

Public Engagement – the final frontier for ultrasound imaging

Carmel M Moran on behalf of the *Imaging inside-out* public engagement team

Imaging Inside-Out engagement team included: Diana Luna Buitrago*, Mairead Butler**, David Hardman*, Triin Ounapuu*, Pratibha*, Robert C Shaw* Yi Zheng*, Qi Zhou*.

*University of Edinburgh, ** Heriot Watt University

BACKGROUND AND AIMS

Background:

- Research councils and medical charities actively encourage dissemination of research findings to the general public
- An ultrasound-based outreach programme was developed with local high-school physics teachers to align with physics curriculum learning stages
- The activity was aimed at young people (12-18 years old) either studying science or attending science clubs



Aims:

- To share results from ongoing ultrasound research undertaken at University of Edinburgh
- To promote discussion of the use of animals in medical research

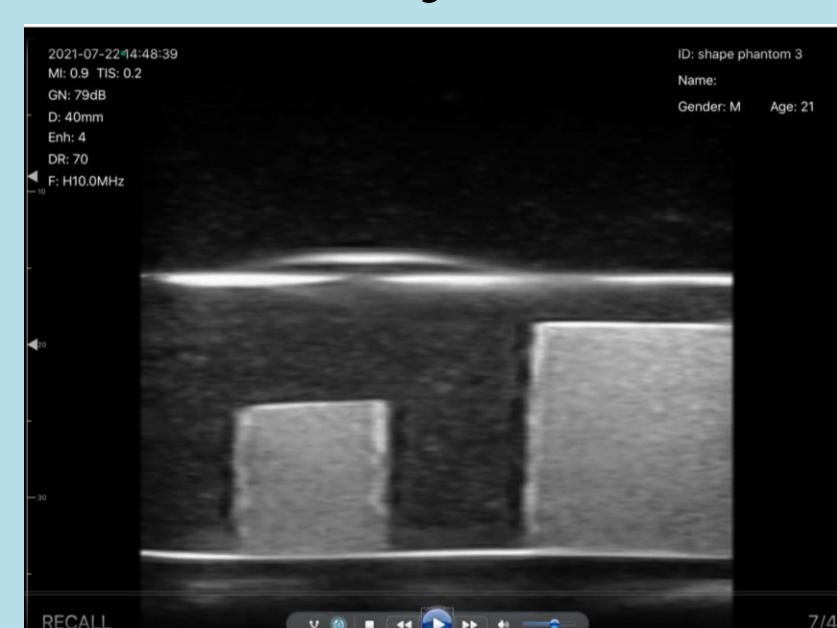
Methods:

Two test-objects were developed

- Agar shapes (cones, cubes, pyramids and spheres) of three different sizes were embedded in opaque gel
- Agar-made mice of 3 sizes embedded in opaque gel



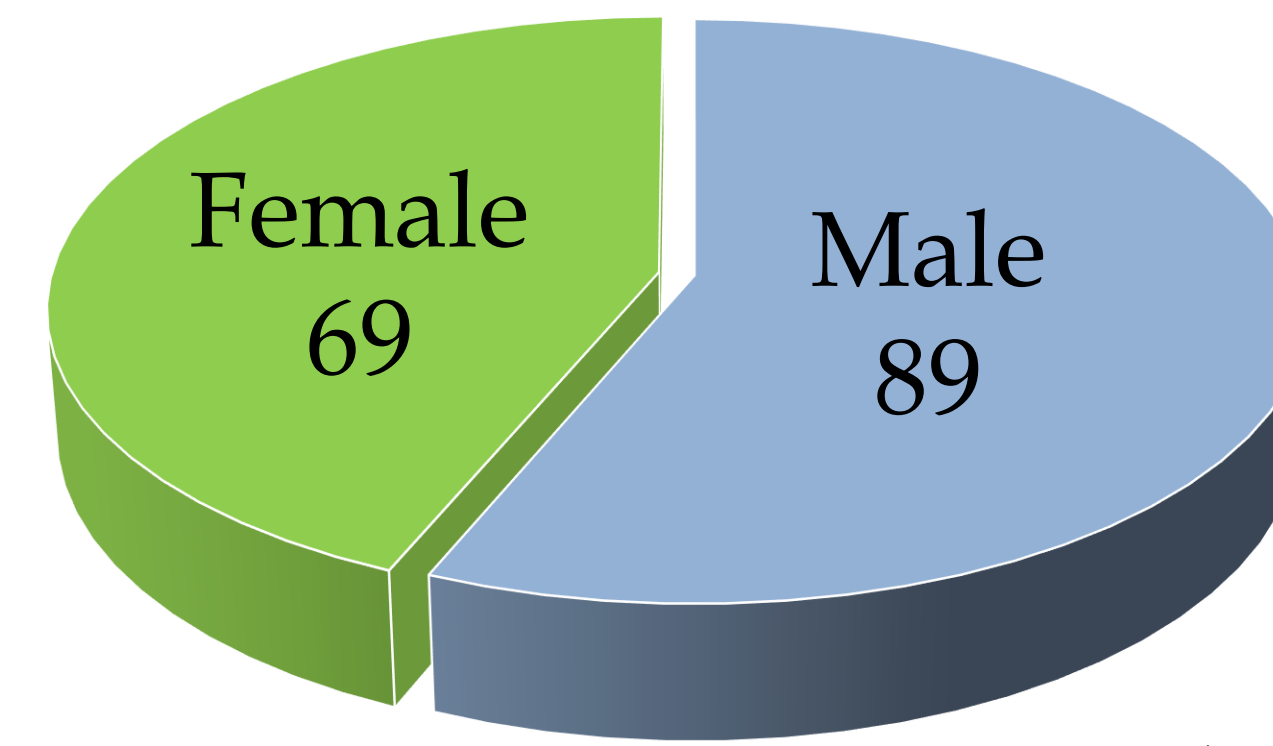
- 6 handheld wireless ultrasound scanners (2 linear arrays operating at 7.5-10MHz, 2 linear arrays at 10-14MHz and 2 curvilinear arrays at 3.5-5MHz) were purchased from Ballater Medical (www.ballatermedical.com)
- Images were displayed on iPads through provided App
- University of Edinburgh postdocs/students using ultrasound in their research projects were invited to become demonstrators
- All demonstrators were invited to attend a training session on *Engaging with the public on animal research* (<https://www.understandinganimalresearch.org.uk>) prior to any engagement activity



METHODS

RESULTS

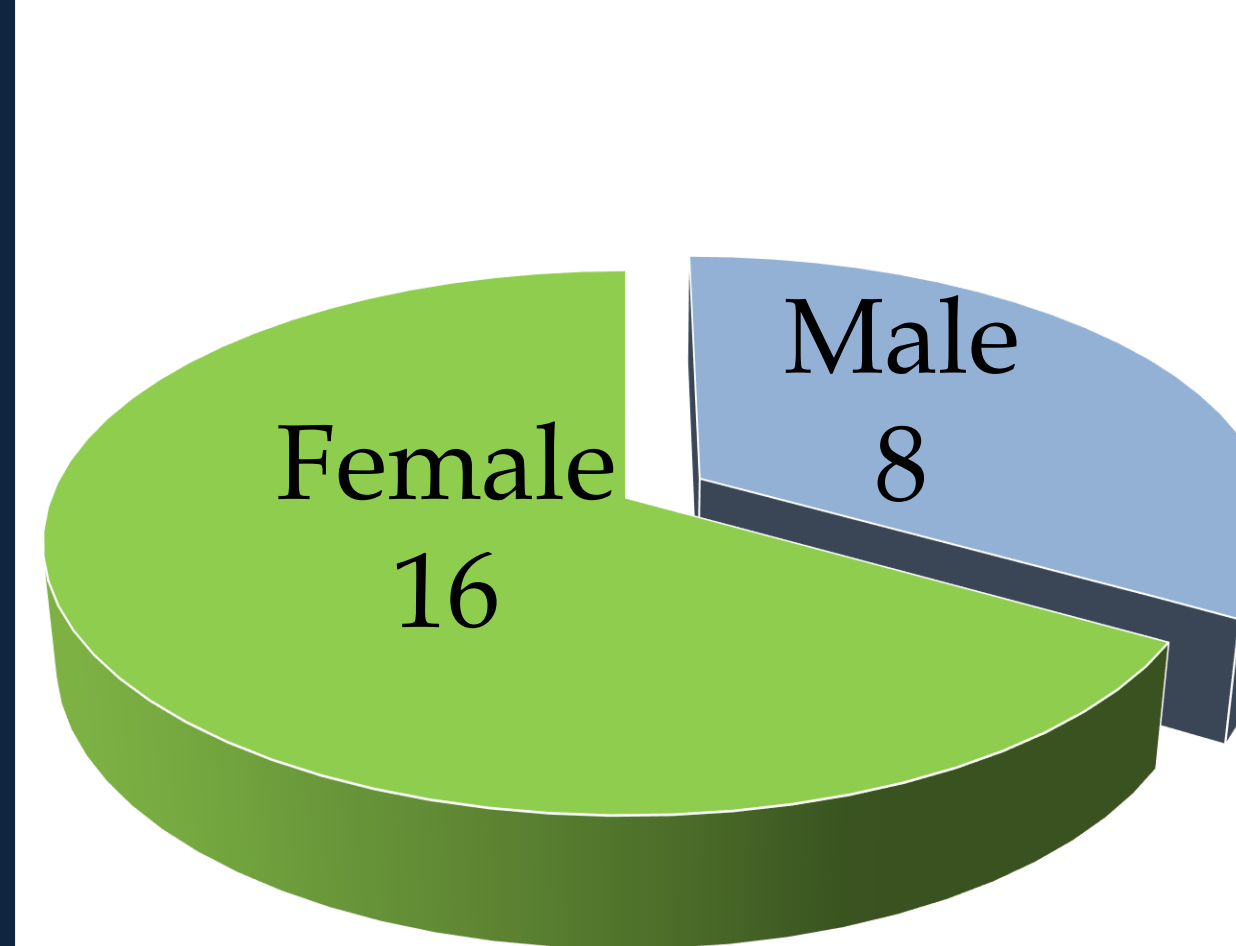
Sex of pupils engaged



158 young people



Sex of demonstrators engaged



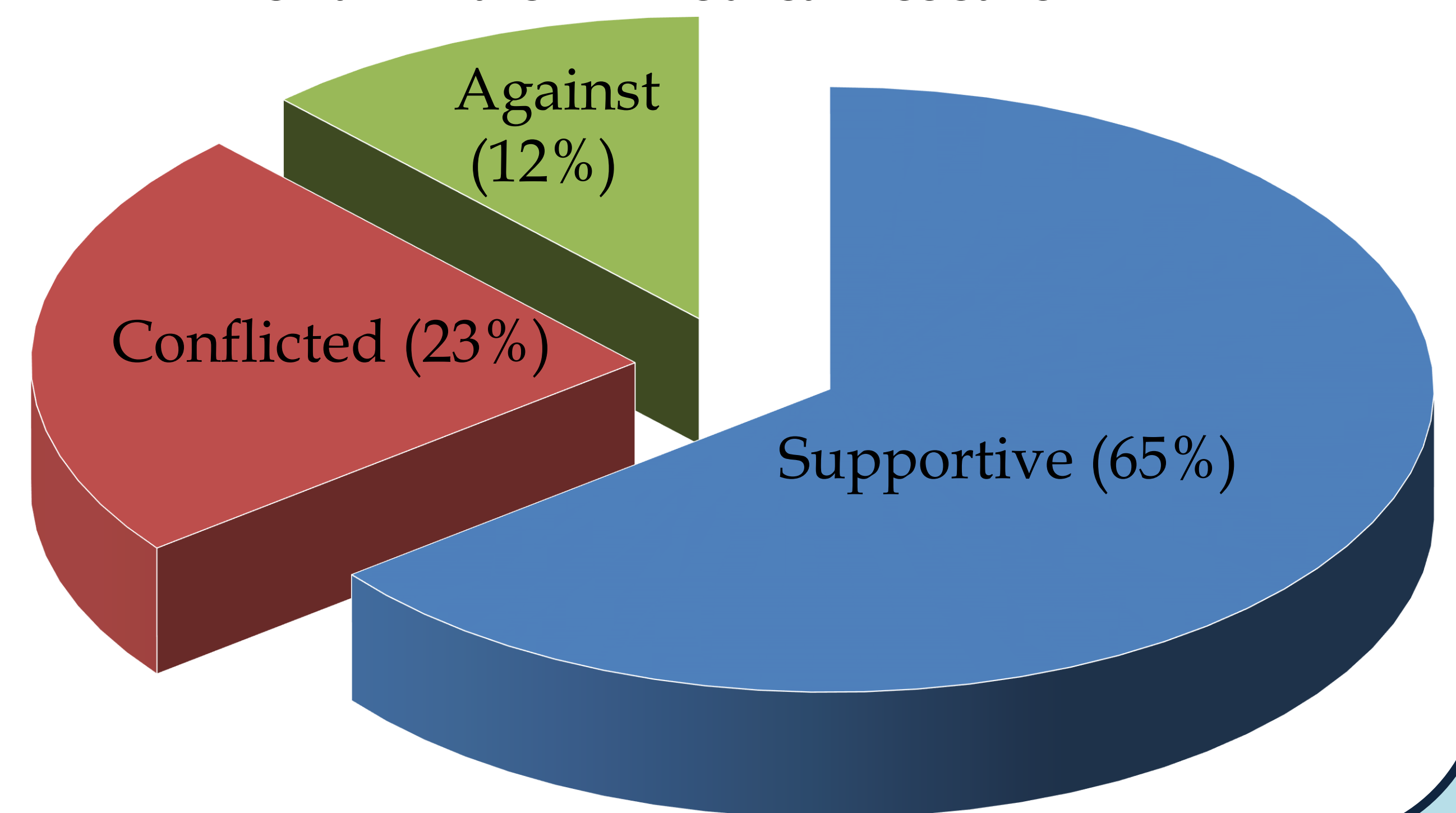
24 demonstrator events



Results:

- Over 90% of pupils were willing to scan the test-objects
- We engaged pupils in discussions on the use of medical ultrasound within hospitals and veterinary applications
- Over 70% of pupils were willing to engage in discussion about the use of animals in medical research
- Even after one outreach activity, all demonstrators expressed increased confidence in discussing animal research

Views of young people after discussing the use of animals in medical research



Conclusions:

- This outreach activity provided opportunities for researchers to engage with young people to discuss the results of their research
- It provided an insight into the views of young people on the use of animals in medical research

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CONCLUSIONS