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Monetary payments for the procurement of oocytes for stem cell research: In search of ethical and political consistency

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Abstract The debate on both the appropriateness of allowing healthy women to provide oocytes for research use and the use of financial incentives is increasingly reduced to a confrontation between ethics, science, and the welfare of women. It is plausible that the expansion of national and international research efforts, paired with the growing trend toward liberalizing stem cell research policies, will inevitably result in increased demand for the materials needed to conduct such research. The scarcity of human reproductive materials that are available for research generates concerns over, the emergence of a "black market", an increase in financial incentives for donors, and the appropriateness of current regulatory frameworks that aim to safeguard donors. In this article we explore the conceptual models for categorizing oocyte donors and analyze the use of financial incentives as well as the compensation models proposed and implemented in various jurisdictions. Finally, we propose the adoption of a mixed model that both respects altruism and provides a feasible solution to an issue that could be situated only in the context of the overall acceptability of providing financial rewards to donors of human reproductive materials for assisted reproductive technologies.

Introduction

The South Korean scandal regarding fraud and gross ethical violations in stem cell research, and the resulting decision of the South Korean National Bioethics Committee to impose restrictions to such research, has garnered much international attention (Kaiser Network Report, 2007). This scandal has reopened the debate on the appropriateness of allowing healthy women to provide oocytes for research and on the use of monetary payments to encourage such donation. As the South Korean case illustrates, the debate is increasingly reduced to a conflict between ethics, science, and the welfare of women.

It is plausible that the expansion of national[1] and international[2] (European Commission Health and Consumer Protection Directorate General, 2006) stem cell research

[1] For example, the California Institute of Regenerative Medicine, Singapore Stem Cell Consortium, the Danish Center for Stem Cell Research, and the UK Medical Research Council.

[2] For example, the International Stem Cell Forum and the International Society for Stem Cell Research. For a review of the European regulatory framework for reproductive cell donation see European Commission, Health and Consumer Protection Directorate General's (2006) Report on the Regulation of Reproductive Cell Donation in the European Union: Results of Survey. Brussels, February 2006.

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efforts, paired with the growing trend toward liberalizing stem cell research policies (Isasi and Knoppers, 2006a, 2006b), will inevitably result in increased demand for the human reproductive materials (Dickenson, 2004) necessary for such research (Mertes and Pennings, 2007). If alternative sources of human embryonic stem cell lines do not yield the promised results, this will undoubtedly be the case (Moore et al., 2006; Mertes et al., 2006; Schulman, 2005).

The scarcity of human embryos and gametes, particularly oocytes that are available for research and for the derivation of stem cell lines, generates various concerns: the possible emergence of a "black market" (Spar, 2007; Waldby, 2006), increasing monetary payments for donors[3], and the appropriateness and sufficiency of current regulatory frameworks that aim to safeguard donors (Rothman, 2006; Holm, 2006).

The controversial issue of providing monetary payments for the procurement of human oocytes to be used in stem cell research must be situated within the larger context of the donation of other human materials (e.g., blood, organs, and tissues). Likewise, it must be analyzed in the context of the overall acceptability of providing financial rewards to donors or providers of gametes and embryos for assisted reproductive technologies. Hence, the great challenge before us is to develop a policy framework that is both ethically and politically consistent.

It is time to move on from a view that portrays the exploitation of women or the hampering of scientific progress as the only ethical and policy options (Katz Rothman, 2006). An ethically and scientifically sound policy framework governing the procurement of human reproductive materials for stem cell research should protect not only donors, but also broad societal interests such as the advancement of science. Such a framework could have a substantial impact on the stem cell research process and on matters such as donor confidence, transparency, research ethics oversight, and clarification of the legal rights of donors.

In this article, we will explore the conceptual models for categorizing the procurement of oocytes for research and review the use of monetary payments for oocyte donation via three forms: (a) financial incentives, (b) financial compensation, and (c) expense reimbursement models.

Oocyte donors, vendors, or providers? Exploring conceptual models

Different conceptual models potentially apply in the context of oocyte procurement; they can be distinguished by the various types of participants and the roles they play. There are two broad categories: "medical" participants, which encompass women already undergoing *in vitro* fertilization or other medical interventions (e.g., sterilization), and "nonmedical" participants, which refers to healthy women who volunteer to undergo medical interventions specifically for oocyte procurement (Magnus and Cho, 2005).

For any policy framework to be ethically sound, clarity and accuracy of language are needed to protect against misconceptions. Are participating women vendors, providers, or donors? The use of monetary payments so as to obtain human reproductive materials to be used in stem cell research will be one factor in the determination of the appropriate terms to be used. When monetary payments are restricted to providing compensation for financial and personal loss, thereby precluding financial incentives or any monetary gain to women providing oocytes, these women are donors in a strict sense. The term "donor" focuses on the altruistic nature of the "gift" of biological materials. We must acknowledge, however, that the term "donor" is in itself ambiguous, referring as it does both to the motivation of the woman procuring the oocytes and simply to the situation of no gain. The point here is that the woman is not better off, financially or physically, than before donating. The purpose of providing financial compensation is, then, to offset the donor's sacrifice.

In contrast, when significant financial incentives (e.g., substantial monetary payments, bonuses, or in-kind services) are provided in exchange for procuring oocytes, as in the context of a market model, it is a misnomer to refer to these women as donors. A more accurate term would be "vendors," because of the nature of the financial transaction: these women are delivering a "product" (the oocytes) for a monetary reward; the transaction mirrors the buying and selling of products for a profit in the marketplace[4].

A third emerging model is one that categorizes healthy women volunteering to provide oocytes for research purposes (e.g., nonmedical participants) as "research donors." This category perhaps best captures the peculiarities of procuring human oocytes from nonmedical participants, as it emphasizes the invasive nature of the procurement process, its potential health risks[5], and the fact that women incur those risks solely for the benefit of others (Mertes et al., 2006).

[3] Recently, the UK's Human Fertilisation and Embryology Authority decided to extend its license to the North East England Stem Cell Institute (NESCI), allowing the NESCI to recruit egg donations for somatic cell nuclear transfer research from women undergoing IVF treatments using an "egg-sharing" program. Under the controversial program part of the patient's costs for fertility treatment are covered by the NESCI if the patient agrees to donate a proportion of the eggs retrieved during the course of the treatment to the research institute (http://www.hfea.gov.uk/cps/rde/xbcr/SID-3F57D79B-5E2DA07E/hfea/Variation_of_licence_to_include_additional_sources_of_eggs_for_research.pdf).

[4] The term "vendor" was first articulated by Professor George Annas (Annas, 1980) to reflect the context of commercial sperm procurement for assisted reproduction.

[5] An analysis of the medical/health risks of oocyte donation for stem cell research is beyond the scope of this paper. As documented in the scientific literature, the short- and long-term physiological and psychological risks are still largely unknown. There is great uncertainty regarding some of the potential acute (e.g., anesthetic risks, ovarian hyperstimulation syndrome, surgical infections) and chronic risks (e.g., psychological risks; breast, ovarian, and endometrial cancer; infertility) of oocyte procurement. In the absence of sufficient and conclusive studies assessing the outcomes of women undergoing *in vitro* fertilization and of oocyte procurement (for both reproductive and research purposes), cautious strategies that seek to minimize the potential risks to donors are necessary. Hence, a case-by-case approach with strict selection and exclusion criteria for donors should be the norm if the safety of donors is to be the paramount concern (Institute of Medicine and National Research Council, Committee on Assessing the Medical Risks of Human Oocyte Donation for Stem Cell Research, 2007).

Like research volunteers in Phase I trials, women who volunteer their oocytes for stem cell research expose themselves to serious medical risks not related to the research itself, but instead to the procurement process, and this with no direct benefit for them. Indeed, healthy volunteers constitute a class of research participants deserving special consideration. Their close proximity to the case of oocyte donors for fertility treatments is an additional factor that warrants the creation of this new category.

We maintain then that the ethics of oocyte provision for research is better understood as a form of participation in human subject research. However, to assess the reasonableness of current monetary payment schemes, in such research, we also need to examine existing compensation models for the donation of other tissues such as bone marrow, blood, and biopsies and include factors such as pain, risk, time, and inconvenience.

The use of monetary payments

The principle of altruism (Titmuss, 1997) has long been an ethical and regulatory norm governing donation in Western countries. Altruism is generally understood as the giving to others without the expectation of receiving a benefit in return, or as the "devotion to the welfare of others, regard for others, as a principle of action" (Oxford English Dictionary, 2007). It is entrenched in a long tradition that condemns the commodification of the human body and its parts (Dickenson, 2002). Blood and organ donors epitomize the ethos of altruism.

An additional underlying ethical issue regarding the donation of the human body and its parts relates to the virtue of solidarity. Solidarity holds that individuals should contribute to the collective good (Chadwick and Berg, 2001). However, altruism and solidarity do not necessarily oppose the use of compensation schemes to reimburse donors or contributors or even the use of monetary payments to increase the rate of such donations/contributions. An example of the latter is the European Union's "Tissue and Cells Directive" (European Union, 2005a), which, while upholding the "principle of altruism of the donor and solidarity between the donor and recipient" and encouraging unpaid donations, allows for compensation schemes.

Although there is consensus that commercializing or obtaining financial gains for the donation of human reproductive materials is not permissible (European Union, 2005b),[6] divergence exists on various points: what constitutes "reasonable" monetary payment, the conditions under which payment should be granted, and the type of monetary payment that is appropriate (e.g., cash or in-kind services). Moral breach occurs when the line between providing fair financial compensation to donors or providers and commodifying human oocytes is crossed.

[6] For example, legislation adopted in Australia, Canada, France, Germany, India, Israel, Italy, Japan, New Zealand, Portugal, Singapore, South Africa, South Korea, Switzerland, Spain, and the United Kingdom prohibits commercial transactions related to human reproduction, including the commercial supply of gametes and embryos. See also European Union (2005b).

Undeniably, the value of the human body and its parts cannot and should not be expressed in monetary terms. This does not obviate civil responsibility, which creates the duty to indemnify where injury to another (and his/her body) was caused by one's fault. The inherent moral value of human reproductive materials—symbolic of human life itself—situates them outside the economic realm. To treat human oocytes as merchandise (e.g., by providing monetary payments for the actual delivery-quantity or quality-of oocytes: Mertes et al., 2006; Ethics Committee of the American Society for Reproductive Medicine (ASRM), 2007) will inevitably undermine fundamental moral, social, cultural, and historical attitudes toward human life in general.

Studies show that financial rewards or monetary payments are an important motivator among normal healthy volunteers in their decision to participate in clinical trials (Tishler and Bartholomae, 2002). Though the evidence is not conclusive, and the issue has not been systematically and extensively investigated, it highlights the fact that providing monetary payments could be ethically problematic. Various questions remain: do monetary payments lead to greater risk-taking than altruistic donation/participation? If so, why are altruistically adopted risks ethically preferable to financially induced ones? Is it because any monetary payment is ethically tainted? If exploitation or undue inducement is avoided, could the monetary payment given to the donor/participant be morally justified?

Monetary payments present an ethical dilemma because of the blurred line between what constitutes undue inducement and what does not (Hyun, 2006). Undue inducements constitute a threat to the individual's ability to provide free and voluntary informed consent for donation (Macklin, 1981). Moreover, they hinder the donor's ability to act in his or her best interests. An incentive becomes undue inducement if the donor's decision to participate rests solely on the monetary payment (Halpern et al., 2004; Bentley and Thacker, 2004) or if the incentive blinds the potential donor to the risks involved in the donation process (Bentley and Thacker, 2004). To determine what really constitutes undue or inappropriate inducements, it is not sufficient to look at the amount of the financial incentive; it is also necessary to take into account the donor's social, cultural, economic, and biographical context. Often, the context in which a donor is situated determines his or her ability to provide a free, voluntary, and informed decision in the face of financial temptation.

Excessive monetary payments may be deemed exploitative and hence incompatible with informed consent (Tishler and Bartholomae, 2002). It has been argued that the recent Human Fertilisation and Embryology Authority (HFEA) decision to allow egg-sharing programs for stem cell research is tantamount to providing an undue inducement (see contra-argument, ASRM, 2007). For couples lacking sufficient financial means to cover the costs of fertility treatments, participation in the egg-sharing program is the sole way to have access to such treatments.

The presence of options does not automatically rule out the possibility of exploitation, because not all choices are equally free. If the perceived harm of not accepting the discounted services (e.g., no access to in vitro fertilization (IVF) treatment) is deemed to be greater than providing oocytes to researchers, then the situation underlying the

potential solution of discounted services is exploitative. Consequently, the lack of financial means to cover the IVF treatment (without participating in the egg-sharing program) becomes a potentially manipulative instrument in the hands of the researchers who provide the "only" alternative. Excessive control by external influences is not compatible with voluntary and autonomous decision making and action. As pointed out, "it is the perceived paucity of other choices, combined with a sense of desperation or even societal or familial expectation of how a situation should be resolved (precisely because the possibility exists) that transforms a potentially free choice into a coerced act" (Todd, 2001). The reasons that motivate people to engage in certain activities matter from a moral and political standpoint. Even if, on further examination, the egg-sharing scheme licensed by the HFEA is found to stop short of being exploitative, it remains undue inducement and thus morally problematic (see HFEA, 2006, for their recent public consultation on the donation of human oocytes for research purposes). The program also raises another ethical dilemma: is this type of egg-sharing program commercialization through the back door?

An ethical analysis of the use of monetary payments for oocyte donation requires determining the boundaries of their three distinctive categories (e.g., financial incentives, financial compensation, and expense reimbursement), so as to make transparent their ethical dimensions.

Finally, it is important to highlight that in the absence of a comprehensive and ethically consistent policy framework, or in the absence of any framework at all, some countries have *de facto* adopted a mixed model, whereby the distinctive categories of monetary payments are combined. In these jurisdictions, financial incentives (e.g., market model), financial compensation, and so called "altruistic" contributions (no-compensation models) coexist with gainful foreign contributions, as for example, by allowing the importation of human reproductive materials from countries with a market model.[7] From a political and ethical standpoint, to be internally consistent, countries that adopt financial neutrality as a model of compensating donors, or the no-compensation model, should prohibit the importation of any human reproductive materials, for either reproductive or research purposes, that are the product of commercial transactions. The principle of ethical reciprocity and internal consistency should always apply but, as we shall see, this is not always the case.

Financial incentives: the market model

Financial incentives are benefits designed to incite a course of action or to motivate an individual to respond, and as such, they import relations of power. "They are best understood as an alternative to other forms of power: persuasion and coercion" (Grant and Sugarman, 2004). In the research context, financial incentives aim to make research participation more attractive to potential participants. They are especially useful in the absence of other motives to participate. Financial incentives characterize the market model.

The economic principle of supply and demand governs this model; therefore, financial incentives are determined by what the market will bear. Given the increasing demand for human reproductive materials for stem cell research, it is conceivable that under this model (mirroring the current market for human-assisted reproduction in countries like the United States) (Spar, 2006; for contra-argument see Covington and Gibbons, 2007), oocyte providers will be paid considerable sums as direct compensation for their contribution, in addition to indirect payment through completion bonuses and other significant incentives. Furthermore, it is plausible that a market model will systematically discourage altruistic donations (Israni et al., 2005).

The market model is often used when the research or the procurement is arduous and risky, offering little or no prospect of direct benefit to the providers of biological materials (e.g., oocyte procurement from nonmedical volunteers). In these circumstances, the motivation to participate in research or to contribute human reproductive materials lies in the amount of financial incentive offered.

Consequently, the market model offers the advantage of allowing providers to profit while making a socially beneficial contribution. An additional advantage is that it encourages high participation rates, thus ensuring a sufficient supply of the oocytes necessary for research to progress.

Advocates of the market model argue that its major advantage is that it promotes the liberty interests of contributors and recipients. For them, "since most of our free choices presuppose some control over our own bodies, these liberty interests imply that people may even sell parts of their body" (Resnik, 2001). Advocates further argue that a public market prevents the emergence of a black market and is not necessarily incompatible with the adoption of safeguards that protect providers and donors (Thompson, 2007).

Certain features of this market model reveal its disadvantages. The monetary payments it offers could be considered akin to undue inducement and, as such, have the potential to compromise autonomous decision making and taint the informed consent process by, for example, diminishing the voluntariness of the consent or blurring the understanding and/or the assessment of potential risks involved. Furthermore, the market model could foster the exploitation of economically vulnerable or disadvantaged populations and, hence, violate social justice principles. Of equal importance is the broader social impact of commodification on respect for human dignity and human rights. The market approach thus appears incompatible with the fundamental values that govern the donation of human body parts (e.g., organs, cells, tissues) and as such it has been condemned by most national and international organizations, as well as professional societies (e.g., European Society for Human Reproduction and Embryology Task Force on Ethics and Law, 2007; Canadian Institutes of Health Research, 2006; National Research Council and Institute of Medicine of the National Academy of Sciences, 2004; International Society for Stem Cell Research, 2007; European Commission, Health and Consumer Protection Directorate General, 2006).

[7] For example, Canada has adopted a system of altruistic donation of human gametes for reproductive purposes, hence limiting financial compensation to the reimbursement of direct and receipted expenses. However, the importation of gametes is allowed without consideration of the financial transactions that led to the procurement of such gametes.

Financial compensation

Compensation in general terms means rendering equivalent for losses (e.g., financial, personal) sustained in a given situation. The goal of a compensation model is to redress a balance in terms of loss of expenditures and personal sacrifices. It aims to protect donors from risk of death, bodily injury, loss of time, inconvenience, or financial dislocation and, in so doing, to encourage more potential donors to pursue their altruistic impulses (Gaston et al., 2006). Under this model, the financial compensation provided to donors ought not to be the equivalent of payment. A reasonable amount to compensate or reimburse donors signifies leaving them as well off as before donation; that is, it must be financially neutral. The higher the level of compensation, the more it becomes morally problematic or undesirable. Compensation can be further subdivided into fixed or wage-payment approaches.

The fixed-compensation model

Under the fixed-compensation model, donors receive a preestablished, standardized monetary payment, aiming at compensating for the time, effort, and discomfort of provision. In sharp contrast to the market model, the fixed-compensation model allows only for small pecuniary compensation set by public policy rather than by market forces (Ethics Committee of the American Society for Reproductive Medicine, 2007; United Kingdom, 2006; Australia, 1995; Poland, 2005).

This model offers advantages and disadvantages. It prevents monetary payments or inducement as the primary motivation for contribution, while minimizing the financial loss to the donors that is the direct consequence of the contribution. However, it does not generate the potential for mass recruitment within a short time (Israni et al., 2005), as does the market model. Moreover, the amount of compensation is both fixed and capped and thus could lead to arbitrary application. Yet, it provides the advantage of certainty and fairness because every donor is treated the same way. Provisions under this model are akin to the ones pertaining to healthy volunteers in clinical research.

The wage-payment model

The rationale for the wage-payment model lies in a conception of the procurement process as a form of unskilled labor and, as such, allowing for the payment of providers using a scale equal to a standardized, low, hourly wage (e.g., Finland). The model also allows for additional payments for inconvenience and discomfort. Whereas it is in some respects similar to the market model, the wage-payment model is not governed by the economic principle of supply and demand; rather the payment is set according to the unskilled-labor market (Dickert and Grady, 1999).

The wage-payment model reduces the financial sacrifice of oocyte providers. At the same time, the model provides an incentive for people to contribute since wages are hourly based. But the incentives provided are significantly less than those granted under the market model.

While the model reduces the possibility of undue inducement, it could lead to the disproportionate recruitment of people with low incomes, which raises questions regarding potential exploitation and fairness. Furthermore, as providers are treated as unskilled workers, the model can be challenged as a mechanism to promote the commercialization of donor participation in research (Bentley and Thacker, 2004). Finally, as the model assumes that research participation is not significantly different in any substantial moral sense from other forms of unskilled labor, the model could be challenged on the grounds of its potential to breach internationally accepted ethical principles and research participant's rights (e.g., right to withdraw).

The no-compensation model

Finally, any analysis of financial compensation models must acknowledge the existence of models that propose no compensation or recognition for the donor's personal and financial loss. The latter model rests on the belief that for a donation to be truly altruistic, zero compensation should be provided. Consequently, donors bear all the financial and personal sacrifices associated with the donation (Israni et al., 2005). To require pure altruism from oocyte donors is not only unrealistic but also unfair (unless so desired by the donor). Oocyte donors are subject to a battery of questionnaires, invasive tests, hyperstimulation, and retrieval methods. This model fails to recognize the necessary personal, health, and financial costs involved in the donation and essentially penalizes donors for their gift. The model also fails to acknowledge the vital societal contribution donors make by helping to advance science. However, this is the only model that lacks all the negative features of the market model, such as commercialization or the creation of markets.

The expense-reimbursement model

Reimbursement of expenses incurred in connection with research participation or donation could be considered a form of compensation broadly understood; we opted for subdividing them for methodological purposes.

The most commonly adopted model is the expense-reimbursement model. (Canada, Cyprus, Finland, France, Japan, Singapore, South Africa, South Korea, and the United Kingdom have all implemented this model.) The rationale underlying this model is the prevention of financial profit from donation, while compensating donors for any financial sacrifice incurred in direct relation to the donation (Dickert and Grady, 1999).

Several methods for reimbursing donors exist under this model (Israni et al., 2005). One approach favors reimbursing donors only for expenditures such as travel, meals, daycare, parking, and lodging, while other methods allow donors to be compensated for loss of wages (e.g., Finland, 2001a, 2001b; United Kingdom, 2006). All preclude donors from being compensated for nonfinancial expenses such as effort, pain, and discomfort. Additionally, a variety of qualifiers serve to distinguish the approaches taken by different countries with regard to regulating this model. Those qualifiers require that the reimbursement be limited to "reasonable expenses"[8] or to

[8] In Australia, for instance, reasonable expenses includes "all expenses related to supply and incurred in the collection, storage and transport of the egg" (Australia, 2002). In contrast, the Czech Republic extends the criterion of reasonable expenses to expenses spent in relation to the procurement but allows taking into account discomfort (Czech Republic, 2006).

limit them so as to prevent them from constituting "valuable consideration" (e.g., New Zealand, 2004; Singapore, 2004).

While the expense-reimbursement model reduces ethical concerns about undue inducement, especially toward vulnerable populations, it could lead to unequal payment of donors for the same type of participation; a subject earning higher wages would receive more compensation than subjects with lower incomes or those who are unemployed. Additionally, the model provides very limited incentive for people to donate and could create a financial burden for donors not reimbursed for lost wages (e.g., France, 2004) or for time away from work or where reimbursement is limited to receipted expenses only (e.g., Canada, 2004). Paradoxically, although it occupies the moral high ground in today's debate, this "proven expenses only" approach could, like the no-compensation model, result in commercial exploitation through forum shopping or a black market. Additionally, the administrative proof required of donors and clinics could be burdensome. Moreover, considering the heightened concern for quality assurance and traceability of human reproductive materials, the even narrower receipted-expenses-only policy could in the long term further reduce the availability of human reproductive materials.

Nevertheless, the model preserves altruism as the primary motivation for donation, and this in itself is valuable. Thus, if compensation includes the reimbursement of reasonable expenses (including loss of wages) that are directly connected to the donation, donors are not receiving "valuable consideration" or financial profit, nor are they being exploited (Bentley and Thacker, 2004). Rather, they are receiving a token of appreciation as a symbolic recognition for their services to society.

Conclusion

In light of the above, perhaps a more equitable solution would be to develop a mixed model wherein there is a statutorily determined amount offered. This set amount would, however, distinguish between the types of reproductive material (Knoppers et al., 2007) and the accompanying risks and personal effort. Across the board, the set amount of monetary payment would be determined by a competent authority[9] that would take into account the time, effort, and risks involved in donation while also offering insurance[10] (Israni et al., 2005) for donors to cover potential complications arising from the donation (e.g., bodily injury).

The statutory amount would have a dual purpose: to act as a financial incentive to encourage donation and to act as a financial compensation for personal and financial sacrifices. The modest statutory amount would be capped[11] and also be below what proponents of the markets would propose (e.g., completion bonuses will be prohibited) to lessen concerns over exploitation or undue inducement. Furthermore, if the monetary amount is low, the undesirable commercialization of the research process could be prevented. Obviously (although beyond the scope of this article), the adoption of this approach requires a reconsideration of the schemes governing organ and blood donation as well.

Furthermore, by linking compensation to risk, our proposal preserves the essence of donation as a gift. The amount would still largely remain a symbolic recognition of the true value of such participation in stem cell research. This proposed mixed model respects altruism, solidarity, and the liberty interests of donors. It is based on principles and pragmatism. It offers certainty, transparency, and fairness.

We acknowledge that at least some potential donors would still be influenced by the monetary payment regardless of its size. Hence, our proposed model would not resolve the challenge of overrepresentation of vulnerable populations and its negative consequences in terms of diminishing the integrity of the research. Consequently, the use of monetary payments as an incentive to encourage donor participation in research can be justified only in the context of a comprehensive and effective system of research donor protections.

Furthermore, given the international realities of stem cell research, global recognition is necessary to prevent "ethical arbitrage" or forum shopping. Several jurisdictions, albeit with different conceptualizations of monetary payments, have led the way by prohibiting the importation of gametes and stem cell lines that have not been procured in accordance with the local laws governing monetary payments and consent rules (e.g. California, 2006; Czech Republic, 2006). These jurisdictions, by setting political and ethical boundaries, demonstrate that a society is capable of making ethical assessments, encouraging consistency, and establishing priorities.

Offering monetary payments to oocyte donors does not automatically lead to the commodification of human gametes or to undue inducement, exploitation, or coercion of donors. Removing fair compensation from the picture does not in turn prevent any of these problems from occurring. But as history has shown, regulatory vacuums and the lack of adequate procedural and substantive safeguards undeniably lead to abuse.

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[9] A detailed analysis of our proposal is outside the scope of this paper. Suffice it to say that we recommend that, following the approach adopted in several jurisdictions (e.g., Victoria, Australia; Israel; United Kingdom), the statutory amount should be established by a regulatory or licensing national authority. Thus we disagree with the recommendation of the International Society for Stem Cell Research (2007) with respect to compensation levels being determined by local oversight committees on a case-by-case basis. Our position is based, among other reasons, on consideration of social justice, certainty, and concerns over the potential for exploitation of the vulnerable, arbitrary applications, and lack of transparency.

[10] Our proposal for providing insurance to donors should not be constructed as for financial gain but rather it should be considered an appropriate hedge against uncertain health risks.

[11] The Ethics Committee of the American Society for Reproductive Medicine (2007), for instance, recommends capping financial compensation of donors of oocytes to $5000 and considers sums above $10,000 as inappropriate or morally problematic.

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