Health and Social Care Committee
Inquiry into the measles outbreak 2013 – Evidence from RCN Wales

ABOUT THE ROYAL COLLEGE OF NURSING (RCN)
The RCN is the world's largest professional union of nurses, representing over 400,000 nurses, midwives, health visitors and nursing students, including over 23,000 members in Wales. The majority of RCN members work in the NHS with around a quarter working in the independent sector. The RCN works locally, nationally and internationally to promote standards of care and the interests of patients and nurses, and of nursing as a profession. The RCN is a UK-wide organisation, with its own National Boards for Wales, Scotland and Northern Ireland. The RCN is a major contributor to nursing practice, standards of care, and public policy as it affects health and nursing.
The RCN represents nurses and nursing, promotes excellence in practice and shapes health policies.

The Royal College of Nursing praised the dedication of nursing staff in South Wales, who worked tirelessly to provide vaccinations to curtail the current measles outbreak. In all, over 61,500 non-routine vaccinations have been given since 1 March. This includes 17,440 people aged 10 to 18 who are said to be the group hardest hit by the measles outbreak centred on the Swansea area.[i]

Martin Semple, Associate Director (Professional Practice), RCN in Wales, said: "Nurses are particularly skilled at working in partnership with communities and networking locally across different agencies, helping the community to address challenges. As usual, nurses have shown dedication and have been working beyond the call of duty to help out. They have also encouraged the communities' parents and carers to get children vaccinated as soon as possible."[ii]

Issues raised by clinical staff

Impacting factors that led to the outbreak

- The impact of Andrew Wakefield's study upon parents' willingness to consent to the MMR and the anxiety that this also created for Health Visitors (and the impact of the portrayal in the media)
- The impact of the local media /press reports and their high profile negativity towards the MMR vaccine
- The impact of the local *JABS* group (high profile group led by a local mother)

- Increasing numbers of children diagnosed with autistic spectrum disorder at the same time influencing parents' beliefs with no clinical evidence to link the same.
- Availability of single MMR vaccines.
- Cultural attitudes towards vaccines for older children (i.e. at 3 years) – i.e. seemingly less importance placed on vaccinating older ones
- Change in who and where immunisations and vaccinations may be administered

Responding to the Outbreak from Health Board perspective

- An Emergency Planning approach was taken with a Senior response team – which incorporated key health /social care and education leads and incorporated a detailed media approach to the same ensuring that a variety of communications was applied to ensure that all susceptible individuals were targeted

- Operationally there was an integrated Nursing response to support vaccination sessions (District Nurse, Health Visitors & School health Nurses supported school sessions/drop-in clinics in the 3 main Hospital settings and in support of the Occupational Health dept to vaccinate HB staff)

Prevention of future outbreaks

- Need to consider the way public health messages/information is disseminated and communicated and by whom to ensure that there is a consistent approach and that the public have confidence in the same
- Where possible to utilise lay members of the public who support the public health messages/information to influence their local communities
- Consistent national approaches that aim to increase immunisations of older children by changing attitudes towards the same
- Consideration given to mechanisms to alert young people/young adults of issues

Background clinical information

What is measles?

Measles is an acute viral illness, characterised by the onset of fever, cold like symptoms, conjunctivitis and cough. The rash commonly starts at the head and spreads to the trunk and limbs over three to four days.

How is it spread?

Measles is spread by airborne or droplet transmission. Individuals are infectious from when the first symptom appears to four days after the appearance of the rash. It is one of the most highly communicable infectious diseases. The incubation period is about ten

days (ranging between seven and 18 days) with a further two to four days before the rash appears.

What are the complications of measles?

- The most common complications of measles infection are otitis media (7 to 9% of cases), pneumonia (1 to 6%), diarrhoea (8%) and convulsions (one in 200).
- More rare complications include encephalitis (overall rate of one per 1000 cases of measles) and sub-acute sclerosing pan-encephalitis
- Death occurs in one in 5000 cases in the UK. The case-fatality ratio for measles is age-related and is high in children under one year of age, lower in children aged one to nine years and rises again in teenagers and adults
- Complications are more common and more severe in poorly nourished and/or chronically ill children, including those who are immunosuppressed.

Epidemiology

- Notification of measles began in England and Wales in 1940. Before the introduction of measles vaccine in 1968, annual notifications varied between 160,000 and 800,000, with peaks every two years and around 100 deaths from acute measles occurred each year.
- From the introduction of measles vaccination in 1968 until the late 1980s coverage was low and was insufficient to interrupt measles transmission. Therefore, annual notifications only fell to between 50,000 and 100,000 and measles remained a major cause of morbidity and mortality. Between 1970 and 1988, there continued to be an average of 13 acute measles deaths each year. Measles remained a major cause of mortality in children who could not be immunised because they were receiving immunosuppressive treatment. Between 1974 and 1984, of 51 children who died when in first remission from acute lymphatic leukaemia, 15 of the deaths were due to measles or its complications. Between 1970 and 1983, however, more than half the acute measles deaths that occurred were in previously healthy children who had not been immunised
- Following the introduction of measles, mumps and rubella (MMR) vaccine in October 1988 and the achievement of coverage levels in excess of 90%, measles transmission was substantially reduced and notifications of measles fell progressively to very low levels.
- Because of the substantial reduction in measles transmission in the UK, children were no longer exposed to measles infection and, if they had not been immunised, they remained susceptible to an older age. A major resurgence of measles was predicted, mainly affecting the school-age population. Small outbreaks of measles occurred in England and Wales in 1993, predominantly affecting secondary school children. In 1993-94, a measles epidemic, affecting the west of Scotland, led to 138 teenagers being admitted to one hospital.

- A UK vaccination campaign was implemented in November 1994.

Children under ten years of age

- The first dose of MMR should be given between 12 and 13 months of age (i.e. within a month of the first birthday).
- A second dose is normally given before school entry but can be given routinely at any time from three months after the first dose.
- Children with chronic conditions such as cystic fibrosis, congenital heart or kidney disease, failure to thrive or Down's syndrome are at particular risk from measles infection and should be immunised with MMR vaccine.

Children aged ten years or over and adults

- All children should have received two doses of MMR vaccine before they leave school.
- MMR vaccine can be given to individuals of any age. Entry into college, university or other higher education institutions, prison or military service provides an opportunity to check an individual's immunisation history.

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[i] http://www.bbc.co.uk/news/uk-wales-22641698

[ii] http://www.rcn.org.uk/newsevents/news/article/uk/rcn_praises_tireless_work_of_nurses_in_swansea_measles_epidemic