

Human Motion Project - The importance of patient compliance

Miriam Porter

For a patient to be compliant in wearing a device it is necessary to consider many factors as early on as at the time of device conception. These factors are divided up into outside influences and patient behavior. Outside influences can come from the treating physician's attitude about the device or the patient's own family. Any device affecting or altering patient's behavior/lifestyle will have a major impact on compliance. It is necessary to invest time and money in order to identify these factors to understand which type of patient populations will be compliant.



The importance of patient compliance

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1st Winter Symposium of “The Human Motion Project”



What is compliance?

<http://www.youtube.com/watch?v=dMAS2S51bM8>

In medicine, **compliance** (also **adherence**, **capacitance** or **Concordance**) describes the degree to which a patient correctly follows medical advice. Most commonly, it refers to medication or drug compliance, but it can also apply to other situations such as medical device use, self care, self-directed exercises, or therapy sessions.

Extent of non- compliance (treatment-related)

Compliance with long-term medication regimes

Treatment	Compliance Rate
Antibiotic treatment	33%
Treatment for hypertension (in general)	53%
Sleeping pills, sedatives	42%
Tranquilizers in schizophrenic outpatients	54%
Tuberculosis drugs	55%
Insulin injections (diabetes)	48%
Anti-asthmatic drugs	46%
Glaucoma eye drops	42%

CPC Healthcare Communications Whitepaper Series: Factors Affecting Patient Compliance (August 2002)

Extent of non-compliance

Manufacturers pour millions of dollars into research and development but do little to ensure compliance¹



‘Improving compliance to medicine has a greater impact than any improvement in medical treatment’ (WHO 2003)

¹CPC Healthcare Communications Whitepaper Series: Factors Affecting Patient Compliance (August 2002)

Barriers to Compliance



The diagram consists of two yellow speech bubbles with brown outlines. The left bubble contains the text 'External Influence' and the right bubble contains 'Patient experience'. Both bubbles have a tail pointing towards the central text 'Patient compliance' located below them. A vertical watermark 'PeerJ Preprints' is visible across the left bubble.

External
Influence

Patient
experience

Patient compliance

Barriers to compliance

External influence

□ Counselling or support tools

□ Investigators attitude towards device/therapy



□ Reimbursement

□ Product/packaging

□ Media



Barriers to compliance

Patient experience

- ❑ Complexity
- ❑ Quality of information
- ❑ Importance of compliance
- ❑ Patient support line
- ❑ Concerns about side effects
- ❑ Co-morbidities/Interactions with other treatments
- ❑ Following / remembering instructions
- ❑ Impact on lifestyle, behavior
- ❑ Cost or insurance coverage

How to identify non compliance factors



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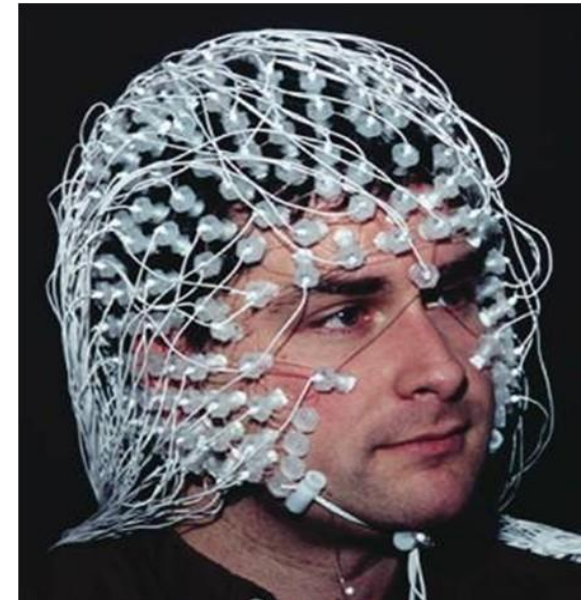


‘patient research’

- Identifies importance of each factor
- Provides insight to understand which patient segments are likely to be compliant
- Indicates, which information is required to address potential compliance issues

Some considerations

- ? What is the indication for the device
- ? What is the target population
- ? How long will the patient have to wear the device to reach objective?
- ? Is it comfortable to wear/use device
- ? What is the backup solution



Some considerations

? Complex device, ease of use



Some more considerations

- ? Costs
- ? Patient burden
- ? What is the site burden
- ? Is there a helpdesk support



and some more...

? Patient Instructions

? Site instructions

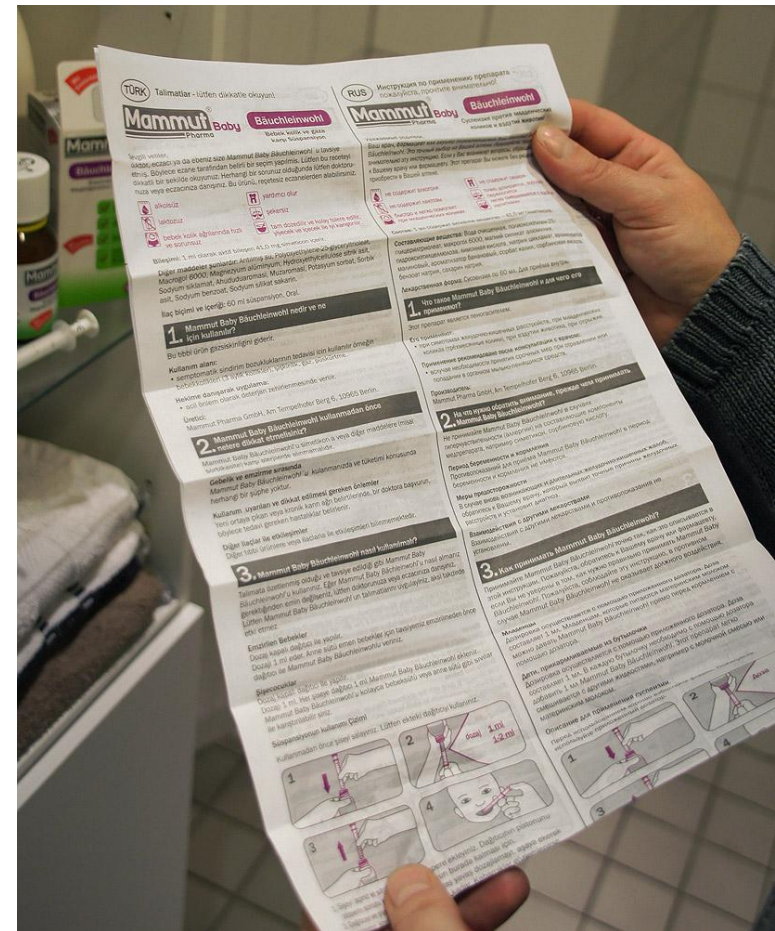
? Benefit of the device

- for patients
- investigator

? Consequence of non compliance

? Feedback to patient

? Follow-up to patient



Take home message

Fully understand the extent and nature of patient compliance

Address compliance challenges prior to use

Plan for time and resources