# Pharma providing drugs for lethal injections during legal executions in the US

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## 1 Introduction

Many pharmaceutical companies are cutting off the supply of drugs to the US government that are used for lethal injections during executions. Given the government's dependence on pharmacies for their executions, said action could be deemed a way to protect humans' right to live. However, there have been numerous occasions where the withdrawal of pharma led the government to turn to less reliable medical resources or alternative execution methods, which arguably made the process more painful for the ones involved. This paper aims to investigate from a number of acknowledged ethical perspectives the following research question: "Is it ethically justifiable for pharma to supply drugs for legal executions in the US?"

# 2 Background

Any US state legislature may impose the death penalty for capital offenses. The American Supreme Court ruled that the death penalty does not violate the Eighth Amendment's ban on cruel and unusual punishment and it never declared an execution method unconstitutional, contrary to some state courts (Legal Information Institute n.d.). Lethal injection is by far the most frequently used means of execution in the US, with 1363 executions since 1976, followed by electrocution (163), lethal gas (11), hanging (3) and firing squad (3), whereas the numbers of states in which said methods are authorised are 31, 8, 7, 3 and 4, respectively. This dominance of lethal injection as the conventional execution method, may have prevented the Court from judging alternative methods (Death Penalty Information Center 2022).

There are numerous reasons to perceive lethal injection as a relatively humane and bearable execution method, as it avoids many negative effects of alternatives: physical disfigurement and bleeding during beheading, the smell of burning flesh in electrocutions, unpleasant sights and sounds in gass chambers and in hangings as well as unintentional evacuation and urination (Amnesty International 2021).

However, the conventional view of lethal injection implying a fairly painless death is questioned by Zimmers TA et al. (2007), who concluded that the lethal injection protocols may not appropriately cause inmates to die without experiencing unintended pain, particularly in case thiopental and potassium chloride fail to cause anesthesia. There have indeed been occasions on which lethal injection did not function properly. For instance, in 2016, Dr Joel Zivot, an anaesthesiologist at Emory University Hospital in Atlanta, US, noticed that the lungs of executed individuals were substantially heavier than they should be, whilst examining their autopsy reports. Together with colleague Mark Edgar, Zivot found that the inmates' lungs were filled with blood, indicating pulmonary oedema, a condition that has the potential to induce a feeling of suffocation. They concluded that pulmonary oedema took place in about three quarters of the three dozen reports they reviewed. An extensive investigation by NPR in 2021 revealed that 84% of over 200 lethal injection autopsies displayed indicators of pulmonary oedema. "In a person who has any sense of themselves, the act of having one's lungs filled with fluid would be exceedingly uncomfortable and frightening", Zivot claimed. To paralyse the muscles of one's lungs, vecuronium bromide is a convential drug. Someone not completely unconsciousness would experience suffocation. Finally, potassium chloride is used to stop the heart. Without adequate sedation, a severe burning sensation would be caused (Jimenez 2021).

After several flawed lethal injections involving the drug midazolam in 2014, Oklahoma death row inmates tried but failed to remove it from lethal injection procedures (Jimenez 2021). Midazolam is still used, including in the execution of John Grant in 2021, who vomited for minutes after the

administration of said sedative. Witness Sean Murphy claimed that "Grant's body shook and jerked nearly two dozen times before vomit spurted from his mouth and spilled down his neck" (Peiser 2021).

A unique characteristic of lethal injection is that it requires physicians. It is insinuated that said involvement was intentional; their presence may improve the public image of executions as a responsible procedure (LeGraw & Grodin 2002).

The medical community severely opposes involvement of its members in lethal injections. The medical profession is monitored by licensing boards and professional organisations. Disciplinary actions by said groups can be shared with the National Practitioner Data Bank (NPDB), whose information can lead hospital staffs to deny practice rights of doctors, medical societies to revoke membership and licensing boards to withdraw medical licenses. Issues regarding ethical violations generally do not lead to radical measures such as withdrawals of physicians' licenses, due to the legitimacy of executions (Death Penalty Information Centre 2022).

Medical societies are generally free to act on ethical violations and are more inclined to publicly speak out against physicians who violate their ethical rules. For instance, in August 2006, the American Society of Anesthesiologists published a statement concerning lethal injection, in which the society's president encouraged its members to refuse participation (American Society of Anesthesiologists 2006). The American Board of Anaesthesiologists voted in 2010 to withdraw the certification of anaesthesiologists assisting in lethal injection (Jimenez 2021). Furthermore, the American Medical Association (AMA), of which 15% of doctors were members in 2011 (Collier 2011), forbids participation of physicians in capital punishment. The AMA's bylaws enable its Council on Ethical and Judicial Affairs (CEJA) to take action in case of ethical offenses. However, the CEJA only withdrew one physician's AMA membership for participating in executions.

Many pharma companies have taken measures to ensure that their products could not be made available for capital punishment. Pfizer was the last federally approved manufacturer to supply its products for lethal injections, until it announced a halt on said supply in 2016. The death penalty is banned in the European Union (EU) and the EU actively opposes capital punishment. In 2011, the EU implemented strict export controls on execution drugs to obstruct their supply to the US for lethal injections. In 2013, the number of executions in the US dropped to 39, the lowest number since 1994. Hospira, the last US manufacturer of sodium thiopental, used for lethal injections, halted its production in 2011. The company experienced pressure from Italian authorities to guarantee manufacture of said drug in Italy conditional on it not being utilised for executions in the US. The US is on its turn rather obscure regarding its acquisition of the drugs used in executions, as no less than 13 states have laws in place to maintain the anonymity of their suppliers (Jimenez 2021).

Shortages due to said anti-execution initiatives have resulted in states acquiring the needed drugs illegitimately from less reputable manufacturers overseas, and experiment with alternative drugs and untested combinations (Jimenez 2021), which jeopardises the reliability of lethal injections. Some states even started allowing the use of alternative methods if lethal injection is not feasible. On the other hand, controversies around the selected execution method have stalled executions in many states, which has played a role in the decreasing use of the death penalty. As states are forbidden to acquire execution drugs from foreign suppliers and pharma companies under increased scrutiny, the US could run out of execution drugs on the long run, which would make it increasingly difficult for the US government to uphold capital punishment.

# 3 Moral Aspects

Pharma companies publicly oppose the death penalty (just like the EU) as it violates the human right to live in their view, which is why they refuse to supply drugs for the executions in an attempt to protect said value. When a death sentence has been declared, the US government wants to make the execution as humane and bearable as possible, not only for the inmate, but also their relatives, as well as executioners and other staff members, which it pursues by via lethal injections. The government thus stands for the value a humane death with dignity. It now becomes evident that we face a moral dilemma where each action favors one of the ethical values at stake over the other: supplying the needed drugs means facilitating the termination of human life, whereas refusing to supply can lead to the executed receiving a less humane and dignified death. The dilemma concerning the decision of pharma to comply to the government's request inevitably involves judgement on the existence of the death penalty, as the publicly stated reason why some pharma companies do not wish to comply is because they are fundamentally against the death penalty, whereas certain US states do deem it a justifiable course of action under certain circumstances. In addition, the stakeholders of the matter have been identified at this point: the US government, pharma, death row inmates, their relatives and the personnel involved.

#### 4 Discussion

#### Utilitarian Perspective

Utilitarians are generally not fundamentally against the death penalty, as the greatest happiness of the greatest number is their supreme principle of morality (Sandel 2010), meaning that whether they deem capital punishment and its facilitation by pharma moral, depends on the associated expected change in overall utility, resulting from a holistic cost-benefit analysis, which we attempt to sketch next.

The inmates executed will no longer enjoy pleasures, relatives will typically suffer pain due to their loss, just like other witnesses of the executions, as the American Civil Liberties Union (ACLU) (2012) revealed how even experienced prison guards and medical assistants are shaken and psychologically affected by observing a human being's execution.

However, executions prevent criminals from harming others again (which they could still do in jail in case of life imprisonment) and imposing further societal costs. Moreover, it is often argued that the death penalty deters capital crimes, which trivially prevents pain. Hence, executions could be particularly favourable for a utilitarian if they deter murders, as this crime deprives victims of any future pleasures.

Nonetheless, the claim that capital punishment deters crime, has been subject to many critics. According to the (ACLU) (2012), the death penalty is not an effective deterrent for several reasons, one being a lack of consistency; only a small fraction of murderers is sentenced to death, of which many are not actually executed. In the mid-1990s, only 3 percent of convicted murderers, were sentenced to death. In the following decade, this percentage decreased further. Solving this inconsistency by sentencing more convicted murderers to death and executing a greater fraction using obligatory capital punishment legislation is unconstitutional since 1976 (Woodson v. North Carolina, 428 U.S. 280).

ACLU further states that capital crimes are often not rationally contemplated in advance, since most are committed spontaneously in a poor emotional state, often while drunk and by the

mentally-ill, leaving little room for thoughts regarding legal consequences, making capital punishment mostly irrelevant. When malice aforethought is present, the perpetrator usually expects to avoid legal punishment, including the death penalty, making its presence of limited discouragement.

Empirical research supports the claim that the death penalty is an insufficient deterrent. For instance, from l990 to l994, the homicide rates in Illinois, where the death penalty was practised, were twice as high as those in Wisconsin and Iowa, neighbouring states where the death penalty was abolished. In the period 2000-2010, the murder rate in states authorising capital punishment was 25-46% higher than in states who did not. In addition, the data suggest that the safety of prison personnel and inmates is not improved by the death penalty: from 1992 to 1995, 176 prisoners were murdered by other inmates. 84% of those murders took place in areas where capital punishment is practised. In said period, 2% of assaults on prison staff by inmates occurred in areas where the death penalty is abolished (ACLU 2012).

Crime experts also generally question the effectiveness of capital punishment as a deterrent; Radelet and Akers (1996) concluded from their empirical study, involving surveys among American societies on criminology, that the country's top criminologists agree that professional research has shown the limited ability of the death penalty to reduce criminal violence.

Another important factor is the severe lengthening time that inmates spend on death row, typically exceeding ten years (Death Penalty Information Center n.d.), due to all the mandatory procedures in place in capital cases to ensure a fair trial, which make them much more lengthy and costly than trials without involvement of capital punishment (ACLU 2012). This argument was supported by Breyer (2016), who considers a death sentence to be a sentence of extremely long detention, which typically involves years of solitary confinement before a potential execution, where inmates await their death in isolation, leading to severe psychological problems, the "Death Row Syndrome", leading to much additional pain. Justice Breyer labels this cruel punishment, conflicting with the Eighth Amendment. ACLU insists that said reducers of the utility attained by employing capital punishment, can only be avoided by dropping legal procedures in place to protect the constitutional rights of suspects, which is in no way a feasible option.

As suggested by said lengthening of trials where capital punishment is involved, the claim that life imprisonment imposes a higher societal cost than execution, is certainly objectionable. This is due to Litigation costs, including the time of judges, prosecutors and defenders, additional costs of briefs, death row accommodation and extra security (ACLU 2012). If New York employed the death penalty again, the cost of a capital trial would already largely exceed the cost of life imprisonment, according to N.Y. State Defenders Assn. (1982). Florida estimated the total cost of an execution as \$3.2 million, six times the cost of life imprisonment (Von Drehle 1988). Numerous other states investigated the finances associated with the death penalty, and the same anti-execution favouring conclusion was reached continuously (ACLU 2012).

We conclude that employing capital punishment is not moral from the utilitarian framework, but one must realise that the death penalty is unlikely to be abolished if pharma stops delivering execution drugs; as discussed, the US government reacts to shortages by turning to less reliable suppliers and alternative methods, which are deemed more unpleasant. This could make the executions more painful for the people directly involved in the executions and the process would become less efficient for the government. In that sense, having reliable pharmaceutical companies as deliverers could make executions less unpleasant for everyone involved.

However, given the evident potential of anti-execution moves to reduce the number of executions, increasing overall happiness greatly based on said consequences, utilitarians would likely

favour the refusal of pharma to supply the execution drugs. Moreover, utilitarians inspired by John Stuart Mill, who emphasises long term effects on the overall happiness, might argue that executions approved by the government devalue human lives and make citizens think that it is appropriate to end someone's life under certain circumstances, which could stimulate homicides, the "brutalization hypothesis" (King 1978). In addition, if pharmaceutical companies facilitate executions, Millsians might worry that their public image and trust from citizens might get damaged on the long term. These negative effects could lead to a less happy society in the future, making Millsians support said refusal of pharma too. Finally, it is noteworthy that if supplying the execution drugs is the action that maximises overall happiness, then utilitarians will deem an agent who (deliberately) pursues that action moral, regardless of the underlying motives, as it is the intention that matters for utilitarians.

### Kantian Perspective

Immanuel Kant personally favoured the death penalty (only) for the crime of murder (Potter 2002), but we will provide our own ethical assessment of the matter using his ethical framework. According to that, acting morally is done by acting based on the categorical imperative, which entails that an action is taken, if it is considered good in itself, regardless of the circumstances (Sandel 2010). Kant distinguishes two formulations of said imperative. The first prompts decision makers to universalise their maxim to see if a contradiction arises in case everyone would act accordingly. Pharma's maxim could be to not supply drugs knowing that they will be used for lethal injections, to obstruct the executions. Since many states only authorise lethal injection as an execution method, if all pharma companies refuse to provide the drugs, including the smaller ones that are currently turned to in case of shortages, said states will face severe obstructions concerning their executions, which was pharma's goal, meaning that universalising the maxim does not seem to lead to a contradiction. However, in this case, the aforementioned allowance of alternative methods if lethal injection is infeasible, might be granted more often by states, in which case the maxim could be realised to a lesser extent, though as said, this development and the accompanying controversies and delays have reduced the use of capital punishment, which makes pharma's strategy effective.

One might wonder if pharma's aforementioned end is moral or if capital punishment can be justified. The Kantian view on executions can be partially understood using the second formulation of the categorical imperative, which states: "Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end." (Kant 1785). This formulation suggests that when executing an inmate for the sake of retaliation, deterrence or some other interest of the US government, the inmate is used merely as a means for said ends and failure to treat their humanity as an end occurs, conflicting with said formulation. One might argue that the inmates are simultaneously treated as ends when carrying out executions in the most dignified way, via lethal injections. However, executions remain a clear violation of inmates' human dignity which should be respected unconditionally according to Kant and in combination with the aforementioned risk of botched lethal injections and discriminatory basis of many executions, which contrasts the Kantian idea of abstracting away from individuals' particularities to find moral principles, the (most) moral course of action would entail opposing this injustice by refusing its facilitation via drugs.

Kantian theory emphasises the importance of an agent's underlying motives for ethical evaluation, meaning that refusal of pharma companies to supply execution drugs would only have moral worth if the agents act out of (moral) duty based on the categorical imperative, not merely to uphold their reputation or to avoid punishment by for instance the EU, as seen in section 2, since

these latter motives would be based on the hypothetical imperative as introduced by Kant (1785), which favours an action conditional on some particular goal that is consequently reached. Even refusing to supply the execution drugs solely in order to decrease the number of executions on the long run would not necessarily have moral worth within the Kantian framework, as depriving current death row inmates of arguably the most dignified execution for the benefit of future inmates would imply treating the former merely as a means to the benefit of the latter group and it would again be driven by the hypothetical imperative.

#### Aristotelian Perspective

At the core of Aristotle's views on ethics is the idea that justice is teleological and honorific: to decide which action is just, one needs to determine the telos (purpose, end) of the social institutions and practices involved and, additionally, deliberating a telos means arguing about what virtues said institutions or practices should promote and reward (Sandel 2010). The telos of pharmaceutical companies is arguably to provide drugs to help citizens combat medical conditions and to improve and promote public health, which they would thus not honour by facilitating executions.

A similar argument could be made regarding the physicians who would need to administer the drugs supplied by pharma during executions; Black and Sade (2008) concluded that when deliberating physicians' involvement in executions, one should consider their role in society, which is perceived as preventing and healing illness and minimising suffering (their telos), which requires trust, protected by ethical standards. Participation in terminating lives by lethal injection is hence deemed unethical as it conflicts with the physician's role, undermining trust. In addition, Black and Sade (2008) contrasted the telos of physicians with that of legislatures by adding that physicians should not be encouraged to violate ethical principles to solve issues arising from legal complications. This is instead the justice system's responsibility. This argument is strengthened by the fact that physicians take the Hippocratic Oath, which arguably forbids intentionally harming or killing a human being as part of the medical practice.

Besides the purpose of individuals and institutions, one could also deliberate the telos of medicine to determine whether its use in executions is ethically permissible. Zivot expresses an intuitive rejection of said possibility: "There's nothing in the package insert for midazolam or pentobarbital that describes how they should be used for execution – no one's making them for that purpose," he claimed. Zivot expressed a further concern regarding the telos of the medical practice by adding: "If a state chooses to execute, that's the state's prerogative – but the idea of using medicine here is trying to usurp and impersonate a medical practice," he insisted (Jimenez 2021).

According to Aristotle, justice is a matter of fit and, as described by Sandel (2010), coercion and resistance indicate an inappropriate fit of an individual to a given role. In our setting, there does seem to be a tendency of medical professionals to avoid having to administer lethal injections, as Kohler (2006) illustrates. Hence, the role of executioner does not seem suitable for physicians, even though they are the ones whose assistance is required to ensure the executions are carried out responsibly, which indicates that lethal injections and their facilitation by pharma could be seen as morally wrong from an Aristotelian point of view.

In order to holistically evaluate the dilemma, it is worth deliberating the morality of the death penalty from the Aristotelian perspective, in which justice means giving people what they deserve. The death penalty is irreversible, despite many innocent people receiving capital punishment; more than 184 death row inmates have been released because of innocence and others have been

executed despite serious doubts about their guilt (Amnesty International 2022). As opposed to life imprisonment, those who received capital punishment without deserving it, cannot be compensated afterwards, which poses a threat to said Aristotelian principle. Some argue that capital punishment is the only true retribution for murder, making it the punishment a rightfully convicted murderer deserves. However, murderers generally do not inform their victims regarding the exact date and form of their killing to then make them wait anxiously for it for years, meaning that capital punishment, which does take on said shape, would not be fully retributive and, along said line of reasoning, not what murderers deserve either (ACLU 2012).

One might also argue that capital punishment is a practice which discourages vice and encourages citizens to lead a good life of virtuous activity in accordance with reason as Aristotle envisioned, by preventing severe criminals from ever inflicting further harm to the community and discouraging crime among citizens due to the existence of capital punishment, thereby developing the right habits in citizens. However, as we concluded that the deterring function of capital punishment is rather limited and that executions approved by the government might devalue human life and normalise killings under certain circumstances among citizens, we believe that the government would be better able to fulfill its telos using life imprisonment.

# Rawlsian Perspective

Rawls proposed that the principles of a just and fair society should originate from a hypothetical social contract, which rational, self-interested citizens made in deliberation in a "veil of ignorance", ensuring they would not know any particularities regarding themselves (Sandel 2010). One might argue that, in such a setting, people would not favour the death penalty in the first place, as they would not want to risk being an (innocent) inmate (or having one as their relative) who receives capital punishment, no matter the crimes (allegedly) committed. In this case, citizens would naturally want to prevent pharma from facilitating the executions.

At the same time, rational and self-interested citizens would not want to fall victim to criminals. Kleven (2006) accordingly claimed that capital punishment for murders could be permissible from a Rawlsian perspective, as its first principle of justice requires each person to have an equal right to basic liberties, including the right not to be killed without just cause, meaning that Rawlsians should permit capital punishment in order to deter violations of that right in a sufficiently just society. However, as we concluded that the death penalty does not deter these violations more than life imprisonment, we do not support said argument in the practical context that we are interested in. Furthermore, the purpose of Rawls' veil of ignorance was to make sure principles of justice are not based on any particularities citizens have, but the literature suggests that capital punishment does discriminate based on these specificities: defendants with white victims were 97% more likely to get capital punishment than those with black victims (Pierce Radelet 2011) and about 90 percent of death row inmates could not afford a lawyer (ACLU 2012). Due to said arising inequalities based on factors that are morally arbitrary (race and financial position) according to Rawls (Sandel 2010), the death penalty remains hard to justify from his ethical perspective.

Nevertheless, if citizens behind the Rawlsian veil of ignorance were to permit the death penalty, we believe that they would want the basic liberties of the inmates being executed to be respected sufficiently (out of fear of becoming a member of this group) by making the process as bearable as possible. As discussed in ??, this would lead us to lethal injection using reliable drugs, made by pharmaceutical companies. Based on this reasoning, it would be morally justifiable for pharma to supply execution drugs (whilst making a profit), as it is indirectly to the benefit of the least

well off in society, in this case (potential) victims of the murderers in question, which would be in accordance with the difference principle (Sandel 2010).

## Libertarian Perspective

Libertarians, who favor unfettered markets, would generally argue that pharma companies should be able to decide who to sell their drugs to, as long as both parties consent, but in this case, the drugs in question are used for the termination of human lives, which violates the libertarian principle of self-ownership and the right to live.

However, according to Kleven (2006), libertarianism does not necessarily oppose capital punishment completely, since it fundamentally requires the government to protect people's right to live according to their own free choice, as long as they do not interfere with others' rights to do the same. If executing murderers would enhance people's right not to be murdered, then from a libertarian perspective, the death penalty is morally justifiable and in that case, so is the facilitation of executions by pharma. Our previous conclusions that capital punishment does not deter murder more than life imprisonment does and that the former could lead to the devaluation of human life and normalisation of killing in certain situations, imply that executing murderers does not protect the right not to be murdered. Moreover, capital punishment is a canonical example of a failed and expensive government initiative according to Cohen Steiker (2022), funded by tax payers, which could be seen to contradict the libertarian principle that the government should only impose taxes that are necessary to guarantee citizens their liberties and simultaneously enable them to live as they wish.

Nevertheless, libertarians might argue that pharma is simply selling its products on a free market via agreements of mutual consent, a practice they strongly promote, while the executions, whether they are ethical or not, are the responsibility of the US government, meaning that irrespective of the judgement rendered on the the way the government chooses to employ the obtained drugs, pharma's sales may be considered ethical based on said libertarian principle.

## 5 Conclusion

We have seen that sound arguments opposing capital punishment and its facilitation by pharma can be constructed from all considered ethical perspectives. Many depend on the academically supported assertion that capital punishment does not significantly deter crime relative to life imprisonment, as this had a major negative impact on the change in happiness associated with the pharmaceutical facilitation of executions which dictates the utilitarian standpoint against it, while a lack of deterrence meant that the violation of human rights of inmates caused by executions are not sufficiently accompanied with the protection of said rights among the rest of society, supporting the same standpoint among libertarians. Both the Rawlsian and Kantian views can be considered to oppose pharma supplying execution drugs unconditionally, the former because a ban on executions would likely be prescribed by citizens themselves in the Rawlsian veil of ignorance, and the latter because it contradicts the categorical imperative and thus fails to respect individuals' human dignity. Finally, Aristotelians are expected to take a similar stance as capital punishment is not deemed a way of politics to realise its aforementioned telos, in part due to said lack of deterrence and also because executions display the violence that the government should discourage among citizens. The Aristotelian perspective has a particularly sound argument against the involvement of the medical world in executions, as it undermines its organisations', individuals' and products' telos. The most appealing argument in favor of said supply of drugs by pharma relies on the libertarian idea that transactions based on agreements

of mutual consent are not unethical, which could possibly be applied even if a party uses the transaction to violate the liberties of citizens.

Interestingly, in case pharma were to provide drugs only for executions of murderers with few relatives, who are reasonably not expected to change their ways drastically in a positive sense, the basis for a moral justification could be stronger from a utilitarian point of view, as the expected pain and missed happiness caused by the execution would in that case be relatively small compared to the eliminated risk of repeated murder, the crime which generally decreases overall happiness the most. However, the other aforementioned arguments would still stand and thus even in that case, we would arrive at the consensus that it is not ethically justifiable for pharma to supply drugs for executions in the US, with possible objections from several perspectives. We thus encourage fellow researchers to shed more light on additional elements of the ethical perspectives.

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