**Case Study: Accuracy of information**

Abi is a researcher at an institute and also a statistical programmer. Abi has received a project from a manufacturer to review the nutritional value of a new cereal, Whizzz. Having collected the necessary data, he now needs to perform the appropriate analyses and print the reports for him to send to the manufacturer. Unfortunately, the data Abi has collected seems to refute the claim that Whizzz is nutritious, and, in fact, they may indicate that Whizzz is harmful.

Abi also realises that some other correlations could be performed that would cast Whizzz in a more favourable light. “After all,” he thinks, “I can use statistics to support either side of any issue.”

**Ethical Concerns**

* Clearly, if Abi changed data values in this study he would be acting unethically. But is it any more ethical for him to suggest analysing correct data in a way that supports two or more different conclusions?
* Is Abi obligated to present both the positive and the negative analyses?
* Is Abi responsible for the use to which others put his program results?
* If Abi does put forward both sets of results to the manufacturer, he suspects that they will publicise only the positive ones. What other courses of action has he?

**Response**

Research integrity plays pivotal role when it comes to conducting professional researches. The set of moral and ethical standards allow researchers to follow best practices when they collect, analyse, report and publish the data, ultimately adhering to the highest possible standards (Kocyigit et al., 2023). In Abi’s case of changing the data and analysing correct data that would have supported two different conclusions, could be seen as scientific misconduct, as stated by Kocyigit et al. (2023) this would be an act of intentional falsification of the data, and the findings would be incomplete, uncorroborated and even fraudulent. Furthermore, having two or more different conclusions can be easily perceived as research bias, undermining its trustworthiness. In this example, selecting one outcome over another is inherently associated with systematic error often introduced in sampling, but this bias can occur at any phase of a research including study design, data collection, analysis as well as publication (Pannucci and Wilkins, 2023).

Abi, as an researcher, should present both negative and positive results. This complies with transparency as a principle that helps to facilitate the proper interpretation of results and to produce reproducible and open research that is evidence-based. This may, therefore, include negative as well as positive research results to improve validity of findings. (Office for Open Research, n.d.). However, if a manufacturer decides to publish only positive results, Abi could intervene with a complaint to the publisher or research integrity institution.

On the other hand, if Abi felt that the usage of his findings could have negative outcomes for others, he could restrain himself from being personally responsible for actions made by others.

**References:**

Kocyigit, F., B. et al. (2023) Research Integrity: Where We Are and Where We Are Heading. *Journal of Korean Medical Science*. 38(47). Available from: [**https://pubmed.ncbi.nlm.nih.gov/38050915/**](https://pubmed.ncbi.nlm.nih.gov/38050915/) [Accessed 04 May 2024]

Office for Open Research (n.d) Research Transparency. The University of Manchester. Available from: [**https://www.openresearch.manchester.ac.uk/resources/open-research-principles/research-transparency/**](https://www.openresearch.manchester.ac.uk/resources/open-research-principles/research-transparency/) [Accessed 04 May 2024]

Pannucci, J. C. and Wilkins, G. E. (2023) Identifying and Avoiding Bias in Research. *HHS Author Manuscript.* 126(2): 619-625. Available from: [**https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2917255/**](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2917255/) [Accessed 04 May 2024]