Safety in BLOOD TRANSFUSION

By: Naeema M. Rajab – ADoN
DHA-RH

- Introduction & Background

- Facts & Numbers

- Education & Monitoring

- Conclusion
  - Safe BT & Technology
  - Safe Practice & Process

- A blood transfusion is a **potentially** hazardous procedure.

- The transfusion of blood and blood products can lead to **complications and adverse outcomes** for patients.

- **Stringent procedures** must be followed to ensure that the correct blood is given and that any adverse reactions are dealt with promptly and efficiently.

- The **risks associated** with transfusion of blood and blood products usually fall into two categories:

- Errors in **procedure** such as:
    - incorrect patient identification,
    - inaccurate blood sample labelling,
    - administration of blood or blood products to the wrong patient.

- Transfusion **reactions**.

- March 2018-2019 at **Rashid Hospital** we <u>integrated blood transfusion quality improvement system</u>.

- We <u>reviewed current status and practice</u> relating to transfusion:
  - practice risks,
  - opportunities for improvement,
  - implementing practice improvement plan and
  - measuring the results.

Sub category	2015	2016	2017	Total
Accidential puncture of bag	5	2	0	7
Blood Utlization	58	60	62	180
Delay in administering blood	1	3	2	6
Inappropriate Storage of Blood	0	3	1	4
Slow/fast rate of administration	0	1	0	1
Transfusion Reaction	28	12	23	63
Wrong blood type or product	1	4	6	11
Wrong patient wrong blood or product administration (IPSG1)	1	0	2	3
Total				275

Findings:

1) Policy Related.

2) EMR (SALAMA System) Related.

3) Blood Bank.

4) End User.

Policy Related issues:

- ✓ Awareness of policy.
- ✓ Integration with the other procedures\guidelines.

EMR (SALAMA System) Related issues:

- ✓ Easy\friendly use module.
- ✓ Flags, alerting signs.
- ✓ Including the pt. blood group in the demographic data.

Blood Bank issues:

- ✓ Number of barcode.
- ✓ Technical issues >>> delay >>> manually.

End User issues:

- ✓ Knowledge and awareness.
- ✓ Technical issues >>> delay >>> manually.

- Number of Incidents:

2017	2018	2019
96	59	30

- Integrated up-to-date polices and procedures guidlines.

- Studies support utilization of EMR systems to enhance patient safety during blood transfusion.

- Supporting EMR system with special features to prevent errors and any potential risks.

- Standard policy.

- Standardized training.

- Multi-disciplinary approach.

Reference

➢ Yen-Michael, Thorsten Haas, Melissa M Cushing "Massive Transfusion Protocols; Current Best Practice". International Journal of Clinical Transfusion , 2016:4 15-27

➢ L.M. McDaniel, E.W. Etchill , J.S. Raval & M. D. Neal, " State of Art: Massive Transfusion", Transfusion Medicine, British blood transfusion society, 2014

➢ RH/COP/005-Management of Blood & Blood Components, Handling, Use and Administration