

'False hope' in assisted reproduction: the normative significance of the external outlook and moral negotiation

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***Abstract:** Despite the frequent invocation of 'false hope' and possible related moral concerns in the context of assisted reproduction technologies, a focused ethical and conceptual problematization of this concept seems to be lacking. We argue that an invocation of 'false hope' only makes sense if the fulfillment of a desired outcome (e.g. a successful fertility treatment) is impossible, and if it is attributed from an external perspective. The evaluation incurred by this third party may foreclose a given perspective from being an object of hope. However, this evaluation is not a mere statistical calculation or observation based on probabilities, but is dependent on several factors that should be acknowledgeable as morally relevant. This is important because it allows room for, and encourages, reasoned disagreement and moral negotiation. Accordingly, the object of hope itself, whether or not based on socially embedded desires or practices, can be a topic of debate.*

INTRODUCTION

Concepts relating to human want are particularly prominent in the field of assisted reproduction. When it comes to human reproduction and the technological means to facilitate it, concepts like ‘need’, ‘desire’, and ‘hope’ play a central role. The discussion, for instance, whether assisted reproduction technologies (ART) meet an important human need or, to the contrary, hardly anything more than a ‘mere’ desire has been a recurring topic throughout the history of assisted reproduction and is commonly viewed to affect opinions on the moral duties to accommodate respective parenthood aspirations. Extensive philosophical attention has been allocated to making it comprehensible that these concepts’ descriptive content and related moral force are much more opaque than their common invocation suggests.

A similar philosophical exercise pertaining to the concept of ‘hope’ may, likewise, illustrate that the frequent use of this word seems to be unhindered by the challenges related to grasping its meaning. Indeed, recent and valuable work has been done in analyzing hope from a fundamental philosophical perspective [1, 2] and from more applied medical-ethical perspectives [3-5]. When it comes to the particular context of (assisted) reproduction, notions of hope are frequently invoked, where reproductive technologies have been termed ‘hope technologies’ as they keep the hope alive to satisfy the desire to have a genetically related child [6, 7]. In this context we are particularly interested in references to ‘false hope’; appeals, that is, to presumed duties to avoid instilling false hope and/or to protect persons against false hope.

Examples of ARTs – which, it is fair to say, mostly pertain to persons’ prospects to become genetic parents – where worries about false hope have been foregrounded include mitochondrial donation, reproductive use of stem cell-derived gametes (including production of cross-sex gametes for use in couples of the same sex), and fertility preservation (especially oocyte cryopreservation) [7-10]. Despite the frequent invocation of this concept (and the possible moral concerns that come with it) in the context of ART, and unlike the conceptual and normative attention that has been paid to it in broader philosophical domains or other medical settings, a focused ethical and conceptual problematization of ‘false hope’ in the field of ART seems to be lacking. Earlier analyses have indeed offered valuable insight in the subtleties of understanding and evaluating hope (and its associate ‘false hope’) in clinical

ethics [3-5]. The point of our paper is, first, to explicitly explore the ethical concerns related to false hope in the specific context of ART, and second, to accentuate that ‘false hope’ only makes sense when it is attributed by an external source. Taken together, we believe that these elements contribute to the literature on ‘false hope’ in clinical ethics and in reproductive ethics in particular.

After introducing accounts of ‘hope’ in the first section, we draw attention to the finding that an invocation of ‘false hope’ implies an external attribution. This is ethically relevant – so we will argue in the second section – given that sensitivity to the fact that this attribution is based on various value-laden factors, encourages reasoned disagreement and moral negotiability. In the final section, this negotiable character is extended to the (socially embedded) object of hope itself.

ACCOUNTS OF ‘HOPE’ AND THE ATTRIBUTION OF ‘FALSE HOPE’

Although there is no agreed-upon definition of ‘hope’, most accounts agree that hope arises when the eventual satisfaction of a desire is believed to be uncertain. The ‘Standard Theory’ states that hope consists of two elements [1]. Whereas the *conative* element comprises the desire for the hoped-for outcome, the *cognitive* element is a presupposition that the outcome is possible [1, 2]. While there is debate on the sufficiency of these two elements, the fact that both elements are important (if not necessary) is intuitively appealing.

Chignell, however, argued for a third element in what he calls the ‘Focus Theory’ of hope [1]. ‘Hope,’ he writes, ‘involves the disposition to *focus on* a desired outcome as one whose possibility is psychologically ‘unswamped’ by the salience of countervailing considerations’ [1]. The possibility of the outcome is ‘unswamped’ as long as no countervailing considerations tend to be more salient for the hoper than its possibility. This focus is not on an estimation of the probability regarding a desired outcome, but rather, on the outcome as probable to some non-zero degree [1]. Therefore, if not swamped by countervailing considerations, someone can believe that an outcome is improbable and still hope for it. Acknowledging the low probability of a particular outcome, an agent can hope for an outcome and at the same time expect the opposite. We will, at least sideways, return to this idea of ‘swamping’ below.

Turning our attention then from the conceptual domain to the more practical context of ART, it may be stated that, although the *probability* of having a genetically related child might be low, this desired outcome is an object of hope (meaning: a state of affairs hoped for) as long as the *possibility* is considered to exist. Hoping to have a genetically related child would be senseless if this prospect is not desired and recognized as possible by the ‘hoper’. Hence, if hoped for, there must be a belief that having a genetically related child is possible (or certainty that the outcome is impossible must be absent). Indeed, although the chance of a successful ART trajectory may be considered small (depending on local parameters, and clients/patients may or may not have correct expectations), the chance that it will lead to conceiving a genetically related child is greater than if an individual/couple did not start a procedure. At least this much is true, independent of the inherent normativity in judging whether a given probability of success is considered ‘low’ or ‘high’ – we return to this below. In short, it would not make sense for an individual/couple to start a fertility treatment if (a) they do not desire a successful outcome, and (b) do not believe that the satisfaction of that desire is possible.

Following the standard theory of hope, the *cognitive* element requires a presupposition describing a specific outcome (p) as (merely) possible. Hence, if p is impossible, it could (as a matter of course) not be an object of hope. If an agent nevertheless comes to hope for p , and thus believes that p is possible, the invocation of ‘false hope’ is correct. Thus, since someone can hope for an outcome with a low *probability*, the attribution of ‘false hope’ to someone pursuing a genetically related child only makes sense if the *possibility* of a successful ART trajectory is absent. Furthermore, in hoping for p , the hoper would not know that p is (in fact) impossible as they would otherwise have no reasons to hope for p . Therefore, saying ‘I have false hopes’ is a contradiction because I would be aware of the fact that p is impossible and, in effect, not hope for p (because the presupposition that the desired outcome is possible is necessary for hope).

As an aside: although based on an incorrect belief in possibilities, the emotion itself is not ‘false’. Likewise, someone can experience something that might be called ‘false joy’ if this emotion is based on incorrect information (e.g. having a false-positive pregnancy test if pregnancy is desired). However, the joy itself, as experienced by the agent, is no less true than if it were based on correct information. Because false hope can be based on justified beliefs (like the false-positive pregnancy test illustrates),

we should be wary of blaming someone for misjudging (or having false beliefs concerning) the possibility. Moreover, justified beliefs can serve as a rational basis for hope, which means that hope can be both rational and false. For example, the evidence available can support (or, indeed, instill) hope to have a genetically related child. However, if the desired outcome is actually impossible, their hope is false, even though it may have been rational at the outset.¹ Crucially, the hoper would be unaware of the fact that the outcome is impossible, as this knowledge would preclude them from hoping for it.

Essentially, however, insomuch as it is quaint for an individual to assert that one ‘has false hope’, a third party *can* point out that the hoped-for outcome is, in fact, impossible and cannot be an object of hope. Therefore, an invocation of ‘false hope’ only makes sense if (a) the fulfillment of the desired outcome is impossible, and if (b) it is attributed from an external, say, third-party perspective (which can also be a personal hindsight perspective). It is the latter that we wish to earmark as an ethically relevant finding in considerations of false hope in medical ethics, and in the context of (assisted) reproduction in particular. As we will explore in the next sections, recognizing this external perspective encourages reasoned disagreement and moral negotiation.

MORAL NEGOTIABILITY OF WHAT IS CONSIDERED ‘FALSE’

While hope need not be ‘false’ if there is a possibility (however meager), the probability of the desired outcome can be low. This triggers normative reflection about when probabilities can be said to be *too* low for warranting assistance. It is not because there is a mere possibility, that any claim for assistance or access to ART generates a duty to provide such service. Even if it is *possibility* that is elementary for hope, and not per se *probability*, it is, however, the case that a successful outcome is foreclosed when a fertility trajectory (or indeed a research line aimed at potential future technological application) is not started at all due to the consideration that probabilities are ‘too low’. In other words, the desired outcome

¹ Contrariwise, hope based on unjustified beliefs need not be ‘false’. Although it may not be the most likely outcome based on current knowledge (or, indeed, not the ‘best guess’ given what is known [5]), there could still be a possibility of it coming to fruition. We return to this notion (and corresponding professional duties) related to these ‘irrational hopes’ in the last section.

(of a successful ART trajectory) becomes impossible when the probability is judged to be 'too low'. If, in view of the above, this impossibility is acknowledged by the patient/s, the (desired) outcome cannot be an object of hope. Indeed, one cannot hope for a trajectory to succeed if the trajectory did not start.

Precluding the possibility of a successful trajectory entails, more fundamentally, the question whether, and when, considerations (based, for instance, on risks or costs for either the hoper or other parties involved) would be regarded as countervailing. Importantly and often overlooked, the weight of these considerations involves a normative judgment. This, in turn, evokes questions about the normative authority attributed to the external yardstick by which hope can supposedly be said to be 'false', and indeed about the normativity of what it means to earmark something as impossible. To be morally justified, the refusal of access to ART requires a balance made by an external party between probabilities (the chance of success) on the one hand, and morally relevant factors like costs, risks, or burdens on the other. This assessment is based on the question: how willing are we to accept (possible) (moral) costs in return for what (chances of) success? A threshold is foreseen based on this evaluation, for which, below a certain probability or expectation, providing access to the treatment (or other means to pursue the hoped-for outcome) is considered morally objectionable. Hence, this normative deliberation is not a mere statistical calculation or observation based on probabilities, but is dependent on several factors that should be acknowledgeable as morally relevant.

These can, for instance, reflect the basic principles in principlist bioethics: autonomy, justice, non-maleficence, and beneficence [11-13]. By obscuring that this evaluation is done from an external perspective, the opportunity to question this assessment is downgraded. This is ethically relevant, because the fact that this threshold is based on a selection of morally relevant factors, allows for reasoned disagreement. To be sure, a (contingent) consensus can be reached on how to regulate access to ART, but to the extent that this consensus is based on negotiable ethical values being weighed against one another, this eventual balance will be open to disagreement. Most countries, for instance, set age limits for coverage and discourage further autologous treatment in case of repeated unsuccessful IVF attempts. While this may reasonably reflect considerations of beneficence and justice, respectively in terms of cost-effectiveness and equity of access, it is also true that the balancing of ethical principles (and pluralism about values) allows room for normative deliberation and negotiation [13].

In a similar line, imposing the use of preimplantation genetic testing (PGT), and thereby (possibly) restricting access to ART, could be justified by ethical principles related to non-maleficence if a future child is imposed to significant health risks due to a severe (potential) genetic condition. However, although an unconditional positive right to access ART is contested (we will return to this shortly), the hopee has at least a right to be treated fairly. The same degree of burden experienced by restrictions (e.g. due to requirements concerning the application of PGT) should be imposed on all patients with an equal (high) risk of significant health hazards to a future child. Therefore, the principle of justice demands that restrictions are applied consistently. Likewise, reasons why probabilities are considered ‘too low’ (resulting in the impossibility to fulfill the desired outcome) must not only be morally relevant, but also applied consistently. For instance, if more effort or costs are accepted for catering to heterosexual couples’ reproductive aspirations than for same-sex couples without further consideration (again, reflecting ethical principles), one can criticize this decision.

Indeed, even if something is identified as currently (technically) impossible – and hence a presumed object of false hope – an openness to the deliberation upon which this normative judgment is based, can induce inquiry into how, and at what costs, this prospect might be made possible. Researchers are skeptical, for instance, about the prospect of producing gametes of the opposite sex (i.e. through in vitro gametogenesis). Yet, it has been argued that if the value of shared genetic parenthood for heterosexual couples is deemed important enough to invest in, then the technical possibility of deriving gametes from the opposite sex should not be a priori set aside as impossible and should receive due attention [14, 15]. The brunt of this, however, will be borne by those attempting to give an ethical justification of what ‘impossible’ and ‘due attention’ amount to. This raises normative questions about the pragmatic concerns about the feasibility of this prospect, the risks or costs it would imply, and which lines of research deserve priority, especially in view of the observation that relatively little research has been directed towards the goal of creating gametes from the opposite sex. Along similar lines, it has been noted that in societies structured to award privileges to some people at the expense of others, desired outcomes of privileged groups are more likely to be fulfilled than the hopes of members of oppressed groups [16].

SOCIAL PRACTICES AS A TOPIC OF DELIBERATION AND NEGOTIATION

In speaking of ‘false hope’, especially with respect to this notion of negotiability, it is not only what is ‘false’ that can be discussed – by critically evaluating when or which probabilities are assigned as ‘too low’ or impossible – but also what is hoped for (i.e. the object of hope). For one thing, the object of hope can be changed by the patient/s. They can, for instance, hope for other physicians making different evaluations, other regulations upholding lower thresholds, emerging technological developments opening new avenues, or they can hope to become parent/s by other means (e.g. adoption).

One may debate whether interfering with the decision of the hoper to alter their object of hope (e.g. to travel to pursue treatment in another country) is paternalistic. It may be held that hopers themselves are often best suited to appreciate the value of their desires and ways of pursuing corresponding outcomes, though as we will suggest, difficult cases of a so-called ‘*idée fixe*’ may compound questions of decisional authority/autonomy. While people have at least a negative right to (try to) reproduce, meaning that they are free to ask for assistance, this does not warrant an unconditional positive right to the satisfaction of their desires [13, 17]. Following this argument, a physician could be justified in not starting an ART cycle. This, however, does not coincide with an entitlement to bar people from pursuing other means to fulfill their desired outcome. That said, one may hold that a physician can – apart from critically assessing and adjusting their own involvement in this pursuit – justifiably express doubts about whether or not pursuing the hoped-for outcome would be for the good, without becoming objectionably paternalistic [18].² While not fulfilling the desired outcome, they could, say, ‘reorient’ the focus of the hoper/s. The third element of hope, presented by Chignell, is relevant here [1]. By ‘reorienting’ the focus, the possibility of the outcome is ‘swamped’ by countervailing considerations that are, now, regarded (by the hoper) as more salient. These countervailing considerations can, for instance, take the form of probable risks or costs for either the hoper or other involved parties.

² Besides the concern of (medical) paternalism in reorienting the focus of hopers, there is a rising issue of so-called neo-paternalism. One could note that whereas ‘old-school’ paternalism in medicine was largely physician-driven, neo-paternalism is about governments, corporations, and other actors steering decisions for both patients and healthcare providers [19].

The opposite, namely whether *not* interfering with the decision of the hopeer to alter their object of hope (by not reorienting the focus) is paternalistic, can in turn be debated. For instance, if hope is considered to be irrational (because it is not the ‘best guess’ based on current knowledge [5]) it could be argued that physicians have the *prima facie* duty to share and express considerations about whether pursuing the fulfillment of an outcome (and at what costs) is desirable. Relying on the principle of respect for autonomy, Musschenga argued that not exposing false hope is *prima facie* wrong [2]. Furthermore, physicians can reinforce or instill false hopes by incorrectly or incompletely informing patients about probabilities concerning the satisfaction of their desire. Indeed, when a physician fails to share complete and accurate information to their patient/s for the sake of their well-being, the physician acts, arguably, paternalistically [2, 5]. The example of the person experiencing ‘false joy’ due to a false-positive pregnancy test is again illustrative. Here, it stands to (moral) reason that a physician, aware of the falsity of the test, should inform and, if possible, alter the belief of this person (even if it would have a negative effect on their well-being).

In a clinical context this is compounded by considerations about how medical (and respective psycho-emotional) conditions may compromise patient autonomy. We sympathize with the view that a healthcare professional’s skills should encompass sensitivity to any individual patient’s situation in order to assess whether respect for autonomy requires that possibly upsetting evidence is disclosed, or whether – vice versa – preservation of ‘a hopeful orientation’ is required to move them across the threshold to be autonomous [5]. One of us has argued elsewhere that one should not expect an absolute heuristic to resolve this question [20]. In addition to earlier reflections that have uncovered these complexities [5], we here (merely) wish to flag that this amounts to putting ‘phronesis’ back in ‘medical practice’.³

We are not seeking to determine what a particular individual may or may not hope for (let alone what should be hoped for), but wish to indicate that ‘hopes’, like beliefs and desires, are formed within

³ This is the subject of a paper that one of us is currently authoring. We will not expand upon this here. For clarity’s sake, this points to cultivating the ‘virtue’ of making fitting judgments in particular cases.

interpersonal contexts. Expanding on this as a final note, and assuming that people are often prepared to go to great lengths to obtain an aspired parental goal (sometimes going against the judgment that this is ill-advised given accompanying physical, psychological, and financial burdens), it may be worthwhile to consider that the willingness to make such efforts may also reflect broader socio-cultural expectations about parenthood. As Stockdale argues, hope is not only an individual state of mind, but is deeply affected by the social, political, and economic positions occupied in relation to others (i.e. our position within interrelated systems of privilege and oppression) [16]. This context shapes not only the object of hope – by affecting what is seen as desirable or worth pursuing – but also how hopes are obtained or kept, and the degree to which someone is hopeful that a desired outcome is likely. Stockdale writes: ‘We find ourselves with hope not just because of desire and uncertainty but also because individuals and institutions in positions of power influence how we think, feel, value and act.’ [16]

Importantly, hope itself – i.e. to meet a supposed ideal of genetic parenthood – can also be oppressive or exploited [16], which is part of the reason why some scholars have criticized the ideological focus on shared and equal genetic parenthood, advocating that this alleged ideal needs not to be pursued against all odds [13, 16]. Yet, when chances of success are low and costs of fertility treatment high, for-profit companies can be said to ‘sell hope’ [3]. Labeling this as selling ‘*false hope*’ may not accurately reflect the situation, as the desired outcome could (at high costs) still be possible, though it can be framed as instilling ‘*irrational hope*’ by exploiting the conative element.⁴

Doubling back to the aspect of negotiability – which we have here aimed to highlight by accentuating the external perspective in false hope attributions – the socially embedded desires that structure objects of hope, can be questioned. Pitting alternative possibilities against shared beliefs (about which hoped-for outcomes are considered desirable and which are not) marks the negotiability of which desires are recognized as worth pursuing [13, 18]. The negotiable character allows room for social practices (possibly backed by policy choices and implicit societal conventions) to be a topic of debate.

⁴ We thank the anonymous reviewer for making this explicit.

CONCLUSION

We argued that the refusal of access to ART, based on which hopes are considered false and which are not, requires a balance made by an external party. This normative deliberation is, thus, not a mere observation on probabilities concerning the fulfillment of the desired outcome, but should depend on several morally relevant factors like costs, risks, or burdens. Taking these countervailing considerations into account, a successful outcome can be foreclosed and, hence, a presumed object of false hope if a fertility trajectory (or a research line aimed at potential future technological application) is not started. Apart from making this evaluation, one may hold that a physician can justifiably express doubts about whether or not pursuing the hoped-for outcome would be desirable, without becoming paternalistic. After all, an openness to the deliberation upon which this normative judgment is based, can induce inquiry into how and when hopes are considered ‘false’.

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