for someone affected by it is what *would* have been done otherwise (McMahan and Savulescu forthcoming, 8; see also Douglas and Devolder 2022; Sparrow 2022).

However, McMahan and Savulescu (forthcoming, 8) argue that this view has implausible implications in certain cases.

> Suppose, for example, that an embryo was created, found to have a genetic disorder, but was then implanted without gene editing, even though gene editing was possible. We can say unequivocally that this was worse for the person who now has to live with the disorder. And this is true even if, for example, the parents had a religious objection to gene editing

> (though not to discarding an embryo), so that they *would* have discarded the embryo if they could not have implanted it without its being edited.

McMahan and Savulescu do not themselves offer any general theory of which alternative or alternatives one should use to determine whether an action was better or worse for someone affected by that action. However, they do claim that the normatively salient alternative to (i) implanting an unedited embryo known to have cystic fibrosis (for short: Unedited Implantation) is clearly (ii) implanting that same embryo with the cystic fibrosis edited out (for short: Edited Implantation). Parents who choose Unedited over Edited Implantation clearly wrong the child in question, by making her life worse for her (McMahan and Savulescu forthcoming, 8).

Furthermore, McMahan and Savulescu (forthcoming, 8) infer from this claim the conclusion that

> whenever gene editing has successfully been done, that was *better for* the person who has developed from the edited embryo.

In other words, McMahan and Savulescu argue that since Edited Implantation is a normatively relevant alternative to Unedited Implantation, symmetrically Unedited Implantation must be a normatively relevant alternative to Edited Implantation. And since Edited is better than Unedited Implantation for the person who develops from the edited embryo, we can conclude that gene editing is better for the edited person than at least one of its normatively relevant alternatives.

McMahan and Savulescu's argument here relies upon the implicit premise that if Edited Implantation is a normatively relevant alternative to Unedited Implantation, then symmetrically Unedited Implantation must be a normatively relevant alternative to Edited Implantation. However, this implicit premise strikes me as undermotivated. I am not yet convinced that the binary relation '___ is a normatively relevant alternative to ___' must be symmetrical.

Suppose we assume that there is nothing intrinsically morally objectionable about gene editing, and that the couple wishing to conceive do not have any morally significant personal or religious objections to it. Under these assumptions, Unedited Implantation is *ex ante Pareto dominated* by Edited Implantation. Unedited Implantation is (at least *ex ante*) worse than Edited Implantation for the child being conceived, and no better than Edited Implantation for the prospective parents (at least with respect to any morally significant considerations). Thus, Unedited Implantation strikes me as an *obvious non-starter* morally speaking. Any morally conscientious agent would reject out of hand an option like Unedited Implantation that is Pareto dominated by some intrinsically unobjectionable alternative. But given this fact, it strikes me as somewhat implausible to suppose that one should pay any attention whatsoever to Unedited Implantation when one is deciding between Edited Implantation and embryo selection. Why should we regard a moral non-starter like Unedited Implantation as a normatively relevant alternative to Edited Implantation?

On the other hand, suppose we instead assume either that gene editing is *pro tanto* intrinsically morally objectionable, or else that the prospective parents have morally significant personal or religious objections to gene editing. Under these assumptions, Unedited Implantation

is no longer an obvious non-starter morally speaking (since it is no longer *ex ante* Pareto dominated by Edited Implantation). Thus, it now strikes me as rather more plausible to suppose that Unedited Implantation might be a normatively relevant alternative to Edited Implantation, as McMahan and Savulescu suggest. Under these assumptions, McMahan and Savulescu's Two-Tier View might indeed imply that Edited Implantation is in one respect morally better than embryo selection. However, we could reach this conclusion only by assuming that in one or more other respects, gene editing is itself *pro tanto* morally objectionable. For all we know, these new moral objections to gene editing might always be *stronger* than any accompanying 'person-affecting' reasons in favour of it.

In summary: even if we accept McMahan and Savulescu's Two-Tier View, it is far from clear that we should reject the "popular position" that embryo selection is morally preferrable to gene editing. On one hand, if gene editing is morally unobjectionable in itself, then it seems quite implausible to suppose that it is better than any normatively relevant alternatives for the child being conceived. But on the other hand, if gene editing is intrinsically morally objectionable, then we clearly start with a *pro tanto* presumption in favour of the popular position. Either way, it is far from clear that the Two-Tier View gives us a compelling reason to reject this popular position.

Neither I nor McMahan and Savulescu (forthcoming) have attempted to develop any domain-general theory of which counterfactual alternatives should be treated as the 'normatively relevant' determinants of whether an action makes some person better off or worse off (cf., *inter alia*, Douglas and Devolder 2022, §V). However, it is incumbent upon supporters of McMahan and Savulescu's Two-Tier View to show that at least one plausible such domain-general theory is available. Unless and until this challenge is met, we have some reason to question McMahan and Savulescu's Two-Tier View.

By contrast, perhaps we should not be so quick to dismiss the "*Impersonal View*," according to which

> reasons to promote well-being and prevent ill-being are impersonal in the sense that they are reasons to produce outcomes in which there would be more well-being, on balance, or in which well-being would be better distributed, or both, than in other possible outcomes. This is true irrespective of whether the impersonally best outcome would be better for anyone (McMahan and Savulescu forthcoming, 2).

McMahan and Savulescu (forthcoming, 4) claim that the Impersonal View is implausible, because they suggest it implies that

> the reason to cause a person to exist rather than not cause anyone to exist will in general be stronger than the reason to save a person's life, as creating an entire good life will normally make the outcome better by more than preserving the remainder of a good life would.

However, it is not clear to me that this claim follows from the Impersonal View as McMahan and Savulescu define it. Recall that according to McMahan and Savulescu's own definition, an advocate of the Impersonal View can care about how welfare is distributed in additional to caring

about how much well-being there is in total. Furthermore, allowing somebody to die young caps this person's overall lifetime well-being at a much lower level than the lifetime well-being levels of their peers. This strikes me as an adverse distributional consequence, which could supply an Impersonal reason in favour of saving existing people's lives, as opposed to bringing additional people with good lives into existence.

Of course, the Impersonal View also straightforwardly supports the popular position that embryo selection is morally preferrable to gene editing. Perhaps this position's popularity is better deserved than McMahan and Savulescu suggest.

References

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