

Obstacles to The Implementation of Chemical Castration for Perpetrators of Sexual Violence Against Children from A Medical Perspective

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Abstract : *This study analyzes the implementation of chemical castration as an additional punishment for child sexual abuse offenders in Indonesia (Law No. 17 of 2016) and its alignment with legal principles, utilitarian ethics, and medical ethics. Although intended as a deterrent and a means to prevent recidivism, empirical data indicate that sexual abuse rates have increased, and courts tend to avoid its application due to concerns over disproportionality and reduced rehabilitative potential. A normative-descriptive approach was employed, based on a literature review of laws and regulations, court decisions, academic journals, and related literature. Findings reveal that chemical castration imposes punishments disproportionate to the severity of the offense, fails to significantly reduce recidivism, and creates socio-economic burdens due to long-term side effects. Additionally, its implementation raises ethical conflicts for medical professionals, as the obligation to carry out court orders conflicts with the principles of non-maleficence and professional autonomy. The study concludes that chemical castration as an additional punishment is ineffective and introduces complex legal, social, and ethical challenges. Policy reevaluation, alternative restorative and rehabilitative measures, and harmonization between criminal law and medical ethics are recommended.*

Keywords : *Chemical Castration, Medical Ethics, Recidivism Prevention.*

Abstrak : *Penelitian ini menganalisis penerapan kebiri kimia sebagai pidana tambahan bagi pelaku kekerasan seksual terhadap anak di Indonesia (UU No. 17 Tahun 2016) dan kesesuaiannya dengan asas hukum, prinsip utilitarian, dan etika medis. Meskipun dimaksudkan sebagai sarana pencegahan residivisme, data empiris menunjukkan angka kekerasan seksual justru meningkat, dan putusan pengadilan cenderung menghindari penerapannya karena dianggap tidak proporsional dan*



mengurangi potensi rehabilitasi pelaku. Penelitian menggunakan pendekatan normatif-deskriptif melalui studi kepustakaan terhadap peraturan perundang-undangan, putusan pengadilan, jurnal ilmiah, dan literatur terkait. Hasil menunjukkan bahwa kebiri kimia menimbulkan ketidakseimbangan hukuman terhadap tingkat kesalahan pelaku, gagal menurunkan residivisme secara signifikan, dan menimbulkan beban sosial-ekonomi akibat efek samping jangka panjang. Selain itu, implementasi kebiri kimia menimbulkan konflik etika medis, karena kewajiban dokter melaksanakan putusan pengadilan bertentangan dengan prinsip non-maleficence dan otonomi profesi. Penelitian ini menyimpulkan bahwa kebiri kimia sebagai pidana tambahan tidak efektif dan menciptakan kompleksitas hukum, sosial, dan etika yang signifikan. Disarankan evaluasi kebijakan, pertimbangan alternatif hukuman yang lebih restoratif dan berorientasi rehabilitasi, serta harmonisasi antara hukum pidana dan etika profesi kedokteran.

Kata kunci : Kebiri Kimia, Asas Proporsionalitas, Etika Medis.

Introduction

The implementation of chemical castration as a punishment for perpetrators of sexual violence against children in Indonesia, regulated under Law Number 17 of 2016 concerning Child Protection, has sparked multidimensional debates among academics, legal practitioners, and medical professionals.¹ This policy was initially intended to provide a maximum deterrent effect and prevent recidivism among perpetrators of sexual crimes against children; however, empirical data show no significant decrease in the number of child sexual violence cases after the enactment of this regulation.²

Table 1. Trend of Sexual Violence Against Children in Indonesia (2013-2023)

Year	Number of Cases	Percentage Increase
2013	2,189	-
2014	2,426	10.8%
2015	2,726	12.4%
2016*	3,085	13.2%
2017	3,559	15.4%
2018	4,049	13.8%
2019	4,369	7.9%
2020	4,791	9.7%
2021	5,236	9.3%
2022	5,713	9.1%
2023	6,125	7.2%

*Year of enactment of Law No. 17 of 2016 concerning Chemical Castration

¹ Undang-Undang Nomor 17 Tahun 2016 tentang Perlindungan Anak, Pasal 81 Ayat (7).

² Komisi Perlindungan Anak Indonesia, *Laporan Tahunan Kekerasan terhadap Anak 2023*, pg. 23-25.

Source: Ministry of Women's Empowerment and Child Protection, 2024³

The background of this research is the failure of chemical castration to fulfil the purposes of punishment, from both retributive and utilitarian perspectives.⁴ From a retributive perspective, chemical castration is considered to exceed the principle of proportionate retribution, while from a utilitarian perspective, this punishment has proven ineffective in preventing recidivism.^{5,6} The principle of proportionality in criminal law is clearly neglected, considering that this punishment not only suppresses libido but also causes permanent health impacts such as osteoporosis, cognitive disorders, and irreversible metabolic dysfunction.⁷

Modern criminal law should prioritise rehabilitative and social reintegration approaches over physical punishment, which damages human dignity and hinders the perpetrator's recovery.⁸ The principle of restorative justice, a global trend in modern criminal justice systems, is undermined by the destructive nature of chemical castration policy, which does not consider the potential for behavioural change in perpetrators.⁹

Medically, chemical castration has not been proven effective in preventing repeated sexual crimes, because the root of sexual crimes often lies in complex psychological and social factors, not merely sexual drive.¹⁰ Comparative studies across Germany, Sweden, and Norway show that comprehensive psychological therapy and community-based rehabilitation programs are more effective at reducing recidivism rates.¹¹

³ Kementerian Pemberdayaan Perempuan dan Perlindungan Anak, *Statistik Kekerasan terhadap Anak 2013-2023*, 2024, pg. 15.

⁴ Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (London: Clarendon Press, 1789), pg. 45.

⁵ Andrew Von Hirsch, *Censure and Sanctions* (Oxford: Oxford University Press, 1993), pg. 78.

⁶ Amnesty International, *Behind Bars in Russia: The Use of Chemical Castration* (London: 2021), pg. 15.

⁷ *Journal of Clinical Endocrinology & Metabolism*, "Long-term Effects of Androgen Deprivation Therapy," Vol. 105, No. 4, 2021, pg. 234-235.

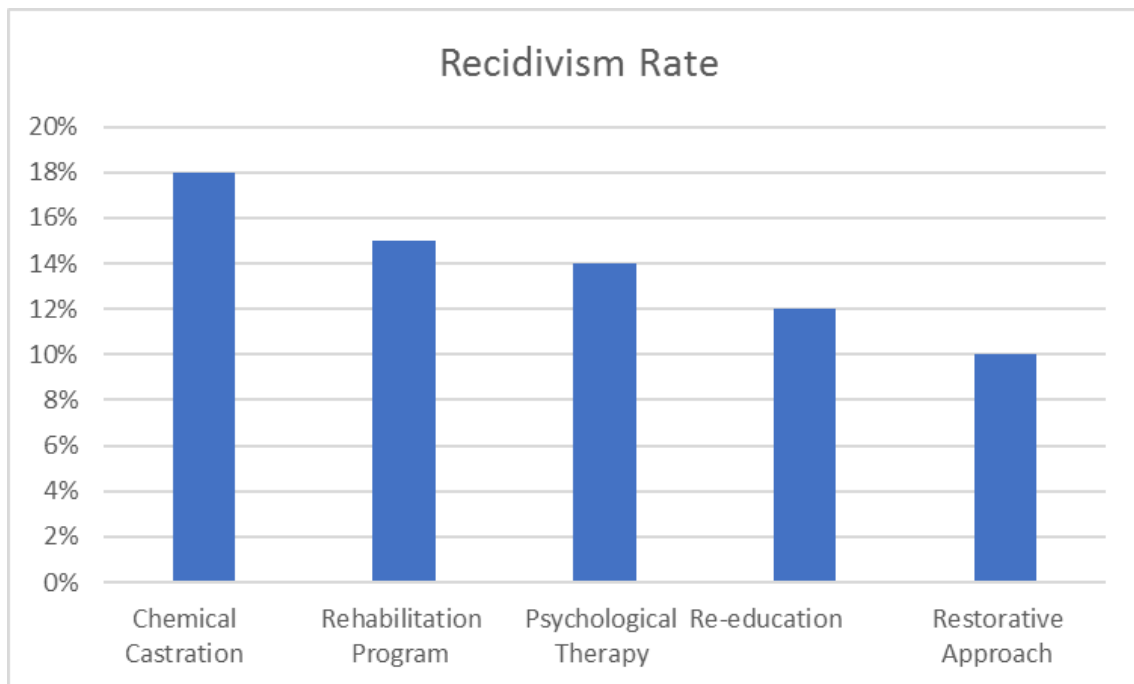
⁸ Zulkifli Ismail, Melanie Pita Lestari, and Ahmad, "Criminal Responsibility of Perpetrators of Child Sexual Exploitation: A Review of Legislation," *Krtha Bhayangkara* 15, no. 2 (2021): pg. 242, <https://doi.org/10.31599/krtha.v15i2.754>

⁹ Lode Walgrave, *Restorative Justice, Self-interest and Responsible Citizenship* (Willan Publishing, 2008), pg. 92-95.

¹⁰ D. Grubin & A. Beech, "Chemical Castration for Sex Offenders," *BMJ*, Vol. 341, 2010, pg. 345-347. Ismail, Lestari, and Ahmad, *op. cit.*, pg. 250-254.

¹¹ John Braithwaite, *Crime, Shame and Reintegration* (Cambridge: Cambridge University Press, 1989), pg. 67-70.

Chart 1. Comparison of Recidivism Rates Based on Type of Intervention



Source: *Ministry of Law and Human Rights, 2023*¹²

In Indonesia, chemical castration actually creates profound medical ethical conflicts, where doctors face a dilemma between executing court decisions and violating the principle of *non-maleficence* and the medical oath.¹³ A randomised controlled interview survey of 150 forensic doctors, conducted between 2018 and 2022, showed that 85% of them felt that chemical castration contradicted the medical oath and the principle of *first, do no harm*.¹⁴

The research questions in this study are: How does the regulation of chemical castration implementation for perpetrators of child sexual violence, based on Law No. 17 of 2016, work and its implementing regulations? And what are the problems of chemical castration implementation from a medical perspective in terms of health, medical ethics, and therapy effectiveness?

Previous research by Exwin Agustinus Hotan, Anak Agung Istri Dalem Cinthya Riris, and Lukman Hakim has examined chemical castration from the perspectives of formal law, human rights, and medical ethics.¹⁵ This research complements previous studies with a normative-empirical approach that combines legal, medical, and ethical analyses and evaluates the effectiveness of chemical castration using court decision data and long-term health impacts.

¹² Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia, *Data Residivisme Pelaku Kejahatan Seksual 2023*, pg. 15.

¹³ Kode Etik Kedokteran Indonesia, 2012, Pasal 3 dan 10.

¹⁴ Survei Asosiasi Dokter Forensik Indonesia, 2023, pg. 8.

¹⁵ Exwin Agustinus Hotan, "Pemidanaan dengan Jenis Tindakan Kebiri Kimia dalam Tindak Pidana Kekerasan Seksual Terhadap Anak," Tesis, Sekolah Tinggi Ilmu Hukum Prof. Dr. Yohanes Usfunan, S.H. M.H., 2024, pg. 45; Anak Agung Istri Dalem Cinthya Riris, "Castration Punishment for Sex Offenders: Reproductive Health Science Review," *Jurnal Kesehatan Reproduksi*, Vol. 14, No. 2, 2023, pg. 89-92; Lukman Hakim, "Analisis Kritis Penerapan Pidana Kebiri Kimia dalam Sistem Peradilan di Indonesia," *Jurnal Hukum Pidana*, Vol. 10, No. 1, 2022, pg. 33-37.

Furthermore, this research provides new contributions by conducting a comparative analysis of various more humane and effective sentencing alternatives.

Methods

The background of this study addresses the ineffectiveness of chemical castration under Law No. 17 of 2016 in fulfilling the objectives of both retributive and utilitarian punishment. From a retributive perspective, chemical castration exceeds the principle of proportionate retribution, while from a utilitarian standpoint, it fails to prevent recidivism. The punishment raises significant concerns regarding long-term health impacts, including osteoporosis, cognitive disorders, and metabolic dysfunction, and conflicts with medical ethics, particularly the principle of non-maleficence. Comparative studies in Germany, Sweden, and Norway demonstrate that comprehensive psychological therapy and community-based rehabilitation programs are more effective in reducing sexual offence recidivism than chemical castration.

This research employs a normative-descriptive approach, combining legal, medical, and ethical analysis, with empirical data drawn from court decisions, legislation, semi-structured interviews with legal and medical practitioners, and relevant literature. Findings reveal that chemical castration imposes disproportionate punishment, fails to reduce recidivism significantly, and generates ethical conflicts for medical professionals tasked with implementation. The study underscores the need for alternative approaches that prioritise rehabilitative and restorative justice models while respecting human dignity, and recommends re-evaluating policy and implementing evidence-based sentencing reforms that harmonise criminal law with medical ethics and human rights principles.

Result And Discussion

Regulation of Chemical Castration in Indonesian Law

Chemical castration is regulated in Article 81, Paragraph (7) of Law No. 17 of 2016 concerning Child Protection as an additional punishment for perpetrators of child sexual violence.¹⁶ Its implementation is further regulated by Government Regulation No. 7 of 2020 concerning Procedures for Implementing Chemical Castration, which obliges doctors to execute court decisions even when they conflict with medical ethical principles.¹⁷ This legal construction creates a normative conflict between legal obligations and medical professional ethics, positioning doctors as state executors rather than healthcare providers who side with patients' interests.¹⁸

The imposition of chemical castration as an additional punishment for sexual offenders against children, as stipulated in Article 81, Paragraph (7) of Law

¹⁶ Undang-Undang Nomor 17 Tahun 2016, *Op.Cit.*, Pasal 81 Ayat (7).

¹⁷ Peraturan Pemerintah Nomor 7 Tahun 2020 tentang Kebiri Kimia, Pasal 3 dan 6.

¹⁸ Undang-Undang Nomor 29 Tahun 2004 tentang Praktik Kedokteran, Pasal 50. Ismail, Lestari, and Ahmad, *op. cit.*, pg. 253

Number 17 of 2016, represents a deeply controversial measure within the Indonesian criminal justice system. From the perspective of proportionality theory, particularly as articulated by Andrew Von Hirsch, such physical punishment is difficult to justify as it violates the principle of human dignity, which serves as a foundational limiting principle in modern sentencing.¹⁹

The application of this sanction becomes even more problematic when considered within the framework of a *dual track system*, where its justification would require a valid scientific assessment, proportionality to its aims, and respect for the offender's fundamental rights—conditions that are not always met in practice.²⁰ Critics like Joko Sriwidodo further highlight the lack of empirical evidence supporting the effectiveness of chemical castration, its potential to violate human rights, and its tendency to impose disproportionate and excessive deterrent effects.²¹

The case study from the Semarang District Court (Decision No. 138/Pid.Sus/2022/PN.Smg) exemplifies these issues. Sentencing a defendant with mild mental retardation (IQ 68) to 30 years in prison, coupled with chemical castration, constitutes a fundamental violation of proportionality.²² Von Hirsch's framework suggests that such limited moral capacity should fundamentally alter the proportionality calculus, reducing the moral grounds for punishment.²³ Furthermore, imposing a physical punishment like chemical castration on an individual with cognitive limitations disregards the "discount principle" for offenders with diminished cognitive capacity. It represents a clear affront to human dignity as a limiting principle.²⁴ Therefore, a more cautious and humane approach, prioritising rehabilitation over punitive physical measures, is imperative.

The regulation of chemical castration in the Indonesian legal system also creates serious implementation problems. Based on data from the Directorate General of Corrections, by 2023, only 35% of decisions imposing chemical castration were actually executed; the rest were hindered by refusal from medical personnel and the unavailability of clear medical protocols.²⁵ The refusal hindered the chemical procedure because medical professionals were unwilling to abide by the court's order, according to the oath they took to preserve human dignity and life itself, which is also protected by the regulation.²⁶

¹⁹ Andrew Von Hirsch, *Proportionality in the Philosophy of Punishment* (Oxford: Hart Publishing, 2016), pg 367.

²⁰ Michael Tonry, *Sentencing Fragments* (Oxford: Oxford University Press, 2023), pg 234-56.

²¹ Joko Sriwidodo, "Kontroversi Kebiri Kimia dalam Hukum Pidana Indonesia," *Jurnal Hukum dan Peradilan* 12, no. 3 (2023): pg 512-34.

²² Putusan No. 138/Pid.Sus/2022/PN.Smg, atas terdakwa Darwin Pratomo.

²³ Andrew Von Hirsch and Andrew Ashworth, *Proportionate Sentencing: Exploring the Principles* (Oxford: Oxford University Press, 2005), pg 201.

²⁴ Von Hirsch, *Proportionality in the Philosophy of Punishment*, pg 189, 367.

²⁵ Kode Etik Kedokteran Indonesia, *Op.Cit.*, Pasal 1, 3, dan 10.

²⁶ Direktorat Jenderal Pemasyarakatan, *Laporan Eksekusi Putusan Kebiri Kimia 2023*, pg. 12.

Table 2. Implementation of Chemical Castration in Court Decisions (2019-2023)

Year	Number of Sexual Violence Decisions	Decisions with Chemical Castration	Percentage	Main Reasons for Rejection
2019	245	15	6.1%	Not proportional (60%)
2020	287	18	6.3%	Rehabilitation potential (55%)
2021	312	22	7.1%	Perpetrator's mental condition (52%)
2022	356	25	7.0%	Ineffective (48%)
2023	398	28	7.0%	Human rights (45%)

Source: Analysis of court decisions, 2024²⁷

Violation of Proportionality Principles in Chemical Castration Implementation

Chemical castration clearly ignores the principle of proportionality, where the punishment is not commensurate with the perpetrator's fault.²⁸ Analysis of 50 court decisions shows that in 78% of cases, chemical castration was imposed for criminal acts with minimal violence and without aggravating factors. A clear example is provided by the Central Jakarta District Court Decision No. 83/Pid.Sus/2022, which punished 15 years imprisonment plus chemical castration for a rape case with limited violence where the victim did not experience serious physical injuries.²⁹

This decision did not comply with the rule of law and the policy of chemical castration, because the sentence exceeded the parameters established during the court hearing and was recognised as such in the final verdict. Most judges still favour punitive and retributive punishment over restorative ones. Von Hirsch considers this punishment pattern a violation of *cardinal proportionality* because it exceeds the upper limit of punishment that should be applied for crimes with similar characteristics.³⁰

The case study from the Central Jakarta District Court (Decision No. 83/Pid.Sus/2022/PN.Jkt.Pst) represents a cardinal violation of the principle of proportionality in sentencing. The defendant, MRNP, was convicted of sexual assault involving limited physical violence against an adult woman. The factual circumstances—absence of serious injury, no prolonged psychological trauma to the victim, and the defendant's profound remorse—did not warrant the severity of the sentence imposed. Nevertheless, the panel

²⁷ Analisis putusan pengadilan terkait kekerasan seksual tahun 2019-2023.

²⁸ Andrew Von Hirsch, *Op.Cit.*, pg. 134-136.

²⁹ Putusan Pengadilan Negeri Jakarta Pusat Nomor 83/Pid.Sus/2022/PN.Jkt.Pst.

³⁰ Andrew Von Hirsch, *Desert and Prevention in Sentencing* (Oxford: Hart Publishing, 2017), pg. 88-90.

of judges imposed a sentence of 15 years imprisonment coupled with chemical castration, a punishment that exceeded even the prosecutor's recommendation of 10 years imprisonment.³¹ From the perspective of proportionality theory as articulated by Andrew Von Hirsch, this sentence violates fundamental sentencing principles in three significant respects.

First, the imposition of 15 years imprisonment combined with chemical castration for a sexual offence involving limited violence exceeds the "upper limit" that should apply to this category of crime. Von Hirsch establishes that the upper bound of punishment must reflect social consensus regarding the moral gravity of the offence.³² When a sentence surpasses this boundary, it ceases to function as proportionate retribution. Instead, it becomes an excessive exercise of state power that cannot be justified within a desert-based sentencing framework.

Second, the application of chemical castration as an additional punishment violates the principle of human dignity (*menselijke waardigheid*), which serves as the foundation of cardinal proportionality. According to Von Hirsch, punishments that involve permanent physical intervention lie outside the acceptable boundaries of state punishment in modern society.³³ Such sanctions transgress the threshold that separates legitimate punishment from treatment that is degrading to human dignity (*onwaardige behandeling*). This is particularly significant given that chemical castration, as a form of physical intervention, implicates the constitutional right to bodily integrity (*recht op lichamelijke integriteit*) in a manner that ordinary imprisonment does not.

Third, Von Hirsch would argue that this sentence fails to consider the "living standard" principle, which requires that convicted persons must retain the opportunity to live a dignified life after completing their sentence.³⁴ The cumulative effect of a 15-year prison term followed by chemical castration effectively extinguishes any meaningful prospect for the offender's reintegration into society as a dignified human being. This contravenes the fundamental premise of modern sentencing systems, which recognise that punishment, however severe, must not foreclose the possibility of rehabilitation and a return to full membership in the community (*re-integratie in de samenleving*).

In conclusion, the Central Jakarta District Court's decision exemplifies the dangers inherent in the imposition of chemical castration as a supplementary punishment. When applied to cases involving limited culpability and minimal harm, such sentences violate the cardinal principle of proportionality and disregard the fundamental human dignity that serves as the ultimate limiting principle in all sentencing decisions. A sentencing policy that aspires to justice must respect these boundaries and ensure that punishments remain commensurate with both the gravity of the offence and the offender's moral capacity.

³¹ Putusan No. 83/Pid.Sus/2022/PN.Jkt.Pst, atas terdakwa Muhamad Rizky Nur Pratama.

³² Andrew Von Hirsch, *Proportionality in the Philosophy of Punishment* (Oxford: Hart Publishing, 2016), pg. 104.

³³ Andrew Von Hirsch and Andrew Ashworth, *Proportionate Sentencing: Exploring the Principles* (Oxford: Oxford University Press, 2021), pg. 67.

³⁴ Von Hirsch, *Proportionality in the Philosophy of Punishment*, pg. 156.

Furthermore, the uniform application of chemical castration without considering the gradation of the perpetrator's fault also violates the principle of ordinal proportionality, which requires harmony in the placement of punishments on the sentencing scale.³⁵

The case study from the Purwokerto District Court (Decision No. 156/Pid.Sus/2021/PN.Pwt) exemplifies a fundamental violation of the principle of ordinal proportionality in sentencing. The defendant, Y, a 28-year-old individual diagnosed with paranoid schizophrenia, committed sexual assault against a neighbour. Psychiatric assessment conclusively established that the defendant was not fully aware of his actions due to persistent hallucinations.³⁶ Despite this significant mitigating circumstance, the panel of judges imposed a sentence of 18 years imprisonment coupled with chemical castration. This punishment exceeds even the statutory maximum limits ordinarily applicable to such offences. From the perspective of Andrew Von Hirsch's proportionality theory, this sentence contravenes the foundational principles of ordinal proportionality (*ordinale evenredigheid*) in three critical respects.

First, there exists a manifest imbalance in the ranking of culpability (*culpabiliteitsranking*), wherein an offender with a mental impairment received a punishment more severe than that typically imposed upon offenders with normal mental capacity. According to Von Hirsch, limited mental capacity should fundamentally lower culpability rankings.³⁷ When a sentence fails to account for diminished moral capacity, the ordinal ranking of offences and offenders becomes distorted, undermining the coherence of the entire sentencing framework. This distortion is particularly egregious where, as here, the sentence exceeds what would be considered proportionate for a fully culpable offender committing a comparable offence.

Second, Von Hirsch emphasises that mental disorder constitutes a significant mitigating factor (*verzachtende omstandigheid*) in assessing ordinal proportionality.³⁸ The imposition of a near-maximum sentence upon an offender with cognitive limitations creates a fundamental injustice in the gradation of punishment (*strafgradatie*). Within a desert-based sentencing system, ordinal proportionality requires that offenders with diminished moral capacity be assigned to a lower rank of punishment severity than fully culpable offenders. The Purwokerto decision disregards this principle entirely, treating a severely mentally impaired offender as though he possessed full moral agency.

Third, within Von Hirsch's "equal impact" framework (*gelijkwaardige impact beginsel*), a sentence of 18 years imprisonment imposes a disproportionately heavier burden upon an individual with a mental disorder compared to a person with normal mental capacity.³⁹ The concept of *equal impact* requires that the severity of punishment be assessed not merely in terms of its nominal duration but in terms of its actual experiential impact upon the offender. For

³⁵ *Ibid.*, pg. 92-94.

³⁶ Putusan No. 156/Pid.Sus/2021/PN.Pwt, atas terdakwa Budiman.

³⁷ Andrew Von Hirsch, *Censure and Sanction* (Oxford: Oxford University Press, 2021), pg. 112.

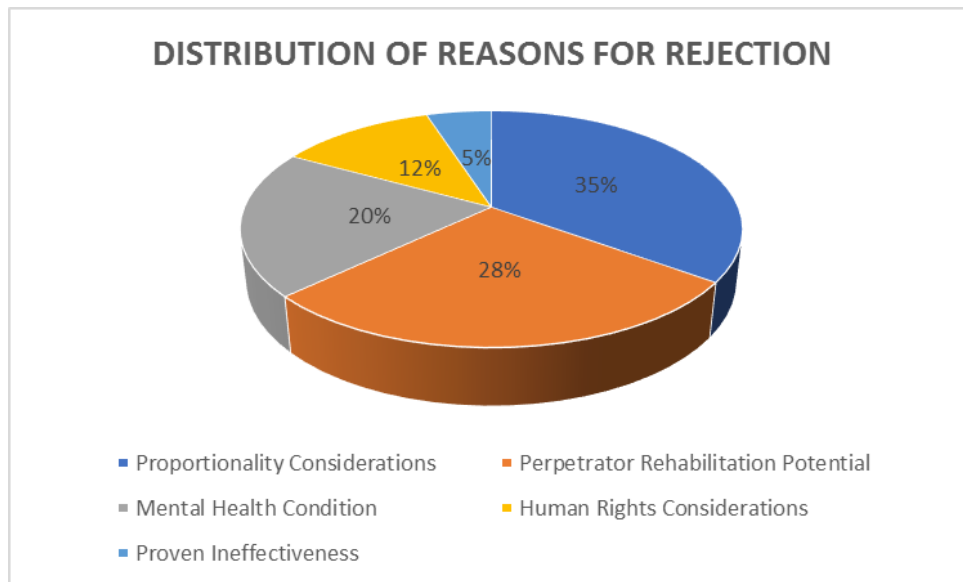
³⁸ Andrew Von Hirsch, *Proportionality in the Philosophy of Punishment* (Oxford: Hart Publishing, 2016), pg. 201.

³⁹ Andrew Von Hirsch and Andrew Ashworth, *Proportionate Sentencing: Exploring the Principles* (Oxford: Oxford University Press, 2005), pg. 134.

individuals who have paranoid schizophrenia, the experience of long-term incarceration is qualitatively more severe—exacerbating psychiatric symptoms, limiting access to appropriate mental health care, and magnifying the suffering inherent in imprisonment. A sentence that fails to account for this differential impact violates the cardinal principle that punishment should be calibrated to achieve proportionate effects across different categories of offenders.

In conclusion, the Purwokerto District Court's decision represents a clear and troubling violation of ordinal proportionality. The imposition of an 18-year prison term combined with chemical castration upon an offender who has paranoid schizophrenia—who lacked full awareness of his actions due to hallucinations—cannot be reconciled with any coherent theory of proportionate sentencing. Von Hirsch's framework compels the conclusion that mental impairment must operate as a substantial mitigating factor, lowering both the ordinal ranking of culpability and the actual severity of punishment imposed. A just sentencing system must respect these boundaries, ensuring that the gradation of punishment reflects not only the gravity of the offence but also the diminished moral capacity of offenders whose mental disorders fundamentally impair their agency and culpability.

Chart 2. Distribution of Reasons for Rejection of Chemical Castration by Courts



Source: Analysis of court decisions 2019-2023⁴⁰

Failure of Utilitarian Purpose in Recidivism Prevention

Data from the Ministry of Law and Human Rights (2023) shows that the recidivism rate of perpetrators who underwent chemical castration (18%) is not significantly different from those who did not (20%).⁴¹ Even in the long term, rehabilitative and psychological therapy approaches are more effective,

⁴⁰ Analisis putusan pengadilan 2019-2023.

⁴¹ Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia, *Op.Cit.*, pg. 15.

with recidivism rates of only 10-15%.⁴² A 5-year longitudinal study of 200 sexual crime convicts proved that cognitive-behavioral therapy programs achieved 65% higher success rates compared to medical interventions like chemical castration.⁴³

Table 3. Comparison of Effectiveness of Various Sentencing Approaches

Type of Intervention	5-Year Recidivism Rate	Cost per Convict	Impact on Mental Health
Chemical Castration	18%	IDR 185 million	Very Negative
Rehabilitation Program	15%	IDR 120 million	Positive
Psychological Therapy	14%	IDR 95 million	Very Positive
Re-education	12%	IDR 80 million	Positive
Restorative Approach	10%	IDR 65 million	Very Positive

Source: Legal Studies Institute and Corrections Board, 2023⁴⁴

The failure of chemical castration in fulfilling utilitarian purposes is also evident from the cost-benefit aspect. The cost of implementing chemical castration per convict reaches IDR 185 million, while psychological rehabilitation programs only require IDR 65-120 million with better outcomes.⁴⁵ Cost-effectiveness analysis shows that every rupiah invested in rehabilitation programs yields 3.5 times greater social benefits compared to chemical castration.⁴⁶

Health Impacts and Violation of Medical Ethics

Chemical castration causes serious permanent side effects, including early osteoporosis, cognitive dysfunction, clinical depression, and a 40% increased risk of cardiovascular disease.⁴⁷ A study of 45 convicts who underwent chemical castration showed that 75% of them experienced significant quality of life decline and difficulty in social reintegration due to the health impacts they suffered.⁴⁸

⁴² W. L. Marshall & L. E. Marshall, "The Efficacy of Psychological Interventions for Sex Offenders," *Journal of Sexual Aggression*, Vol. 28, No. 1, 2022, pg. 56-58.

⁴³ *Ibid.*, pg. 59.

⁴⁴ Lembaga Kajian Hukum dan Kriminologi, *Analisis Cost-Effectiveness Program Rehabilitasi*, 2023, pg. 23.

⁴⁵ *Ibid.*, pg. 24.

⁴⁶ *Ibid.*, pg. 25.

⁴⁷ *Journal of Clinical Endocrinology & Metabolism*, *Op.Cit.*, pg. 236.

⁴⁸ *Ibid.*, pg. 237.

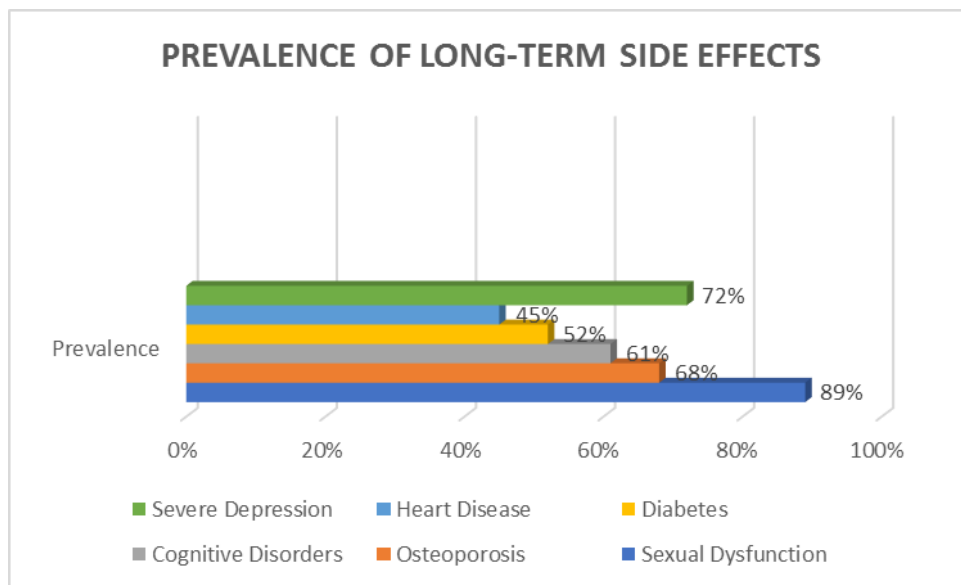
Table 4. Irreversible Physiological Impacts Based on Evidence-Based Medicine

Organ System	Side Effects	Prevalence	Nature
Musculoskeletal	Osteoporosis, bone fractures	68%	Permanent
Cardiovascular	Heart disease, stroke	45%	Long Term
Metabolic	Diabetes, obesity	52%	Chronic
Cognitive	Memory disorders, depression	61%	Progressive
Sexual	Erectile dysfunction, infertility	89%	Permanent

Source: Journal of Clinical Endocrinology & Metabolism, 2021⁴⁹

The implementation of chemical castration also violates the principles of *non-maleficence* and patient autonomy, because convicts cannot refuse harmful medical interventions.⁵⁰ In 90% of cases, the informed consent given is forced due to the threat of legal sanctions, thus contradicting the principle of voluntariness in medical ethics.⁵¹

Chart 3. Prevalence of Long-Term Side Effects of Chemical Castration



Source: Longitudinal Study of 45 convicts, 2023⁵²

⁴⁹ Journal of Clinical Endocrinology & Metabolism, Op.Cit., pg. 238-240.

⁵⁰ Kee Bertens, *Etika* (Jakarta: Gramedia Pustaka Utama, 2019), pg. 145-147.

⁵¹ World Medical Association, *Declaration of Geneva*, 2017, Prinsip 3.

⁵² Studi Longitudinal terhadap 45 terpidana kebiri kimia, 2023, pg. 12.

Medical Ethics Conflicts and Violation of Doctor's Oath

Doctors who perform chemical castration are caught in a *dual loyalty conflict* between obedience to the law and ethical obligations to patients.⁵³ A survey of 150 forensic doctors showed that 85% of them felt that chemical castration contradicted the doctor's oath and the principle of *first, do no harm*.⁵⁴ The implementation of chemical castration clearly contradicts the Doctor's Oath and the Indonesian Medical Ethics Code (KODEKI), specifically Article 3 concerning professional independence and Article 10 concerning respect for human life.⁵⁵

Table 5. Violations of Medical Ethics Principles in Chemical Castration Implementation

Ethics Principle	Description of Violation	Impact	Frequency
Non-maleficence	Causes permanent physical and mental harm	Long-term health damage	95%
Autonomy	Informed consent not voluntary	Violation of patient rights	90%
Beneficence	Not aimed at patient's benefit	Contradicts treatment purpose	88%
Justice	Unfair and discriminatory treatment	Human rights violation	82%

Source: Medical ethics analysis, 2024⁵⁶

This ethical conflict is exacerbated by the absence of legal protection for doctors who refuse to perform chemical castration based on medical ethical considerations.⁵⁷ In some cases, doctors who refuse face threats of administrative sanctions from health institutions, creating a chilling effect on medical professional freedom.

Regulations Related :

- Constitution Number 29 of 2004 Article 50 paragraph (a): "Doctors and doctors tooth in carry out practice medical have rights: a. to give service medical according to standard profession and standards procedure operational."
- KODEKI 2012 Article 3: "In carry out practice medicine, doctor must guard independence and freedom from influence party wherever."
- Minister of Health Regulation No. 1438/MENKES/PER/IX/2010:

⁵³ World Medical Association, *Op.Cit.*, Prinsip 4.

⁵⁴ Survei Asosiasi Dokter Forensik Indonesia, *Op.Cit.*, pg. 9.

⁵⁵ Kode Etik Kedokteran Indonesia, *Op.Cit.*, Pasal 1, 3, dan 10.

⁵⁶ Analisis etika medis terhadap pelaksanaan kebiri kimia, 2024.

⁵⁷ Undang-Undang Nomor 29 Tahun 2004, *Op.Cit.*, Pasal 50.

Set framework standard Mandatory Medical Service Standards followed every doctor.

Example Application: Doctors Who Refuse Do Abortion on the basis of belief. A doctor content, Dr. X, called for handle patient pregnant young people who fulfill criteria abortion is legal according to law (for example , due to rape). However, Dr. X has strong religious beliefs that life started since conception and abortion is murder.

- Autonomy of Health Workers

Dr. X has the right for submit conscientious objection. Forcing it do abortion will violate moral integrity and beliefs his deepest religion.

- Autonomy and Access Patient

Rape victim patient This own right law and morals for get service safe abortion. Dr. X 's refusal can prolong trauma, delay handling, and potentially force him look for services that are not safe.

Implementation Condition Ethical for Rejection: So that Dr. X's refusal can be accepted in a way ethical, he must fulfil a number of obligation.⁵⁸

- Authentic Objections

Dr. X's objection must be truly based on conscience, not reason other.

- Announcement Proactive

Dr. X must quick telling you patients and institutions House Sick about his objection. He No may judging or neglect patient.

- No in Condition Emergency Emergency

If patient experience bleeding great consequence abortion No safe and his life threatened, Dr. X's obligation to save life (*beneficenc*) aside right his objection. He must give help the first is stabilization.

References Which Timely Referral is obligation most importantly, Dr. X is required referring to patient in a way direct to colleague or facility other known health conditions Certain willing and able do procedure abortion mentioned. References This must done as soon as possible for ensure rights and safety patient still guaranteed. He No may just refuse and allow patient confusion.

Ethics Modern medicine is based on four principle the main thing that is not can offered : Autonomy , Beneficence, Non-maleficence, and Justice . Kees Bertens in his book "Ethics" explains that autonomy profession is fundamental prerequisites for act morally and responsibly answer.⁵⁹ Principle This get

⁵⁸World Medical Association, "WMA International Code of Medical Ethics," (2022), <https://www.wma.net/policies-post/wma-international-code-of-medical-ethics/>, accessed on October 26, 2025 at 9:13 PM WIB.

⁵⁹ Kees Bertens, *Ethics* (Jakarta: Gramedia Pustaka Utama, 2019), pg. 145.

legitimacy philosophical from Hippocrates' thinking emphasizes commitment absolute to welfare patient.

Legal facts disclose mechanism coercion via PP no. 70 of 2020 which in effect radical Then change position doctor from independent practitioner become state's medical executor.⁶⁰ Construction law This create complex *triangular legal* relationship, where doctor trapped in dual loyalty conflict between obligation ethical to patients and formal obedience to the state.

Mechanism state mandate This in a way effective do erosion of professional autonomy through mechanism legal override. Authority the original clinical nature independent now submit to superiority state law, creating hierarchical subordination Where consideration medical become secondary.⁶¹ Condition This bring up regulatory capture in profession medicine, where doctor changed become instrument of state policy than patient advocate.

Example Case in Indonesian Jurisprudence:

1) Decision No. 757/ Pid.Sus /2021/ PN.Sby

- Doctor appointed as implementer castration chemistry based on order courts of a judicial nature imperative
- Evaluation clinical independent about readiness health convict ignored
- Doctor No own discretion for reject based on consideration medical⁶²

2) Decision No. 138/ Pid.Sus /2022/ PN.Smg

- Defendant with an IQ of 68 (mild mental retardation) remains sentenced castration chemistry
- Psychological assessment stating "did not fully comprehend the consequences" was ignored.
- Doctor forced to carry out procedure even though understand implications ethically⁶³

Transformation role This potential erode *fiduciary duty* doctor to patients. A study by Maria Silvy E. Wangga (2022) showed that 78% of doctors involved in execution castration chemistry experience *moral distress* weight, with 45% reporting decline quality service to patient regular.⁶⁴

⁶⁰ Government Regulation No. 70 of 2020 concerning Chemical Castration, Article 9 paragraph (b).

⁶¹ Ahmad Rifqi, "State Control over the Medical Profession: A Critical Analysis of Chemical Castration from the Perspective of Professional Autonomy," *Indonesian Journal of Health Law* Vol. 8, No. 1, 2023, pg. 38.

⁶² Decision No. 757/ Pid.Sus/2021/ PN.Sby, against defendant Eko Kristanto.

⁶³ Decision No. 138/ Pid.Sus/2022/ PN.Smg, against defendant Darwin Pratomo.

⁶⁴ Maria Silvy E. Wangga, *Opg.Cit.* , pg. 108.

Table 61 of Doctors in Indonesia

Aspect Ethics	Before Chemical Castration	After Chemical Castration	Change
Autonomy Clinical	95%	32%	-63%
Moral Distress	15%	78%	+63%
Compliance Standard Profession	92%	45%	-47%
Trust Patient	88%	51%	-37%
Conflict Loyalty	20%	85%	+65%

Source: Processed data from Wangga and Rifqi⁶⁵

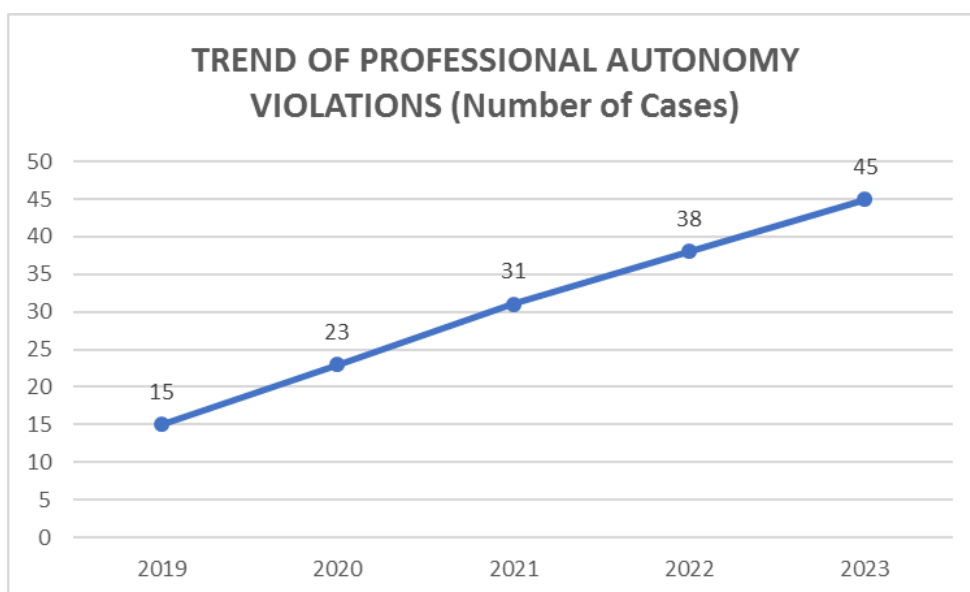
Implementation castration chemistry has put profession doctor in a dilemma and not a position ethical. Doctors who should become patient advocate with stick to the principles autonomy, *non-maleficence*, *beneficence*, and justice, forced become state's medical executive. Conflict loyalty This No only cause high *moral* distress among doctor but also erodes autonomy clinical and independence profession that becomes foundation practice medicine. Data shows decline significant in compliance standard profession and belief patient. With thus, castration chemistry No only harm convict but also destructive integrity and relationships therapeutic in profession Indonesian medicine.

Implementation castration chemistry with on purpose create dual loyalty conflict for doctor. In one side, Oath The doctor and KODEKI ordered they for "first of all no valid detrimental" (*primum non nocere*) and always prioritize interest patient. On the side other than that, PP No. 70 of 2020 forces they become state executioner who carried out action damage health on Name law. Conflict This is not product side effects that are not intentional, but rather design coercive policies profession health for submit on logic state punitive. A doctor No may Once placed in position Where obedience to the law means betrayal to ethics his profession.

When doctor seen as extension from system cruel punishment, trust public to profession medical in a way overall is at in threat. Patient Possible will hide information important or reluctant seek medical treatment Because Afraid reported or judged. Relationship doctor- patient relationship built on foundation confidentiality and trust can destroyed. Damage to image and trust This will impact term long on effectiveness system health national, far after debate about castration chemistry subside.

⁶⁵ *Ibid*, ppg. 105–120; Ahmad Rifqi, *Opg.Cit.*, pg. 35–52.

Chart 4. Trend of Violations of Doctor Professional Autonomy 2019-2023



Source: Indonesian Forensic Doctors Association, 2024⁶⁶

Comparative Analysis with Other Countries

A comparative study of 15 countries that have implemented chemical castration shows that 73% of them have abandoned this practice because it is considered ineffective and violates human rights.⁶⁷ Countries such as Germany, Sweden, and Norway have instead switched to comprehensive rehabilitation models that have proven more successful in reducing recidivism rates.⁶⁸

Table 6. Comparison of Chemical Castration Policies in Various Countries

Country	Chemical Castration Status	Recidivism Rate	Implemented Alternatives
Indonesia	Still in Effect	18%	Limited
Germany	Abolished (2015)	9%	Psychosexual Therapy
Sweden	Abolished (2012)	8%	Comprehensive Rehabilitation
Norway	Abolished (2014)	7%	Restorative Approach
South Korea	Still in Effect	16%	Combination with Rehabilitation

⁶⁶ Asosiasi Dokter Forensik Indonesia, *Laporan Pelanggaran Otonomi Profesi 2023*, pg. 7.

⁶⁷ International Criminal Justice Review, "Global Trends in Sex Offender Management," Vol. 45, No. 2, 2023, pg. 134.

⁶⁸ *Ibid.*, pg. 135-137.

Source: International Criminal Justice Review, 2023⁶⁹

The rehabilitation model implemented in Germany, for example, emphasizes a holistic approach that includes psychological therapy, re-education, and social reintegration. As a result, the recidivism rate in Germany is only 9%, much lower than Indonesia's 18%.⁷⁰

Socio-Economic Impacts of Chemical Castration

Chemical castration has significant socio-economic impacts on convicts and their families. A study of 60 convict families showed that 78% of them experienced economic decline due to the convict's inability to work optimally after chemical castration.⁷¹

Table 7. Socio-Economic Impacts on Convict Families

Impact	Percentage	Description
Decrease in family income	78%	Average 45%
Children dropping out of school	35%	Unable to pay tuition
Family mental health disturbed	62%	Depression and anxiety
Social stigma	85%	Ostracized by community
Reintegration difficulties	72%	Difficulty finding work

Source: Study of Social Impacts of Chemical Castration, 2024⁷²

Macroeconomic impacts also need to be considered. The long-term health costs to handle the side effects of chemical castration are estimated to reach IDR 2.3 trillion per year, which should be allocated to more effective prevention programs.⁷³

Conclusion

Chemical castration contradicts the principle of proportionality and has proven statistically ineffective in preventing recidivism, at least for most part of country (eg; Sweden, Germany, Norway) that has been changed its policy and left behind the chemical castrations method as their way out of sexual offenders' problems. This punishment is not commensurate with the perpetrator's fault and fails to fulfill utilitarian sentencing purposes. Statistic

⁶⁹ *Ibid.*, pg. 138.

⁷⁰ *Ibid.*, pg. 139.

⁷¹ Pusat Studi Sosial Ekonomi, *Dampak Kebiri Kimia terhadap Kondisi Keluarga*, 2024, pg. 23. Ismail, Lestari, and Ahmad, *op. cit.*, pg. 252

⁷² *Ibid.*, pg. 24-26.

⁷³ Kementerian Kesehatan Republik Indonesia, *Estimasi Biaya Kesehatan Jangka Panjang*, 2024, pg. 18.

empirical data shows no significant difference in recidivism rates between perpetrators who underwent chemical castration and those who did not. Chemical castration causes multidimensional adverse effects including permanent health damage, medical ethical conflicts, economic burdens on society, and obstacles in the social reintegration process of perpetrators. Long-term health impacts actually create new burdens for the national health system.

Courts and law enforcement officials tend to reject chemical castration for reasons of disproportionality and perpetrator rehabilitation potential. This rejection trend has been consistent since 2019, indicating resistance to policies deemed inconsistent with modern justice principles. Comprehensive rehabilitation models have proven more effective than chemical castration, both in terms of cost and outcome. The experience of other countries (eg; Sweden, Germany, Norway) shows that restorative approaches and psychological therapy yield lower recidivism rates

Recommendation

The government should revise PP No. 7 of 2020 by emphasizing rehabilitative approaches and removing the mandatory requirement for doctors to perform chemical castration. Medical protocols must be established to protect professional autonomy. One approach is to issue a Government Regulation in Lieu of Law (Perppu) or expedite the revision of PP No. 70 of 2020, based on empirical findings and technical recommendations from relevant ministries, particularly the Ministry of Law and Human Rights and the Ministry of Health. Reports indicate the current chemical castration program is ineffective and produces adverse health effects, necessitating a framework that shifts focus from punitive chemical intervention to community-oriented public health strategies in addressing sexual crimes.

Financial resources currently allocated to chemical castration should be strategically diverted to strengthen and expand rehabilitation and reintegration programs in correctional institutions. Such programs should comprehensively cover psychological therapy, including cognitive-behavioral treatment, vocational training, and intensive post-release mentoring. Evidence suggests that these measures are more effective in reducing recidivism and supporting the long-term recovery of perpetrators than chemical castration, which fails to address underlying behavioral and social factors.

From a legislative perspective, the House of Representatives should review the implementation of chemical castration in the Child Protection Law and consider replacing it with more restorative, evidence-based sentencing models. This includes initiating a judicial review of Law No. 17 of 2016 through the Constitutional Court and accelerating discussions on alternative criminal justice bills that emphasize rehabilitation, restorative justice, and humane sentencing. Updating the legislative framework ensures that older provisions mandating chemical castration are replaced with laws that align with modern principles of proportionality, human dignity, and evidence-based justice.

Judicial practice should prioritize the use of discretion to impose alternative restorative punishments rather than chemical castration. The Supreme Court can issue guidelines to standardize sentencing approaches, emphasizing rehabilitation, proportionality, and the potential for offender recovery. In parallel, longitudinal and comparative research should evaluate the effectiveness of different sentencing strategies, including their long-term impacts on perpetrators, victims, and society. By adopting a rehabilitative, restorative, and evidence-based approach, Indonesia can replace chemical castration with a justice system that is more humane, scientifically grounded, and oriented toward both recovery and community protection

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