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Infanticide in bioethics: Singer's argument and cross-framework debates

Stanislava Baranová[1]

Abstract

The aim of this article is to analyze Peter Singer's utilitarian approach to infanticide and compare it with alternative moral frameworks through systematic philosophical analysis. Singer argues that cognitive capacities, such as self-awareness and the ability to form preferences, rather than species membership, should determine moral consideration. This perspective leads him to conclude that newborns do not possess full moral personhood and may be subject to different ethical calculations. This includes his controversial "replaceability argument" regarding severely disabled infants. The analysis also considers supporting views from philosophers like Michael Tooley and Jeff McMahan, as well as opposition from deontological and natural law theorists, who maintain that human dignity is inherent and not dependent on specific capacities. The debate has practical implications, as evidenced by the Groningen Protocol in the Netherlands, and extends to broader societal concerns such as eugenics, disability rights, and healthcare resource allocation. Recent advances in neonatal care and prenatal testing have complicated these discussions by improving outcomes and altering decision-making contexts. While Singer's framework appears philosophically coherent, it remains morally troubling. Conversely, alternative approaches have yet to resolve the fundamental disagreements surrounding human moral worth.

Keywords: infanticide, bioethics, Peter Singer, moral status, utilitarianism, newborn, medical ethics

Introduction

When, if ever, can the ending of a newborn's life be ethically justified? This question about when human life begins to hold moral significance has remained one of the most persistent and divisive issues in bioethics. The debate has intensified with advances in medical technology that enable the survival of severely disabled newborns. These developments have raised questions about quality of life and resource allocation. At the center of this discourse is Peter Singer, whose utilitarian approach to moral philosophy fundamentally challenges traditional Western conceptions of human dignity and the sanctity of life.

Singer's position on infanticide, first articulated in his landmark work *Practical Ethics* (1979), has provoked widespread philosophical and practical debate. He argues that moral status is not determined by a being's species but by cognitive capacities such as self-awareness, rationality, and the ability to have preferences about one's future (Singer, 2011). This view has profound implications for our understanding of the moral status of infants, especially those who are severely disabled.

The importance of this debate extends from academic philosophy to the realm of everyday medical decision-making. Clinicians, families, and policymakers grapple with decisions regarding treatment withdrawal, palliative care, and end-of-life care for critically ill newborns. The establishment of protocols like the Groningen Protocol (Verhagen & Sauer, 2005) in the Netherlands illustrates the intersection of philosophical debates and clinical practice, raising questions about the universal applicability and moral acceptability of such approaches. Bioethical reasoning often reveals a tension between abstract philosophical theorizing and case-based approaches grounded in real clinical contexts (Arras, 1991; Caplan, 1992).

Existing studies have typically examined Singer's utilitarian approach in isolation or focused primarily on objections related to disability rights. This article contributes to the discussion by providing a systematic cross-framework comparison and analyzing the Groningen Protocol as an example of end-of-life decision-making frameworks.

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[1] Constantine the Philosopher University in Nitra (Slovakia); stanislava.baranova@ukf.sk; ORCID 0009-0000-7934-8429

The examination begins with an analysis of Singer's theoretical framework and the voices that support it. It then considers deontological and natural law opposition, reviews practical applications, and evaluates societal implications and contemporary developments. Finally, the article offers a critical assessment of the debate's implications for medical ethics and social policy.

Historical context and philosophical foundations

The concept of moral status has evolved significantly throughout Western philosophical history. Traditional religious and philosophical perspectives generally maintained that human life possesses inherent dignity from either conception or birth, based on divine endowment or rational capacity. However, the twentieth century saw increasing challenges to these assumptions, particularly following Darwin's evolutionary theory (Darwin, 2019), which questioned human exceptionalism. Advances in developmental psychology also revealed the gradual emergence of cognitive capacities (Piaget, 1974; Kohlberg, 1981). These scientific developments undermined traditional beliefs about innate human dignity and supported cognitive-based theories of moral status. This shift was influenced partly by work in animal ethics, where philosophers like Singer argued that the capacity for suffering, rather than species membership, should determine moral consideration (Singer, 1975).

Jeremy Bentham's classical utilitarianism lays the philosophical foundation for Singer's approach, highlighting that the moral worth of actions is determined by their consequences for overall well-being. Bentham famously stated, "the question is not, Can they reason? nor Can they talk? but, Can they suffer?" This established the capacity to suffer as a fundamental criterion for moral consideration (Bentham, 1996). While Bentham focused primarily on suffering and pleasure (the sentience criterion), Singer developed preference utilitarianism, which broadens moral consideration to include beings capable of having preferences about their futures. This shift from Bentham's sentience-based approach to Singer's preference-based framework represents a significant advancement, as it grounds moral status not only in the ability to experience pain and pleasure but also in the capacity for self-aware desires regarding one's continued existence and future experiences. Singer's preference-based approach, which is rooted in utilitarian philosophy, suggests that the interests of beings capable of having preferences deserve moral consideration in proportion to their capacities for suffering and preference satisfaction. Additionally, Singer argues that the wrongness of killing is not merely based on the ability to suffer, but also on the frustration of future-oriented preferences and the complexity of psychological life (Singer, 2011).

Peter Singer's argument on infanticide

Singer's approach to infanticide is based on three distinctions that are often conflated. The first distinction relates to sentience, which is the capacity to experience pain and pleasure. Newborns possess sentience, making their suffering morally significant from a utilitarian perspective. The second distinction involves personhood, which Singer defines more narrowly than simply being biologically human. According to Singer, personhood requires self-awareness, rationality, and the ability to form preferences about one's future. Since newborns lack these psychological capacities, they do not meet Singer's criteria for personhood. The third distinction addresses why killing is morally wrong, where the first two categories become crucial. Killing a person is considered wrong primarily because it frustrates that individual's preferences regarding continued existence. In contrast, killing a sentient non-person involves different moral considerations. While such an act may cause pain to the being itself, provoke grief in caregivers, and undermine social trust, it does not frustrate future-oriented preferences that the being does not possess (Singer, 2011). This conceptual framework is essential for evaluating Singer's arguments regarding infanticide and clinical practices like the Groningen Protocol, since the moral reasons for and against ending life differ fundamentally based on whether the subject is a person or a sentient non-person.

Building on these distinctions, Singer argues that mere biological membership in Homo sapiens does not automatically grant moral status. Because newborns lack the psychological continuity and future-oriented preferences that characterize personhood, their moral status is qualitatively different from that of fully developed individuals (Singer, 2011). This conclusion, although challenging, follows from prioritizing cognitive capacities over species membership as the basis for full moral consideration.

Singer's position is further complicated by his "replaceability argument". This argument suggests that in cases where a severely disabled infant (such as one with spina bifida, significant intellectual impairment, or terminal illness) is likely to experience more suffering than happiness, their death might be justified if it allows the parents to have another child who could experience greater well-being (Singer, 2011). The replaceability argument, grounded in total utilitarian principles, posits that if a being's death does not frustrate any preferences regarding future existence, another being with similar capacity for positive experiences can take their place to maintain or enhance overall well-being. Singer primarily applies this principle to beings lacking self-awareness and future-oriented preferences, viewing them as subjects of experiences without a unique temporal identity. In contrast, he considers self-aware beings to be non-replaceable, as their death frustrates their personal preferences about the future (Singer, 2011).

Replaceability is not a straightforward implication of utilitarian theory that applies to all severely disabled infants. Singer presents it as justified only under specific conditions that involve multiple counterbalancing considerations. Although these infants lack personhood, they are sentient, and their capacity for suffering is morally significant. In their work, *Should the Baby Live?* (1985), co-authored with Helga Kuhse, Singer identifies several constraints on the replaceability argument. They argue that killing a wanted baby wrongs the parents, regardless of the infant's moral status. Even if parents do not wish to raise a disabled infant and someone else is willing to adopt and care for it, taking the child's life is unjustified due to the infant's potential for a meaningful life (Kuhse & Singer, 1985, pp. 135, 161, 190). In such circumstances, the replaceability argument does not hold. Furthermore, Kuhse and Singer assert that infants have a right to be free from pain, even if they do not have an outright right to life (Kuhse & Singer, 1985, p. 135). They also advocate for procedural safeguards based on the 'Limitation of Treatment Bill':[2] written parental consent, certification from two physicians (both with a minimum of seven years of experience, one of whom must be a pediatrician), and a 28-day timeframe during which the infant is granted full legal protection (Kuhse & Singer, 1985, pp. 173, 191, 194–196).

In *Practical Ethics* (2011), Singer highlights the emotional challenges faced by parents who wish for their infant to live, emphasizing that this parental grief serves as a significant argument against allowing the infant to be killed (Singer, 2011, p. 161). He further addresses the potential slippery slope of such decisions and the broader social implications for trust in medical institutions (Singer, 2011, pp. 186–190). Although he argues that procedural safeguards, such as requiring two physicians for approval, can mitigate the risk of abuse, he acknowledges that there is still "a small but nevertheless finite risk of unwanted consequences" when moving away from traditional sanctity-of-life ethics (Singer, 2011, p. 189). Singer also emphasizes the necessity of maintaining stable expectations in medical practice (Singer, 2011, pp. 186–190).

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[2] Proposed by Prospect, a British parents' organization formed in response to the trial of Dr. Arthur, who was charged with the murder of an infant with Down syndrome. This organization aimed to support parents of severely handicapped children and to promote legislative reform, including the 'Limitation of Treatment Bill,' which was sent to all British Members of Parliament. The text outlines certain requirements for the decision regarding infant care (Kuhse & Singer, 1985, p. 173).

Additionally, Singer (2011) shifts away from a purely preference-based approach to utilitarianism, incorporating more hedonistic and objective elements (Singer, 2011, pp. x, xiii, 86–87, 116–117). He asserts that “to say that pleasure is good and pain is bad is to assert not only that there are preference-independent values, but to say that pleasure and pain are such values” (Singer, 2011, p. 117).[3] It enhances the concern for suffering as an intrinsic harm, rather than merely a negative outcome due to frustrated preferences. Importantly, this perspective does not automatically broaden the justification for infanticide. In fact, it may lead to stronger arguments against ending lives, as suffering is significant regardless of whether the being has preferences about its future.

Singer (2011) also challenges the traditional moral distinction between the passive withdrawal of life-sustaining treatment and the active termination of life. He contends that, from a utilitarian standpoint, moral evaluation should focus on the consequences rather than the methods used (Singer, 2011, pp. 181–183). While he asserts that there is no intrinsic moral difference between active and passive measures (Singer, 2011, p. 183), he acknowledges practical and policy reasons for treating them differently in real-world scenarios. These reasons include concerns about slippery slope risks, procedural safeguards, and the importance of maintaining public trust, as discussed earlier (Singer, 2011, pp. 186–190). This distinction is particularly relevant for frameworks like the Groningen Protocol, which involves actively ending a life and thus requires more stringent safeguards than decisions regarding standard withdrawal of treatment.

Despite these constraints and Singer’s theoretical shift, his stance on infanticide remains controversial. Critics like Kagan (1998) argue that treating infants as replaceable in utilitarian calculations commodifies human life. Disability scholars Eva Feder Kittay and Adrienne Asch expand on this critique by questioning the quality-of-life judgments that underpin Singer’s evaluative framework. They assert that his focus on quality-of-life indicators mirrors implicit ableist biases regarding what constitutes a valuable life (Kittay, 2005; Asch, 2001). Kittay emphasizes that systemic barriers and societal discrimination significantly shape the lived experiences of individuals with disabilities, far more than their inherent impairments (Kittay, 2005). Asch contends that Singer’s framework overlooks how societal attitudes—rather than disabilities themselves—diminish the quality of life for disabled individuals (Asch, 2001). From Kittay’s perspective, Singer’s utilitarian approach risks perpetuating stigmatizing narratives and reinforcing exclusionary attitudes toward disabled populations (Kittay, 2005).

Supporting voices and theoretical extensions

Michael Tooley’s work on abortion and infanticide provides vital support for Singer’s position while developing distinct philosophical arguments. Tooley argues that the right to life depends on the capacity to desire continued existence, which requires a concept of self as a continuing subject of experiences. Since newborns lack this self-concept, they cannot hold desires about their future existence and therefore do not possess the right to life that characterizes persons (Tooley, 1985). Tooley’s criterion of “self-referential desires” offers a more precise philosophical foundation for distinguishing between mere biological life and morally significant existence. His argument indicates that the capacity for self-referential desires gradually emerges during development, creating a spectrum of moral status rather than a sharp dividing line (Tooley, 1985). However, Tooley’s criterion addresses only the right to life as it relates to personhood and does not eliminate moral considerations stemming from sentience. Ending the life of a sentient being lacking personhood still raises moral concerns about pain, the effects on caregivers, and social trust.

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[3] This shift is most apparent in the third edition of *Practical Ethics* (2011).

Jeff McMahan's contribution to the debate emphasizes the temporal dimension of moral status through his theory of time-relative interests. McMahan asserts that the moral significance of death depends on the strength of the victim's time-relative interest in continuing to live, which correlates with psychological continuity and connectedness over time (McMahan, 2002). He argues that newborns have weaker time-relative interests in continued existence than older children or adults because they lack the psychological connections that create personal identity over time. This view suggests that while killing a newborn is wrong, it is considered less wrong than killing an older child or adult who has stronger psychological ties to their future (McMahan, 2002). McMahan's framework evaluates the comparative harm of death based on psychological continuity but also considers sentience, as a being's capacity for suffering remains morally relevant regardless of its time-relative interests in continued existence.

Although both Tooley and McMahan ground moral status in psychological capacities, their arguments are logically independent. Tooley's criterion establishes when the right to life emerges, while McMahan's framework assesses how seriously death harms a being based on psychological continuity. One can accept McMahan's comparative account of harm without endorsing Tooley's rights-based criterion, or vice versa. Tooley's self-referential desire criterion posits that once a being develops a concept of self over time, it acquires the right to life. Conversely, McMahan's time-relative interests framework suggests that even among persons, some deaths may be less harmful than others depending on the degree of psychological continuity with one's future self (Tooley, 1985; McMahan, 2002).

Alberto Giubilini and Francesca Minerva significantly expand on Singer's arguments by introducing the term "after-birth abortion", which they describe as a morally permissible form of infanticide under certain conditions. In their 2013 article, they argue that if abortion is ethically acceptable because a fetus lacks personhood, then the same reasoning should apply to newborns, who likewise lack cognitive capacities typically associated with moral personhood—such as self-awareness and future-oriented preferences (Giubilini & Minerva, 2013). Although their argument has faced considerable ethical criticism, it represents a consistent development within the utilitarian framework that Singer proposed. By emphasizing morally relevant qualities like sentience and cognitive potential over species membership or biological life, Giubilini and Minerva reveal the ethical implications of adopting a strictly cognition-based account of moral status. Their thesis highlights both the coherence and the normative challenges found in utilitarian approaches to moral status at the margins of life.

Their proposal has faced significant objections. One of the main criticisms comes from Regina Rini, who argues that Giubilini and Minerva confuse two separate arguments, neither of which convincingly demonstrates that infanticide is permissible. Rini asserts that their first argument could equally support the prohibition of abortion rather than permitting infanticide. She also points out that their second argument relies on an ambiguous premise that fails under scrutiny (Rini, 2013). Lindsay Porter presents a different perspective, arguing that the absence of a right to life does not resolve the issue. She emphasizes that moral considerations are highly context-dependent; what justifies an action in one situation may not justify it in another. For Porter, the moral contexts of fetuses and newborns are fundamentally different, making it invalid to simply apply justifications for abortion to the case of infanticide (Porter, 2013).

Deontological and natural law critiques

Immanuel Kant's deontological ethics presents a significant challenge to Singer's utilitarian perspective on infanticide. Kant's categorical imperative, especially the formulation that requires us to treat humanity "never merely as means but always at the same time as ends", posits that human beings have inherent dignity that cannot be overshadowed by utilitarian calculations. This principle, known as the Formula of Humanity, underpins Kant's absolute prohibition against treating human life as a tool for achieving other ends (Kant, 1998).

Contemporary Kantian philosophers argue that Singer's utilitarian approach instrumentalizes human life by viewing individuals as means to achieve greater overall happiness. From this standpoint, the replaceability argument particularly suggests that disabled newborns are seen as exchangeable commodities rather than as ends in themselves, possessing inherent dignity (O'Neill, 1986; 1990; Korsgaard, 1996).

Kantian responses assert that the Formula of Humanity does not require currently exercised rational capacities to confer moral status. Christine Korsgaard argues that human dignity is derived from being a member of a rational kind, rather than from actual rational performance. Humans possess moral standing by virtue of their nature as rational beings, even if those capacities are not yet developed (Korsgaard, 1996). Onora O'Neill differentiates between dignity as an intrinsic property and membership in the moral community as a relational status. Infants possess dignity as potential rational agents, generating duties towards them despite their inability to engage in moral deliberation (O'Neill, 1990). These perspectives challenge Singer's cognitive criteria by appealing to the potentiality of human beings and the categorical nature of the duties we owe to all individuals. From this Kantian viewpoint, infanticide is impermissible because it violates the categorical duty to respect all human beings as ends in themselves.

Natural law theorists, such as John Finnis and Robert P. George, provide significant critiques of Singer's position. Finnis contends that human life has inherent value from the moment of conception, and this value is not dependent on the development of specific capacities or the quality of life experienced. He argues that intentionally ending innocent human life is always morally wrong, regardless of utilitarian considerations (Finnis, 2011). According to Finnis, the inherent dignity of human life supports absolute moral prohibitions against actions like abortion and infanticide, which cannot be justified by appeals to consequences or individual circumstances. George's contribution emphasizes the continuity of human development through the concept of organism-kind identity. He argues that a human embryo, fetus, or newborn is the same continuing organism as the adult it will eventually become, belonging to the rational human kind from the outset. This perspective holds that basic goods, such as life and practical reasonableness, establish moral status. These goods are intrinsic to human beings because of their rational nature, rather than dependent on the current exercise of capacities (George, 2002). The acorn-to-oak analogy is sometimes used to illustrate this identity across different developmental stages. However, the argument is based on embryological evidence of a distinct organism, combined with the metaphysical claim that rational nature is present from conception. Thus, each human being possesses inherent dignity, regardless of their developmental maturity (Finnis, 2011; George, 2002).

Central to the arguments about natural law is the idea that human nature forms the foundation for moral status. This means that the essential characteristics and rational capacities inherent in all members of the human species are what determine their dignity. Both John Finnis and Robert George advocate for a view of human dignity that is intrinsic and non-contingent, rejecting utilitarian frameworks that assess moral status based on capacities or outcomes. They emphasize the inviolability of human life at all stages of development (Finnis, 2011; George, 2002).

Critics from both deontological and natural law perspectives argue against Singer's cognitive criteria for moral status, labeling them as arbitrary and potentially dangerous. They contend that determining moral worth based on cognitive capacities creates a hierarchy that could lead to discrimination against individuals with intellectual disabilities, dementia, or other cognitive impairments (Kaczor, 2010). This hierarchical approach risks marginalizing vulnerable populations by denying them equal moral consideration simply because they do not meet certain cognitive benchmarks. These critics argue that Singer's perspective reflects a form of cognitive elitism that fails to acknowledge the equal dignity of all human beings. Instead, they assert that moral status should be based on human nature itself, rather than on the attainment of specific capacities. This perspective affirms the inherent worth and equal moral status of every person, regardless of cognitive ability (Tollefsen, 2008). By emphasizing the intrinsic value of human life, these viewpoints challenge utilitarian frameworks that depend on fluctuating criteria and highlight the ethical importance of protecting those who may lack certain cognitive functions.

End-of-life decision-making: The Groningen Protocol

In clinical practice, making end-of-life decisions for severely ill newborns raises important ethical questions about suffering, quality of life, and the need for active intervention. The Groningen Protocol,[4] developed in the Netherlands in 2004, serves as a framework for prosecutorial and clinical reporting. The Groningen Protocol establishes formal guidelines that require mandatory oversight for extreme end-of-life cases involving newborns who experience unbearable suffering when medical treatment is no longer effective. It acts as a mechanism for legal clarity and accountability, allowing physicians to report cases of active life-ending interventions to prosecutorial authorities for retrospective review (Verhagen & Sauer, 2005). While the protocol is independent in its development, it addresses ethical concerns that align with utilitarian principles regarding quality of life and suffering, similar to the considerations put forth by philosopher Singer. However, it is important to note that the Groningen Protocol did not originate from, nor was it intended to implement, Singer's theoretical framework.

The protocol was created to regulate and standardize decisions regarding the active euthanasia of newborns, with the aim of preventing arbitrary or inconsistent practices. It identifies three categories of cases: those with no chance of survival, those with severe disabilities and poor prognoses, and those experiencing unbearable suffering despite treatment. Several strict conditions must be met: the suffering must be intolerable with no possibility of improvement, the diagnosis and prognosis must be confirmed by at least two independent physicians, both parents must provide informed consent, and the case must be reported to prosecutorial authorities for retrospective review. These procedural safeguards are designed to ensure transparency, prevent misuse, and facilitate compassionate end-of-life care in exceptional circumstances (Verhagen & Sauer, 2005).

Nationwide surveys conducted in 1995 and 2001 found that the intentional ending of life in neonates accounted for approximately 1% of all deaths under one year of age, corresponding to about 15 to 20 cases annually in the Netherlands (Van der Heide et al., 1997; Vrakking et al., 2005; Verhagen & Sauer, 2005). Between 1997 and 2004, 22 cases were officially reported to district attorneys and reviewed by prosecutors, all of which did not result in prosecution (Verhagen & Sauer, 2005). Following the implementation of the Groningen Protocol in 2005, reporting patterns changed dramatically. Data from October 2005 through September 2006 indicated only one case of deliberate life-ending (Verhagen et al., 2009). Prior to the protocol, there were three to five cases annually, but in the 18 years following its implementation, only three cases of active neonatal life-ending were formally reported and reviewed under the national oversight system[5] (Verhagen & Lantos, 2024). This figure specifically refers to "active ending of life" cases and excludes treatment withdrawal, withholding, or palliative sedation.

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[4] Although it is not codified in Dutch law, the protocol functions within the existing legal system as a professional-legal guideline created collaboratively by physicians and prosecutors. Its purpose is to ensure transparency and oversight in exceptional cases of neonatal end-of-life decisions (Verhagen & Sauer, 2005; Verhagen & Lantos, 2024).

[5] Dutch end-of-life studies distinguish between three categories of neonatal decisions: (i) withdrawal or withholding of life-sustaining treatment, (ii) intensification of pain or symptom relief with potential life-shortening effects (palliative sedation), and (iii) active ending of life by administering drugs with the explicit intention to hasten death. The "1%" figure and the estimate of 15 to 20 cases annually refer to category (iii) as identified in nationwide surveys (Van der Heide et al., 1997; Vrakking et al., 2005). Similarly, the "three cases" reported by Verhagen and Lantos (2024) concern only category (iii), representing formally reported and reviewed cases under the Groningen Protocol framework.

The Groningen Protocol has sparked extensive international debate, garnering both support and criticism. Supporters see it as a compassionate response to unbearable suffering in newborns, providing clear guidance for physicians on when further treatment would only prolong pain. They argue that the protocol's strict criteria and procedural safeguards are designed to prevent abuse while allowing for compassionate care (Manninen, 2006). Conversely, critics view it as a form of institutionalized infanticide, warning that such guidelines could set a dangerous precedent. They argue that this might undermine the value of disabled lives and pave the way for broader euthanasia practices (Jotkowitz & Glick, 2006; Vanden & Martinovici, 2013).

The discussion around the Groningen Protocol highlights ongoing ethical tensions in clinical practice, particularly concerning the fundamental principles of beneficence, non-maleficence, respect for autonomy, and distributive justice. The protocol challenges traditional interpretations of the obligation to 'do no harm,' suggesting that, in certain circumstances, continuing medical intervention may cause more suffering than it alleviates (Kon, 2007). It also raises important questions about decision-making authority in cases involving patients who cannot express their wishes. While parents typically have the right to make medical decisions for their children, the irreversible nature of ending a life prompts concerns about whether such decisions should undergo additional oversight.

Medical professionals worldwide remain deeply divided on the ethical acceptability of the Groningen Protocol. Some emphasize the importance of comprehensive palliative care as an alternative to active intervention, while others argue that the protocol provides a necessary framework for addressing cases of extreme neonatal suffering (Špoljar et al., 2025). Various professional medical organizations have taken differing positions on active neonatal euthanasia, with most highlighting the need for improved pain management and family-centered end-of-life care. European pediatric societies exhibit more variation in their stances, but most prioritize comfort care and stress the importance of involving multidisciplinary teams in complex decision-making (Soltani & Bazmi, 2020).

In light of this professional divergence, the Dutch government implemented a significant policy shift in April 2023. Unlike the neonatal Groningen Protocol, this new policy expands end-of-life provisions to seriously ill and untreatable children aged 1 to 12 years. Set to take effect on February 1, 2024, the measure builds on similar ethical and procedural foundations and applies in cases where palliative care has proven insufficient and suffering remains unbearable. To ensure oversight and prevent misuse, the policy requires review by a national committee comprising a legal expert, an ethicist, and three physicians, who will evaluate whether each case meets the established criteria (Verhagen & Lantos, 2024). Consequently, the Netherlands has become the first country to allow euthanasia for children in this age group under a formalized legal framework.

Societal and policy implications

A major objection to Singer's position is its perceived connection to eugenic ideologies. Critics argue that supporting infanticide for disabled neonates could create societal pressures that discourage families from raising children with disabilities. This could lead to a phenomenon referred to as 'soft eugenics,' where societal norms subtly influence reproductive choices and devalue the lives of disabled individuals (Hubbard, 2006; Thomas, 2016; Cavaliere, 2018).

It is crucial to differentiate between various practices: prenatal abortion refers to the termination of a pregnancy before birth, while postnatal end-of-life decisions involve actively ending life, withdrawing or withholding life-sustaining treatment, and providing palliative sedation.[6] While these practices differ both morally and legally, data on prenatal termination is

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[6] These practices differ significantly. (i) Active ending of life involves administering lethal drugs with the explicit intent of causing death; (ii) withdrawal or withholding of life-sustaining treatment allows death to occur without

relevant to the debate on infanticide because it reflects societal attitudes toward disability that could create normative pressures in both prenatal and postnatal contexts.

Critics who discuss "soft eugenics" do not equate individual reproductive choices with coercive state eugenics programs. Instead, they explore how cumulative patterns may reflect and reinforce broader societal devaluation of disabled lives. Empirical evidence from several countries highlights these trends: termination rates following prenatal diagnosis of Down syndrome reach 67–85% in the United States (Natoli et al., 2012) and 92% in England and Wales (Morris & Alberman, 2009). Similarly, targeted screening programs have significantly reduced the birth prevalence of specific conditions in various countries. For instance, in Taiwan, the number of thalassemia births declined from 5.6 to 1.21 per 100,000 over an eight-year period (1994–2002) after the implementation of a national screening program (Chern et al., 2006). These statistics provide descriptive data about reproductive patterns rather than making normative assessments about parental choices. Nevertheless, when considered alongside historical examples of coercive state eugenics programs that targeted individuals with disabilities for sterilization or elimination (Kevles, 1995; Ronen et al., 2009), these patterns raise concerns about how societal attitudes toward disability may influence reproductive decision-making. Critics worry that Singer's arguments could unintentionally support discriminatory practices (Mechmann, 2023).

Singer's utilitarian view on infanticide raises important questions about treatment decisions and health policy for extremely preterm infants. A systematic review conducted in 2024, which analyzed 69 studies from 25 countries, found that survival rates for extremely preterm infants admitted to neonatal intensive care units varied significantly. At 22 weeks of gestation, the survival rate was about 30% (95% CI 25–36), while it increased to 74% (95% CI 70–77) at 25 weeks. Notably, there were substantial disparities in survival rates between high-income countries and low- and middle-income countries (Li et al., 2024). Additionally, a large study conducted in the U.S. across 24 hospitals examined survival rates among infants born at 22 to 26 weeks from 2006 to 2011. This study revealed considerable variation in survival rates between hospitals, primarily attributed to differing practices regarding active treatment (Rysavy et al., 2015). These discrepancies create complex ethical dilemmas concerning treatment decisions and resource allocation. Critics argue that economic factors should never influence the assessment of human life's fundamental worth.

Survival is just one aspect of overall outcomes for infants born extremely premature. Among those who survive, the rate of neurodevelopmental impairment is significant. Research from Japan indicates that 50–57% of infants born at 22–23 weeks gestation experienced moderate to severe neurodevelopmental impairment by the age of 3 (Ishii et al., 2013). In a large cohort study conducted in the United States, the rates of such impairments ranged from 28–36% for infants born at 22–24 weeks when assessed at 18–26 months (Adams-Chapman et al., 2018). These figures vary considerably depending on gestational age and the methods used for assessment. The risk of cerebral palsy is notably high for infants born at 22–24 weeks, who face a 47 times greater risk compared to term infants (Chen et al., 2021). Recent studies have suggested that while the rates of severe cerebral palsy are decreasing, there is an increase in milder forms of impairment. Overall, however, the rates of moderate to severe neurodevelopmental impairment have seen little improvement, despite advancements in survival rates (Adams-Chapman et al., 2018; Kono et al., 2018). These medical advancements come with significantly higher healthcare costs and increased resource usage. Critics are concerned that frameworks focused on quality of life could influence important decisions

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direct intervention; (iii) palliative sedation administers medication to relieve suffering, which may unintentionally shorten life (Verhagen & Sauer, 2005; Soltani & Bazmi, 2020).

regarding healthcare funding, insurance eligibility, and research priorities, especially in systems with limited resources.

The conversation surrounding infanticide has important implications for disability rights and advocacy. Prominent organizations within this movement have consistently opposed Singer's position, arguing that it reinforces negative stereotypes about disability and undermines efforts to achieve full inclusion and equal treatment for individuals with disabilities (Asch, 2001; Hopwood, 2016; Booth, 2018). Advocates stress that judgments about quality of life often stem from misconceptions about disability. They contend that with appropriate societal support and recognition, even individuals with severe impairments can lead meaningful lives (Parens & Asch, 2000; Asch, 2001).

Contemporary developments and future directions

Recent advances in neonatal intensive care have complicated the debate around infanticide due to paradoxical developments. On one hand, survival rates for severely ill newborns have improved dramatically; on the other hand, neurodevelopmental outcomes have shown only limited progress (Li et al., 2024; Adams-Chapman et al., 2018; Ishii et al., 2013). These advancements challenge both Singer's utilitarian approach and traditional viewpoints by creating situations where survival is possible, but the quality of life remains uncertain. Emerging technologies continue to expand the boundaries of viability for premature infants, but access to these technologies is uneven on a global scale, and their ability to ensure meaningful outcomes is still debated. This creates another paradox: successful neonatal interventions may only delay end-of-life dilemmas rather than resolve them. Children with severe disabilities often face difficult treatment decisions throughout their childhood and adolescence.

Technological advances necessitate a continuous reassessment of protocols like the Groningen Protocol. However, significant uncertainty in prognostic outcomes complicates these evaluations. Individual infants exhibit considerable variation in their neurodevelopmental trajectories, making it challenging to accurately predict long-term outcomes, especially at the margins of viability, where treatment decisions become highly contested (Adams-Chapman et al., 2018; Kono et al., 2018). This uncertainty undermines utilitarian calculations that rely on dependable predictions and complicates quality-of-life judgments when prognoses remain probabilistic rather than definitive. As Kittay and Asch have pointed out, quality-of-life assessments often reflect ableist assumptions about what constitutes a valuable life, rather than objective medical realities (Asch, 2001; Kittay, 2005). When these biased social assumptions are combined with prognostic uncertainty at 22–25 weeks of gestation (Li et al., 2024; Adams-Chapman et al., 2018; Ishii et al., 2013), along with the documented wide variance in actual outcomes, Singer's cost-benefit analyses may become empirically unreliable. They can be based on outdated outcome data and socially constructed notions of acceptable quality, rather than merely being normatively controversial.

Global disparities in access to neonatal care exacerbate significant challenges in infant survival. Research shows that survival rates for extremely preterm infants are significantly higher in high-income countries compared to low- and middle-income countries, with disparities reaching threefold differences for infants born at 24–25 weeks of gestation (Li et al., 2024). This discrepancy raises questions about the applicability of ethical frameworks, such as those proposed by Singer, which are primarily developed in resource-rich environments. It prompts us to consider whether these frameworks, based on access to advanced medical interventions, can be universally applied, and whether assessments of quality of life are valid in vastly different resource contexts.

Additionally, the growing availability and precision of prenatal genetic testing have shifted some moral debates from the topic of infanticide to that of selective abortion. Conditions that might previously have led to infanticide decisions can now be identified before birth, allowing parents to make informed reproductive choices (Parens & Asch, 2000). This shift has complex implications for the infanticide debate, raising concerns about the consistency of moral reasoning that accepts prenatal selection while rejecting postnatal infanticide (Steinbock, 2011).

Emerging ethical paradigms aim to find a balance between Singer's utilitarian framework and traditional views on the sanctity of life. The capabilities approach, developed by philosophers like Martha Nussbaum, focuses on the potential for human flourishing rather than merely current cognitive abilities. This shift emphasizes developmental possibilities and the importance of social support structures (Nussbaum, 2000). Similarly, relational frameworks question individualistic approaches by grounding moral status in caring relationships and social connections, rather than solely in isolated cognitive abilities (Kittay, 2005).

The intersection of medical, technological, and philosophical developments suggests that future debates will require more nuanced approaches. These approaches must account for both the expanding possibilities of therapy and our evolving understanding of moral status. The challenge for contemporary bioethics is to develop frameworks that can effectively guide decision-making in increasingly complex clinical situations while maintaining coherent philosophical foundations.

Analysis and critical evaluation

Singer's utilitarian perspective on infanticide presents philosophical merits that contribute to its ongoing significance in bioethical discussions. One of the primary strengths of this framework is its coherent and rigorous approach to navigating morally complex decisions, emphasizing empirical criteria over personal intuitions or traditional conventions. By focusing moral evaluation on cognitive function and weighing suffering against well-being, this approach offers a rational basis for ethical decisions that can be consistently applied across various clinical scenarios (Rachels, 1986). Furthermore, Singer's viewpoint recognizes the reality of human suffering and the importance of quality-of-life considerations in medical decision-making. In situations where continued life would result in only pain and suffering, with no hope for improvement, the utilitarian framework provides a compelling justification for ending life – one that resonates with many people's intuitions (Kuhse & Singer, 1985).

Despite its philosophical sophistication, Singer's position faces significant criticisms that challenge its practical applicability and moral acceptability. The most fundamental criticism concerns the arbitrary nature of cognitive criteria for determining moral status. Critics argue that there is no consistent way to identify which cognitive capacities are necessary for personhood or when they develop sufficiently to warrant moral protection (Warren, 1997). The replaceability argument, in particular, is criticized for commodifying human life and for its implications on how we value individuals with disabilities. The notion that one life can be replaced by another appears to violate basic intuitions about the uniqueness and irreplaceability of individual persons (Kagan, 1998).

The practical limitations of Singer's framework become evident in concrete clinical scenarios. Consider a 23-week-old infant born following severe maternal hemorrhage. Brain imaging may suggest extensive injury, yet some infants with similar presentations survive with minimal impairment while others develop severe cerebral palsy. Singer's utilitarian approach relies on reliable outcome predictions, but it falters when outcomes are genuinely uncertain. While the framework provides clarity in hypothetical cases with specified outcomes, it struggles in actual neonatal care. Though Singer prompts explicit consideration of suffering and quality of life over reflexive maximal intervention, he misleadingly implies a certainty that medicine does not offer. His cognitive criteria are too rigid for the unpredictable landscape of periviable care, where individual trajectories frequently deviate from statistical expectations.

Additionally, the debate surrounding infanticide raises methodological questions about bioethical reasoning. Singer's utilitarian methodology often employs intuitive hypotheticals and abstract thought experiments as tools for moral analysis; however, critics argue that these methods may inadequately reflect the complex realities faced in clinical contexts and broader societal settings (Arras, 1991). This epistemic tension—between philosophical abstraction and empirical complexity—is especially prominent in discussions about neonatal ethical decision-making. While Singer's theoretical claims are compelling in normative philosophy, applying them to real-life cases involving medically vulnerable infants and emotionally distressed families introduces elements that extend beyond purely analytical frameworks. This challenges the adequacy of philosophical models that are disconnected from contextual sensitivities (Caplan, 1992).

Conclusion

The ongoing debate over infanticide in bioethics is one of the most challenging and controversial issues in modern moral philosophy. Singer's utilitarian approach questions traditional assumptions regarding human dignity and the value of life, which form the basis of both classic moral systems and contemporary disability rights advocacy. Instead of dismissing human dignity as a moral concept, Singer argues that traditional appeals to dignity are often too abstract to effectively guide specific clinical decisions, especially for newborns who lack the cognitive capacities typically associated with personhood. Critics point out, however, that Singer's own reliance on hypothetical scenarios and utilitarian calculations is similarly abstract.

A critical examination of his position, along with perspectives from philosophers like Michael Tooley and Jeff McMahan, reveals the logical implications of cognitive-centric accounts of moral status. While these frameworks are helpful in developing systematic methodologies for resolving ethically challenging dilemmas, they often lead to conclusions that many find morally troubling, especially when applied to vulnerable individuals.

Counterarguments rooted in deontological ethics and natural law traditions highlight a significant philosophical divide concerning the foundation of human moral worth. While Singer bases moral status on demonstrable cognitive competencies, his critics uphold a view of intrinsic human dignity that exists independently of functional attributes. The practical implications of these theoretical debates, as illustrated by the Groningen Protocol, underscore the real-world significance of philosophical positions on infanticide, all while striving to provide compassionate end-of-life care within ethical boundaries.

The societal implications of this debate extend beyond individual clinical decisions. They encompass broader concerns regarding distributive justice, disability rights, and differing normative visions of society. Recent developments in neonatal care and prenatal diagnosis complicate the moral landscape further, creating new therapeutic possibilities while raising additional ethical questions. The emergence of alternative ethical frameworks indicates that new approaches are needed to address the complex moral issues surrounding infanticide.

The discussion on infanticide within bioethics highlights fundamental disagreements regarding the nature of human morality and the foundation of human dignity. While Singer's utilitarian approach offers useful analytical tools, the ongoing opposition suggests that any future agreement must align normative philosophical theories with their practical ethical implications. As medical technologies progress and societal attitudes towards disability change, the challenging questions posed by Singer's views are likely to continue being significant issues in bioethics, clinical practice, and social policy.

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References

ADAMS-CHAPMAN, I., HEYNE, R. J., DEMAURO, S. B., HINTZ, S. R., PAPPAS, A., HIGGINS, R. D., VOHR, B. R., PERALTA-CARCELEN, M., WILSON-COSTELLO, D. E., EVANS, P. W., MYERS, G. J., GOLDSTEIN, R. F., MCGOWAN, E. C., FULLER, J., GORDON, P. V., ACARREGUI, M. J., YOLTON, K. & DAS, A. (2018): Neurodevelopmental impairment among extremely preterm infants in the Neonatal Research Network. In: *Pediatrics*, 141(5), e20173091.

ARRAS, J. D. (1991): Getting down to cases: The revival of casuistry in bioethics. In: *Journal of Medicine and Philosophy*, 16(1), pp. 29–51.

ASCH, A. (2001): Disability, bioethics, and human rights. In: G. L. Albrecht, K. D. Seelman & M. Bury (eds.): *Handbook of disability studies*. Thousand Oaks: Sage Publications, pp. 297–326.

BENTHAM, J. (1789/1996): *An introduction to the principles of morals and legislation*. Cambridge: Cambridge University Press.

BOOTH, K. (2018): What I learned about disability and infanticide from Peter Singer. In: *Aeon*, January 10, 2018. [online] [Retrieved July 30, 2025]. Available at: https://aeon.co/ideas/what-i-learned-about-disability-and-infanticide-from-peter-singer

CAPLAN, A. L. (1992): *If I were a rich man could I buy a pancreas? And other essays on the ethics of health care*. Bloomington: Indiana University Press.

CAVALIERE, G. (2018): Looking into the shadow: the eugenics argument in debates on reproductive technologies and practices. In: *Monash bioethics review*, 36(1–4), pp. 1–22.

CHEN, R., SJÖLANDER, A., JOHANSSON, S., LU, D., RAZAZ, N., TEDROFF, K., VILLAMOR, E. & CNATTINGIUS, S. (2021): Impact of gestational age on risk of cerebral palsy: Unravelling the role of neonatal morbidity. In: *International Journal of Epidemiology*, 50(6), pp. 1852–1863.

CHERN, J. P. S., LIN, K. H., SU, Y. N., LU, M. Y., JOU, S. T., LIN, D. T., WANG, S. C. & LIN, K. S. (2006): Impact of a national beta-thalassemia carrier screening program on the birth rate of thalassemia major. In: *Pediatric Blood & Cancer*, 46(1), pp. 72–76.

DARWIN, C. (1859/2019): *The Origin of Species.* London: Vintage Classics.

FINNIS, J. (2011): *Natural law and natural rights* (2nd ed.). Oxford: Oxford University Press.

GEORGE, R. P. (2002): *The clash of orthodoxies: Law, religion, and morality in crisis*. Wilmington: ISI Books.

GIUBILINI, A. & MINERVA, F. (2013): After-birth abortion: Why should the baby live? In: *Journal of Medical Ethics*, 39(5), pp. 261–263.

HOPWOOD, M. (2016): 'Terrible Purity': Peter Singer, Harriet McBryde Johnson, and the Moral Significance of the Particular. In: *Journal of the American Philosophical Association*, 2(4), pp. 637–655.

HUBBARD, R. (2006): Abortion and disability: Who should and should not inhabit the world? In: L. J. Davis (ed.): *The disability studies reader* (2nd ed.). New York: Routledge, pp. 93–104.

ISHII, N., KONO, Y., YONEMOTO, N., KUSUDA, S. & FUJIMURA, M. (2013): Outcomes of infants born at 22 and 23 weeks' gestation. In: *Pediatrics*, 132(1), pp. 62–71.

JOTKOWITZ, A. & GLICK, S. (2006). The Groningen Protocol: another perspective. In: *Journal of Medical Ethics*, 32(3), pp. 157–158.

KACZOR, C. (2010): *The ethics of abortion*: *Women's Rights, Human Life, and the Question of Justice.* New York: Routledge.

KAGAN, S. (1998): *Normative ethics*. Boulder: Westview Press.

KANT, I. (1785/1998): *Groundwork of the metaphysics of morals*. Cambridge: Cambridge University Press.

KEVLES, D. J. (1995): *In the name of eugenics: Genetics and the uses of human heredity*. Cambridge: Harvard University Press.

KITTAY, E. F. (2005): At the margins of moral personhood. In: *Ethics*, 116(1), pp. 100–131.

KOHLBERG, L. (1981): *The Philosophy of Moral Development: Moral Stages and the Idea of Justice: 1.* New York: HarperCollins.

KON, A. A. (2007): Neonatal euthanasia is unsupportable: The Groningen Protocol should be abandoned. In: *Theoretical Medicine and Bioethics*, 28(5), pp. 453–463.

KONO, Y., YONEMOTO, N., NAKANISHI, H., KUSUDA, S. & FUJIMURA, M. (2018): Changes in survival and neurodevelopmental outcomes of infants born at <25 weeks' gestation: A retrospective observational study in tertiary centres in Japan. In: *BMJ Paediatrics Open*, *2*(1), e000211.

KORSGAARD, C. M. (1996): *Creating the Kingdom of Ends.* Cambridge: Cambridge University Press.

KUHSE, H. & SINGER, P. (1985): *Should the baby live? The problem of handicapped infants*. Oxford: Oxford University Press.

LI, Y. X., HU, Y. L., HUANG, X., LI, J., LI, X., SHI, Z. Y., YANG, R., ZHANG, X., LI, Y. & CHEN, Q. (2024): Survival outcomes among periviable infants: a systematic review and meta-analysis comparing different income countries and time periods. In: *Frontiers in Public Health*, 12, pp. 1–15.

MANNINEN, B. A. (2006): A case for justified non-voluntary active euthanasia: Exploring the ethics of the Groningen Protocol. In: *Journal of Medical Ethics*, 32(11), pp. 643–651.

MCMAHAN, J. (2002): *The ethics of killing: Problems at the margins of life*. Oxford: Oxford University Press.

MECHMANN, E. (2023): *Stealth eugenic euthanasia of disabled infants*. In: *The Human Life Review*, April 25, [online] [Retrieved July 30, 2025]. Available at: https://humanlifereview.com/stealth-eugenic-euthanasia-of-disabled-infants/

MORRIS, J. K. & ALBERMAN, E. (2009): Trends in Down's syndrome live births and antenatal diagnoses in England and Wales from 1989 to 2008: analysis of data from the National Down Syndrome Cytogenetic Register. In: *BMJ*, 339, b3794.

NATOLI, J. L., ACKERMAN, D. L., MCDERMOTT, S. & EDWARDS, J. G. (2012): Prenatal diagnosis of Down syndrome: a systematic review of termination rates (1995–2011). In: *Prenatal Diagnosis*, 32(2), pp. 142–153.

NUSSBAUM, M. C. (2000): *Women and human development*. Cambridge: Cambridge University Press.

O'NEILL, O. (1986): *Faces of hunger: An essay on poverty, justice and development*. London: Allen & Unwin.

O'NEILL, O. (1990): *Constructions of reason: Explorations of Kant's Practical Philosophy*. Cambridge: Cambridge University Press.

PARENS, E. & ASCH, A. (eds.) (2000): *Prenatal testing and disability rights*. Washington: Georgetown University Press.

PIAGET, J. (1952/1974): *The Origin of Intelligence in Children.* Madison: International Universities Press.

PORTER, L. (2013): Abortion, infanticide and moral context. In: *Journal of Medical Ethics,* 39(5), pp. 350–352.

RACHELS, J. (1986): *The end of life: Euthanasia and morality*. Oxford: Oxford University Press.

RINI, R. A. (2013): Of course the baby should live: Against 'after-birth abortion'. In: *Journal of Medical Ethics,* 39(5), pp. 353–356.

RONEN, G. M., MEANEY, B., DAN, B., ZIMPRICH, F., STÖGMANN, W. & NEUGEBAUER, W. (2009): From Eugenic Euthanasia to Habilitation of "Disabled" Children: Andreas Rett's Contribution. In: *Journal of child neurology*, 24, pp. 115–127.

RYSAVY, M. A., LI, L., BELL, E. F., DAS, A., HINTZ, S. R., STOLL, B. J., VOHR, B. R., CARLO, W. A., SHANKARAN, S., WALSH, M. C., TYSON, J. E., COTTEN, C. M., SMITH, P. B., MURRAY, J. C., COLAIZY, T. T., BRUMBAUGH, J. E., HIGGINS, R. D. & EUNICE KENNEDY SHRIVER NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT NEONATAL RESEARCH NETWORK. (2015): Between-hospital variation in treatment and outcomes in extremely preterm infants. In: *The New England Journal of Medicine*, 372(19), pp. 1801–1811.

SINGER, P. (1975): *Animal liberation*. New York: Harper.

SINGER, P. (1979/2011): *Practical ethics* (3rd ed.). Cambridge: Cambridge University Press.

SOLTANI, G. M. & BAZMI, S. (2020): Neonatal end-of-life decisions and ethical perspectives. In: *Journal of medical ethics and history of medicine*, 13(19), pp. 1–10.

ŠPOLJAR, D., JANKOVIĆ, S., VRKIĆ, D., MCNAMARA, G., ĆURKOVIĆ, M., NOVAK, M., FILIPOVIĆ-GRČIĆ, B., GROSEK, S., GASTMANS, C., GORDIJN, B., BOROVEČKI, A. (2025): Ethics and end-of-life in pediatric and neonatal ICUs: a systematic review of recommendations. In: *BMC Palliat Care*. 24(36).

STEINBOCK, B. (2011): *Life before birth: The moral and legal status of embryos and fetuses* (2nd ed.). Oxford: Oxford University Press.

THOMAS, G. M. (2016): Keeping the backdoor to eugenics ajar? Disability and future prenatal screening. In: *AMA Journal of Ethics*, 18(4), pp. 406–415.

TOLLEFSEN, C. (2008): *Biomedical research and beyond: Expanding the ethics of inquiry*. New York: Routledge.

TOOLEY, M. (1985): *Abortion and infanticide*. Oxford: Oxford University Press.

VAN DER HEIDE, A., VAN DER MAAS, P. J., VAN DER WAL, G., DE GRAAFF, C. L. M., KESTER, J. G. C., KOLLÉE, L. A. A., DE LEEUW, R. & HOLL, R. A. (1997): Medical end-of-life decisions made for neonates and infants in the Netherlands. In: *The Lancet*, 350(9073), pp. 251–255.

VANDEN, E. S. & MARTINOVICI, D. (2013): Neonatal euthanasia: A claim for an immoral law. In: *Clinical ethics*, 8(2–3), pp. 75–84.

VERHAGEN, A. A. E., DORSCHEIDT, J. H. H. M., ENGELS, B., HUBBEN, J. H. & SAUER, P. J. (2009): End-of-life decisions in Dutch neonatal intensive care units. In: *Archives of Pediatrics and Adolescent Medicine*, 163(10), pp. 895–901.

VERHAGEN, E. & SAUER, P. J. (2005): The Groningen Protocol: Euthanasia in seriously ill newborns. In: *New England Journal of Medicine*, 352(10), pp. 959–962.

VERHAGEN, E. A. A. & LANTOS, J. D (2024): The Dutch model for regulating paediatric euthanasia. In: *Archives of Disease in Childhood*, 110(5), pp. 397–399.

VRAKKING, A. M., VAN DER HEIDE, A., ONWUTEAKA-PHILIPSEN, B. D., KEIJ-DEERENBERG, I. M., VAN DER MAAS, P. J. & VAN DER WAL, G. (2005): Medical end-of-life decisions made for neonates and infants in the Netherlands, 1995–2001. In: *The Lancet*, 365(9467), pp. 1329–1331.

WARREN, M. A. (1997): *Moral status: Obligations to persons and other living things*. Oxford: Oxford University Press.