What have I missed? A SHOT cognitive bias case study

Victoria Tuckley, Nicola Swarbrick, Debbi Poles and Shruthi Narayan - Serious Hazards of Transfusion, Manchester, UK

Introduction

Cognitive biases are subconscious mental shortcuts used to aid decision-making. They are often useful in everyday life. When they occur undetected in healthcare decision-making important information can be overlooked, which can lead to potential patient harm. Anchoring bias occurs when one piece of information is focused upon at the expense of other relevant information. Confirmation bias occurs when individuals seek out information which confirms their existing view.

Case Study

1. A unit of red cells was requested for a patient with acute myeloid leukaemia and a known anti-c antibody

2. When a biomedical scientist (BMS) performed an antibody identification panel, many cells were c-positive. The BMS selected extra cells to exclude additional antibodies

3. A heterozygous cell was used to exclude anti-M and a reaction with a homozygous M-positive cell was overlooked

4. The patient was transfused a crossmatch compatible c-negative red cell unit, but the M status of the unit was unknown

5. Upon review of the antibody identification panel results by senior staff the anti-M antibody was identified

6. The BMS was focused on organising the transfusion at short notice for the day ward taking into consideration the presence of the anti-c antibody

Discussion

- Staff can overcome anchoring and confirmation bias by taking a ‘stop moment’ before release of blood components
- A second check of serology before release, and use of tools such as the SHOT ‘PAUSE’ tool, could prevent these errors from reaching patients
- Individuals should be trained in the impact of cognitive bias
- Asking questions such as ‘What have I missed here’? and ‘What else could this be?’ can help overcome assumptions, anchoring and confirmation bias