Innovations in Ophthalmic Nursing

Sue Raynel
Department of Ophthalmology
University of Auckland
History

- Couching; ancient Egypt
- First cataract surgery, Benares Treatise on Surgery, the Susruta Samhita some time around 250BC
- Cataract operation in 2nd century AD
Arab surgery

- Ophthalmology became a specialty 12th & 13th centuries

- 13th century, a Syrian physician, Ibn al-Quff composed a general surgical manual - omitted all ophthalmological procedures
“a German master came through Tournai, and after he looked at my eyes he promised he could cure me, with God's help. Having thought over all he had told me, in the end-against the advice of my family and friends-I accepted his offer, and on the Sunday after the exaltation of the Holy Cross [14 September] I let him work on one eye and the following Thursday on the other. He operated with a tool like a needle, restoring light to the eyes quickly and with little pain. I recovered my sight and could see—not like a young man, but as well as could be expected for the 80-year-old that I am—and I saw the sky, the sun, the moon, the stars (though I could not recognize people very well), and I could take care of myself pretty well except that I could not read or write.”
Qualified surgeons

John Woolhouse: 1666-1734. Son of an oculist. Q Trinity Cambridge. Oculist to King James II. Moved to Paris, surgeon to the Hopital des Quinze-Vingts "A Treatise of ye Cataract & Glaucoma. Dictated by Mons. Woolhouse, Oculist to ye French King, begun April 29, 1721." Incorrect old fashioned views. Gassendus and Rohault who opened a couched eye the Academy of Sciences and found no crystalline humour. "to believe yt ye crystalline humour was deprest in ye operation by ye needle, and that there was no other cataract, but ye opake crystalline, an ill founded tradition caused by ye sophistry and cherelattanery or quackery, of oculists of all ages, whose interest it was, to confound glaucomas and cataracts together, 'twas but ye prick of a needle and they gained their money right or wrong."
Mountespan's Hospital, Gabriel Cox of above 60 years old, recovered his sight by couching. I open'd his eye at his death and found ye crystalline humour trans- parent and in ye natural place and ye cataract coucht as aforesaid.

Renaissance

- Ambroise Paré:
  "It must be made of iron or steel, and not of gold or silver; it must also be flatted on the sides, and sharp pointed, that so it may better pierce the eye, and wholly couch the cataract once taken hold of, and lest it should slip in the surgeon's hand, and be less steady, it shall be put into a handle."
  Army barber-surgeon, devised innovative military surgical procedures. Noted that the usual practice of treating gunshot wounds with boiling oil was detrimental: instead he tried applying ointment and bandaging the wounds. Ligation (tying blood vessels) not cauter.
  26 books, including Des Monstres, a book filled with stories about sea devils and other monsters, were compiled into a large volume, translated into several languages, including Latin.
  That Paré did not know Latin irritated the learned physicians of France, who feared that lowly surgeons untrained in classical languages might become their rivals.
Manchester Royal Eye Hospital

- Founded 1814
  - 1864
  - 215 in patients in this year
- Average stay 4 ½ weeks
- 2010 new building
Post cataract; the patient is best in bed for a week
Dressing; soft lined, cotton wool and a 4 tailed bandage
Both eyes
Room dark for a week
All dressings done by candlelight
Clean lids twice daily and don’t open the eye for several days
Atropinise to prevent iritis
10 day; eye shade but bandages at night
2 weeks patient can go out with eyeshades or dark goggles
Discharged 3-4 weeks
Stephenson S (1894) Ophthalmic Nursing - For the Ophthalmic School, Hanwell

- Chapters on
  - ‘the Germ theory of disease’
  - Structure and action of the eye
  - Contagion and infection

...the more a discharge resembles pus, the more virulent it is likely to be. The chronic form of conjunctivitis known as trachoma is slightly contagious only and the same is probably true of ‘catarrhal ophthalmitis’ commonly known as ‘blight’...acute purulent ophthalmia caused by the introduction of gonorrhoeal matter into the eye is highly contagious.
Ophthalmic nursing text books

- Davis-Douglas (1905)
  Eye Ear Nose and Throat Nursing
- Whiting M (1941)
  Ophthalmic nursing 3rd edition (Moorfields)
- Garland P (1962)
  Ophthalmic Nursing 4th edition
Influences on Innovation

- Technology
- Skilled workforce
- Static or decreased resources
- Disease trajectories / Aging population
- More questioning & empowered population
Length of stay

- 1864 = 4 \( \frac{1}{2} \) weeks
- 1960’s = 9-15 days
- 1990’s = 2-5 days
- Current = day stay
Patient Care

Cataract extraction – soft diet, both eyes bandaged for 3-4 days, off absolute bed rest at the end of a week (it happens rarely that cataract patients develop mental symptoms shortly after operation. Due partly to age, partly to closing both eyes and sometimes to the toxic effects of atropine. Take the pad of the unoperated eye, stop atropine and give hypnotics). Home after 14 days
Patient Care

• Admitted 2 days pre op, phenobarbitone, bath and hairwash, practice using a bed pan and drinking from a feeder
• Move the locker to the side of the unaffected eye
• Both eyes bandaged for 24-48 hours
• Speak to patient from side of unoperated eye
• If feeding him, the patient may hold the feeder but the nurse must keep her hand on it.
• At night, hands tied with flannel bandage, sedative
• 9th – 12th day, patient discharge
• (the recent tendency is for very early discharge)
Patient Care

In the serious inflammatory disease of the eye and after operations the nurse should talk to the patient only in the course of her duty demands and allow the patient to talk but very little. Only recently, a lady under my care with chronic inflammatory glaucoma was thrown into an acute attack lasting for a period of twenty-four hours because the nurse allowed a friend of the patient to sit and talk to her for two hours.
Changing times

- From very traditional roles as doctor’s helper.....
- To much more autonomous roles and advanced practice...
- ...with a much greater selection of much more interesting books!
Europe (parts)

- Large numbers of doctors
- Doctors undertaking nursing roles
- Nurses undertaking a very traditional ‘subservient’ role
- High level of nursing education
Saudi Arabia

- An expatriate nursing workforce, high levels of education
- Specialists in home country
- Male, medical dominant model
- Nurses undertaking some non-traditional roles
Sweden

- Degree led nursing
- Post graduate (in time) ophthalmic qualification to specialize
- Innovative and forward thinking health care models
- Non traditional roles
  - 53% of glaucoma
The Gambia

- Very few doctors
- National Eye Care Programme
- Community ophthalmic nurses in villages
- Primary care including lid surgery for trachoma

- Secondary Eye Care Centre
- Run by ophthalmic nurse:
  - senior ophthalmic medical assistant
  - Undertakes cataract surgery (ECCE + IOL)
  - Manufactures drops
United Kingdom

- Diploma level education (mostly, as yet)
- Access and support of post graduate qualification patchy and generally poor
- Many advanced practice roles in innovative services, highly successful and supporting modernisation
  - Often with little educational preparation
- Training model with often, no formalisation or updating
Nursing and Midwifery Board of Australia (NMBA)

- Endorsement as a nurse practitioner
- A level of practice not a role
- Incorporate professional leadership, education and research into their clinically based practice.
- Work within a generalist or specialist context
Advanced Practice New Zealand

- Nurse Practitioner
- Expanded Practice
- Nurse Prescriber
Nurse Practitioner

- R/N registration (practicing certificate)
- Four years in specific area of practice
- Clinically focussed Master’s
- Demonstrated competencies
- Prescribing
- 2016 NP Training Programme
Expanded Practice

- “R/N’s level of expertise beyond established contemporary or ‘traditional’ scopes of practice”
- Technology
- Autonomous roles in chronic care
- Other activities e.g. nurse injector

Guideline: Expanded practice for Registered Nurses Sept 2010
Nursing Council of New Zealand
Nurse Prescriber

- 3 years full-time practice
- PG diploma in registered nurse prescribing
- practicum with an authorised prescriber
- assessment of competencies
- **Roles**
  - Cataract care
  - Accident and emergency services
  - Anaesthetic support
  - Medical specialities
  - Oculoplastics
  - Vitreo-retinal
  - Glaucoma
  - Cornea
  - Uveitis
  - Diabetes
  - Laser

- And........
Problems and Issues

- Education and training
- Knowledge base
- De-skilling - nurses, doctors
- Titles
- Career Progression
- Succession management
- Remuneration
• **Special thanks to:**

• Janet Marsden

• Mary Shaw
"Right now I take a blue pill, a purple pill, an orange pill, a white pill, and a yellow pill. I need you to prescribe a green pill to complete my collection."