



Implementing EBM: the case of antibiotics for sore throat

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Implementing EBM in general practice:

- Antibiotics
 - antibiotics over consumption
 - increasing antibiotic resistance
- Guideline on the management of acute sore throat: **clear message, antibiotics are NOT needed**
- Cultural differences *(De Schepper 2002)*
- Lack of local implementation research

Aims of the research

Identify *barriers* and *facilitating* factors for implementation of EBM-guidelines by GPs in Belgium

Explore what *patients expect* and how they *communicate* with their doctor

Design and field test an *intervention* aimed at improving implementation of the EBM-guideline on *acute sore throat*

4 Phases of the project:

1. Literature review
2. Qualitative research
3. Quantitative research
4. Field test of an intervention

Literature review

- reassurance, information, pain relief - **NOT antibiotics**

Gillam 1999, Butler 1998

- expectations **seldom** explicitly mentioned

Barry 2000, Butler 1998

- GPs are not good at '**guessing**' what patients want

Himmel 1997

- GP's **perception** determines prescription

Dosh 2000, Britten 1997, Cockburn 1997

- **satisfaction**: no relation to prescription

Butler 1998, Hamm 1996

Qualitative research: interviews

semi-structured interviews with 17 GPs

Barriers

- Guidelines that do not correspond with the views of the GP
- *comprehensive messages for patients*
- *research: group versus individual*
- *Patients with strong opinions difficult to counter*
- *Abuse by pharmaceutical industry*

Quantitative: cross sectional research

Patients' expectations and GPs' perceptions

- 74 GPs with 343 consultations for acute sore throat
- north western Belgium
- inclusion: age >12 years and not accompanied
- questionnaires: patient & doctor - directly after the consultation

Patients' knowledge and attitudes

Sore throat

mean score

- sore throat gets better in 1 week: 45% 3.3
- infection is severe in presence of fever: 78% 4.1

Antibiotics

- speed recovery: 70% 3.9
- prevent sore throat from getting worse: 67% 3.8
- frequent use causes problems for own health: 80% 4.2

Why do patients consult their doctor?

“3 most important reasons” (list of 13)

1. ‘I want the doctor to give me something for the **pain**’

important: 86.6%

not important: 3.6%

2. ‘I want to be **examined** for the cause of my sore throat’

important: 85.4%

not important: 4.2%

3. ‘I want the doctor to **explain** the course of my disease’

important: 82.3%

not important: 2.6%

Why do patients consult their doctor?

“3 least important reasons” (list of 13)

1. ‘I want an **antibiotic**’

important: 37.4%

not important: 38.1%

2. ‘I want to be **referred** to a specialist’

important: 22.5%

not important: 57.8%

3. ‘I am in a stressful situation and I need **support**’

important: 18.5%

not important: 63.7%

GPs' perceptions: do they match?

*association:
gamma statistic*

- | | |
|---------------|------|
| • pain relief | 0.51 |
| • examination | 0.27 |
| • explanation | 0.38 |
| • sick leave | 0.79 |
| • antibiotic | 0.52 |
| • referral | 0.35 |
| • support | 0.64 |

What do GPs prescribe ?

	N	%
Non-pharmacological	68	21.3%
Referral	7	2.2%
Sick leave	71	22.3%
Drug treatment:	252	79.0%
– antibiotic	130	40.8%
– analgesic	136	42.6%
– antiseptic	56	17.6%

penicillin 22.8%

broad spectrum 25.2%

amoxy-clavulanic 15.4%

neo-macrolide 25.2%

Is satisfaction related to a prescription?

	Antibiotic is important	Antibiotic is not important
Antibiotic prescribed	4,60 (n=63)	4,43 (n=55)
Antibiotic not prescribed	4,33 (n=46)	4,48 (n=128)

- AB prescribed (4,54) = AB not prescribed (4,44)
- patient wants AB: satisfaction with prescription = without
- patient did not get AB: satisfaction of pt who wants AB **lower**
- pt who wants but did not get AB = pt did not want but gets AB

Conclusions – what do patients want?

- information and reassurance, rather than antibiotics
- GPs do not ask for expectations
- Patients who expect AB and don't get them are **not less satisfied** than patients who expect AB and get AB
- most satisfied with **information**

Conclusions - GPs

- too often antibiotics and mostly **NOT** first choice
 - not good at **guessing** what their patients want
 - if GP **'thinks'** the patient wants antibiotics he is more inclined to prescribe antibiotics
- **80%** of GPs prescribing an antibiotic **say they followed the guideline**

Implementing EBM guidelines

- Patient centredness: “How can I help you?”
- ‘Split cognition’: knowledge - belief - performance

(Fishbein & Ajzen, 2000)