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What to think about when using MI in context of children and their families ?

What is evolving from theory, practice and studies ?

Whats´ new evidence in this area ?

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Motivational Interviewing

What do we usually do in context of individual counselling including motivational interviewing ?

In which way would this have to be modified when applied to children and their families ?

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MI – Adults Individual counselling

1. Counsellor is the facilitator of the process
2. Behaviour change has to arise within the patient – not the counsellor
3. This process begins by clarifying the patient ambivalens, the resistance concerning the ”problems”
4. Focus is put on the discrepancy between the patients story about problems and potentiel solutions to the problems
5. The process will fluctuate, change a long the path to behaviour change, where fluctuations may be feedback to whether or not the plan has to be adjusted
6. Finally, the patient need to leave the counselling with a positive expectation to their own ability to change behaviour concerning the problem

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MI – Children and their family

The litteratur concerning communication with children defines several approaches when working with their behaviours

A general reccurent feature is the ability of the counsellor to engage the child into the proces

Other main issues to discuss are:

- The parents role and function in the process, in the counselling sessions and afterwards at home
- What to do at different child ages
- The psychomotorical development of the child
- The child and parents ability to reflect the current situation into their ”everyday life”
- The nature of the specific ”behaviour” to change

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MI – Children and their family

Furthermore depending on those issues mentioned different approaches has to be implemented :

- Individual child counselling sessions and/or joined family sessions
- Other potentially important members of the childs home network ?
- In which order should this take place ?
- Would it be benificial to include other children/parents with same issues to inlighten the process towards goals for another child/family in joined sessions ?

However, before we discuss these important issues, we need to address the background of the family in present time…

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Generations changes profile, thus will parents change, thus will children change ”background”.

- Generation X (1950s-1970s), 1.G with both parents working out, institutionalized children, a world in ”cold war”, crisis in Africa generating a world full of possibilities but also prohibitive problems
- Generation Y (1980s-1990s) with the phraming of ”primadonnas and yuppies”, internationalization, a safe world to be explored and enjoyed, however concerned about being ”perfect”
- Generation Z (2000s…), called the ”Digital natives, the facebook generation”, fast and hectic changes in the world, both physical, geographical, virtual etc. New crisis´ are always present, economical, climate, terror, nothing is certain, and despite this, the G Z withhold a positive approach to the world development with a focus on proximity and relations in everyday life.

Frellsen Et al, 2010, ”Generation Z zooming in”

”The speed of the society results in parents without experiences to base the parenting on.
This is due to the feeling of outdated experienced which do not fit into the new order”

Lars Poulsgaard, 2011, professor of socialpsychologi

Change in background for generation, changes parents and their children, which again have impact on what to expect from the meeting, the counselling session.

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In counselling with families today:

- The expectation of the counsellor are often hudge
- The parents (and adolescents) becomes experts in their own problem, with hudge unfiltrered knowledge by the internet
- The children become strong and seemingly independent
- The responsibility of ”health” is placed at who…?

We need to be clear about:

- Our professional role
- Adjust expectations from the beginning before even contemplating where to begin ”motivating”
- Adjust background of the situation by filtering and sorting out the ”expert knowledge” of the family, what is important and what is not in the case

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Having the background in place –

Next step is to consider the actual MI integration in counselling session with children and parents.

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MI – application from adult to children

It is a methodological challenge to extract and use methods from adult counselling to a more complex setting including a child and parents, a family

Nomenclatur dictates that:

- Individual ”terapy” focus on factors meaningfull for the person, ie work, leisure activities, life style etc.

- Family oriented ”terapy” is based on the conceptual idea that individual behaviour is to be understood and interpretated in a family context. Thus, the need of understanding the family dynamics in order to obtain ”system change”

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MI - Children and their family

We need a mix of this, thus applying both approaches when changing

- childrens behaviour
- family behaviour
- or family support of children behaviour

This mix will include variations in approach due to previous mentioned factors, as age, problem at hand, family background, ability to reflect etc

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MI - Children and their family

Example 1:

A 5 year old child with overweight problems have been referred to counselling, stating detailed history of what has been done for this child to obtain weight loss with no effect.

Parents will be focused on ”something must be done now” often with less reflections of what the family dynamics as a hole may affect the situation .

This situation will often imply to the child that ”it is their own fault, it is the child having ”the problem”, implicating direct causality to the child for not solving the problem, the situation before.

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MI - Children and their family

What to do – a plan has to occur:

1. Obtain family background, evaluate the psychomotorical development of the child, the child and parents ability to reflect the current situation into their ”everyday life”
2. Adjust background of the situation by filtering and sorting out the ”expert knowledge” of the family, what is important and what is not in the case
3. Adjust expectations from the beginning before even contemplating where to begin ”motivating”
4. Make plans for next session including ”time alone” with the child, and ”family time” in the session.
5. Then engage in principals rules of MI in order to obtain a starting point of behaviour change.

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MI - Children and their family

After 1.part of the proces, MI can begin/continue:

MI is integrated into the pediatric communication style

Pediatric communication includes:

1. Direct communication with the child in age-neutral language
2. Non-direct communication through playing, observing in the session, by children drawing specific home-related situations, thus obtaining information in various different ways of the problem, background, previous solutions, what worked, did not work etc.

The session is divided to focus:

1. On the child, having consent or agreeing with the child that the parents also are included in the discussions
2. On the parents information, reflections
3. On a common part obtaining agreement from both child and parents to next step

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MI - Children and their family

Example 2:

A child of 14 years with diabetes in regular control in ”out of patient clinic” at the hospital.

Expectations will imply that the child in broad terms are in control of the treatment of diabetes. However, parents to teenagers will on the other hand often tend to think that this is not the case

Thus, the session will tend to become a battle between parents and child/adolescent of control and ”power” of the situation.

How to support the childs/teenagers ”autonomy” and at the same time address potential failures in ”home control, behaviour”.

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MI - Children and their family

In this situation the same plan including re-evaluation of family background, setting has to be made.

However, The ”MI-part” will have to engage with focus of the adolescent and aiming towards a ”joined venture” plan respecting adolescent autonomy and family dynamics, thus also including the parenting concerns.

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MI - Children and their family

The session is divided to focus:

1. On a common start to obtain common reflections upon the situation
2. On the child alone, without parents, obtaining contemplations on ambivalence, resitance, goals etc, thereafter obtaining child consent on including parents into the discussions again
3. On a common part reviewing what have been said, heard, diffentiating outcomes from child and parents, exploring conflicting and joining emotions, hints/factors of importance, creating an overview of different problems, evaluating the level of contemplation of each problem stratified on child/parents etc.
4. Reflecting together about potential step, a collective prioritization on what is most important at this point, what is most likely for the adolescent to be adherent to, mainly from the child with the support of the family

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MI - Children and their family

AND then a hole lot of other things have to be differentiated from one counselling to another….

During MI sessions with children, adolescents, parents the following aspects have to be considered

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MI – specific aspects 1 Children and their family

- Where is the ”problem, behaviour” present:at home, in school, kindergarten, all over
- Parents emotions
- ”Positive refraeming”
- ”Normative feedback”
- Parents understanding of their child
- Silent childe – what to do
- Aliance with the family – common agenda
- When NOT to have family sessions
- OARS – age of the child ?

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At what time and age will aspects of OARS be applicable

Short answer would be ”when the child is feeling safe in the conversation, once trust is established it will be applicable.

OARS:
O – Open ended questions
A – Affirmation
R – Reflection
S – Summary

HOWEVER…

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However, regarding age, it is very dependable on whether or not the child through both normal conversation and ”playing” as previously described is able:

- to comprehend potential correlating aspects in behaviour, causality between behaviour and effect
- to give expression of beliefs and thereby reflections on ambivalence, resistance

The main outcome will often be to obtain an overview of important factors, mechanisms in different ”home-situations” which have impact on behaviour

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How do we include feedback in the process as a motivational element of the counselling session of children and parents ?

MEDICAL EDUCATION 2010; 44: 16–17

Feedback can effectively influence Behaviour !

The questions is how feedback itself becomes motivating to obtain potential goals ?

Review: Hattie J, Timperley H. The power of feedback. Rev Educ Res 2007;77:81–112.

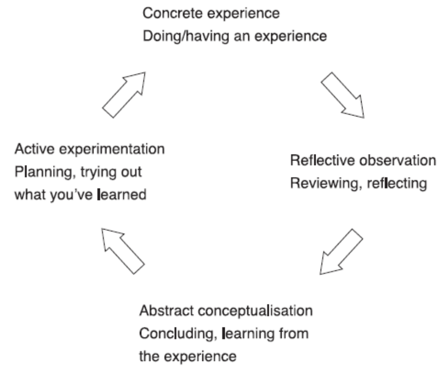
Veloski J et al. Systematic review of the literature on assessment, feedback and physicians clinical performance. Med Teach 2006;28 (2):117.28.

Jamtvedt G et al. Audit and feedback: effects on professional practice and health care outcomes. Cochrane Database Syst Rev; 2006; Issue 1.

Feedback can have a very powerful effect on learning. In a review of the general education literature, Hattie and Timperley[1] reported a synthesis of over 500 meta-analyses involving hundreds of thousands of studies and effect sizes, and millions of students. Over 100 factors that might influence achievement were cited, including attributes of the schools, students, teachers and curricula. The average effect size was 0.40 (achievement improved 40% of a standard deviation), but the effect size for feedback was 0.79, which, at about twice the average effect size, ranks feedback among the top influences.

Feedback & Motivation

Feedback is described as the last element of the conscious process of motivation, where goals are set, plans are made, empowering and support is included, but how becomes feedback into motivation ? (Rubak 2005, Buelens 2006, Donnelly et al 2010)



Kolb's learning cycle (Kolb and Fry,1975)

Learning curve or learning spiral

- PQRS – Praise, Questioning, Reflection and Summary
- SWOT – Strengths, Weaknesses, Opportunities and Threats
- PERP – Prepare, engage, reflect, project
- **Feedforward - Motivating Feedback**

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Kluger et al. Medical Education 2010: 44: 1166–1174

"Feedforward seeks to create a reflection process that firstly serves the interviewee and his or her needs"

"Feedforward seeks to establish both an internal standard of excellence based on past performance and to generate internal information on the distance from the standard that currently exists" ie.

"What has happened before – AND evaluation of the discrepancy between behaviour and goals…"

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Feedforward - motivation

Positive feedback influences motivation and "performance behaviour by "promotion focus"

Negative feedback influences by same measure of effect the motivation and "performance behaviour" by "prevention focus"

Higgins ET. Promotion and prevention: regulatory focus as a motivational principle. Academic Press 1998;1–46.
Higgins ET. Making a good decision: value from fit. Am Psychol 2000;55 (11):1217–30.

Self-regulation theory

"Prevention focus" is to avoid the unpleasant. This imply obtaining goals that are necessary for us

"Promotion focus" is to gain reward. This imply obtaining goals that are desirable, successful for us

Feedforward - motivation

"Positiv feedback yield good emotions
Negative feedback yeild bad emotions"
Or is that so ?

This needs to be elaborated further:
1. Success about something desirable leads to happiness, proudness
2. Success about something necessary leads to releaf or "ok, made it"
3. Failure in something desirable leads to disappointment
4. Failure in something necessary leads to stress

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Feedback – Motivation

Hypothesis:
Success leads to motivation to gain more…

Releaf or "Ok, made it" feelings leads to no immediate desire to try again

Disappointment and stress leads to amotivation, and thereby surrender to "possible minimum of what is acceptable"

However, this has been proven NOT to be the case..

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Feedback - Motivation

Study of “Motivation for working” - Two groups of young adults with two messages:

Gr.1 imagine that they have a job necessary for their life, not the “dream job”
Gr 2 imagine that they have their dream job

Boss gives 2 messages, either that you have failed your assignments or that you have done well

Van Dijk D et al. Task type as a moderator of positive . negative feedback effects on motivation and performance: a regulatory focus perspective. J Organ Behav 2010.
Van-Dijk D et al. Feedback sign effect on motivation: is it moderated by regulatory focus? Appl Psychol 2004;53 (1):113.35.

Feedback - Motivation

Question is “How motivated are you to do an extra effort ?”

Results:
1. Positive message in dream job
2. Negative message in necessary job
3. Negative message in dream job
4. Positive message in necessary job

Van Dijk D et al. Task type as a moderator of positive . negative feedback effects on motivation and performance: a regulatory focus perspective. J Organ Behav 2010.
Van-Dijk D et al. Feedback sign effect on motivation: is it moderated by regulatory focus? Appl Psychol 2004;53 (1):113.35.

Feedback - Motivation

How can this be ?

Groups having negative feedback is more motivated than the group with positive feedback in a necessary job

1. Positive message in dream job = Even more potential
2. Negative message in necessary job = Safety project
3. Negative message in dream job = Error detection
4. Positive message in necessary job = “Done enough to stay, no need to do further” or maybe “Idea generating” ?

However, we all know that “Idea generation” at best is not the same as behaviour change

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Feedback - Motivation

What can we deduct from this in a pediatric setting - if we group potential motivating feedback:

1. Positive feedback on what was prioritized by the child, the parents = desire for more…
2. Negative feedback, but focus on “baseline issues”, core-goals obtained = desire to consolidate core goals and built further
3. Negative feedback on what was prioritized = Error detection and drive towards new planning
4. Positive message on core goals obtained = Idea generation for next step

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MI is usefull as a methode in behaviour change regarding children, adolescents and their families.

However, it demands several considerations due to context, complexity of handling ambivalence, resitance, change talk, empowering, motivation across a family

This is an exciting and dear challenge to all of us working with children and their family in daily practice

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What do we know
about effect of MI ?
in pediatric setting ?

Rubak et al. Br J Gen Pract. 2005 Apr;55(513):305-12.

MI (M/R) have been used and investigated in many settings showing effective:

- Misuse (Alcohol, substance)
- Psychiatric diseases ie depression,schizophrenia
- Life style changes ie smoking cessation, weight loss, physical activity, asthma, diabetes
- Adherence (to treatment, to follow up, home control)

“Motivational interviewing”, a systematic review and a meta-analysis.
Rubak et al. Br J Gen Pract. 2005 Apr;55(513):305-12.

MI research – Update !

What else do we know about effect of MI?

- Counsellors profession
- Behaviour, “problem” at hand
- Length of MI session
- Number of MI sessions
- Length of periode in which MI sessions are performed
- Other factors ie knowledge between patient/counsellor

“Motivational interviewing”, a systematic review and a meta-analysis. Rubak et al. Br J Gen Pract. 2005 Apr;55(513):305-12.

MI research !

Since that time (2005-2013) much research in this area have been published, thus in total now:

- 294 reviews of MI in various areas of interest
- 37 meta-analyser
- 24 Cochrane Database Systematic Review

However, these include many other approches to motivation than MI – Miller & Rollnick

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MI research !

- 2 meta analysis on substance misuse, showing no or less effect of MI
- 7 meta analysis on psychiatric disease showing no or less effect of MI
- 12 meta analysis on alcohol misuse, variating moderate positive effect of MI
- 6 meta analysis on adherence to Anti-HIV treatment, in all showing positive effect of MI
- 6 meta analysis on smoking cessation, moderate positive effect of MI
- 2 meta analysis on weightloss, positive effect of MI
- 2 meta analysis on Professional adherence to MI showing positive effect

MI research – Update !

What about research on MI regarding children & family ?

Pubmed search publication search strategy:
- Motivational interviewing family: 232
- Motivational interviewing children: 138
- Motivational interviewing children family: 55

However, again less than app 10% of these are MI based on Miller & Rollnick, while the remaining studies are based on advice giving regimes, other therapeutic approaches etc.

- App. 20 publications internationaly, have specifically investigated MI use in context of children and their families
- These few studies have several areas of ”interest” ie sun protection, reduction of caries, vaccination adherence, exercise, diabetes, asthma, smoking cessation, parents alcohol-/substance misuse in relation to hospitalised children

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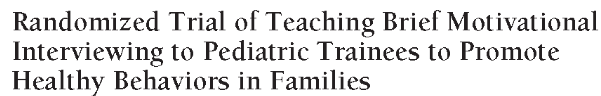
Lene Bjerregaards PhD: Alcohol consumptions habits in parents with hospitalized children

- Bjerregaard L, Gerke O, Rubak S, Høst A, Wagner L. Identifying parents with risky alcohol consumption habits in a paediatric unit – are screening and brief intervention appropriate methods? Scand J Caring Sci. 2011 Jun;25(2):383-93. doi: 10.1111/j.1471-6712.2010.00838.x. Epub 2010 Oct 12
- Bjerregaard L, Rubak S, Høst A, Wagner L. Alcohol consumption patterns amongst parents of hospitalised children: findings from a brief intervention study using motivational interviewing. The International Nursing Review. Article first published online: 17 NOV 2011 DOI: 10.1111/j.1466-7657.2011.00930.x. Published March 2012; vol 59(Issue 1): 132-138.
- Bjerregaard L, Gerke O, Rubak S, Høst A, Wagner L. Motivational interviewing overcome personal and professional barriers towards dealing with parents alcohol consumption habits. Clinical Nursing Research. 2013; Aug, Epub,In Press.

MI research – Children & Family

MI, children and asthma – publication are mostly in favour of MI regarding effect

- Rikert et al, The development of a motivational interviewing intervention to promote medication adherence among inner-city, African-American Adolescents with asthma. Patient Educ Couns 2011 Jan; 82(11):117.122
- The potential of asthma adherence management to enhace asthma guidelines. Weinstein AG. Ann Allergy Asthma Immunol. 2011 Apr;106(4).283-91
- Randomized controlled trial to improve care for urban children with asthma: results of the school-based asthma therapy trial. Halterman et al, Arch Pediatr Adolesc med 2011; Mart: 165(3):262-8
- Rubak S, Kier S, Rubak J. Effects of a Clinical pathway including MI – Childhood asthma, a pilot study. Pediatrics. Epub ahead, In Press 2013.



Randomized Trial of Teaching Brief Motivational Interviewing to Pediatric Trainees to Promote Healthy Behaviors in Families

Paula Lozano, MD, MPH; Heather A. McPhillips, MD, MPH; Bryan Hartzler, PhD; Andrea S. Robertson, MPH; Cecilia Runkle, PhD; Kelley A. Scholz, MSW; James W. Stout, MD, MPH; Gail M. Kieckhefer, ARNP, PhD

Hypothesis: That pediatric resident trainees would demonstrate increased counseling skill following training in brief motivational interviewing (MI).

Design: Randomized controlled trial.

Setting: University of Washington Pediatric Residency.

Participants: Pediatric residents (N=18), including residents in postgraduate years 1, 2, 3, and 4.

Interventions: Collaborative Management in Pediatrics, a 9-hour behavior change curriculum based on brief MI plus written feedback on communication skills (based on a 3-month Objective Standardized Clinical Evaluation [OSCE]).

Main Outcome Measure: The percentage of MI-consistent behavior (%MICO), a summary score for MI skill, was assessed via OSCEs in which standardized patients portray parents of children with asthma in 3 clinical scenarios (stations). The OSCEs were conducted at baseline and 3 and 7 months. Blinded coders rated videotaped OSCEs using a validated tool to tally communication behaviors. Training effects were assessed using linear regression controlling for baseline %MICO. Global ratings of counseling style served as secondary outcome measures.

Results: Trained residents demonstrated a trend toward increased skill (%MICO score) at 3 months compared with control residents. At 7 months, %MICO scores increased 16% to 20% ($P < .02$) across all OSCE stations after the combined intervention of Collaborative Management in Pediatrics training plus written feedback. The effect of training on global ratings supported the main findings.

Conclusions: Pediatric trainees' skills in behavior change counseling improved following the combination of training in brief MI plus personalized feedback.

Trial Registration: clinicaltrials.gov Identifier: NCT00510341

Arch Pediatr Adolesc Med. 2010;164(6):561-566

MI research – Children & Family

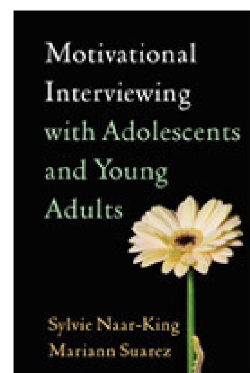
Conclusion on MI research in context of children and their family would have to be, that there are a small, but growing body of valid studies

However, not many of these have until know described specifically ”what to do”, when using MI in childrens case

MI with adolescents and young adults

Book: Motivational Interviewing with Adolescents and Young Adults by Sylvie Naar-King, Mariann Suarez 2010.

Rubak S, Channon S. Motivational interviewing with children – Family based intervention. Book chapter 20



Overall conclusion - we do view a large amount of various studies of different ”quality” on effect of MI in many areas of interest in **adult** setting.

There is a continous need of more MI studies concerning:

- Effect of specific implementation strategies of MI in the health care system
- Effect of MI in pediatric setting

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It is ”fun and games”, exciting to work with MI together with children and their families – try it.

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