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Childless, You Are Nothing: The Dilemma of IVF in Developing Countries

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"So often, people do not regard you as human. There is no respect," says Ann, a woman from Kampala, Uganda (Cui 2010), referring to how the people around her began to treat her after an ectopic pregnancy left her unable to bear children. Although infertility is a problem faced by women – and men – all around the world, it is in developing countries where cultural norms can force childless couples to deal with stigma and ostracization (Allahbadia 2013). For women in particular, child-bearing is often seen as their primary role in the community, and not being able to fulfil this function makes people think of them as a burden on society – as someone who has failed at their job, and is, therefore, not worth spending resources on. The significance of child-bearing for women in some societies is illustrated by how, in some traditional Indian communities, mothers are addressed exclusively with reference to their children's names, as 'so-and-so's mother' – as if their child were the most important thing about them. As infertility is often extremely prevalent in developing countries (Ombelet 2011), the obvious solution to this problem might appear to be the implementation of in vitro fertilization (IVF), the most common type of assisted reproductive technology (ART). However, arguments against the use of IVF in developing countries – around the issues of overpopulation, limited resources, and the overall inaccessibility and cost of IVF – prevent its practice from being more widespread. Although these arguments come from places of genuine concern for individuals, societies, or the population of the world as a whole, it can be found that they either inadvertently impinge on the human right to reproduce or can be mitigated. This does not at all take away from the

delicacy of the issue, nor does it imply that the use of IVF should be allowed to happen in a thoughtless, uncontrolled fashion. This essay will first examine the arguments against the practice of IVF in developing countries, then illustrate how this reasoning is either invalid or how associated problems might be mitigated. Finally, it will discuss how IVF may be used in developing countries, keeping all factors in mind, to ensure the wellbeing of all the millions of people affected by infertility.

The most common argument by far against IVF in developing countries is that of overpopulation. This is not an invalid concern; world population, which is 7.8 billion now, is expected to increase to 9.2 billion in 2050 (United Nations 2006). When scientists are saying that the current population has already pushed the earth past its 'tipping point' – the point where natural resources are being consumed so fast they do not have time to replenish themselves (Ehrlich 1996) – it is understandable why people might think that it would be more helpful to focus on reducing rather than aiding child-bearing. Furthermore, it is often developing countries that have the greatest population growth rate, but this is perhaps because fertility rate is directly related to infant mortality (Palloni et al. 1999). In countries where the risk of losing a child is higher, women often have more than three children in order to ensure that they are eventually left with at least one child who can support their family and also ensure their acceptance in society.

The second concern put forth by critics of IVF in developing countries is that of inaccessibility. IVF is both unaffordable and limited in availability in developing countries, and some researchers believe that this shows that it is not a viable option for their citizens. Current costs of IVF in India are approximately US$ 1300, which can be equivalent to six months' or even one years' salary for some couples (Cui 2010). This statistic brings to mind the heart-breaking story of Ann, the woman from Uganda quoted earlier in this essay, who sold her entire inheritance – a plot of land – to undergo an IVF procedure when an ectopic

pregnancy rendered her unable to bear children (Cui 2010). The relatively modest success rate of IVF – even in developing countries – means that anyone wishing to either receive or conduct the procedure is monumentally risking their time and money, and this might not be an option for people who are extremely poor (Daar et al. 2002). Given that live birth from IVF is only successful about 40% of the time even in the most cutting edge of environments, it is devastating that people in poor countries might have to waste their money on an ineffective procedure. Ann's procedure was unsuccessful (Cui 2010), and she was now left childless, as she was before, with the loss of her inheritance as an added burden. Detractors of IVF in developing countries would say that this suffering could be avoided if IVF was not provided as an option at all. If this were to be the case, the few who might have been able to afford IVF would not be able to avail of it, but at least situations like Ann's would not occur.

Within the issue of inaccessibility also lies the problem of income disparity, which is pervasive in developing countries. Access to IVF is limited, and is mostly available only in private hospitals, further increasing costs (Allahbadia 2013). This means that it is much more easily accessible for wealthier members of developing countries, which keeps it out of reach of the extremely poor.

Related to the issue of inaccessibility is what is referred to as the 'low-resources' (Ombelet 2011) argument in developing countries. According to this argument, poorer countries already face a great many problems that should be prioritized over infertility (Ombelet 2011). IVF is extremely expensive, and many consider it a waste of time, money, and effort in places where there is a dearth of all three. Unlike infectious and fatal diseases such as malaria, tuberculosis, and HIV (diseases that are prevalent in developing countries), infertility does not immediately suggest mortality. When humans are already dying, the argument seems to be, why aid the creation of more? Indeed, the promotion of reproductive health in developing countries has always lagged behind countries in the Global North. As

these issues are finally given importance, concerns such as maternal mortality and the use of contraception are prioritized, while the 'low-resources' argument is used to sweep infertility under the rug (Aboulghar 2004).

Additionally, many believe that infertility-prevention programs are a more viable option compared to focusing on helping parents have children when they are already biologically unable to do so (Cui 2010). They encourage health policy-makers to include infertility-prevention in healthcare systems, so that preventable causes for infertility might be dealt with in a timely manner before they begin to cause problems. Infertility-prevention treatment and education is often exponentially cheaper than any form of assisted reproductive technology, especially IVF, and may also help poor couples avoid the cost of infertility treatment – as well as the social costs of being childless – when the time comes for them to have a child.

The lack of resources in developing countries also means that hospitals and laboratories might be unable to provide adequately safe and effective IVF treatment to patients. Subjecting patients to substandard treatment administered by ill-prepared health care providers brings up serious ethical concerns (Word Health Organization 2013). When funding for IVF is so hard to come by in developing countries, it is not a stretch to think that its implementation might be therefore less effective or safe (Cui 2010). Researchers have disagreed in the past about whether IVF done in 'less than ideal conditions' is less successful than when it is performed in extremely high-quality laboratories, but the concern nevertheless remains. Some worry that if it does turn out that this apprehension is true, it will be extremely unfair that some people are unable to access treatment of adequate quality simply because they are poorer, as is the case with many medical treatments. Poverty-stricken regions might also have a hard time paying for high-quality equipment and well-trained staff, which also

arouses concerns about whether the method would then be safe for the patients (World Health Organization 2013).

Less well-equipped health-care providers might also be unable to deal with the many risks associated with infertility treatment. IVF treatment can often bring a large number of complications with it, including ovarian hyperstimulation syndrome, multiple pregnancies, premature babies, and ectopic pregnancies (Ombelet 2011). Without the required tools and knowledgeable staff, IVF can be extremely dangerous for some patients.

Now that we have examined the arguments against the implementation of IVF in developing countries, we can begin to talk about the research that refutes these claims. It has already been established that people from developing countries are more likely to suffer from infertility, and that infertility is, ironically, most common where fertility is extremely high (Cui 2010). For example, secondary infertility rates (infertility after the birth of the first child) worldwide are 10.5% (Mascarenhas 2012). In sub-Saharan Africa, however, more than 30% of women are affected by secondary infertility. This is largely because people from developing countries often suffer from illnesses because of their social and economic backgrounds that can affect their fertility – genital tuberculosis, for example, is a major cause of infertility in India (Cui 2010). When incidences of infertility are so high in developing countries as compared to wealthier countries, it makes it hard to argue that only people from well-off countries should be allowed to enjoy the benefits of infertility treatment.

Further, the lack of education in poorer countries can also lead to a huge amount of stigma involving the idea of childlessness. This stigma was briefly explained earlier in this essay, but will now be examined in further detail. In many traditional cultures, childlessness is seen as a failure to perform life's most important task (Hamberger et al. 1997). From an evolutionary perspective, this can be seen as the failure to pass your genetic material on to the next generation. Some might say that issues of stigma and sexism surrounding the idea of

infertility would not exist if 'backward' societies were educated and traditional norms were changed. This would then invalidate the argument that IVF should be implemented in developing countries in order to diminish the consequences of these norms. However, it is important to remember that these traditional values have existed for thousands of years, and will probably be extremely difficult to shake off. It must also be noted that in traditional societies, the rich might be stigmatised as much for infertility as the poor are, so the income and status of a particular family are not the only things that affect social attitudes.

As with a lot of different things, infertility is also used as a weapon to subjugate women. Although men and women have been statistically shown to equally be the cause of a couple's inability to conceive (Rowe et al. 2000), society is quick to always place the blame on women (Daar et al. 2002). Women who are unable to have children for whatever reason are often abandoned by their husbands, who use it as grounds for divorce, or who take to polygamy in cultures where it is allowed (Pennings 2008). Some communities can go extremely far to ensure that childless women are no longer given any form of respect, whether it is by banning them from important social events (Hoden 2017) or by subjecting them to economic deprivation, physical harm and abuse, or even murder (Daar et al. 2002). In some cases, women subjected to this type of ostracization have developed serious mental disorders or felt that suicide is the only way to end their pain (Dyer et al. 2005). If we were to consider the idea of IVF in this setting, preventing these women from getting IVF can be considered to be another form of institutional ostracization, as these women will be unable to access solutions to their healthcare problems the way other people with other issues might. It is truly hard to deny the difference it might make for those who can have successful IVF procedures.

Research has also been done to directly disprove some of the claims given by those who argue against the benefits of IVF in developing countries. Evidence against the

population argument, in particular, is quite damning. Researchers have found that even if IVF were provided to developing countries, it would be responsible for less than 1% of births (Ombelet 2011). Education about family planning and contraception, which will be discussed later, will easily be able to reduce the overall fertility rate by this minuscule amount. Studies have shown that developing countries have already reduced their fertility rate by almost 3 children per woman since 1950 (United Nations 2006), and this is because of increased awareness – along with education, economic prosperity, and better healthcare – rather than increased infertility.

The inaccessibility and limited resources arguments are a little harder to refute, but experts say that denying people in developing countries IVF or other infertility treatment under any circumstance goes directly against the tenets of reproductive health defined by the a United Nations conference in 1994 (Allahbadia 2013) – that, other than being in a state of 'complete physical, mental and social well-being,' reproductive health also 'implies that…people […] have the capability to reproduce and the freedom to decide if, when and how often to do so.' Therefore, not giving people treatment, should they want to have children and be unable to do so, directly impinges on the human right to reproduce.

Furthermore, it has been shown that, although inaccessibility in countries where people are too poor to access treatments such as IVF is a serious issue, it doesn't have to be quite so expensive. Whether cheaper IVF methods are as successful as expensive ones has been a point of great contention, but studies in the last decade have shown that they can indeed be as effective if methods of treatment are simplified - and research about the simplification of IVF is growing every year (Ombelet 2011). For example, a study showed that a lot of the expenses involved with IVF could be avoided if high doses of costly medication such as gonadotrophins were reduced. Instead, extremely cheap but equally effective drugs such as clomiphene citrane can be used (Ingerslev et al. 2001). A clinic in

India is has been successful in reducing expenses by giving low dosages of hormones (Ciu 2010). This method has lessened costs by one-third while providing treatment that produces fewer side-effects. Of course, as mentioned earlier, IVF is successful in less than half the cases of intervention, so this does mean that perhaps public-health providers might need to limit the number of times this could be supported for any one couple as a more moderate alternative to banning it altogether. While the 'limited resources' issue has proven the hardest to mitigate, studies have shown that, although the ethical problems of performing complicated IVF procedures in low-resource settings do persist, they are not unique to developing countries (Macklin 1995).

In conclusion, it can be seen that although arguments against the provision of IVF technology in developing countries offer some form of scientific or ethical backing, it is necessary that IVF is implemented, even if only to uphold the right to reproductive autonomy. Evidently, infertility does not begin when a couple finds out they cannot have children, and the most effective way of dealing with infertility is to strike a balance – not excessively focusing on treatment, but also acknowledging that it might be absolutely required in some cases. Earlier, it was said that it might be extremely hard to change the way certain societies think about infertility, simply because of how entrenched these biases are. However, this is not to say that education is not important – in fact, it is always the most important thing. Social stigma surrounding infertility must be reduced, however incrementally, to ensure that childless men and women and men are not forced to suffer for something that is out of their control (Ombelet 2011). Comprehensive infertility-prevention education should also be introduced into health-care programs (Sharma et al. 2009). These programs are necessary in order to prevent more couples from getting caught in a situation where they are unable to have children. Multiple, highly reputable sources have shown that education is the best way to reduce population growth (Ombelet 2011), so these programs

would be killing two birds with one stone – making it possible for participants to have the children they want, but also preventing the birth of the children they don't. Researchers have hypothesized that involving traditional healers in this kind of education will help to get the message out to people more effectively, whether the information is about reproductive health, infertility prevention, or infertility treatment.

One of the arguments against IVF in developing countries is that the focus of reproductive healthcare should be placed on infertility-prevention programs rather than infertility treatment itself. However, this does not take into account the millions of people who are *already* suffering from infertility, and will not benefit from this intervention. In cases where IVF is necessary, it is not the fault of people in developing countries that they are unable to have children and cannot afford expensive IVF treatment. Instead of withholding the treatment from them because they are poor, cheaper but equally effective treatments must be developed in order to reduce inaccessibility, as some researchers have already begun to do. More IVF clinics should follow in the footsteps of the Indian clinic mentioned above (Cui 2010) that reduced costs through ingenious means, and another clinic in Egypt (Cui 2010) that subsidizes costs for low-income couples. Other cheaper methods – such as keeping the new-born in a 'humidcrib,' a more cost-effective alternative to the laminar flow hood (Pilcher 2006), have also proven to be an effective means of controlling infant mortality, which will eventually give couples the courage to have fewer children.

When all is said and done, infertility is not something that has been given much relative importance in the field of public health (Pennings 2008). IVF is only a method that aims to 'cure' people of their childlessness, and, although necessary, it cannot be implemented sufficiently without the backing of education and awareness programs on the issue of infertility. However, preventing its implementation in developing countries amounts to encroaching on human rights and preventing millions of people from gaining its benefits. It

may be an imperfect method, but it is certainly a necessary one, if it can spare so many people immense suffering.

Literature cited:

Aboulghar, M. A. 2005. The importance of fertility treatment in the developing world. *BJOG: an international journal of obstetrics and gynaecology*, *112*, 1174-1176.

Allahbadia, GN. 2013. IVF in Developing Economies and Low Resource Countries: An Overview. *J Obstet Gynaecol India*. 63(5):291–294.

Cui, W. 2010. Mother or nothing: the agony of infertility. *Bulletin of the World Health Organization*, *88*(12), 881–882. https://doi.org/10.2471/BLT.10.011210.

Dyer, S. J., Abrahams, N., Mokoena, N. E., Lombard, C. J., & van der Spuy, Z. M. 2005. Psychological distress among women suffering from couple infertility in South Africa: a quantitative assessment. *Human reproduction*, *20*(7), 1938-1943.

Daar, AS., Merali, Z., Vayena, E., Rowe, PJ., and Griffin, PD. 2002. Current Practices and Controversies in Assisted Reproduction. Geneva, Switzerland: World Health Organization. Infertility and social suffering: the case of ART in developing countries, 15–21.

Ehrlich, A. H. 1996. Looking for the ceiling: Estimates of Earth's carrying capacity. *American Scientist*, *84*(5), 494.

Hamberger, L., & Janson, P. O. 1997. Global importance of infertility and its treatment: role of fertility technologies. *International Journal of Gynecology & Obstetrics*, *58*(1), 149-158.

Ingerslev, H. J., Højgaard, A., Hindkjær, J., & Kesmodel, U. 2001. A randomized study comparing IVF in the unstimulated cycle with IVF following clomiphene citrate. *Human Reproduction*, *16*(4), 696-702.

Macklin, R. 1995. Reproductive technologies in developing countries. *Bioethics*, *9*(3), 276-282.

Mascarenhas, M. N., Flaxman, S. R., Boerma, T., Vanderpoel, S., & Stevens, G. A. 2012. National, regional, and global trends in infertility prevalence since 1990: a systematic analysis of 277 health surveys. *PLoS medicine*, *9*(12), e1001356.

Ombelet, W. 2011. Global access to infertility care in developing countries: a case of human rights, equity and social justice. *Facts, views & vision in ObGyn*, *3*(4), 257.

Palloni, A., & Rafalimanana, H. 1999. The effects of infant mortality on fertility revisited: New evidence from Latin America. *Demography*, *36*(1), 41-58.

Pennings, G. 2008. Ethical issues of infertility treatment in developing countries. *ESHRE Monographs*, *2008*(1), 15-20.

Pilcher, H. 2006. Fertility on a shoestring. Nature. 442:975–977

Rowe, P. J., Comhaire, F. H., Hargreave, T. B., & Mahmoud, A. M. 2000. *WHO manual for the standardized investigation and diagnosis of the infertile male*. Cambridge University Press.

Sharma, S., Mittal, S., & Aggarwal, P. 2009. Management of infertility in low resource countries. *BJOG: An International Journal of Obstetrics & Gynaecology*, *116*, 77-83.

United Nations, Department of Economic and Social Affairs, Population Division. 2006. World Population Prospects: The 2006 Revision, Highlights.

World Health Organization. 2013. Biomedical infertility care in poor resource countries: barriers, access and ethics. Geneva: World Health Organization.