Who to Influence?

- **Society**: Governmental agencies, Policies
- **Community**: Community leaders
- **Organization**: Hospital, Healthcare providers
- **Interpersonal**: Partner, Family, Friends
- **Individual**: Pregnant women, Women in childbearing age, Women with alcohol abuse, Etc.
Example Approaches

- Large-scale campaigns, alcohol policy, network linkages, research
- Community-based interventions, mobilizing advocacy
- Holistic services for e.g., high risk pregnant women
- Support Services for e.g., family
- Screening, brief interventions (motivational interviewing)
New Year's Resolutions for 2017

1. Exercise more again
2. No alcohol
3. Be kinder to others & yourself
4. Read more 1 book anything
5. No more sweets
Beliefs

“My family said that drinking alcohol would help me during pregnancy”

“If I have already eaten well and I drink a little glass of red wine, I do not feel that I put my baby at risk”

“Some family members or friends also drank alcohol throughout pregnancy and had very normal, even beautiful kids”

“If I do not drink alcohol in pregnancy I feel more stressed”

A taxonomy of behaviour change methods: an Intervention Mapping approach

Gerjo Kok, Neil H. Gottlieb, Gjalt-Jorn Y. Peters, Patricia Dolan Mullen, Guy S. Paré, Robert A.C. Ruiters, Maria E. Fernández, Christine Markham and L. Kay Bartholomew

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ABSTRACT

In this paper, we introduce the Intervention Mapping (IM) taxonomy of behaviour change methods and its potential to be developed into a coding taxonomy. That is, although IM and its taxonomy of behaviour change methods are not in fact new, because IM was originally developed as a tool for intervention development, this potential was not immediately apparent. Second, in explaining the IM taxonomy and defining the relevant constructs, we call attention to the existence of parameters for effectiveness of methods, and elaborate the related distinction between theory-based methods and practical applications and the probability that poor translation of methods may lead to erroneous conclusions as to method-effectiveness. Third, we recommend a minimal set of intervention characteristics that may be reported when intervention descriptions and evaluations are published. Specifying these characteristics can greatly enhance the quality of our meta-analyses and other literature syntheses: in conclusion, the dynamics of behaviour change are such that any taxonomy of methods of behaviour change needs to acknowledge the importance of, and provide instruments for dealing with, these conditions for effectiveness for behaviour change methods. For a behaviour change method to be effective: (1) it must target a determinant that predicts behaviour; (2) it must be able to change that determinant; (3) it must be translated into a practical application in a way that preserves the parameters for effectiveness and fits with the target population, culture, and context. Thus, taxonomies of methods of behaviour change must distinguish the specific determinants that are targeted, practical, specific applications, and the theory-based methods they embody. In addition, taxonomies should acknowledge that the lists of behaviour change methods will be used by, and should be used by, intervention developers. Ideally, the taxonomy should be readily usable for this goal, but alternatively, it should be clear how the information in the taxonomy can be used in practice. The IM taxonomy satisfies these requirements, and it would be beneficial if other taxonomies would be extended to also meet these needs.

Introduction

Recent attempts to establish a cumulative science of behaviour change have used taxonomies of behaviour change techniques (or methods; BCTs) to derive effectiveness of such techniques through meta-analysis of intervention evaluations (Michie & Johnston, 2012). These taxonomies...
Determinants

Descriptive norm

Injunctive norm

Risk perception

Attitude / Self Efficacy

Coding/ Categorizing psycho-social determinants

<table>
<thead>
<tr>
<th>Determinant</th>
<th>Theory</th>
<th>Parent</th>
<th>Coding operationalisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>RAA</td>
<td>Intention</td>
<td>Operationalisations that measure the latent disposition or tendency to respond favourably versus unfavourably to [target behavior], for example using the semantic differentials bad-good, favour/disfavour, like/dislike</td>
</tr>
</tbody>
</table>
### Table 5: Methods to Change Attitudes, Beliefs, and Outcome Expectations (Adapted from Bartholomew et al., 2011)

<table>
<thead>
<tr>
<th>Method</th>
<th>Definition</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical conditioning</td>
<td>Stimulating the learning of an association between an unconditioned stimulus (UCS) and a conditioned stimulus (CS).</td>
<td>Most effective when the time interval is short and the CS precedes the UCS.</td>
</tr>
<tr>
<td>Self-reevaluation</td>
<td>Encouraging combining both cognitive and affective assessments of one's self-image with and without an unhealthy behavior.</td>
<td>Stimulation of both cognitive and affective appraisal of self-image. Can use feedback and confrontation; however, raising awareness must be quickly followed by increase in problem-solving ability and self-efficacy.</td>
</tr>
<tr>
<td>Environmental reevaluation</td>
<td>Encouraging realizing the negative impact of the unhealthy behavior and the positive impact of the healthful behavior.</td>
<td>Stimulation of both cognitive and affective appraisal to improve appraisal and empathy skills.</td>
</tr>
<tr>
<td>Shifting perspective</td>
<td>Encouraging taking the perspective of the other.</td>
<td>Initiation from the perspective of the learner; needs imaginary competence.</td>
</tr>
<tr>
<td>Arguments</td>
<td>Using a set of one or more meaningful premises and a conclusion.</td>
<td>For central processing of arguments they need to be new to the message receiver.</td>
</tr>
<tr>
<td>Direct experience</td>
<td>Encouraging a process whereby knowledge is created through the interpretation of experience.</td>
<td>Rewarding outcomes from the individual's experience with the behavior or assurance that the individual can cope with and reframe negative outcomes.</td>
</tr>
<tr>
<td>Elaboration</td>
<td>Stimulating the learner to add meaning to the information that is processed.</td>
<td>Individuals with high motivation and high cognitive ability; messages that are personally relevant, surprising, repeated, self-pacing, not distracting, easily understandable, and include direct instructions; messages that are not too.</td>
</tr>
</tbody>
</table>
Scene One
A woman is walking along the beach with her friend. The woman says with a smile, “Can you keep a secret?”
The friend replies, “Of course I can! Why?”
The woman says, “You have to promise you won’t tell anyone, yet…”
The friend stops walking, nods, and looks at the woman with excitement.
The woman says “I’m pregnant!”
They scream and laugh and the friend gives the woman a big hug.

Scene Two
It is a ‘girls’ night out’ party scene and the same woman and her friend are arriving together. The woman gets offered a glass of wine by the host, and the woman says “No thanks, just an OJ for me.”
The host says, “What? That’s not like you!”
The friend is standing next to the woman and says “Oh, we’re both on a health-kick, I’ll have a water.”
The host says “Good on you!”
The woman and her friend smile at each other while the host turns away to get them the drinks.

A final message is displayed on the screen and a voice says:
**No alcohol during pregnancy is the safest choice.**
A taxonomy of behaviour change methods: an Intervention Mapping approach

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In this paper, we introduce the Intervention Mapping (IM) taxonomy of behaviour change methods and its potential to be developed into a coding taxonomy. That is, although IM and its taxonomy of behaviour change methods are not in fact new, because IM was originally developed as a tool for intervention development, this potential was not immediately apparent. Second, in explaining the IM taxonomy and defining the relevant constructs, we call attention to the existence of parameters for effectiveness of methods, and explicate the related distinction between theory-based methods and practical applications and the probability that poor translation of methods may lead to erroneous conclusions as to...
Applying Methods
Effectiveness?

The Need for a Framework
Developing Health Promoting Programs

 Coming Soon...

✓ Intervention Mapping Checklist

<table>
<thead>
<tr>
<th>Participatory Planning Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental factors contributing to problem(s)</td>
</tr>
<tr>
<td>Logic model of the problem: links</td>
</tr>
<tr>
<td>Community Capacity Capacity</td>
</tr>
<tr>
<td>Program Goals</td>
</tr>
</tbody>
</table>

- Did this
- Did not do this
- Not applicable
Conclusions

- FASD is an important health problem in need of prevention
- FASD warrants simultaneous prevention on multiple levels and requires a multidisciplinary approach
- For FASD prevention there is ample room for improvement
- Decisions about prioritizing short-term and long-term actions are important
“Each one of us can make a difference. Together we make change”
always make a tight project schedule ...

what about FASD Prevention?

That is on Friday the 8th at 11:45 AM
Table Discussion

LEVEL 1
MASS MEDIA
Broad awareness building and health promotion efforts

LEVEL 2
HEALTH PROMOTION
Discussion of FASD/alcohol with all women of childbearing age and their families

LEVEL 3
ANTENATAL SUPPORT
Support of pregnant women with alcohol and other health/social issues

LEVEL 4
POSTNATAL SUPPORT
Postpartum support for new mums and support for child assessment and development

Adapted from Canadian FASD Prevention Researcher Nancy Poole’s Four Part Model