Continuous Professional Education Programme for Registered Nurses and Midwives to administer immunisations under the Medicines Protocols of the Schools Immunisation Programme (SIP)

Current issues and Communication

Current updates in relation to immunisation and the importance of effective communication

2019
Overview of Continuous Professional Education & Development Programme on Immunisations for Registered Nurses and Midwives

1. Introduction
2. Current updates and Communication
3. Professional and Legal Aspects of Vaccinations
4. Immunisation Process
   1. Storage and Handling of Vaccine
   2. Correct Administration & Standard Precautions
   3. Documentation, record keeping, reporting and audit.
6. Questions & Evaluation
Aim & Learning Outcomes

• Aim:
  To explore current updates in relation to immunisation.

• Learning outcomes:
  To discuss current updates in relation to immunisation and the importance of effective communication.
Vaccine Hesitancy

World Health Organisation (WHO) defines vaccine hesitancy as

- delay in acceptance or refusal of vaccinations despite availability of vaccine services.
- is complex and context specific varying across time, place and vaccines.
- it is influenced by complacency, convenience and confidence (SAGE, 2014).
Vaccine Hesitancy Continuum

VACCINATION BELIEFS

Anti-vaccine

Vaccine Rejector
- Unimmunized
- Completely reject vaccines
- High safety concerns
- Lack trust in health care provider

Vaccine-Hesitant
- Under-immunized
- Delay/question vaccines
- Select only certain vaccines
- Desire trustworthy health care provider

Pro-vaccine

Vaccine Acceptor
- Fully Immunized
- Few concerns about vaccines
- High trust in health care provider
3 C’s of Hesitancy
Complacency, Convenience and Confidence.

• Because vaccines have effectively controlled many of the once-common childhood infectious diseases, parents of young children are no longer familiar with these diseases.
• Fear has moved to alleged vaccine reactions that typically include child health problems that occur around the time that many vaccines are given. For example MMR time of administration and association of Autism.
• Increase number of vaccines available for an increasing number of diseases.
• Lack of trust in Government Agencies, HSE and Public Health.
• Barriers to accessing vaccinations: i.e. ease of access to services, social norms of non acceptance, environments (schools).
Vaccination has become a victim of its own success.

Because vaccinations programmes have been successful, vaccine preventable diseases are becoming less visible and many individuals as well as Health Care Professionals, have no first hand knowledge of the risks of these diseases.
HPV decline in uptake in Ireland reflects international decline

National media campaign by anti-vaccination groups (local/national/international)
How do we correct misperceptions?
IMPACT

Increase in uptake in 2016/2017
Increased in 1st dose uptake in 2017/2018

<table>
<thead>
<tr>
<th>Academic year</th>
<th>HPV1</th>
<th>HPV2</th>
<th>HPV3</th>
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<tbody>
<tr>
<td>2010/2011</td>
<td>84.0</td>
<td>82.1</td>
<td>81.9</td>
</tr>
<tr>
<td>2011/2012</td>
<td>87.9</td>
<td>87.3</td>
<td>85.5</td>
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<tr>
<td>2012/2013</td>
<td>87.0</td>
<td>86.3</td>
<td>84.2</td>
</tr>
<tr>
<td>2013/2014</td>
<td>89.3</td>
<td>88.2</td>
<td>84.9</td>
</tr>
<tr>
<td>2014/15</td>
<td>89.7</td>
<td>86.9</td>
<td></td>
</tr>
<tr>
<td>2015/16</td>
<td>82.4</td>
<td>72.3</td>
<td></td>
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<td>2016/17</td>
<td>50.0</td>
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<td>55.8</td>
<td></td>
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</tr>
<tr>
<td>2017/18 *</td>
<td>61.7</td>
<td></td>
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</tr>
</tbody>
</table>
TERRY PRONE: If the HPV vaccination trend grows, Laura will have saved women’s lives

Any doubts I had about the #hpv vaccine have now been answered! What a brave and selfless woman to come on and share her story! Amazing! @RTELateLateShow #HSE #cervicalcancer awareness!

10:03 PM - 13 Apr 2018

Donal Brennan
@donalbs

If you don't want to listen to medics about #HPVvaccine, please listen to @kimmykims31 and @laurabrennan091 - heroes telling their personal stories - much more powerful than an RCT. #vaccineswork #protectourfuture

7:05 PM - 13 Apr 2018

19 Retweets 40 Likes
What influences decision making about vaccination?

- Healthcare Professionals (HCPs) recommendations (positive and negative), HCPs confidence in vaccinations.
- Personal and past experience, attitudes and beliefs.
- Knowledge and information of disease – risk perception and trust.
- Subjective norms – to have or not have vaccine.
- Importance of vaccine.
- Moral convictions – natural methods.
- Family and friends.
- Media (newspapers, magazines, television, internet, social media).
- Peer Pressure (parent/parent, children/children, HCP/HCP).
- National Immunisation policies – public health.
Surveys Show That Parents Want:

- Healthcare professionals who are:
  - Knowledgeable, confident, consistent and trustworthy

Supportive environment where parents receive:
- Balanced and factual information
- Clarity
- Consistency
- Confidence to ask and discuss
- Openness
- Time and the opportunity to discuss their concerns

Effective Communication,

1. Partnership approach to decision making about vaccination between the parent and health professional (informed consent).
2. Recognise factors affecting an individuals’ decision making and explore any specific concerns, avoid down playing concerns regarding vaccinations.
3. Present risks and benefits accurately, consequences of not vaccinating.
4. Clear language and check understanding.
5. Be well-informed, confident, competent, empathetic, open and honest.
6. Provide written information leaflets and recommend other reliable sources of information www.immunisation.ie
7. Practice safely and maintain competence in accordance with best evidence in relation to the Schools Immunisation Programme (SIP).
8. Engage with current and up to date evidenced based information.
Current Updates

1. Gender Neutral Vaccinations (GNV) for HPV
2. Men ACWY
JABS FOR THE BOYS: The case for gender-neutral HPV vaccination
What about the boys?

Direct protection

Increase herd protection
“No man is an island”...

Equity of Access
HIQA ADVISES

The following would be an efficient use of resources:

- **Change** to the 9-valent vaccine.
- **Extend** the vaccine to include boys to provide better protection for everyone.
Why Boys?

- High rates of infection across all age groups
- Impacted by certain diseases and cancers
- Remain susceptible throughout life – low rates of seroconversion after natural infection
- No recommended routine screening
- Gender Neutral Vaccines (GNV) programmes accelerates HPV cancer and disease elimination

6 Elstrom JID 2016;203:199
After 70 years with 40% vaccine uptake:

- Girls only: ↓prevalence by
  - 53% in girls
  - 36% in males.

- **GNV**: ↓prevalence by 71%

Gender Neutral Vaccination (GNV)
GNV Provides Greater HPV Prevalence Reductions

Prevalence Reduction With
40% Coverage

GNV
Female-only
36%

NNG
Female-only
53%

71%

Prevalence Reduction With
80% Coverage

GNV
Female-only
83%

GNV
Female-only
99%

100%

GNV = gender-neutral vaccination.
HPV and Cancer

• HPV cause other cancers:-
  ➢ 90% anal
  ➢ 70% vaginal
  ➢ 50% penile
  ➢ 40% vulvar
  ➢ And 13-72% head and neck cancers
HPV and Cancer

• HPV cause other cancers:-
  ➢ 90% anal
  ➢ 70% vaginal
  ➢ 50% penile
  ➢ 40% vulvar
  ➢ And 13- 72% head and neck cancers
Genital HPV prevalence higher in males than females and does not decrease with age
Anal and Penile Cancers 2010-2014

36 cases/year
90% HPV related

National Cancer Registry: Cancer Trends No 33 4th May 2017
Rates of Cervical Cancer Are Declining While HPV-Related Oropharyngeal SCC in Males Is Rising (USA)

Oropharyngeal SCC (male):AAPC = 2.7

Cervical carcinoma; AAPC = -1.6
Oral HPV Prevalence Is Significantly Higher in Males Than in Females

Males, any HPV infection

- Unadjusted
- 95% CI
- Adjusted

Females, any HPV infection

- Unadjusted
- 95% CI
- Adjusted

HPV Prevalence, %

Age, years

15 20 25 30 35 40 45 50 55 60 65 70

0 5 10 15 20 25 30

Slide courtesy of MSD
Oropharyngeal Cancer: 2010-2014

<table>
<thead>
<tr>
<th>Sex</th>
<th>Period</th>
<th>APC</th>
<th>95% CI</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1994-1999</td>
<td>-7.5%</td>
<td>(-16.0%, +1.0%)</td>
<td>0.108</td>
</tr>
<tr>
<td></td>
<td>1999-2014</td>
<td>+3.7%</td>
<td>(+2.1%, +5.3%)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Female</td>
<td>1994-2014</td>
<td>+3.6%</td>
<td>(+1.9%, +5.2%)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

National Cancer Registry: Cancer Trends No 33 4th May 2017
Oropharyngeal cancer (OPC)

Ireland
- 2009 - 2013: 123 cases /yr
- 2014 - 2018: 168 cases/yr
- 33-43%+ are p16\textsuperscript{INK4a} pos (marker for HPV)

US
- 1988-2004
- HPV \uparrow OPC by 225% (0.8 to 2.6/100,00)
  Estimate 70% HPV related

UK
- Doubling of OPC cases 2002-2011, 50% HPV related
  (HIQA:HTA of HPV in boys, 4\textsuperscript{th} Dec 2018)
Is HPV vaccine safe?

- > 80 publications
  - RCT: 72,835 subjects
  - Cohort studies
  - Post licensure studies
  - Systematic reviews
  - Safety reviews

Men ACWY Vaccine

Minister for Health announced that Men ACWY would replace Men C vaccine in Ireland for first years at second level from academic year 2019-20

• Plans are progressing to implement this change
• Information materials will inform parents
• Only one dose needed for protection
Conjugate Men ACWY vaccine in adolescents
1. Provide direct protection to risk group.
2. Prevent carriage of meningococci therefore help to prevent spread.
Men B vaccine (Primary Care Immunisation Schedule) as subunit vaccine may provide some cross protection against W
Sources of Immunisation Information

https://www.immunisation.ie
The Immunisation team at the National Immunisation Office (NIO) produces this factual immunisation site for Healthcare Workers and health professionals

• It is accredited by WHO

• It is a comprehensive, up-to-date and an accurate source of information on vaccines, disease and immunisation

• It has a News section where current issues are rapidly responded to and clearly explained

• Fact sheets and information packs (multilingual) can be ordered and/or downloaded and translations are also available

• https://www.hpsc.ie Health Protection Surveillance Centre
My family believes vaccines do more harm than good.

This isn't for your child... it's a shot of common sense for you.

Changing practice to support service delivery

Office of the Nursing & Midwifery Services Director

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

STAHLER
GOLCOMICS.COM 2015
Acknowledgements

• Thank you to the National Immunisation Office and Prof Karina Butler for continued support and sharing of educational resources and materials.
• Thank you, Laura and other women who support the NIO for your courage and bravery to support the future of girls and women to live healthier lives.
• Thank you to all Schools Immunisations Teams across Ireland, who’s continued hard work and dedication has been central to the success of this programme.
Sources of Vaccine and Disease Information

- National Immunisation office [www.immunisation.ie](http://www.immunisation.ie)
- Health Protection Agency [www.hpa.org.uk](http://www.hpa.org.uk)
- Department of Health [www.dh.gov.uk](http://www.dh.gov.uk)
- World Health Organisation [www.who.int/en/](http://www.who.int/en/)
- Royal College of Paediatrics and Child Health [www.rcpch.ac.uk/](http://www.rcpch.ac.uk/)
- Health Prevention Surveillance Centre [www.hpsc.ie](http://www.hpsc.ie)
Any Questions

• Presentations to follow