

Responsible Conduct of Research (RCR) – Peer Review

In research, the term “peer review” is used to describe the impartial and independent assessment of research by fellow colleagues working in the same or related field. Peer review has a number of important roles in research, such as in the assessment of grant applications, selection of materials for publications, review of the performance of researchers and teams, as well as selection of staff.

On its own, peer review cannot ensure research integrity; however it has played an important role in detecting fraud in research.

Case Study

Dr Yellow is Dr Pink’s colleague in the same department and they have similar research interests. One day, Dr Pink asked Dr Yellow if he would be agreeable to be the peer reviewer of his manuscript. Despite knowing that his schedule was swamped with clinical and academic obligations in the coming weeks, Dr Yellow nonetheless agreed to be the manuscript reviewer and agreed to the two-week deadline given by Dr Pink (in time for the manuscript to be submitted to the journal editor by the week after that).

However, Dr Yellow realised that he was unable to meet the given deadline, and decided to delegate the review work to his research assistant without informing Dr Pink.

(1) As a peer reviewer, what should Dr Yellow have done?

- He should have checked his work schedule to ensure that that he had sufficient time to carry out the peer review before agreeing to Dr Pink’s request. Following that, he should have performed the review work himself, within the given deadline. If he had been unable to meet the deadline, he should have either declined the review or requested for an extended deadline from Dr Pink.
- He should not have asked his research assistant (or anyone else) to perform the review on his behalf.
- a and b.

(2) What are some characteristics or qualities of a peer reviewer that Dr Yellow should have been aware of?

- A peer reviewer should conduct the review process responsibly, and be unbiased and timely in his review; act in confidence and not divulge the contents or outcome of any process for which he is involved; declare all conflicts of interest (if any); not allow personal prejudices to influence the peer review process and not introduce considerations that are irrelevant to the review criteria; and not take calculated or undue advantage of knowledge gained during the peer review process.
- A peer reviewer should assess whether the research methods are appropriate; check calculations and/or confirm the logic of arguments; ensure that the conclusions are supported by the evidence presented; confirm that the relevant literature has been consulted and cited; and give proper consideration to research projects that challenge current norms and practices.
- All of the above.

References

- Shamoo, A.E. and Resnik, D.B (2009). *Responsible Conduct of Research 2nd Edition*. Oxford University Press. Chapter 7: Publication and Peer Review
- Nicholas H. Steneck, Revised Edition 2007. *ORI Introduction to the Responsible Conduct of Research Chapter 10: Peer Review*

To find out more about RCR, please visit the NHG research website at:

https://www.research.nhg.com.sg/wps/wcm/connect/romp/nhg_omp/hssp/responsibleconductofresearch/corecomponentsofrcr/

Valerie Wee

Senior Executive
Research Education
National Healthcare Group

Correct Answers for Case Studies

1. c, 2. c

