THE SAFE ADMINISTRATION OF BLOOD TRANSFUSIONS AT NIGHT

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ABSTRACT Stevenson, T. (2007) The safe administration of blood transfusions at night. Nursing Times; 103: 5, 33–34. This audit, which examines the practice of giving patients blood transfusions at night, found that two-thirds of transfusions could have been delayed until the following morning without any detrimental effects to patient care. The article evaluates the areas of risk and concern associated with administering blood at night, and makes recommendations to improve practice. This is a summary: the full paper and reference list can be accessed at nursingtimes.net.

AIM OF THE AUDIT
During a training session at a hospital in Dorchester it was suggested that transfusions were occurring routinely at night. The researchers decided to find out whether this was the case and if so, the reasons why.

The practice of local hospitals in providing transfusions was audited to determine the level of night transfusion activity. Based on the findings it was decided to widen the investigation and a regional project on night transfusion practices was undertaken. The aim was to evaluate night transfusion practices and, in light of the results, suggest a strategy for improving safe practice for blood transfusions outside of normal hours.

METHODS
Scoping
The audit had two parts. The first part examined the overall percentage of blood transfused at night at each hospital in the region. Eight hospitals were contacted and data collected from six. This was collated to calculate the proportion of transfusions occurring at night for the region as a whole.

Detailed analysis
Once it was established that undertaking blood transfusions at night was common practice, the second part of the project explored the reasons why. Sixty pro formas were issued to regional transfusion practitioners and laboratory managers to collect more details about transfusion practice at night. The pro formas collected the following information:

- Whether the patient was scheduled for surgery the following morning;
- Whether the patient was being prepared for discharge;
- Whether the patient was wearing a wristband;
- Whether the patient was unconscious;
- Whether the correct patient observation procedures were followed;
- Whether the location of the patient during the transfusion made observation during the procedure difficult;
- Staffing numbers during the transfusion and shifts immediately before and after.

RESULTS
Proportion of transfusions at night
The first part of the audit examined the percentage of transfusions taking place at night. Two of the eight hospitals in the region did not participate in this stage of the audit, giving a 75% response rate. This data was collected retrospectively from the transfusion issue information for February 2006.

The results showed that the average proportion of transfusions occurring at night across the region was 25% in February 2006, with 866 transfusions taking place during the night and 2,603 during the day at the six hospitals that provided data. The proportion of night transfusions in hospitals ranged from 13% to 29%. The total number of transfusions performed at each hospital ranged from eight to 928 during the month.

Types of patients transfused at night
The second part of the audit looked in detail at the types of patients who underwent blood transfusions at night and the practices of the hospital. A total of 60 pro formas were issued to the six participating hospitals and 43 were returned from five hospitals; a response rate of 72%.

Patients who had transfusions at night were most likely to have been admitted through the orthopaedics department. Most blood transfusions at night were given to...
overnight and that two-thirds of these were
within the Dorchester region a quarter
the results of this project demonstrated
reasons why the correct observations were
during the night, which could be one of the
levels were generally at least 50% lower
were considerably lower at night. Staffing
in side rooms and 26% were located in
patients received their transfusions in view of
these observations. In addition, only 30% of
blood transfusions at night did not receive
of cases; 40% of patients who underwent
transfusion practice, where observations
how night observations differ from daytime
for 40% of the cohort. It is difficult to assess
because of the lack of patient observations
40% of the cohort. It is difficult to assess
from daytime practice in this study. However, indications
from the National Comparative Audit of Blood Transfusion (2005) on bedside
transfusion practice, where observations
nationally are recorded in 85% of patients,
suggest that observations at night are
inferior to daytime practices.

An issue of major concern was that most
patients receiving transfusions during the
night were located in areas where potentially
they could not be readily observed by the
nursing staff. Most patients were located in
side rooms or in a bay and these were not in
view of the nurses’ station.
The data gathered also confirmed that
staff-to-patient ratios were lower at night
than during the day.

CONCLUSION
The audit confirmed that a number of
avoidable factors were putting patients who
received blood transfusions at night at
greater risk than those who received them
during the day. These factors included
receiving a blood transfusion at night
despite no clinical necessity, being
transfused in a side room away from the
view of nursing staff, not receiving the
required observations and reduced staffing
levels at night.

IMPLICATIONS FOR PRACTICE

- Protocols should be instituted that comply
with the Serious Hazards of Transfusion Steering
Group (2003) recommendations that routine transfusions do
not take place at night because staffing levels are lower.

- These protocols could include the nurse challenging the need for
night-time transfusions to ensure they are clinically urgent and establishing a
checklist for nursing staff, such as whether the patient is bleeding or
experiencing chest pain.

- Policies should include a clear statement promoting
safe night practice and this could be backed up by a
poster campaign.

- Hospital practices should be audited regularly to ensure that
best practice protocols are being followed.

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