SCIENTIFIC CONTRIBUTION



Against age limits for men in reproductive care

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Abstract

Almost all countries and fertility clinics impose age limits on women who want to become pregnant through Assisted Reproductive Technologies (ART). Age limits for aspiring fathers, however, are much less common and remain a topic of debate. This article departs from the principle of reproductive autonomy and a *conditional positive* right to receive ART, and asks whether there are convincing arguments to also impose age limits on aspiring fathers. After considering three consequentialist approaches to justifying age limits for aspiring fathers, we take in a concrete normative stance by concluding that those are not strong enough to justify such cut-offs. We reinforce our position by drawing a comparison between the case of a 39-year-old woman who wants to become a single mother via a sperm donor on the one hand, and on the other hand the same woman who wants to have a child with a 64-year-old man who she loves and who is willing to care for the child as long as he is able to. We conclude that, as long as appropriate precautions are taken to protect the welfare of the future child, couples who want to receive fertility treatment should never be limited on the basis of the age of the (male) partner. An absence of age limits for men would respect the reproductive autonomy of both the man *and* the woman.

Keywords Age limits · Advanced paternal age · Medically assisted reproduction · Moral · Gender equality

Introduction

Most Western countries have legislation that regulates access to (and/or reimbursement of-) Assisted Reproductive Treatment (ART) for women based on the aspiring mother's age. These age-based restrictions normally contain a "cutoff point", i.e. they indicate an age beyond which the aspiring mother cannot access ART or receive reimbursement. There are some commonly accepted reasons to justify the existence of such limits. For example, an age limit can be justified based on concerns for the harm to the woman or the child, since ageing decreases the chances of a (healthy) pregnancy and increases risks to the woman and her potential offspring (Van Loendersloot et al. 2010; Sugai et al.

Steven R. Piek steven.piek@ugent.be 2023). When it comes to age limits for accessing publicfunded ART, age limits can be justified based on considerations of efficient resource allocation, given the low chance of success (measured in terms of chances of a live-birth) associated with certain advanced ages.¹

It may seem intuitively appealing to think that, like for women, there ought to be age limits on ART-access for men as well. Indeed, a (relatively small) number of countries also imposes age cut-offs on aspiring fathers. In France, Portugal and Finland, access to fertility treatment is denied when the man is 60-years-of-age or older, and in Sweden this limit lies at 56-years-of-age (Calhaz-Jorge et al. 2020; French Government 2021). With regards to reimbursement of treatment costs, Austria, Germany (both at 49), Sweden, Spain (both at 55), Portugal and Finland (both at 60), each place limits on the age of the aspiring father (Calhaz-Jorge et al. 2020). In this article, we will have a critical look at

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¹ The connection between success rate and risks for the offspring assumes that the advanced age women try to become pregnant with their own 'fresh' eggs. This connection no longer exists if they would use their own frozen eggs or younger donor eggs. If a couple or individual use a surrogate, the matter of obstetric risks of course also disappears.

age-based restrictions to ART for aspiring fathers, and reflect whether there can be a sound normative justification for such limits.

Although there are some indications that Advanced Paternal Age brings about advantages for the wellbeing of the child(ren) (Couture et al. 2020), most of the time advanced paternal age is presented as a potential disadvantage and age limits to ART-access (and/or reimbursement) are often justified by referring to the possible negative implications. As men age, the quality of their sperm decreases gradually, resulting in increased health risks for the offspring. This has led some authors to speak of a "male biological clock" with a "Paternal Age Effect" (PAE) on (future) offspring (Pasqualotto et al. 2008; Ramasamy et al. 2015). This complements the discourse on female reproductive ageing (e.g. interpretations of scientific data about correlations between a woman's age, her decreasing fertility, and the increased chance of birth defects and obstetric risks). Beyond such reasons, a further concern comes from the fact that the older people are, the more likely they will need care and eventually die².

The idea of age cut-offs to ART for men has been discussed by various authors but without taking a concrete normative stance as to whether such limits are morally desirable or not (Belaisch-Allart et al. 2016; Bray et al. 2006; Klitzman 2016; Zweifel et al. 2020). Arguably, this is also because there is no consensus as to when fathers can be considered of "Advanced Paternal Age" (henceforth APA)³. For instance, the review by Brandt et al. (2018) on the medical risks of APA showed that different studies used their own cut-off point to demarcate the group "fathers of advanced age". These range from 30, to 40 and 55 years-of-age. Another review of the literature identified 32 publications of which the threshold age to define APA varied widely as well (Ramasamy et al. 2015). Because of the gradual onset of APA and the context-dependency of its definition, we will refrain from concretely defining APA in this article. Instead, we will use the term "advanced age" to refer to any age that is labelled "too high" in the context of a potential argument in favour of age limits for men (e.g. this could vary from 40-, to 50- or 65-years of age). After all, the essence of our argument is not to discuss when a strict age limit should be put, but whether having a strict age limit at all has a solid normative justification.

To examine whether age-based restrictions to ART for aspiring fathers are justified, it is first necessary to take a stance on the nature of the claim to ART-access. In most Western countries, this claim can be described as a conditional positive right to ART. It is recognised as a positive right as demonstrated in the fact that many aspiring parents are being actively assisted in fulfilling their desire by allowing access to ART with - in many countries - some form of reimbursement. One can justify this by pointing at the importance of the right to found a family and at the need for medical assistance for the infertile (Boivin and Pennings 2005). Additionally, it is a conditional right, because such assistance (in terms of treatment or reimbursement) is provided only if certain conditions (e.g. having a high-enough chance of success) are met. Hence, it is important that the conditions on the basis of which it is decided who is denied access to ART and/or reimbursement of ART are supported by valid reasons.

In this article, we focus on the normative dimension of the age of aspiring fathers⁴ in the context of assisted reproduction. We will hold that losing both parents before a child has reached adulthood involves such harm, that at the time of treatment there should be at least one parent with a long-enough healthy life expectancy to be able to care for the child until it is mature. This position is based on the principle of *reasonable* welfare (Pennings 1999), situated in between the minimalist "barely worth living"-principle (Steinbock & McClamrock, 1994) and the maximalist principle of "procreative beneficence" (Savulescu & Kahane, 2009). Simultaneously, we adopt a non-comparative and impersonal approach to the potential offspring's wellbeing (Williams & Harris, 2014).

Next to the wellbeing of the future child, we base our argument on the importance of the reproductive autonomy of not only the father but also of the aspiring mother. After all, if the aspiring father is denied access to ART because of his age, this automatically implies a refusal of her wish to have a biologically related child with her partner as well. However, we do not endorse an understanding of reproductive autonomy that allows ART at any cost. Like Segers et al. (2019), we hold that the aspiring parents' whish for a child can be outweighed by other considerations, such as the welfare of the child (risks of serious birth defects) or the very low chance of success of the treatment. In other words, reproductive autonomy has to be balanced against other principles such as non-maleficence and justice.

² The average life expectancy for 60-year-old men and women over 26 European countries is 81 and 85 respectively (Weber and Loichinger 2022).

³ This ambiguity of course pertains to parents of both genders. Therefore, APA is often used to abbreviate 'Advanced *Parental* Age'. However, since our article particularly focusses on age cut-offs for aspiring fathers, we will use APA to refer to 'Advanced *Paternal* Age'.

⁴ Although this article focusses on heterosexual couples of which the aspiring father is significantly older than the aspiring mother, our argument is just as well applicable to other reproductive scenarios such as same-sex couples and persons using a surrogate. In such cases, "aspiring father" may simply be understood as "the eldest reproductive partner". The fundamental criterion remains that at least one parent must live long enough in good health to be able to care for the child until it reaches maturity.

First, we will look at what can generally be considered sound ethical reasons to deny access to ART or reimbursement (section"Conventional age cut-offs in current practices and their moral justification"). Subsequently, we will consider arguments in support of male age limits that are based on empirical data about sperm quality and increasing risks for the health of the offspring (section "Sperm quality, increased risks and their moral significance"). We then look at arguments regarding the psychosocial dimension of the welfare of children of APA-fathers⁵ (section "Impact of APA on the psychosocial welfare of the child"), after which we focus on what influence APA might have on the distribution of parental responsibilities and household tasks in the couple (section "Impact of APA on the (fair) distribution of tasks and responsibilities"). In the last section (section "Is it the presence of an old father that creates the problem?"), we draw a comparison between family forms where a second parent is absent altogether seeking ART-access and APA-couples requiring ART to conceive. We argue that – if access to ART is granted in the first case and denied in the second – this suggests that the presence of a father of advanced age is considered less desirable than him being completely absent. We conclude that there is no convincing normative ground for limiting the reproductive autonomy of men (and therewith automatically their partner's) with strict age cut-offs for ART-access - neither at the level of national legislation nor at the level of an individual fertility clinic.

Conventional age cut-offs in current practices and their moral justification

In most of the current national legislations around ART, age cut-offs deny certain people (partial) reimbursement of the costs or exclude them from access to treatment altogether. To morally justify a denial of reimbursement, one may use arguments of distributive justice and efficient allocation of public funds. After all, it may be that the chances of a couple to successfully achieve a live birth after ART are considered too low to dedicate public money to. For the moral justification of a denial of treatment altogether, one may point out that ART is both physically and emotionally very demanding for the woman (and for the man too with regards to the emotional dimension) (Verhaak, 2007). Therefore, engaging in a treatment program of which the estimated chance of success is practically negligible (i.e., "futile") would amount to wasting treatment capacity and causing unnecessary harm and may thus form a reason to deny access.⁶ In addition, adverse pregnancy outcomes significantly increase from a woman's mid-forties onwards (Sugai et al. 2023).⁷ Another potential moral reason to deny access to ART for aspiring parents above a certain age is when it is likely that the future child will not have at least one caring parent until it is mature, or when there are strong indications that the child will be born with a defect or under circumstances that will lower its future welfare below a reasonable level (Pennings 1999). The age of the aspiring parents is often used to make decisions and formulate cut-off points with regards to the concerns just mentioned because age correlates strongly with some ethically relevant variables (e.g., chance of a live birth, obstetric risks and life expectancy (in good health). When a variable (e.g., age) helps to predict another variable (e.g. chance of a live birth), it functions as a proxy. Although there may be various other proxies besides age that can help to predict relevant variables, in this article we will specifically focus on the moral dimension of "male (chronological) age" as a proxy in the context of ART because our argument considers the legitimacy of age cut-offs for men.

In current practice, age cut-offs for ART-access and reimbursement often only apply to women while men mostly stay out of the picture. Cutas et al. (2018) point out that women are predominantly framed as "the source of the problem" when it comes to fertility issues, despite the fact that some 'studies suggest [that] 40-50% of fertility problems in couples can be attributed to male factors' (p. 146). One reason, however, why much attention is paid to women policy-wise, is that there are different dynamics in the "reproductive aging" of men and women (Martani et al. 2022; p. 11). Whereas a woman's ability to reproduce with her own eggs declines relatively fast and inevitably, a man's reproductive capacity decreases much more gradually and, generally speaking, never completely stops. Still, it remains difficult to identify a straightforward cut-off point beyond which a woman's age gives a solid justification for why access to- or reimbursement of ART should be denied. After all, each individual is unique and it may

⁵ Importantly, the arguments presented in (section "Impact of APA on the psychosocial welfare of the child") and (section "Impact of APA on the (fair) distribution of tasks and responsibilities") are also relevant with respect to other family forms where the second aspiring parent is not a man – e.g. lesbian couples. This is important to notice, since there are countries which pose parental age limit for both aspiring parents regardless of their gender. For example, French law imposes age limits also for 'the member of the couple who will not carry the child' (French Government 2021; art. 1).

⁶ We are aware that concerns about paternalism exist with regards to arguments pertaining to harm to the mother. However, it is not self-evident that autonomy should always take priority over other considerations, especially not if the chance of a successful outcome is very poor or futile (e.g., because of the woman's age). For example, the Ethics Committee of the ASRM has argued that in such cases, clinicians have a quasi-duty to not grant access to fertility treatment (2019).

⁷ This systematic review analyzed the general population, and did *not* distinguish between women who achieved pregnancy through natural reproduction, medically assisted reproduction with own eggs, or donated eggs. The use of donated eggs from younger women or younger frozen own eggs may lead to different results.

be unjust to establish a rigid age cut-off beyond which no woman could access ART. In fact, different women can be equally old in terms of their age, yet have different anticipated treatment outcomes on the basis of other proxies (Piek et al. 2024). Moreover, older women can still use "young" eggs (either from a donor, or their own if frozen at an earlier stage in their lives), because such eggs lower the correlation between the current age of the woman and both success rate and aneuploidy (Seshadri et al. 2021). As a result of this, 'the fact that they are of "advanced maternal age" need not prevent women from becoming mothers' (Cutas et al. 2018: p. 150). However, even if donor- or her own preserved eggs are used, a woman's age at the time of treatment still plays a role with regards to how her pregnancy will unfold since obstetric risks keep increasing with age (Yogev et al. 2010; Shufaro and Schenker 2014). In short, all "older pregnancies" are risk pregnancies (Smithson et al. 2022), but at what point those risks are high enough to warrant femalespecific age cut-offs remains up for discussion⁸.

Sperm quality, increased risks and their moral significance

As men age, their sperm quality gradually decreases, leading to an increased risk of a variety of future health complications and birth defects in the offspring. In their literature review, Brandt et al. (2018) discuss the mechanisms that contribute to increased reproductive risks associated with APA. Sperm of men of advanced age holds an increased risk of mutations that may lead to, for instance, Pfeiffer syndrome, achondroplasia and multiple endocrine neoplasia⁹. The highest estimation of this PAE in the offspring of men aged 40 years or older is 0,5% or less (p. 83). In fact, APA is also associated with an increased risk of congenital anomalies and psychiatric diseases such as Autism Spectrum Disorder and schizophrenia (p. 84). Generally, this increase in risks to the health of the offspring leads to recommendations such as paying more attention to age during counselling and offering prenatal genetic testing for those conditions that are detectable (Brandt et al. 2018; p. 85; Couture et al. 2020; Ramasamy et al. 2015).

Yet, it remains unclear how much weight should be attached to those risks, let alone whether they warrant the establishment of rigid age cut-offs for men who want to access ART. To determine that, it would be necessary to discuss how much *higher* (relative value) these risks are for aspiring fathers of advanced age, and also *how high* they are in general (absolute value). In this way one might then decide whether an ascertained risk is high enough to actually justify an age cut-off.

A meta-analysis by Miller et al. (2011) found that among the offspring born to men aged 50 years or older, there were more than twice (2.2) as many cases of schizophrenia in comparison with the offspring of men aged 25 to 29 at the time of birth. Although this may seem high at first sight, this comes down to quite a small chance in absolute terms, namely 103 out of 10,000 (or roughly 1%). Similarly, although children of men aged 40 to 49 have a one-and-ahalf time (1.6) higher chance of Autism Spectrum Disorder than those of fathers in the age group 15 to 29 and offspring of men aged 50 years or older an almost three times (2.7)higher chance, this still results in an actual risk of 11 out of 10,000 and 19 out of 10,000 respectively (roughly 0.1% and 0.2% respectively) (Reichenberg et al. 2011; idem.)¹⁰. From this perspective, the increase in risks for their offspring as men age seems to have more rhetorical potential than direct moral implications. In absolute terms, the risks remain (very) low. It is noteworthy that - when trying to illustrate the relative increased risks of APA to the health of the offspring - most empirical studies pick a "referenceage category" of men in their (early) 20s, which they then compare to men in their 40-50 s, subsequentially putting them in the "APA category". Yet, the mean age at which men in Western countries actually have children tends to be considerably higher than this reference value of "early 20s". For instance, the mean age in the United States was 30.9 years-of-age in 2015 (Khandwala et al. 2017), in Finland 33.3 in 2016 (Statistics Finland 2017) and in Germany 34.7 in 2021 (Destatis 2022). Comparing the relatively higher risks of older men with the youngest age-group (instead of the age-group in which most children are actually born) may create a misleading image. In addition to that, the widely observed increase in mean paternal (and maternal) age is not unique on a historical scale. The increase seems dramatic if one only examines data from the last few decades of the twentieth century. Research indicates 'that mean paternal (as well as maternal) age around 1900 was substantial[ly] higher than current levels and that today's paternal age level is comparable with that in the nineteen twenties' (Willführ and Klüsener 2016; para. 3). Billari et al. (2007) analysed Swedish data and came to a similar conclusion with regards to maternal age: 'Despite media claims that fertility postponement is pushing the limit of late childbearing, the fraction of [Swedish] births above age 45 among all births to

⁸ For these reasons, the American Society for Reproductive Medicine discourages treatment with donor or preserved eggs if a woman is over 55 years of age (Daar et al. 2016).

⁹ Mutations like these are gathered under the aforementioned umbrella term "Paternal Age Effect" (PAE).

¹⁰ It should be remarked that other studies have reached different conclusions and that the numbers referred to by us thus merely serve indicative purposes. Yet, the main observation of the absolute risks remaining low on the individual level is recurrent throughout the majority of studies like these.

women aged 40 + years has declined substantially from its peak early in the twentieth century, and it has not increased markedly since the 1980s' (p. 160).

A final potential reason to ascribe ethical importance to the genetic effects associated with advanced paternal age comes from the potential negative effects on the "gene pool": The *de novo mutations* due to aged sperm can accumulate over time across generations, so that '[i]f this process is unmitigated, the fitness of each human generation will become successively lower' (Smith 2015; p. 776). However, since only a fraction¹¹ of births comes from assisted reproduction and the upmost majority of APA-men father children through natural reproduction, moral intervention at the clinical and thus individual level will not have a noticeable effect.

In conclusion, we hold that the risks to the health of the offspring related to male reproductive ageing are – especially in light of the already commonly accepted baseline risks – too low to justify rigid age cut-offs on ART-access for men. However, the presence of these age limits may be justified (or justifiable) on other grounds, to which we turn in the next sections.

Impact of APA on the psychosocial welfare of the child

A noteworthy advantage of parenting at an advanced age is that those who have children later in life generally have a higher socio-economic status (Carslake et al. 2017; Myrskylä et al. 2017) and more life experience (Rözer et al. 2017), which can be directly beneficial for the child's wellbeing. Yet, the discourse about APA (and advanced maternal age as well) tends to focus on the potential psychosocial downsides of having an older father.

It is often argued that a father of advanced age is likely to become care-dependent for health reasons, which could result in a harmful dynamic of parentification (Engelhardt 2012). Or the child may be confronted with the death of its father during childhood which is associated with symptoms of depression (Harrison and Harrington 2001; Howarth 2011). Based on the wish to avoid such harm to the wellbeing of the child, one might argue that there should be age cut-offs for aspiring fathers willing to access ART. However, '[t]he open question that remains with this argument is what constitutes "great harm"?' (Zweifel et al. 2020; p. 258, emphasis added). As for now, it is difficult to conclude from the empirical evidence whether growing up with a care-dependent father or having to cope with early paternal (or maternal) loss causes such great harm and thus a high enough degree of suffering. Moreover, Daar et al. point out that although '[s]tudies about the impact on children of the early death of a parent indicate that parental death is traumatic[,] the negative consequences can be minimized by appropriate social support and provision of clear and honest information about the circumstances of the parent's death' (2018, p. 47).

At this point, it is interesting to remark that on average, patients with the life-limiting genetic disease Cystic Fibrosis (CF) die when they are in their 30-40s (McBennet et al., 2022). However, despite their seriously reduced life expectancy, granting (male) CF-patients access to ART¹² is a commonly accepted practice. In addition to the fact that CFpatients need a great amount of daily medical care, they will most probably pass away before their child(ren) are adults. A retrospective study based on the French CF-registry found that the mean age at which men with CF became father was 30.7 years and (one outlier aside) the mean age of the children when their father died was 6.1 years (Duguépéroux et al. 2006). Now, if one accepts the provision of ART to aspiring parents of whom one is terminally ill (which we do), then there is no reason to deny APA-couples access to treatment (or reimbursement) either. After all, as long as at least one parent will be able to care for the child until it is mature, its wellbeing will still meet the reasonable welfare standard.

From yet another perspective, one may try to argue that there should be age cut-offs for men based on the assumption that children in APA-families receive worse parental care. However, since someone's age does not directly correlate with his or her parenting competence (Pennings 2013), it cannot be claimed that being of (very) advanced age will make a father unable to provide adequate care for his child, which renders age cut-offs based on that idea unwarranted.

Impact of APA on the (fair) distribution of tasks and responsibilities

In the previous subsection, we addressed the potential impact an increasingly care-dependent father might have on his child. Even if the child will remain exempt from having to care for its parent, a situation with a care-dependent father may nonetheless turn out to be highly burdensome for the mother. We recognize that, generally speaking, despite increased gender equality in terms of participation in the workforce, women still do more daily household and childcare tasks whereas men have only disproportionately increased their contribution (Moreno-Colom 2015; p. 2). In Europe, women spend roughly 2 to 3 times more time on such tasks in comparison to men (p. 11). Some women suffer from a so-called "double shift" 'in which they not only work in the public sphere for pay but also spend more time than

¹¹ E.g., Assisted reproduction contributed to 2% of all babies born in the US in 2018 (Sunderam et al. 2022; p. 1).

¹² Of men with CF, 97% is infertile (Kazmerski et al., 2022).

men on household tasks and caring for the children in the private sphere' (García-de-Diego and García-Faroldi 2022; p. 2889). However, absence of empirical data about the participation of APA-fathers allows one to speculate that such men may actually participate more in childrearing and running the household than the average father since they retire when the children are younger and have thus more free time to contribute. Admittedly, when a father of advanced age becomes care dependent himself, this will definitely have an impact on the division of household- and childcare tasks. Yet, instead of holding that such a foresight warrants an age cut-off for men, we argue that the aspiring mother (i.e., the youngest aspiring parent) should be deemed capable of coping with the burden of possibly having to care for both her child and partner at some point in the future. A clinician should make the aspiring mother duly aware of what the future may hold for her if she chooses to reproduce with her APA-partner, but it should remain up to her to make the final decision. Again, the couple should be aware that they have to take the right precautions so that their child will not have to carry the full burden of care for an ageing father during his or her childhood.

Is it the *presence* of an old father that creates the problem?

Suppose a single aspiring mother requested access to ART. In this scenario, a father (in the social sense) is completely absent. The Ethics Committee of the ASRM (2013) pointed out that on the basis of the available evidence, one cannot claim that children of single persons (or homosexual couples) are being harmed, because '[c]hildren born in such situations do not appear to have appreciably better or worse lives than children born to heterosexual married parents' (p. 1526). Welfare of the child is no sound basis to deny single aspiring parents (or homosexual couples) the reproductive autonomy that is assigned to heterosexual couples with a child wish (Ethics Committee of the ASRM 2013; De Wert et al. 2014). Now, let us consider the hypothetical case of a 39-year-old single woman who wants to conceive with donor sperm and raise the resulting child on her own. In the absence of additional complicating factors, there are no consequentialist arguments to deny her access to ART. Let us now imagine a slightly different scenario, in which the same woman asks a close friend of 64-years-old to be the sperm donor. Based on what we have argued in the foregoing sections, there are no valid ethical reasons to refuse treatment because the increased risks that come with the sperm of men of his age are still acceptable. For a third and last hypothetical case, picture the aforementioned woman and man together in a *romantic* relationship where he is willing to not only provide the sperm to conceive the child, but also to adopt the role of father to at least some extent and care for the child as long as he is able to. Proponents of age limits on ART for men may object to this last scenario due to the presence of an aspiring father who could soon die or create an imbalance in the distribution of care duties within the family. In this sense the presence of an APA-father is considered problematic, as compared to cases where no father is ever present (e.g. postmortem conception) or absent (single parenthood with sperm donor) from the beginning of the child's life. But the question remains whether the psychosocial impact of a care-dependent father and building a relationship with the father and then losing him relatively early in life actually leads to a level of welfare below a reasonable standard for the child and outweighs the benefits of the father's presence and involvement with the child in the years prior to that. In (section "Impact of APA on the psychosocial welfare of the child"), we saw that CF-patients receive fertility treatment despite them being highly caredependent and having a seriously reduced life-expectancy already at the time of treatment. Therefore, if one accepts the treatment of CF-couples, there is no reason to deny APA-couples their reproductive desire either. In fact, one may say that many APA-couples have a better prospect than CF-couples if the APA-man is not yet care dependent at the time of treatment.

With the above in mind, it should also be remarked that the typical "nuclear family"¹³ is not truly representative of the traditional family structure when seen from a broader socio-historical perspective. Instead, '[a] more accurate picture of the human family is one of flexibility' (Sear 2021; p. 3). Particularly missing from the post-war nuclear family model in Western countries is an acknowledgement of cooperative relationships beyond the biological: 'The extended family and other group members also share other tasks needed to raise children successfully, such as direct childcare' (p. 3). Looking beyond the nuclear family model creates room for other ways of thinking about childrearing and the household in APA-families. Instances of parenting arrangements that deviate from the stereotypical nuclear family, are likely to be found with single parents by choice, where '[r]esearch overwhelmingly finds that these parents have much extended and thoughtful deliberations before actively making the decision to become parents' (Yorks 2021; p. 9). The child wish of couples of which the aspiring father is of an age that makes it unlikely that he will remain vital and participative until their child is mature should not be rejected a priori. Instead, APA-couples should be encouraged to arrange a support network of external caretakers who are willing to assist and partake in the family life when the APA-father starts to become less able to contribute to the

¹³ In which the father is the breadwinner while the mother stays at home to raise the children and take care of the household on her own.

upbringing of the child and household tasks and eventually passes away.

Conclusion

Age cut-offs for aspiring mothers who want access to ART are widespread, while the moral necessity of such limits for aspiring fathers on the national and clinical level remains ambiguous. Despite an ongoing debate that focusses on the negative outcomes associated with fatherhood at an advanced age, there seems to be indecisiveness about what normative conclusions should follow and how those should affect policy. Yet, some countries have started to impose strict age cut-offs for aspiring fathers as well. We wanted to find out if there are strong normative reasons to install age cut-offs for aspiring fathers to deny reimbursement of ART and/or denial of access to ART. While considering multiple arguments in favour of such age-based restrictions, we have made the following claims: First, the genetic risks for the offspring that APA brings about increase too gradually and the actual risks themselves are not of enough moral significance to justify a straightforward and strict age cut-off for aspiring fathers. Second, the alleged severity of the potentially negative psychosocial effects that APA may have on the child is not supported by a convincing body of empirical evidence and might even be (partly) outbalanced by the advantages that APA can bring about for the child. However, we realize that the image of a twelve-year-old who has to cope with the deathbed of a father may evoke strong moral intuitions. Still, the same holds for couples whose child wish is granted despite one of them being terminally ill (e.g., CF patients), and as mentioned in the introduction, we hold that only one parent should be able to take care of the child. Finally, problematizing the probably unequal household- and childcare task division in a future APA-family does not form a convincing argument to refuse to help such couples getting pregnant. Respecting the aspiring mother's reproductive autonomy should imply that she is allowed to decide by herself if she is willing to accept a future in which her reproductive partner will "drop out" sooner rather than later. We can now conclude that there are no strong normative reasons that warrant an age cut-off for aspiring fathers, with regards to both access to- and reimbursement of ART. As such, while safeguarding the welfare of the future child by demanding of the couple to take the right precautions, the reproductive autonomy of both the aspiring father and mother will be duly respected.

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Declarations

Conflict of interest The authors declare that there is no conflict of interest.

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