ARIA masterclass – from guidelines to real-life, Brussels 12.9.2018

Patient participation for better control

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DISEASES DO CHANGE!

“Non-communicable diseases represent a public health emergency in slow motion.”

- UN Secretary Ban Ki-Moon 2011
The readily accessible information has exploded!
mHealth meets the growing demand for care. Mobile applications increase health literacy, bridge patient-physician communication, and increase patient participation.

Examples of participation through the use of web-based and mobile applications.

- Live **videoconferencing** appointments have proven effective, especially in the field of mental health.
- Patient **reminders** have increased patient participation in attending preventative screenings.
- Patient-centred **health applications** increase rapidly, over 100,000 mobile applications available for use already!
- **Problem 1**: lack of research and testing the application before going live.
- **Problem 2**: patient willingness to use the treatment apps over time.

“The experience of transparency, individualization, recognition, respect, dignity, and choice in all matters in health care”
(Donald Berwick 2009, Institute for Healthcare Improvement)
Change Management

- We are moving from the guideline era to partnership era.
- Less dictating and speaking about lack of compliance and adherence and more true collaboration with the patient.
- To find individual management solutions and more effective and safe ways to employ medication and other treatments.
- From dictatorship to democracy, but preserving the healing power of doctor’s personality and presence.
A Framework for Public Health Action: The Health Impact Pyramid

Counseling and Education
Clinical Interventions
Long-Lasting Protective Interventions
Changing the Context to Make Individuals’ Default Decisions Healthy
Socioeconomic Factors

Increasing Population Impact
Increasing Individual Effort Needed

FIGURE 1—The health impact pyramid.
A Framework for Public Health Action: The Health Impact Pyramid

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Increasing Population Impact

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Increasing Individual Effort Needed

FIGURE 1—The health impact pyramid.
Clinical review

Asthma programme in Finland: a community problem needs community solutions

T Haahela, T Klaukka, K Koskela, M Erhola, L A Laitinen, on the behalf of the Working Group of the Asthma Programme in Finland 1994–2004

Early and effective diagnostics and management
A Framework for Public Health Action: The Health Impact Pyramid

FIGURE 1—The health impact pyramid.

Guided self-management is the key to stop exacerbations and improve control (we have known this for 22 years!)

Guided self management reduces incidents caused by asthma and improves quality of life

There is a time lag of 4-5 days between the start of symptom increase and drop of PEF

Fig 1—Cumulative percentage of patients not having had any incident caused by asthma in self management and traditional treatment groups

Fig 2—Relation between occurrence of asthma symptoms and peak expiratory flow (PEF) values on 141 occasions five days before and five days after the values dropped more than 15% below optimal levels

Exacerbation starts to escalate
Asthma in control
Symptom increase and decline of lung function

Hit increasing symptoms early!
Usual time point for intervention
Exacerbation starts to escalate
Asthma in control

Time
Guided self-management — adult asthma

**ASTMAN JA NUHAN OHJATTU OMAHOITO**

**Take asthma into control**

Notice symptom increase

1. Avaavan lääkkeen tarve lisääntyy
   muutaman päivän kuluessa
2. Flunssainen, tukkoinen olo
3. Yskää ja hengitysvaikeuksia, erityisesti yöllä
4. Rasituksensieto huononee
5. Aamu-PEF-arvo laskee
6. PEF on laskenut arvosta ____ arvoon ____

**Stop exacerbation**

1. Kaksin- tai nelinkertaista hoitavan
   inhaloitavan kortisonin annos tai
   aloita sen käyttö 2 viikon ajaksi
2. Ota avaava lääke ennen hoitavia lääkettä
   2 viikon ajan. Sen jälkeen tarpeen mukaan
3. Jos käytät kortisonin ja avaavan yhdistelmä-
   lääkettä, kaksinkertaista annos 2 viikon ajaksi
4. Aloita lisäksi tarvittaessa kortisontablittikuuri,
   prednisoloni 20 mg tai metyyliprednisoloni
   16 mg kerran päivässä 1-2 viikon ajan
5. Mene päivystykseen, jos hoito ei auta.
   Tarkista myöhämmän hoitavan lääkityksen
   riittävyys.
Finland 1987-2013
Overall annual costs of asthma care per patient decreased by 72%, from € 2656 to € 749

Haahtela T, et al. JACI 2017


Karelia Allergy Study
The Finnish Allergy Programme 2008-2018

The good news: Allergic rhinitis & asthma (and other NCDs) are preventable!

Nationwide educational programme for **patients, families and lay-public, not only for professionals!**

**The Finnish Allergy Programme 2008-2018 in action**

**Advising** the allergic people and other citizens

- Target on lay-public – not only ‘high risk’ groups
- Focusing on mass media: internet, radio, tv
- Educational material: posters, leaflets, web
- Personnel education in patient organizations
- ‘Tolerance steps’ on children daycare units
- 2.3 million Finns reached

**Public attitude – more tolerance!**

- ‘Right attitude to allergy’: a leaflet for child health care units
- ‘Allergies and asthma and smoking’: a leaflet for health centres
- Campaigns on the web, including the biggest social media service and the largest health and welfare online service in Finland

**The Finnish Allergy Programme 2008-2018 in action**

**Education** of opinion leaders, specialists, health care and other professionals

- Launch for 21 Central Hospital Districts, 2 hrs
- Health Centres, **half a day**
- Central Hospital Districts, **Allergy day**

- 338 educational sessions so far; more than 20,000 participants
- Regional education with varying themes for primary care
  - Multiprofessional – doctors, nurses, pharmacists
  - Free of charge
  - At their own hospital / health centre at working hours
  - Practical topics tailored to meet the local needs
- A medical advisor and nurse by Filha always on the spot
  - Local experts involved in the education
- Allergy management – patient guidance material for health care
- Other tools for health care professionals
- Establishment of Regional Allergy Working Groups (14)
  - To continue the regular multidisciplinary education after the programme
Natural Step to Respiratory Health

Haahtela T. The dawn of true prevention for allergy and asthma. European Academy of Allergy and Clinical Immunology (EAACI) Newsletter 2017;47.
Guided self-management — 10 conditions covered

1. Asthma – adults
2. Asthma – children
3. Allergic rhinitis – adults
4. Allergic conjunctivitis – adults
5. Atopic eczema – adults
6. Atopic eczema – children
7. Hand eczema – adults
8. Urticaria – adults
9. Angioedema – adults
10. Anaphylaxis
Precision Medicine – Personalized Medicine

The spectacular 1000 Genomes Project called for a new era of Precision Medicine (PM). Patient participation is the essential driver of PM.

**Biologicals**

e.g. Omalitsumabi (Xolair®) 2005
Mepolitsumabi (Nucala®) 2015
Reslitsumabi (Cinqaero®) 2016
Benralitsumabi (Fasenra®) 2018
The five elements endorsing recovery

1. Partnership, support from others
2. Hope and optimism
3. Identity, self-confidence
4. Meaning of life, social environment
5. Empowering, taking personal responsibility

In the modern health-care patients have more rights but also more responsibility of their own health and actions.

**mHealth: Challenges**

- Financial
  - Business model
  - Funding
  - Sustainability

- Cultural
  - Language
  - Attitude
  - Gender roles

- Capacity
  - Technical capacity (support and development)
  - Human capacity (training)
  - Infrastructure

- Other
  - Regulations
  - Privacy

*“Look on the bright side, you can contribute your data to the Failed Reactions Database.”*
My final hint: re-furnish your office!