Addressing staffing crises in transfusion without compromising safety

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SUMMARY

A presentation of data submitted to Serious Hazards of Transfusion (SHOT), the UK's Haemovigilance scheme. Data subject is training and competency of healthcare professionals in temporary roles, such as locum or agency.

KEYWORDS

Healthcare, blood transfusion, SHOT, safety, training

Introduction

There should be regular and relevant training for all staff involved in the blood transfusion process as this is vital for transfusion safety (BSH, 2017). The Blood Safety and Quality Regulations (BSQR, 2005) mandate that all staff involved in the collection and distribution of blood components undertake regular training and competency assessments. The BSH suggests that there is very little evidence to indicate the optimum frequency of training to maintain knowledge and skills but recommends it should be at least every three years. Temporary staff in clinical and laboratory settings are often used to maintain acceptable and safe staffing levels and ensure continuation of activities. This means that health care professionals working for an agency or as a locum nursing, medical, scientific and support staff may have to work in unfamiliar care settings and outside of their normal scope of practice. During the response to COVID-19 pandemic there was requirement for rapid staff re-deployment to meet increased demand, the staffing crisis was further exacerbated by clinical and laboratory staff shortages due to sickness and the need for isolation due to exposure to the virus in many cases. Whilst there is a necessity for re-deployed, temporary and agency staff for service continuity, there also needs to be a process for ensuring they have the necessary training and have undergone competency assessment so that the care provided continues to be high-quality with no risk to patient safety.

Serious Hazards of Transfusion is the UK's independent professionally led haemovigilance scheme working collaboratively with MHRA. SHOT receives reports from hospitals throughout the UK via the Serious Adverse Blood Reactions and Events (SABRE) electronic database. This anonymised information is analysed, and an Annual SHOT Report and Summary is published which includes recommendations to enhance the standard of hospital transfusion practice and improve patient safety. This review looks at all errors reported to SHOT involving the use of temporary/redeployed staff and to see if these staff were trained and competency assessed or not. There is no current national guidance for minimum transfusion training/competency requirements for temporary staff.

Method

Data from reports submitted to SHOT between 2018 to 2020 was reviewed for cases where redeployed, agency or temporary staff were involved in the transfusion process error.

Results

There were a total of 12,348 reports submitted to SHOT during this period, 190/12,348 (1.5%) involved staff that were in temporary roles such as agency/locum staff or had been re-deployed to an area different from their usual workplace. There were 5/190 (2.06%) paediatric cases.

Nurses accounted for 85/190 (44.7%) of reports and in 28/85 (33.0%) of cases had received no induction or training in the transfusion process when they were either re-deployed or were working for an agency. Doctors accounted for 44/190 (23.1%) cases and 10/44 (22.8%) of these had received no training. There were 50/190 (26.4%) cases involving laboratory biomedical scientists (BMS), of these 4/50 (8.0%) had not received training. Midwives were involved in 7/190 (3.7%) cases with none being untrained and Healthcare Assistants (HCA) accounted for 4/190 (2.1%) cases with 1/4 (25.0%) untrained. This data is limited as there were 120/190 (63.1%) of reports where information regarding the staff member receiving training or not was unavailable.

Near miss wrong blood in tube events (NM WBIT), where blood is taken from the wrong patient and is labelled with the intended patient's details or blood is taken from the intended patient but labelled with another patient's details was the most common near miss event with 44/190 (23.1%) reports. Nurses were involved in 22/44 (50.0%) of these cases and doctors in 14/44 (31.8%).

Reports of near misses (NM), errors which if undetected could result in the determination of a wrong blood group or transfusion of an incorrect component but was recognised before the transfusion took place accounted for 36/190 (18.9%). In this category 22/36 (61.2%) of cases involved a Biomedical Scientist (BMS), 9/36 (25.0%) nurses and 5/36 (13.8%) doctors.

The other two categories which had a high incidence of errors were handling and storage errors (HSE) 35/190 (18.5%) and avoidable delayed or under/over transfused (ADU) 27/190 (14.3%). The remaining errors occurred in right blood right patient (RBRP) where a patient was transfused correctly despite one or more serious errors that in other circumstances might have led to an incorrect blood component transfused, 17/190 (8.9%). Specific requirements not met (SRNM) where a patient was transfused with a blood component that did not meet their specific requirements, for example irradiated components, accounted for 14/190 (7.4%) cases. Wrong component transfused (WCT) where a patient may have been transfused with a blood component of an incorrect blood group, or which was intended for another patient and was incompatible with the recipient accounted for 10/190 (5.3%) cases and errors with Anti-D Ig where there was an error related to the prescription, requesting, administration or omission of anti-D Ig for 7/190 (3.6%).

In 174/190 (91.6%) of reports there was no adverse clinical impact on the patient, 11/190 (5.8%) patients had minor morbidity but recovered fully. There were 5/190 (2.6%) deaths with two of these deaths possibly related to the delay in the transfusion.

Conclusion

While there are limitations to the data discussed (variable reporting, incomplete information, non-comprehensive), it is clear from this review that the training and competency assessments that are mandated by BSQR is not really been ensured in temporary locum/agency/redeployed staff. They

provide flexibility and improve staffing in the NHS however it is imperative that they are provided with the necessary training and undergo essential competency assessments for safety critical tasks such as blood transfusion. A UK wide harmonised approach with national standards for minimum knowledge and skills standards for temporary staff members to be able to carry out transfusion related activities is needed. This will ensure that all patients continue to receive safe, high-quality care.

References

BSH Robinson S, Harris A, Atkinson S, et al. The administration of blood components: a British Society for Haematology Guideline, 2017.

Blood Safety and Quality Regulations (BSQR) 2005.