



# Justice Denied Through Obsolete Laws and Upheld Through Judicial Discretion: A Comparative Analysis from South Asia

D. Saumya Bulathwela

Independent Researcher, Attorney-at-Law, Member of the Bar Association of Sri Lanka

saumyabulathwela@ymail.com

**Abstract:** The legal systems in South Asia continue to follow statutes enacted during the colonial era. Some of these obsolete laws fail to meet the contemporary needs of society. Thus, they undermine justice, which is one of the primary objectives of the law. When laws are outdated, the role of the judiciary becomes vital. However, the judicial discretion is subject to statutory limitations and guided by the rules of statutory interpretation. Statutory reform is a cumbersome and protracted process. Therefore, when the judiciary finds no solution within the law and precedent, judicial discretion becomes the most plausible approach. A few examples of progressive judicial decisions include *Joseph Shine v. Union of India* (2018) and the judicial interpretation of the Adoption of Children Ordinance No. 24 of 1941 of Sri Lanka in a case heard before the District Court of Colombo in August 2025. The study aims to identify obsolete statutes from South Asia that have created negative impacts on the administration of justice, analyze landmark cases where the judiciary has intervened diligently, evaluate the limitations of judicial discretion, and propose how judicial discretion could be systematically utilized to advance justice concerning obsolete laws. The study employs a doctrinal research methodology focusing on primary sources such as legislation and case law across South Asia, and secondary sources such as scholarly writings while examining the theories of statutory interpretation, separation of powers and judicial law-making. The study becomes significant as it suggests a positive approach towards overcoming discrimination caused by the law itself.

**Keywords:** Obsolete Laws, Judicial Discretion, Statutory Interpretation.

## 1. Introduction

South Asian countries are generally considered the member states of the South Asian Association for Regional Cooperation (SAARC). Accordingly, South Asia comprises eight countries: Sri Lanka, India, Bangladesh, Pakistan, Nepal, Bhutan, the Maldives, and Afghanistan (South Asian Association for Regional Cooperation [SAARC], n.d.). Farid (2023) notes that all these South Asian countries have either been subject to British colonization (Sri Lanka, India, Bangladesh, and Pakistan) or indirectly subject to British influence or protection (Nepal, Bhutan, the Maldives, and Afghanistan). Consequently, the legal systems of these countries were heavily influenced by British common law principles. Although these countries enacted new constitutions to reflect their sovereignty and national identity, the common law-based statutes continued with local variations. These laws enacted decades ago continue to be in operation today with few or no amendments. However, when fines, punishments, and liabilities recognized decades ago apply the same way today, justice is immensely undermined. Therefore,

© The Author(s) 2026

T. Islam et al. (eds.), *Proceedings of the International Conference on Challenges and Trends in Arts and Social Sciences (ICCTASS 2025)*, Advances in Social Science, Education and Humanities Research 1019,

[https://doi.org/10.2991/978-2-38476-581-2\\_12](https://doi.org/10.2991/978-2-38476-581-2_12)

the judiciary plays a vital role in relation to obsolete laws. Obsolete laws refer to the laws that are no longer of practical utility (Law Commission for England and Wales, 2015). Accordingly, a law may become obsolete if it no longer has any legal effect on technical terms or the purposes for which it was enacted no longer exists. When deciding a case, the judiciary is guided by the theories of statutory interpretation, such as textualism and purposivism. Hence, the judicial discretion is not unlimited. This practice ensures that the doctrine of separation of powers is upheld since the law-making power of the legislature is not interfered with by the judiciary. There are several incidents across South Asia where the judiciary has played an active role concerning obsolete laws with the sole purpose of achieving justice for the aggrieved.

## 2. Methodology

The study adopts a doctrinal research methodology referring to primary and secondary sources of law. Primary sources include legislation and landmark judicial decisions from South Asian countries. The discussion involves an analysis of selected statutes and case law related to archaic laws. By referring to the said sources, the paper discusses the detrimental effects of obsolete laws and the role of the judiciary in mitigating such negative consequences. Moreover, the secondary sources, such as books and scholarly articles, enrich the study with research, opinions, and findings concerning South Asia, its legal systems, and their strengths and weaknesses. The theories, particularly related to statutory interpretation, separation of powers and judicial law-making establish the theoretical background of the study.

## 3. Discussion

### 3.1 Theoretical Background

#### Statutory Interpretation

In deciding a case, the court treats a statute as a legitimate and effective source of law making (Gvozdenovic, 2022). It means that the judiciary gives priority to the statute in question when they are presented with a case. There are two approaches adopted in statutory interpretation: textualism and purposivism (Shukla, 2023). According to Scalia (1997), textualism requires a judge to focus on the plain meaning of the text without resorting to legislative history. Textualism upholds the doctrine of separation of powers as it limits judicial discretion. On the other hand, purposivism is the approach where judges look to the intention of the legislature at the time of the enactment, without merely relying on the literal meaning of the text (Eskridge, and Frickey, 1995). Moreover, judges have an institutional duty to adhere to the principle of *stare decisis*, as their opinions should be consistent with precedents (Panjwani, 2025). The common law systems require giving reasons for a decision and following *stare decisis*, ensuring that the law is coherent, non-arbitrary, and predictable (Raz, 1992). However, Anderson (2006) notes that the existence of precedent functions as a barrier to judicial discretion.

On the other hand, judges are also empowered to amend or even overrule precedents (Panjwani, 2025). There has been a long-established debate regarding whether or not judges should exercise discretion and to what extent they should do that when deciding cases (Dworkin, 1963). Judicial discretion is allowed to a certain extent, as the legislature cannot anticipate every circumstance (Dharshini, 2020). However, Calabresi (1982) argues that the court could reduce the impact of a statute or disregard it entirely if it is ‘obsolete.’

### **The Doctrine of Separation of Powers and Judicial Law-Making**

Montesquieu introduced the doctrine of separation of powers with the idea that there can be no liberty when the executive and legislative powers are concentrated in the same person or in the same body of magistrates (Montesquieu, 1748/1949, Book XI, Chapter VI, p. 152). According to this doctrine, governmental powers, namely, the executive power, legislative power and judicial power are vested in three distinct institutions and they are expected to act within their own sphere of authority. Therefore, this doctrine aims to safeguard against the emergence of totalitarian and arbitrary power through centralization of power (Merkel, 2006). The doctrine of separation of powers encourages a system of checks and balances where one branch of government checks and balances the power of other branches (Holcombe, 2018). This doctrine stipulates that only the legislature is authorized to make laws and the other institutions such as courts and administrative tribunals should enforce or implement laws fulfilling the legislative will (Michell, 1996). However, the division of the three branches of government has been difficult to maintain in practice since government powers often overlaps (Marsoof, 2010). As the former Chief Justice of Australia, Hon. Anthony Mason (1996) identifies, “The difficulty of precise definition arises from the impossibility of defining each of the three powers in a way that reveals them as mutually exclusive concepts. As well as legislators, judges make law, if only in a minor way. The executive also makes law pursuant to statutory authority. Judges and courts...exercise administrative functions. Legislatures convict and punish for contempt. And administrators and administrative tribunals determine a range of disputes.” It is recognized that co-operation between governmental organs is indispensable and thus, mingling governmental powers is successful rather than functioning in complete separation (Wilson, 1908). The judges are not mechanical interpreters of the law; they contribute to its growth and development. Hence, judge-made law is one of the existing realities (Cardozo, 1921).

### **3.2 Landmark Judicial Decisions from South Asia**

Colonial history has fundamentally influenced the legislation in South Asian countries. There are challenges faced by litigants as well as the judiciary when these pre-independence laws continue to operate at present. The following are some landmark judicial determinations in which archaic laws have been purposively interpreted by the judiciary to meet the contemporary needs of society.

In August 2025, the District Court of Colombo (Chandima Edirimanna J.), Sri Lanka delivered a landmark judgment allowing a step-father to adopt an 18-year-old girl under the Adoption of Children Ordinance No.24 of 1941 (Sooriyagoda, 2025). This ruling becomes significant as it recognized the adoption law of Sri Lanka to be obsolete

and needed reform. These laws enacted even before the independence of Sri Lanka remain valid because under Article 168(1) of the Constitution of Sri Lanka, any written or unwritten law enacted before the commencement of the Constitution continue in force unless otherwise parliament provides.

Section 3(1) of this Adoption Ordinance No.24 of 1941 requires that the age difference between an adopter and a child shall be 21 years and Section 17 requires that a child shall be below the age of 14 years. In the case in question, the adopter had only an 18-year difference with the child and the child was above 14 years. The birth certificate of the child recorded that her parents were unmarried and her biological father's whereabouts were not known. These issues had prevented her from obtaining a National Identity Card of Sri Lanka, and sitting for her G.C.E. Ordinary Level examination. Considering the emotional and educational burden that the child had to undergo, the judiciary was in the view that the best interest of the child should prevail over rigid, outdated laws. The Adoption Ordinance came into force in 1941, when the age of majority in Sri Lanka was 21 years. When the Age of Majority (Amendment) Act No.17 of 1989 was introduced, the age of majority changed from 21 to 18 years. However, the adoption law failed to capture this change. Therefore, this ruling is a testament to the fact that the judiciary looks to the intention of the legislature at the time of the adoption of this statute and fills the gaps in the law for the purpose of achieving justice.

In a discussion of obsolete laws, property laws cannot be ignored. The Land Acquisition Act of 1894 of Pakistan is such significant civil law that has been considered obsolete by the judiciary. In 2023, the Supreme Court of Pakistan held that the exiting land acquisition laws are colonial and deprive people of their properties and the rights attached to them (Afzal, 2023). The judiciary was in the opinion that these laws were drafted to acquire private property for public purposes at the lowest price possible. Moreover, it was also argued that this statute was enacted in 1894 during the colonial rule concerning infrastructure such as bridges, railways, roads, and communication networks for the benefit of the rulers at that time (Afzal, 2023).

Obsolescence is not confined to the statutes of civil nature, but also affects criminal legislation. A leading example is *Joseph Shine v. Union of India* (2018). In this case, the Supreme Court of India held that Section 497 of the Indian Penal Code (IPC) which makes adultery an offense is unconstitutional. This provision states that a man who had sexual intercourse with another man's wife without that man's consent or connivance should be punished. This law does not recognize that the woman should be punished as an abettor. Joseph Shine filed this action arguing that this provision is a violation of fundamental rights under the Constitution of India. The court viewed this provision, treating a woman as property of the man who is subject to the consent or connivance of her husband. This case established that leaving a woman out of punishment does not ensure her protection but promotes inequality because this provision identifies a woman as incapable of consent. Therefore, the court concluded that Section 497 of the IPC is archaic and patriarchal. This case marks the history of India as the first case to decriminalize adultery and make it only a ground for divorce under a civil action. Khan and Arif (2018) note that the provision regarding adultery has been incorporated in Indian criminal law based on the common law concept of

criminalizing adultery. They further argue that this law continued to rule in India in a time when even England had decriminalized adultery. This landmark decision further held that once a totally valid legislation in a historical context may become obsolete and archaic with the passage of time. The court notes in this case that the judiciary may have identified the archaic nature of this provision before, but it has expected the legislature to amend laws considering the societal transformations.

*Navtej Singh Johar v. Union of India Ministry of Law* (2018) is another significant case in the legal history of India. In this case, the Supreme Court ruled that same-sex relations which come under ‘consensual adult acts in private’ are not punishable under Section 377 of the Indian Penal Code. The petitioners instituted this case alleging that this provision violates their fundamental rights such as the right to equality (Article 14), freedom from non-discrimination (Article 15), right to life and dignity (Article 21), and freedom of expression (Article 19(1)(a)) under the Constitution. The court held that India gained its independence from colonial rule years ago and a colonial legislature that criminalizes partners of the same gender to build relations in love should not prevail. The court’s view was that citizens of a democratic nation cannot be subject to repressive colonial legislation.

In terms of obsolete laws, the sedition law is crucial. The sedition law has been introduced in India by the British and incorporated into the Indian Penal Code in 1870 under Section 124A (Gurung, 2024). This same provision is found in the Penal Codes of Pakistan and Bangladesh since they inherited the penal laws from British India, which refers to the areas in the Indian sub-continent under the governance of the British East India Company. The judiciary in India, Pakistan and Bangladesh has recognized sedition law to be a colonial law that is inconsistent with the Constitutions in their respective jurisdictions. The following seminal judgments from India, Pakistan and Bangladesh are a testament to the exercise of judicial discretion concerning sedition law.

In *Haroon Farooq v. Federation of Pakistan and Others* (2022), the High Court of Lahore ruled that the sedition law laid down in Section 124-A of the Pakistan Penal Code (PPC) is unconstitutional and a violation of fundamental rights guaranteed by the Constitution of Pakistan. Section 124-A which has been inserted in the PPC in 1870 during British rule makes it an offence to excite or attempt to excite disaffection towards the federal or provincial government by way of spoken or written words, signs, visible representation or otherwise. The main argument of the petitioners was that this provision is unconstitutional as it infringes upon their right to freedom of speech and expression and right to information. The learned counsel for the petitioners argued that the sedition law was used as a tool by colonial masters to suppress the voices of the people against the government in power. According to Tahir (2023), even after Pakistan gained independence in 1947, the successive governments continued to employ sedition law to suppress people’s voices. Considering the history of this impugned sedition law, the High Court of Lahore struck down 124-A of the PPC which is a product of a colonial mindset.

The judiciary’s reluctance to entertain complaints under the sedition law is evident in Bangladesh as well. In 2021, the Dhaka Metropolitan Magistrate Court

refused to entertain an action brought by a Bangladeshi lawyer under the sedition law as he had not obtained approval from the government of Bangladesh (Al Jazeera Investigative Unit, 2021). This action was instituted against four people including the Director General of Al Jazeera as a result of an investigation they conducted regarding high-level corruption in the country. The complainant claimed that the investigative report of Al Jazeera is “fictitious and flawed” and tarnished the image of the Bangladesh government. Dhaka Metropolitan Magistrate Shahidu Islam asked the complainant to withdraw the case stating that the complainant had not obtained approval from the relevant authorities as required under Section 196 of the Code of Criminal Procedure (Nafiu, 2021). This incident confirms the active role played by the judiciary when dealing with colonial laws such as sedition laws.

*S.G. Vombatkere v. Union of India* (2022) becomes a landmark case which undermined the validity of the sedition law as an archaic law. This case was instituted by a retired major general challenging the constitutionality of Section 124A of the Indian Penal Code which refers to sedition law. His argument was that it violates the fundamental right to freedom of speech and expression guaranteed under Article 19(1)(a) of the Constitution of India. Identifying the irrelevance of Section 124A in the contemporary society with its colonial characteristics, the Supreme Court of India ruled that all pending trials, appeals and proceedings in relation to this provision shall be kept in abeyance. However, Section 152 of the Baratiya Nyaya Sanhitha, the newest penal code of India that came into force on 1<sup>st</sup> of July 2024, includes the sedition law with a broader definition (Gurung, 2024).

As long as the laws are obsolete, they do not address the reality of the place where they operate. All of the above judgements are a testament to that matter. At a time when South Asia continues to face difficulties with obsolete laws, Baratiya Nyaya Sanhitha (BNS) No.45 of 2023, the new criminal code of India, could be considered a major legislative reform as it replaced the colonial Indian Penal Code (IPC) of 1860.

#### **4. Recommendations**

The said leading cases establish that the judiciary plays a key role in relation to obsolete laws. However, in order to strike a balance between the functions of each branch of government, all the executive, the legislature, and the judiciary shall be involved in mitigating the effect of obsolete laws. Accordingly, it is recommended that the executive establish legal commissions or committees to periodically identify, review and suggest the repeal of obsolete laws. These establishments could be made through cabinet decisions, an appropriate ministry, executive orders or regulations.

It is expected from the legislature to repeal colonial laws, introduce new legislation or make amendments to the exiting statutory provisions where necessary within the boundaries of separation of powers. However, since enacting new legislation or making amendments to exiting statues after period review is cumbersome and may consume a considerable amount of time, the judiciary is recommended to engage in purposive interpretation when they encounter an obsolete statute. This practice mitigates the adverse consequences of vesting the entire law-making process in the legislature.

## 5. Conclusion

The law should evolve over time to represent the needs of the changing society. However, it appears that South Asian countries still continue with the statutes that have been enacted in the colonial past. These archaic laws function as a barrier to justice and most of the time amount to a breach of fundamental rights. Where there are gaps in legislation, the role of the judiciary is to exercise discretion for the purpose of mitigating injustice. Hence, judicial discretion functions as a corrective tool when the obsolete laws continue to apply without amendment or repeal. The above-mentioned landmark decisions across South Asia establish that the colonial laws remain to be in force, cause barriers to justice and extend the role of the judiciary to judicial law making. While the executive could engage in periodic reviews of laws and suggest amendments or repeals of obsolete laws, the legislature could act on the recommendations of the executive and the judiciary could adopt purposive interpretation with the aim of achieving justice. The negative effects of archaic laws could be mitigated with the active role played by all three branches of government. The Baratiya Nyaya Sanhitha No.45 of 2023, which is the new penal law in India, provides a great example of addressing the issue of obsolete laws.

### Acknowledgments

The author gratefully acknowledges Md. Ikra, the conference chair of the Law session in which this paper was presented, and the reviewers of the 2nd FASS International Conference on Challenges and Trends in Arts and Social Sciences (ICCTASS 2025) for their valuable insights and constructive comments on an earlier version of this manuscript.

### Disclosure of Interests

The author declares that there are no conflicts of interest.

## References

1. Afzal, M.A. (2023, February 19). *Land Should be Acquired at Market Value : SC*. The Express Tribune. [Land should be acquired at market value: SC](#)
2. Al Jazeera Investigative Unit. (2021). *Bangladesh court rejects sedition case over Al Jazeera Report*. Reported in Al Jazeera. [Bangladesh court rejects sedition case over Al Jazeera report | Investigation News | Al Jazeera](#)
3. Altman, A. (1986). Legal Realism, critical legal studies, and Dworkin. *Philosophy and Public Affairs*, 15(3), 205-35.
4. Anderson, S.A. (2006). *Legal Indeterminacy in Context* [unpublished doctoral dissertation]. Ohio State University. [LEGAL INDETERMINACY IN CONTEXT](#)
5. Calabresi, G. (1982). *A Common Law for the Age of Statutes*. Harvard University Press.
6. Cardozo, B. N. (1921). *The Nature of the Judicial Process*. Yale University Press.
7. Chaudhry, F. (2024). *South Asia, the British Empire, and the Rise of Classical Legal Thought: Toward a Historical Ontology of the Law*. Oxford University Press.
8. Dharshini, P. (2020). Encroaching the legislative field? Purposivism v. Textualism in practice: A clear distinction or a convergence of theories: Analysis of Cardozo's Methods of statutory interpretation. *International Journal of Advance Research, Ideas, and Innovations in Technology*, 6(5), 661-665. [Encroaching the legislative field? purposivism v. textualism in practice: A clear distinction or a convergence of theories: analysis of Cardozo's methods of statutory interpretation](#)

9. Dworkin, R. (1963). Judicial discretion. *Journal of Philosophy*, 60(21), 1624-638.
10. Eskridge, W. N., & Frickey, P. P. (1995). *Legislation and statutory interpretation*. West Publishing.
11. Farmer, B. H. (1993). *An introduction to South Asia*. London: Routledge.
12. Farid, C. (2023). Perceiving law without colonialism: Revisiting courts and constitutionalism in South Asia. *International Journal of Law in Context*, 19(3), 278-295. <https://doi.org/10.1017/S1744552323000083>
13. Gurung, S.R. (2024). Evolution of Sedition Law as per the Judicial Interpretation. *International Journal of Creative Research Thoughts*, 12(4), 768-780
14. Gvozdenovic, M. (2022). Statute, Common Law and Analogical Reasoning : Pouring Oil on Troubled Waters. *Statute Law Review*, 43(3), 3315-340. [Statute, Common Law, and Analogical Reasoning: Pouring Oil on Troubled Waters | Statute Law Review | Oxford Academic](#)
15. Haroon Farooq v. Federation of Pakistan and Others, (2022) W.P.No 59599/2022 (Lahore High Court Mar.30, 2023). [Haroon Farooq v Federation of Pakistan & Others – AfricanLII](#)
16. Holcombe, R. G. (2018). Checks and balances: Enforcing constitutional constraints. *Economies*, 6(4), 57. <https://doi.org/10.3390/economies6040057>
17. Joseph Shine v. Union of India, (2018) 2 SCC 189 (Supreme Court of India). [Joseph Shine vs Union Of India on 27 September, 2018](#)
18. Khan, O.H. and Arif, F. (2018). Law and Sexuality : Commentary on Joseph Shine vs. Union of India and Others 2018 SC. *National Law School Journal*, 14(1) 269. "[Law and Sexuality: Commentary on Joseph Shine vs. Union of India and O' by Owais Hasan Khan and Farheen Arif](#)
19. Law Commission for England and Wales. (2015). *Statute law repeals: Consultation paper - General repeals* (SLR 03/14). Law Commission. [https://www.scotlawcom.gov.uk/files/6414/1863/6655/slr\\_general\\_consultation.pdf](https://www.scotlawcom.gov.uk/files/6414/1863/6655/slr_general_consultation.pdf)  
*This consultation paper reviews existing statute law with a view to proposing the repeal of obsolete Acts and soliciting responses from stakeholders to inform the subsequent repeal report.*
20. Mason, A. (1996, July 25). *A new perspective on separation of powers: Reshaping Australian institutions* [Lecture 1, ANU Public Lectures]. Australian National University. p. 5.
21. Merkel, R. (2006). Separation of powers—A bulwark for liberty and a rights culture. *Saskatchewan Law Review*, 69(1), 129. <https://canlii.ca/t/7n2rw>
22. Michell, P. (1996). *Dynamic statutory interpretation* by W. N. Eskridge, Jr. *McGill Law Journal*, 41(3), 713 <https://lawjournal.mcgill.ca/article/dynamic-statutory-interpretation-by-william-n-eskridge-jr/>
23. Montesquieu, C.-L. de S. de. (1748/1949). *The spirit of the laws* (T. Nugent, Trans.). Hafner Publishing.
24. Nafiu, R.F. (2021, February 23). *Court rejects sedition complain over Al Jazeera Report*. Dhaka Tribune. [Court rejects sedition complaint over Al Jazeera report](#)
25. *Navtej Singh Johar v. Union of India Ministry of Law* (2018) 10 SCC 1. [Navtej Singh Johar vs Union Of India Ministry Of Law And ... on 6 September, 2018](#)
26. Panjwani, R. (2025). *A model of common law adjudication. Theory and Decision: An International Journal for Multidisciplinary Advances in Decision Science*. Advance online publication. Springer. <https://doi.org/10.1007/s11238-025-10078-4>
27. Raz, J. (1992). The relevance of coherence. *Boston University Law Review*, 72(2), 273-321.
28. Scalia, A. (1997). *A matter of interpretation: Federal courts and the law*. Princeton University Press.
29. *S.G. Vombatkere v. Union of India* (2022). 7 SCC 433 (India). [S.G. Vombatkere vs Union Of India on 11 May, 2022](#)
30. Sharafi, M. (2014). *Law and identity in colonial South Asia: Parsi legal culture, 1772-1947*. Cambridge University Press.

31. Shahrukh, M., & Mustafa, G. (2025). Land Revenue Systems in South Asia: A Comparative Legal and Institutional Study of Pakistan, India, and Bangladesh. *Orient Research Journal of Social Sciences*, 10(1), 47-65.
32. Shukla, V. (2023). Legal Lens : Navigating the Boundaries of Law. *Indian Poilitics & Law Review Journal*, 8, 165-188. [Yanshika-Shukla-IPLR.pdf](#)
33. Singha, R. (2000). Colonial law and infrastructural power: Reconstructing the Indian Penal Code, 1860. *Journal of Asian Studies*, 59(1), 1-34.
34. Sooriyagoda, L. (2025, August 30). *Court permits step father to adopt 18-year-old girl in exceptional case*. Daily Mirror. [Daily Mirror - Sri Lanka Latest Breaking News and Headlines - Print Edition Court permits stepfather to adopt 18-year-old girl in exceptional case](#)
35. South Asian Association for Regional Cooperation (SAARC). (n.d.). *About SAARC*. Retrieved November 12, 2025, from <https://saarc-sec.org/>
36. Tahir, R. (2023, May 11). *Lahore High Court Strikes Down Pakistan's Colonial-era Sedition Law*. Oxford Human Rights Hub. [Lahore High Court Strikes Down Pakistan's Colonial-era Sedition Law | OHRH](#)
37. Wilson, W. (1908). *Constitutional government in the United States* (p. 56). Columbia University Press. [Constitutional government in the United States](#)

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

