









Protection of privacy and confidentiality in research: The arduous journey of researchers - A questionnaire-based study

Authors:

Shama U Rao
Dr Uma Kulkarni
Affiliation: Centre for Ethics
Yenepoya (deemed to be University)
No conflict of interest
(Financial/Non-financial)

Acknowledgement:

National Institutes of Health Grant No. 1R25TW010305, USA Yenepoya University Fogarty International Centre (YU-FIC), Yenepoya (deemed to be University) India. This content is solely the responsibility of the authors and does not necessarily represent the views of the NIH and Yenepoya (deemed to be University)

- Background
- Indian scenario and need for the study
- Objectives
- Methodology
- Results
- Discussion
- **▶** Conclusion
- Limitations
- References

Speaker's profile

- Name: Shama U Rao
- Designation: M.Sc. Research Ethics Scholar, Centre for Ethics, Yenepoya (deemed to be University), India
- ▶ Education: M.Sc. Pharmacology and Drug Discovery, Coventry University, U.K.
- Experience: Worked as JRF at Yenepoya Research Centre, from 2020-2022
- Publication:
- 1. Shet, V. B., Palan, A. M., Rao, S. U., Varun, C., Aishwarya, U., Raja, S., Goveas, L. C., Vaman Rao, C., & Ujwal, P. (2018). Comparison of response surface methodology and artificial neural network to enhance the release of reducing sugars from non-edible seed cake by autoclave assisted HCl hydrolysis. *3 Biotech*, 8(2), 127. https://doi.org/10.1007/s13205-018-1163-9
- 2. Shet, V. B., Varun, C., Aishwarya, U., Palan, A. M., Rao, S. U., Goveas, L. C., Raja, S., Rao, C. V., & Puttur, U. (2018). Optimization of reducing sugars production from agro-residue coconut leaflets using autoclave-assisted HCl hydrolysis with response surface methodology. *Agriculture and Natural Resources*, 52(3), 280-284. https://doi.org/10.1016/j.anres.2018.09.015





Privacy and Confidentiality



- Privacy and confidentiality (P&C) are a fundamental part of biomedical research. [1, 2, 3]
- Right of individual(s) to protect themselves from unwanted intrusions. [4]
- Keeping information about someone or something private. [4]



Indian scenario



כ

Indian Good
Clinical
Practices [3]

Privacy and Confidentiality

ICMR
Ethical
Guidelines
2017 [1]

NDCTR 2019 [2]

What are the possible gaps in policies and practices?
How are researchers maintaining confidentiality in the context of research?

Objectives

To explore the methods employed by the researchers to maintain P&C of the participants

Privacy and Confidentiality



To explore the barriers and enablers encountered while maintaining P&C

Methodology

Ethics committee (EC) approval

Cross sectional questionnaire

Checklist based questionnaire

Written informed consent

Convenience sampling

Validated and pretested 55 clinical/non clinical researchers

Responses marked by PI

Qualitative and descriptive analysis

Results - Maintaining P&C

Informed	OPD	54.4%	Anonymizat ion measures	Code	72.7%
	Ward	43.3%		Remove/mask identifiers	38.2%
Sensitive data collection	OPD	9.1%	Storage measures for data and samples	Cabinet	72.7%
	Consultation room	9.1%		Password	68.2%
Personal identifiers collected	MRD number	50.0%		Logbook	45.5%
	Address	32.7%		Biometric	36.4%

Results - Breach of confidentiality



- ▶ Only one researcher reported experiencing data breach.
- ► However, this was minor and was quickly resolved with the help of the IT department.
- ▶ While the EC was made aware of this, the participants were not informed.

Results - Barriers





- Barriers were reported to be;
- 1. Time and space constraints
- 2. Utilizing crowded areas for informed consent and data collection
- 3. Poor participant comprehension
- 4. Documentation
- 5. Sharing work space with others
- 6. Cost
- 7. Memory and technical issues





Results - Enablers





- ▶ Enablers mentioned by the researchers were;
- 1. Ethics training
- 2. Convenience and accessibility to participants
- 3. Anonymization of participants samples/data
- 4. Protection of P&C of participants





Discussion

- Many challenges like technical issues lack of understanding from researchers and participants etc., were observed as found by Noroozi M et al (2018). [8]
- ► Strict measures were taken to protect confidentiality by psychiatry department and this was also reflected by Karasneh R *et al* (2021). [9]
- As seen other studies by Adarmouch L et al (2020), Mac-Seing M et al (2021), Karasneh R et al (2019), Noroozi M et al (2018) and Karasneh R et al (2021) our study indicates many researchers seem to have a lack of understanding of various aspects of P&C. [5, 6, 7, 8, 9]

Conclusion

- ▶ Our study reveals several weak points about protecting P&C in research like utilization of crowded places for collecting data and easy access to medical records, thereby increasing the vulnerability of participants to breach of P&C.
- Possibilities of breach of P&C include informed consent process, data collection specifically related to sensitive information, storage and sharing of data/samples and anonymization
- Researchers require more robust mechanisms to protect P&C in research.

Limitations of the study

- 1. An in-depth interview study would be a better study design to explore barriers and enablers.
- 2. Participants hesitated to speak freely.
- Due to busy schedule of researchers, there was lack of interview time.
- 4. Responses are self reported and not directly observed.

References

- 1.Mathur, R., & Swaminathan, S. (2018). National ethical guidelines for biomedical & health research involving human participants, 2017: A commentary. *The Indian journal of medical research*, 148(3), 279-283. https://doi.org/10.4103/0971-5916.245303
- 2.G, S., & Lc, P. (2019). New Drugs and Clinical Trial Rules 2019, What is New? Our Views from Ethical Perspective. *The Journal of the Association of Physicians of India*, 67(10), 75-76.
- 3. Malhotra S. (2022). Good Clinical Practice (GCP) an alternative, unarticulated narrative. *Indian journal of medical ethics*, VII(2), 119-122. https://doi.org/10.20529/IJME.2021.064
- 4. Varkey B. (2021). Principles of Clinical Ethics and Their Application to Practice. *Medical principles and practice: international journal of the Kuwait University, Health Science Centre*, 30(1), 17-28. https://doi.org/10.1159/000509119
- 5. Adarmouch, L., Felaefel, M., Wachbroit, R., & Silverman, H. (2020). Perspectives regarding privacy in clinical research among research professionals from the Arab region: an exploratory qualitative study. *BMC medical ethics*, 21(1), 27. https://doi.org/10.1186/s12910-020-0456-9

References

- 6.Mac-Seing, M., Ringuette, L., Zinszer, K., Godard, B., & Zarowsky, C. (2021). How to navigate the application of ethics norms in global health research: reflections based on qualitative research conducted with people with disabilities in Uganda. *BMC medical ethics*, 22(1), 140. https://doi.org/10.1186/s12910-021-00710-7
- 7.Karasneh, Reema & Al-Azzam, Sayer & Alzoubi, Karem & Hawamdeh, Sahar & Muflih, Suhaib. (2019). Patient Data Sharing and Confidentiality Practices of Researchers in Jordan. Risk Management and Healthcare Policy. Volume 12. 255-263. 10.2147/RMHP.S227759.
- 8. Noroozi, M., Zahedi, L., Bathaei, F. S., & Salari, P. (2018). Challenges of Confidentiality in Clinical Settings: Compilation of an Ethical Guideline. Iranian journal of public health, 47(6), 875-883.
- 9. Karasneh, R., Al-Mistarehi, A. H., Al-Azzam, S., Abuhammad, S., Muflih, S. M., Hawamdeh, S., & Alzoubi, K. H. (2021). Physicians' Knowledge, Perceptions, and Attitudes Related to Patient Confidentiality and Data Sharing. International journal of general medicine, 14, 721-731. https://doi.org/10.2147/IJGM.S301800

Thank you

