

Addressing Learning Needs

The development of Haemovigilance Modules with Dublin City University



- Commenced Autumn 2005
- Funded for three years by the Department of Health and Children, Ireland
- External validation by Dr Dorothy Stainsby
- Currently nearing the end of the second year



Haemovigilance Officer

- Prior to 1999 five posts filled in Ireland
- Following recommendations from the Finlay Tribunal of Inquiry –upsurge in appointments
- Presently 105 posts in 85 hospitals

Background to appointments:

- Mostly nurses from a variety of professional backgrounds (haematology, ICU, oncology, general surgery or medicine, nurse education)
- Small number of Medical Laboratory Scientists with a background in Blood Transfusion

Components of HVO Role

- **Transfusion Surveillance** – *incident investigation and reporting*
- **Blood Transfusion Practice**- *monitoring and development*
- **Transfusion related Audit**
- **Transfusion Risk Assessment and Management**
- **Education** – *planning, delivery and evaluation of structured programme*
- **Liaison throughout multidisciplinary team and within regions**

Audits of Service in 2004-2005

- Level of Satisfaction amongst hospital based haemovigilance staff with the service offered by the NHO
- Hospital-based Haemovigilance

Results: 1. *Inadequate educational support for post holders*
2. *Actual and perceived learning deficits identified*

Council of Europe

- **Recommendations on teaching transfusion medicine to nurses (2004)**
 - All nurses must receive training in Blood Transfusion

HVOs felt ill prepared for developing education programmes, conducting audits, developing policies etc

Decision to develop Degree level Professional Development modules

- Differing educational needs of HVOs
- Time commitment required
- Co-operation from DCU
- Multidisciplinary entry requirements

Each module:

- Credits based on European Credit Transfer and Accumulation System (ECTS)
- Can be taken individually or together, either as stand alone modules or as part of a degree
- 30 teaching hours per module
- Individual Assignment and Group work (validated externally)



Understanding and Management of Blood Transfusions in a Haemovigilance Context (module 1)

- Pathology and function of blood components
- Physiological effects of blood loss, anaemia and common haematological disorders
- Management of donors and of patient undergoing transfusion therapy
- Indications for, and benefits and risks of transfusion therapy
- Haemovigilance – its purpose

Relevant to:

- **Nurses who have an interest in haemovigilance/blood transfusion e.g.**
*those working in haemovigilance,
haematology/oncology units, operating theatres, ICU,
donation clinics etc.*

- **Anatomy and Physiology of blood**
- **Pathophysiology of blood**
- **History of transfusion medicine**
- **Blood donation – selection, donation, Apheresis (donation and therapeutics)**
- **Indication and physiological effects of:**
 - surgical and medical red cell transfusion
 - plasma transfusion
 - platelet transfusion
 - Albumin and factor concentrate administration
 - Anti D
- **Blood transfusion laboratory testing**
- **Transfusion transmitted infections**
- **Testing and Manufacture of blood**
- **Haemovigilance and its origins**
- **Management of patient having a transfusion in a hospital setting**
- **Adverse transfusion reactions and events**
- **Traceability, look back and recalls**
- **Risk management theory**

Haemovigilance: Blood Transfusion Practice (module 2)

- Critically evaluate the clinical use of specialist blood component therapies
- Critically appraise existing practice and risks
- Analyse practices from a quality/risk perspective

Relevant to:

- Those from either a nursing or laboratory background who currently work as HVOs
- Those who have completed the first module

- **Blood transfusion alternatives (pharmacological and in surgery)**
- **Specialist Blood component therapy**
- **Serology of Transfusion Reactions**
- **Risk Management and root cause analysis**
- **Clinical Audit**
- **Quality and Health care**
- **Quality initiatives in Haemovigilance**
- **Blood transfusion and the law (information provision and consent)**
- **Specialist blood requirements**
- **Clinical use of immunoglobulin and plasma exchange treatment**
- **Change Management**
- **IT initiatives in blood transfusion**

Evaluation of Year 1

- All agreed that modules are important and relevant to HVO professional development
- Agreed that modules increase the participants effectiveness in the role
- Disappointed that following completion of the modules the student does not have a formal qualification in the specialist area of Haemovigilance

Future plans

- Currently working with DCU within the National Framework of Qualifications
- Students who complete both modules in 2007-2008 will be awarded with a Certificate in Haemovigilance by DCU

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- Dublin City University
- All contributing lecturers
- All students

- Dr Stefan Laspina
- Dr Emer Lawlor and NHO Team
- Curriculum planning team

CLASS OF 2005-2006



31/05/2007

M Kirwan, National Haemovigilance Office

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31/05/2007

M Kirwan, National Haemovigilance Office

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