Women in Physiology: Development of educational infographics to improve awareness of the contributions of historical female physiologists.

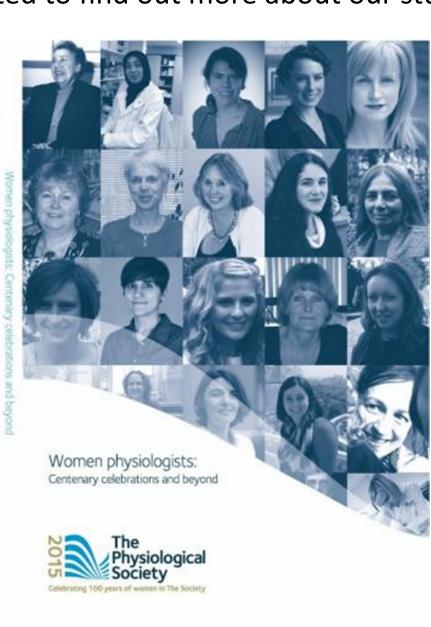


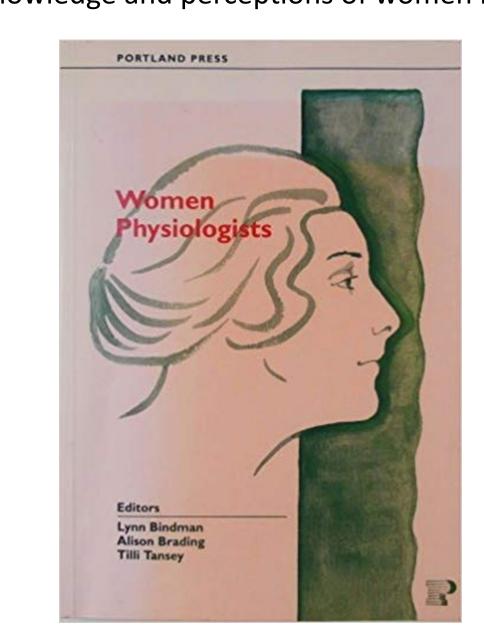
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Background

- The history of our subject may often receive limited coverage in our curricula, and perhaps only included by a few enthusiastic teaching staff. Some staff and students felt it was sometimes hard to find interesting ways to communicate this information.
- We do cover history of medical sciences in our students' first ever course, but staff were concerned about how few female scientists appeared within the course material, and that we perhaps had too much of a focus on the UK and Europe.
- Anecdotally, our students' (and staff!) seemed to have real problems naming an important female physiologist when asked.
- We wanted to find out more about our students' knowledge and perceptions of women in physiology.





Existing review material celebrating women in physiology.

Much of this work had been supported by the Physiological Society.

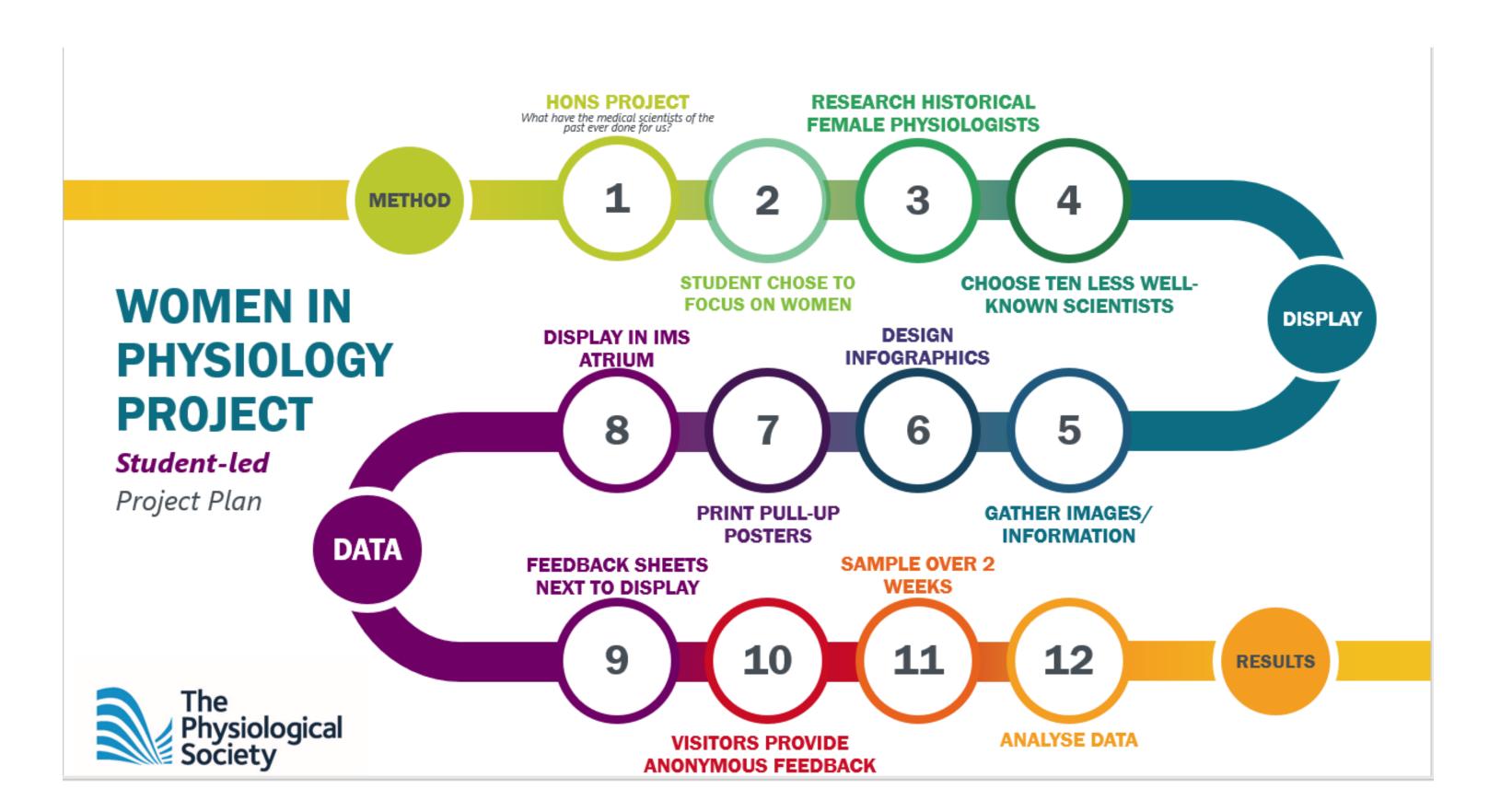
Much of it requires updating and is only available in hard copy, unless made available via the Society's webpages.

Anecdotal evidence suggests that some felt that the stereotypical design of some resources (i.e. pink book cover) reinforced negative or traditional stereotypes of women and put them off engaging with such resources.

Aims

- To investigate the perceptions of students and academic staff regarding key historical female researchers in physiology.
- It was hoped that this study would raise the profile of women in medical science, and help students learn about the history of physiology.
- To stage an exhibit of infographic posters in the Institute of Medical Sciences (IMS) and investigate if communicating information in this way was viewed positively by the audience.

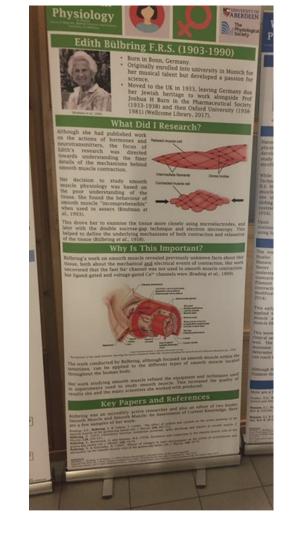
Methods



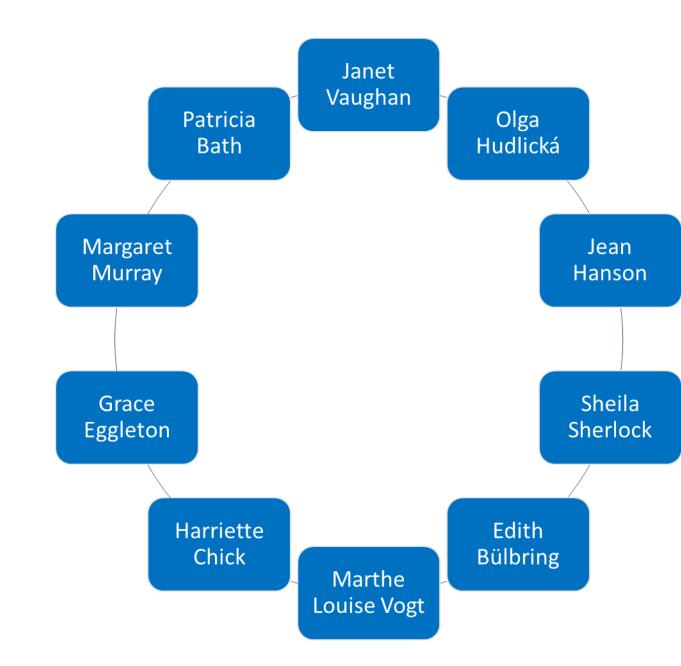
Examples of student-created infographic resources



- Infographics (information graphics) are now commonly used by various industries (i.e. marketing, news media, healthcare) to communicate complex information to a broad audience in a quick, memorable and accessible way.
- This project used 11 large infographic posters to stage an exhibit in a public area of a university building.

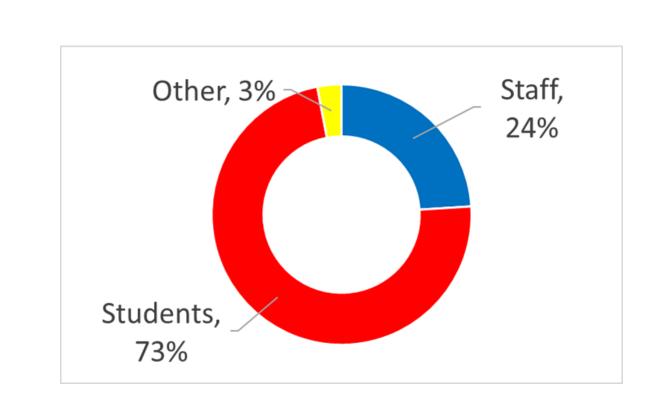


Results



Ten women in physiology selected — variety of career periods, nationalities, backgrounds and subject specialisms.

37 responses in 2 weeks



•Only **24%** of respondents had heard of the women physiologists.

66% said this knowledge had come from lectures.

- •100% agreed infographics were an effective way of representing these women and their contributions, and for engaging a broad audience with scientific concepts/information.
- •100% thought women were treated unfairly in coverage of the history of medical science.
- \bullet 92% of respondents agreed they knew more about male researchers in medical sciences.
- $\bullet~95\%$ agreed that infographic posters were an effective way to learn about the history of physiology.
- 89% felt that university courses focused more on the contributions/discoveries of one gender than another (male or female).
- \bullet 97% felt teachers should give equal attention to the contribution of males and females in the subject matter they teach.
- \bullet 97% wanted to learn more about women in physiology and 100% wanted more of such exhibitions around university locations.

'What is a physiologist?'

- some felt it hard to define as the science crossed traditional disciplinary boundaries.



Terms used to describe female physiologists in the feedback forms – powerful appeared in 20/37 responses

Discussion & Conclusions

- This pilot study has shown that universities may have to do more to raise the profile of the contributions of female medical scientists in their teaching.
- Exhibits such as this may be an effective method of engaging a broad audience of students and staff with such topics, as well as improving how we teach the history of physiology.
- Further exhibits have taken place in other areas of university campus and during public engagement events to increase the visibility of women in physiology –we now have over 500 responses.
- Results are being used as part of programme review, in partnership with students, regarding the history of medical science that we teach (i.e. do we provide fair coverage to scientists of each gender, do we provide a global perspective, do we consider disability etc).
- A final plea from my student please can the Physiological Society publish a new edition of 'Women Physiologists', without the pink cover!

Thanks & Acknowledgements

- Prof Tilli Tansey & Dr David Miller from History & Archives, Phys Soc.
- Dr Ann Rajnicek for tracking down her copy of 'Women Physiologists' that she was sent to review in 1993.
- Rebecca Mackay, who did all the work.

