Behaviour Change and Exercise Referral

Dr Amanda Pitkethly

Physical activity is known to be of near universal benefit … but studies still show that exercise referral schemes (ERS) can be …. more or less successful

A 2015 systematic review and economic evaluation of ERS showed:

- details of schemes varied across studies - which elements promoted changes to physical activity levels?
- more or less successful for people with different medical conditions or risk factors, but may have an impact on more than one risk factor or condition
- people who lacked their own transport or who lived in more deprived neighbourhoods were less likely to take up a referral to an ERS
- people with a history of activity, referred for coronary heart disease risk factors, or were older were more likely to increase their activity levels
- the upfront costs of providing ERSs outweighed the benefits, although there was a large amount of uncertainty in estimates of the health benefits

Campbell, F., Holmes, M., Everson-Hock, E., Davis, S., Woods, H. B., Anokye, N., ... & Kaltenthaler, E. (2015). A systematic review and economic evaluation of exercise referral schemes in primary care: a short report. *Health technology assessment*, *19*(60).

Audit of Exercise Referral Schemes in Scotland

(Kim Buxton & Sonia McGeorge, 2018)

The results show:

- varied approaches to delivery
- schemes operate at different capacities
- with a range of partners
- different operational structures and standards
- most evaluated schemes and where impact data was available physical activity increased between 27% and 80% at 12 months

Audit of Exercise Referral Schemes in Scotland

(Kim Buxton & Sonia McGeorge, 2018)

Recommendation:

- *Exercise referral scheme providers need to ensure that their workforce is equipped with the necessary knowledge, skills and behaviours to facilitate long-term behaviour change of those people attending their scheme and it is recommended that they continue to provide appropriate and, where relevant accredited CPD opportunities for anyone delivering activities within their scheme.*

Behaviour change is hard ... we need good skills

Rollnick, S., Kinnersley, P., & Stott, N. (1993). Methods of helping patients with behaviour change. *BMJ*, *307*(6897), 188-190.

- Health habits are not changed by an act of will ... this requires motivational and self-regulatory skills (Bandura (2004, p. 151)

- People do not naturally keep their goals in mind or evaluate their own progress ... rather than just assuming they are able to, it is necessary to explicitly develop these skills (Schunk, 2001)

… an example of what is being recommended

- Non-alcoholic fatty liver disease (NAFLD) is rapidly becoming the most common liver condition in the world. The Institute of Cellular Medicine at Newcastle University recognise the benefit of PA, and of a 20 minute behaviour/lifestyle consultation

- *Traditionally, patients with NAFLD are told/advised by clinicians to lose weight; however, commonly, they are not supported to make any meaningful changes to their lifestyle behaviors. This frequently results in unsuccessful weight loss attempts and disengagement with services.*

- Who provides this support? The paper recommends a change in the way that lifestyle interventions are delivered in the clinic, placing more emphasis on the use of behaviour change strategies and engaging patients in a discussion about the choices they have in relation to their care as opposed to clinicians providing unsolicited advice.

- So will brief interventions work?

- Hallsworth, K., Avery, L., & Trenell, M. I. (2016). Targeting lifestyle behavior change in adults with NAFLD during a 20-min consultation: summary of the dietary and exercise literature. *Current gastroenterology reports*, *18*(3), 11.

Brief interventions?

- Brief interventions (BI) are too long for primary care consultations!

- The BI reviews reported varying definitions of BIs, only one of which specified a maximum duration of 30min.
- BIs can increase self-reported physical activity in the short term, but there is insufficient evidence about their long-term impact, their impact on objectively measured physical activity, and about the factors that influence their effectiveness, feasibility and acceptability.

- Lamming, L., Pears, S., Mason, D., Morton, K., Bijker, M., Sutton, S., & Hardeman, W. (2017). What do we know about brief interventions for physical activity that could be delivered in primary care consultations? A systematic review of reviews. *Preventive Medicine*, *99*, 152-163.

So why bother at all with behaviour consultations?

- A primary care pedometer-based walking intervention in seven London, United Kingdom, primary care practices
- inactive (n = 11015, aged 45- to 75)
- Three-arm cluster randomised trial (2 intervention and 1 control), and 12-month follow-up

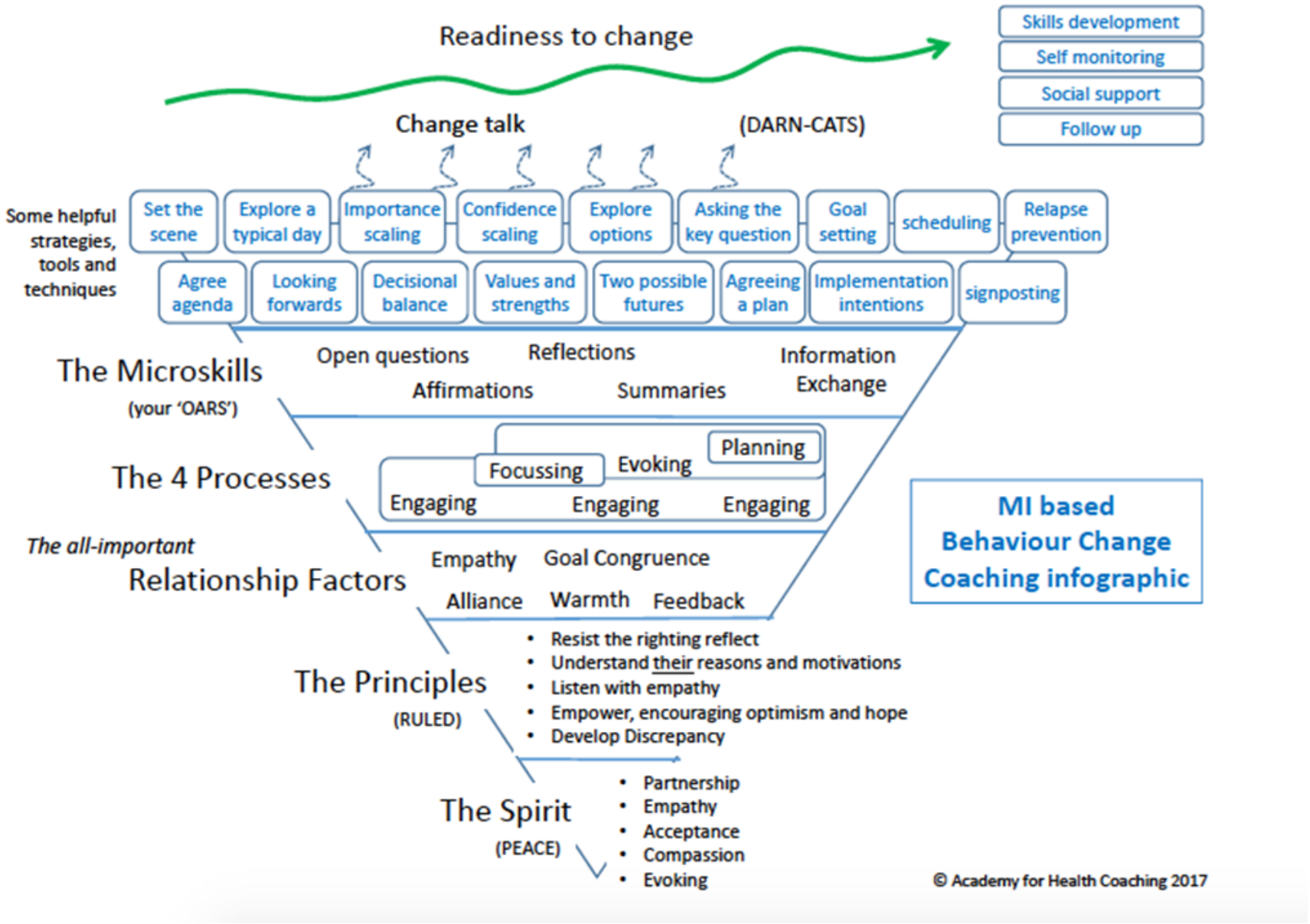
- Postal and nurse intervention groups received pedometers, 12-wk walking programmes, and PA diaries.
- The nurse group was offered three PA consultations including recognised behaviour change techniques and MI
- PA increased in both intervention groups compared with the control group (additional step-counts (steps/day)
- postal 642 (95% CI 329, 955; $p < 0.001$) and nurse-support 677 (95% CI 365, 989; $p < 0.001$). no significant differences between the two interventions at 12 months

- Information about the consultation itself includes MI (https://trialsjournal.biomedcentral.com/articles/10.1186/1745-6215-14-418)

- So what is the problem?

- Harris, T., Kerry, S. M., Limb, E. S., Victor, C. R., Iliffe, S., Ussher, M., ... & Anokye, N. (2017). Effect of a primary care walking intervention with and without nurse support on physical activity levels in 45-to 75-year-olds: the pedometer and consultation evaluation (PACE-UP) cluster randomised clinical trial. *PLoS medicine*, *14*(1), e1002210.

So why MI?


Readiness to change
Skills development
Self monitoring
Social support
Follow up
Change talk
(DARN-CATS)
Some helpful strategies, tools and techniques
Set the scene
Explore a typical day
Importance scaling
Confidence scaling
Explore options
Asking the key question
Goal setting
scheduling
Relapse prevention
Agree agenda
Looking forwards
Decisional balance
Values and strengths
Two possible futures
Agreeing a plan
Implementation intentions
signposting
The Microskills
(your 'OARS')
Open questions
Reflections
Information Exchange
Affirmations
Summaries
The 4 Processes
Planning
Focussing
Evoking
Engaging
Engaging
Engaging
The all-important
Relationship Factors
Empathy
Goal Congruence
Alliance
Warmth
Feedback
The Principles
(RULED)
Resist the righting reflect
Understand their reasons and motivations
Listen with empathy
Empower, encouraging optimism and hope
Develop Discrepancy
The Spirit
(PEACE)
Partnership
Empathy
Acceptance
Compassion
Evoking
MI based Behaviour Change Coaching infographic
© Academy for Health Coaching 2017

So why MI?

- Motivational interviewing (MI) typically requires less contact hours of treatment relative to other behaviour change strategies
- MI can be effectively delivered by most health professionals with SUFFICIENT training
- The person-centred nature means MI has relatively high levels of acceptability among patients

- O'Halloran, P. D., Blackstock, F., Shields, N., Holland, A., Iles, R., Kingsley, M., ... & Taylor, N. F. (2014). Motivational interviewing to increase physical activity in people with chronic health conditions: a systematic review and meta-analysis. *Clinical rehabilitation*, *28*(12), 1159-1171.

… fidelity is a big issue?

- O'Halloran, P. D., Blackstock, F., Shields, N., Holland, A., Iles, R., Kingsley, M., ... & Taylor, N. F. (2014). Motivational interviewing to increase physical activity in people with chronic health conditions: a systematic review and meta-analysis. *Clinical rehabilitation*, *28*(12), 1159-1171.
- Eleven publications were included.
- The dose of MI received varied considerably and could not be determined with any precision in the majority of trials
- There was moderate level evidence that motivational interviewing had a small effect in increasing physical activity levels in people with chronic health conditions relative to comparison groups (standardized mean differences = 0.19, 95% CI 0.06 to 0.32, p = 0.004).
- Sensitivity analysis based on trials that confirmed treatment fidelity produced a larger effect.

- Morton, K., Beauchamp, M., Prothero, A., Joyce, L., Saunders, L., Spencer-Bowdage, S., ... & Pedlar, C. (2015). The effectiveness of motivational interviewing for health behaviour change in primary care settings: a systematic review. *Health Psychology Review*, *9*(2), 205-223.
- inconsistency of MI descriptions and intervention components,
- MI *should* result in patients verbalising arguments for change but *****no studies included formal measures change talk.

- In other areas and studies we see similar issues around MI education level and evaluation of MI related to outcomes

Physical activity behaviour consultations

- Loughlan & Mutrie promoted PA consultations in the 1990s - one to one intervention in a health promotion setting not involving physical testing or measurement

- This is happening within ERS .... but with too much variation in behaviour change training, approach and delivery

- There is STILL a huge potential market for the application of behaviour practitioners/consultations in a variety of health promotion settings, e.g.
- primary health care,
- general practitioner health promotion clinics,
- pre- and post-operative situations,
- leisure centres which exist throughout the UK

- Loughlan, C., & Mutrie, N. (1996). Conducting an exercise consultation: guidelines for health professionals. *Journal of the Institute of Health Education*, *33*(3), 78-82.

PA behaviour change consultations

- We need skilled independent PA behaviour change practitioners/consultants, social prescribers/ health navigators (CIMSPA standards are being created)

- A promising opportunity in England ... **The number of workers trained to prescribe social activities, like exercise groups and art classes, to GP patients who don't need pills, is set to rise, under NHS England plans.** The NHS says more than 1,000 will be recruited by 2020-21. In the long term, link workers will handle around 900,000 patient appointments a year.

https://www.bbc.co.uk/news/health-46999922

Behaviour change - not just for referred patients but also for staff

- WE HAVE TO CHANGE OUR BEHAVIOUR TOO

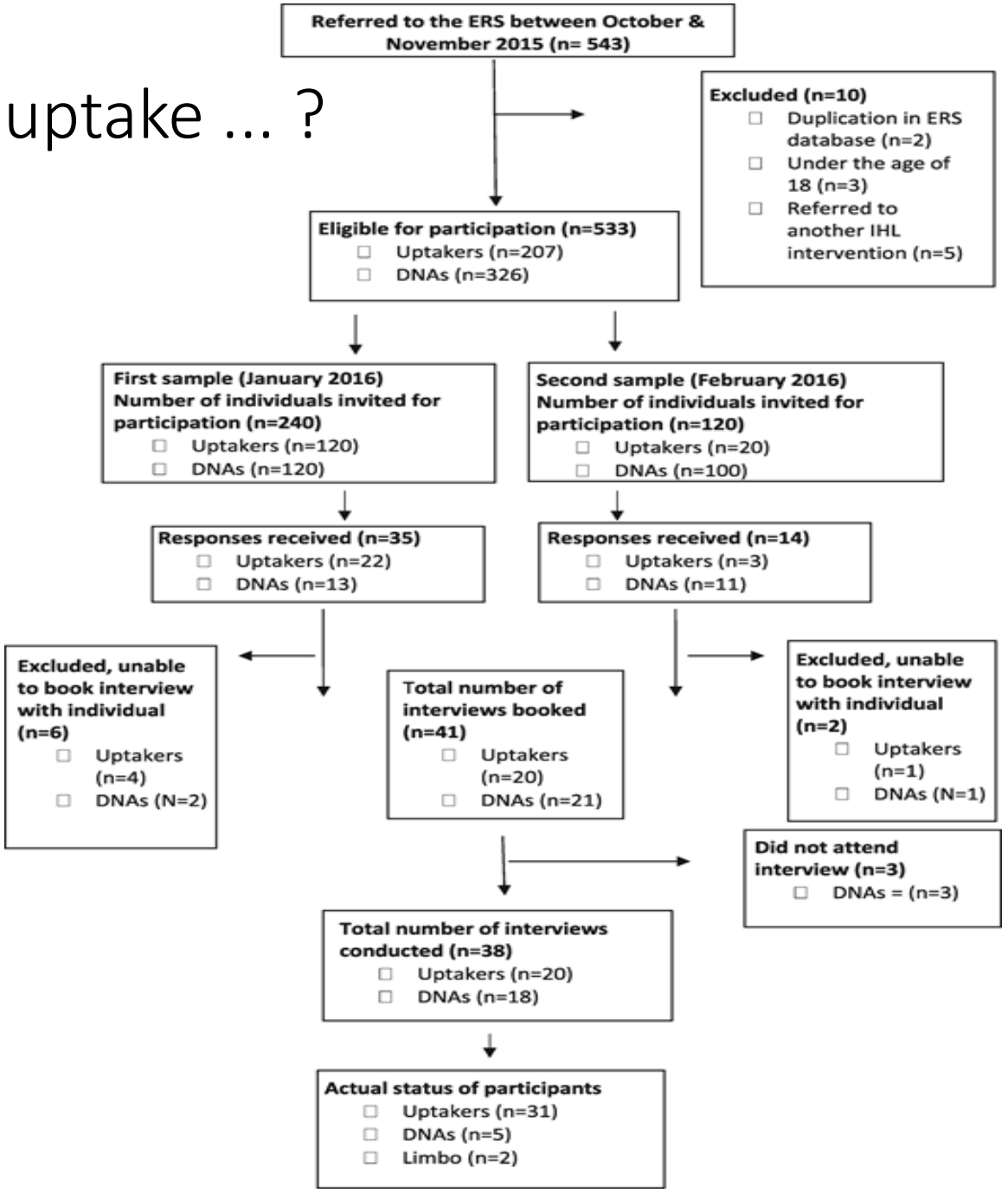
- *****Education, practice and implementation, i.e. the goal of keeping in mind the behaviour change approach, practising it, using it consistently and becoming skilled

- The development of self-regulatory competencies occurs over 4 stages: observation, emulation, self-control and self-regulation

- In ERS, what we are doing to improve these skills in our staff is too varied, and in many cases, insufficient to result in effective behaviour change for patients

Bridging the gap between referral and uptake … ?

- The majority of studies have focused on patients who have taken up ERSs, with little consideration of reasons for non-uptake
- In addition, to patient adherence in ERS … patient uptake to ERS could be improved using good MI PA consultations.
- Uptake to ERS is varied, falling between 30% and 98%
- Older women, those with better mental health and those living in less deprived areas are more likely to take up ERSs.



- Birtwistle, S. B., Ashcroft, G., Murphy, R., Gee, I., Poole, H., & Watson, P. M. (2018). Factors influencing patient uptake of an exercise referral scheme: a qualitative study. *Health education research*, *34*(1), 113-127.

Bridging the gap between referral and uptake … ?

Recommendations have been made to:

- Improve communication between services, e.g. having an ERS staff member (with strong beahviour change /MI skills) in referral environments (e.g. GP surgeries) to discuss the ERS with potential service users,

- ... and for exercise specialists to have access to patient medical records so they could prescribe PA based on clients' health (Birtwistle et al., 2019)

- Birtwistle, S. B., Ashcroft, G., Murphy, R., Gee, I., Poole, H., & Watson, P. M. (2018). Factors influencing patient uptake of an exercise referral scheme: a qualitative study. *Health education research*, *34*(1), 113-127.

Six common errors made by policy makers prevent the successful implementation of health-related behaviour change

1. *It is just common sense* – if it was that easy we would all be perfect
2. *It is about getting the message across* - simple stimulus-response models explain only a small fraction of human behaviour
3. *Knowledge and information drive behaviour* - if we tell people the negative consequences of eating too much or exercising too little, they will change their behaviour accordingly, this is clearly not true and every front-line clinician and practitioner knows this
4. *People act rationally* - Even where people are in possession of the information behaviour change can be very difficult
5. *People act irrationally* – behaviours may not be so irrational after all given peoples' lives and experiences, people have their own reasons for doing things
6. *It is possible to predict accurately* - even the most careful of our behaviour models, a great deal of variance in individual behavioural outcomes remains, it is still very difficult to say with any certainty how individual people will behave in any given situation

- Kelly, M. P., & Barker, M. (2016). Why is changing health-related behaviour so difficult?. *Public health*, *136*, 109-116.

It’s not that easy to change …

- *Changes in smoking and eating as well as alcohol consumption and physical activity are processes and practices embedded in social life, not one-off events triggered by information or prevented by remedying information deficits.*

- So a good place to start is to upskill our workforce with strong skills ... MI respects an individual’s expertise in their own life experience and empowers people to buy in to their own motivation and confidence to change.

- Directing resources in this direction is a sensible investment in the long game of behaviour change

- Kelly, M. P., & Barker, M. (2016). Why is changing health-related behaviour so difficult?. *Public health*, *136*, 109-116.

Thanks you!
Any questions?