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Abstract

Background: The health related behaviours of people with intellectual disabilities (ID) may be determined by organisational influences. This innovative study aimed to explore managers' and staffs' perspectives on organisational influences on the promotion of healthy behaviours for this population.

Method: A qualitative methodology was employed. Four focus groups with staff and eleven telephone interviews with managers were undertaken across three residential services in one region (Northern Ireland) of the UK. Transcripts were analysed thematically.

Findings: The organisations involved in this study did not have the cultural ethos or capacity to sustain consistent support for staff involvement in health promotion. Organisational support and outcome focused strategies are recommended for encouraging staff involvement in health promotion activities.

Conclusion: These findings have implications for some organisations that support people with ID in improving the way they facilitate health promotion. They highlight the need for organisational cultures to facilitate knowledge translation and embrace evidence based health promotion interventions.

Introduction

It is well known that people with intellectual disabilities (ID) have a poorer health profile than the non-disabled population (World Health Organisation, 2011). In addressing the health disparities of people with ID, it is worth recognising the interplay that the determinants of health have on this population: 1) genetic/biological factors; 2) individual lifestyle factors; 3) health promotion and healthcare access; and 4) socio-economic, cultural and environmental context) (Emerson & Hatton, 2014). Although the genetic/biological determinants of health cannot be directly targeted, individual lifestyle factors can be addressed in order to improve health outcomes (Marks & Sisrak, 2014).

A healthy lifestyle constitutes a way of living in order to reduce risk of chronic illness or premature death. It can comprise specific behaviours such as tobacco/alcohol avoidance, and health screening (World Health Organisation, 1999). Physical activity levels and dietary habits are also lifestyle factors that have a strong impact on health (World Health Organisation, 1999). Governmental guidance states that at least 150 minutes per week is required, in order to promote good cardio-vascular health (American Heart Association, 2014). It is also recommended that a diet low in saturated fat, salt and refined sugar is required to reduce weight management problems and circulatory disease (World Health Organisation, 2015).

Evidence demonstrates that individuals with ID do not meet these guidelines. They engage in high levels of sedentary behaviour, limited physical activity, consume an unhealthy diet and are prescribed high psychotropic medication dosages: consequently

leading to high obesity rates (Phillips & Holland, 2011; Gephart & Loman, 2013). People with ID also do not regularly engage in health promotion opportunities and access appropriate healthcare (Taggart & Cousins, 2014). These behaviours can influence risk of serious health conditions such as coronary heart disease, certain cancers, Type 2 diabetes etc. (Hu *et al.,* 2005; Haveman *et al.*, 2011; Taggart *et al.*, 2014); and premature death (Heslop *et al.,* 2013).

The implications of poor life style habits for people with ID have been reflected in UK and international health services policy. Reducing premature death is currently a National Health Service (NHS) policy objective for people with ID (Department of Health, 2014). The NHS (2015b) framework states that carers should be supported, so have the resources to enable people with ID to maintain a healthy weight. Preventative measures against weight problems and poor health outcomes are also in line with international health service policy, as the UN convention (2008) values early intervention and prevention for people with disabilities. This need to effectively support people with ID to achieve a positive weight status and reduce premature mortality adheres with the NHS (2015a) core values. These are centered on promoting equality and reducing health inequalities.

There have been several health interventions developed on an international level for people with ID that appear to work towards these policy objectives through promoting healthier behaviours (i.e. increase in physical activity, better diet, cancer screening, etc.) (Taggart & Cousins, 2014). However, the majority of these complex interventions have had many challenges (i.e. atheoretical, small sample sizes, no control group, no longitudinal data collected etc.) (Craig *et al.,* 2008; Emerson & Hatton, 2014).

Recently, there have been attempts to develop theoretically based and robust multi-

component interventions that have led people with ID to maintain regular physical activity and a healthy diet. For example the '*Health Belief Model'* guided Ewing *et al.'s* (2004) '*Health Education Learning Program'* and Mann *et al.'s* (2006) *'Steps to Your Health'* intervention. Goal setting and self-monitoring were central to Melville *et al's* (2011) multi-component '*TAKE 5'* weight management intervention.

Bandura's (1994) social learning theory guided Marks *et al's* (2013) staff led '*HealthMatters Program,* which focused on encouraging people with ID to engage in more physical activity and a healthier diet. Marks *et al.* (2013) also used the Trans-theoretical Model of Behaviour Change (TTMBC) to guide this intervention.

The TTMBC was originally developed by Prochaska & DiClemente (1983) and was applied to change smoking habits. Prochaska *et al.,* (1994) generalised this model across various behaviors such as overweight instances and sedentary lifestyles. Prochaska & DiClemente (1983) constructed intentions to change a specific behavior along a continuum of five stages (pre-contemplation, contemplation, preparation, action, maintenance) (Prochaska & DiClemente, 1983; Prochaska *et al.*, 1994).

Movement between these stages was facilitated through ten processes which include 'consciousness raising, self-liberation, social liberation, self-re-evaluation, environmental re-evaluation, counterconditioning, stimulus control, reinforcement management, dramatic relief, and helping relationships' (Prochaska & DiClemente, 1983). Self-efficacy and temptation are core constructs of the TTMBC, as it is theorised that an individual's confidence in their ability to cope with high risk situations (self-efficacy) increases and the temptation to engage in a specific behaviour reduces as they progress through the model (Prochaska & DiClemente, 2012).

Prochaska *et al.,* (2001) identified that although the TTMBC was originally developed to change individual behaviour, it could be applied on an organisational level to change staff attitudes and behaviours (see Table 1).

Table 1: Processes of behaviour change applied to organisations

Process	Description
1. Consciousness Raising	Becoming more aware of a problem and
2. Dramatic Relief	Emotional arousal, such as fear about failures to change and inspiration for successful change.
3. Self-Re-evaluation	Appreciating that change is important to
4. Self-Liberation	Believing that a change can succeed and making a firm commitment to this new working
5.Environmental Re-	Appreciating that a change will have a positive
6.Reinforcement	Finding intrinsic and extrinsic rewards for new
7. Counter-Conditioning	Substituting new behaviours and cognitions for
8. Helping Relationships:	Seeking and using social support to facilitate
8. Stimulus Control	Restructuring the environment to elicit new
10. Social Liberation	Empowering individuals by providing more

Adapted from Prochaska *et al*., (2001)

It is important to explore the application of this model as on organisational level, as evaluations of previous health interventions have emphasised the potential influence of organisational and environmental support. These studies identified how staff perform a

critical role in empowering people with ID with health information/education, controlling exposure to temptations and reinforcing healthier choices (Spanos *et al.,* 2013; Marks *et al.*, 2013; Hsieh *et al.*, 2014; Kuijken *et al.,* 2015). Therefore it may be important to target behaviour change initially on an organisational level before applying theoretical approaches such as the TTMBC on an individual level. This being due to the evidence that organisations can influence staff capacity (i.e. knowledge, confidence, time and resources) to enable people with ID to sustain healthy behaviours..

Targeting behaviour change on an organisational level has also been highlighted in several health service policy documents such as '*Health Care for all'* (Michael, 2008) and '*Valuing People now'* (Department of Health, 2008). These documents emphasised the importance of targeting leadership in order to inspire paid carers to develop the attitudes and behaviours, in order to performing effectively in a health promotion capacity.

However organisational theorists have emphasised that the pattern of shared meanings and practices (labelled as organisational culture) can take a long time to change i.e. progress from pre-contemplation to maintenance. Therefore organisational culture has a strong impact on staff capacity for sustainable health promotion change (Robbins & Barnwell,2006, Butterfoss *et al.*, 2008; Spassiani *et al.*, 2015).

Previous studies have evidenced the influence of organisational culture on health promotion support and outcome for people with ID. For example James & Shireman (2010) and Bergstorm & Wihlman (2011) demonstrated that managers of residential schemes for people with ID often do not have the knowledge and skills to direct their staff in undertaking health promotion initiatives. Previous studies have also identified how staff capacity to promote physical activity and a healthy diet is reduced by limited

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resources (Elinder *et al.,* 2010; Naaldenberg *et al.*, 2013).

There has been no in-depth investigation into the organisational barriers and enablers to health promotion for people with ID in their residential/supported living services (James & Shireman, 2010; Heller & Sorensen, 2013). This is worth investigating, as Spassiani e*t al.* (2015) theorised how policies, beliefs and resources within the organisational culture can influence knowledge transferability and maintenance of a healthy lifestyle. It is critical to ensure that opportunities for staff to encourage people with ID to engage in regular physical activity and healthy diet are integrated, implemented and sustained within the organisational culture (Robbins & Barnwell, 2006; James & Shireman, 2010; Sundblom *et al.*, 2015).

The aim of this study was to explore the organisational barriers and enablers to staff supporting people with ID to engage in regular physical activity and a heathy diet. The purpose was framed in line with the application of the TTMBC on an organisational level (see Figure 1). A qualitative approach was required to explore these influences within the context of interviews/focus groups with mangers and frontline staff who work in residential services with people with ID.

Method

Design

A qualitative methodology explored organisational influences on promotion of physical activity and a healthy diet for people with ID in a residential context. Three Northern Ireland, UK based organisations were purposively selected to participate in this study

because they provided supported living and residential services for people with ID, and could reflect on organisational influences within this context.

The lead author facilitated focus groups with paid staff and telephone interviews with managers from these organisations. Job descriptions were obtained for staff from these organisations for the positions of (a) Residential Worker (Learning Disability) Band 3 (b) Adult Support Worker (Band 3) (c) Senior Adult Support Worker (Band 5 (d) Support Assistant (Supported Living) (band not specified).

Participants

Thirty staff and fifteen managers from the organisations were invited to participate. Twenty-one staff and eleven of these managers consented to participate. Participant demographics are illustrated in Table 2 below. The majority of the staff and managerial participants were female (86%, N=51). The age of staff ranged from 20 to 65 years.

Table 2 Demographics of participants

Participant code	Staff or manager	Age	Gender
1	Manager	Not given	Female
2	Manager	Not given	Female
3	Manager	Not given	Male
4	Manager	Not given	Female
5	Manager	Not given	Female
6	Manager	Not given	Female
7	Manager	Not given	Female
8	Manager	Not given	Female
9	Manager	Not given	Female
10	Manager	Not given	Male
11	Manager	Not given	Female
39	1	32	Female
40	1	28	Male
41	1	50	Female
42	1	27	Female
43	2	32	Male
44	2	24	Female
45	2	20	Female

47	2	29	Male
48	2	32	Female
49	2	48	Male
50	2	28	Male
51	3	47	Female
52	3	37	Female
53	3	27	Female
54	3	25	Female
55	4	48	Female
56	4	65	Female
57	4	58	Male
58	4	49	Female
59	4	43	Female

Four focus groups were conducted with staff (i.e. support/care workers), consisting of between four and eight participants in each group. Eleven telephone interviews were conducted with managers of these facilities. Participant consent was obtained prior to audio-recording of the interviews/focus groups

Interview format

A topic guide supported the focus group and manager interviews (see Table 3). These were informed by a review of the literature and the TTMBC (Prochaska *et al.,* 2008). They included three sections, and focused on organisational enablers and barriers to health promotion (specifically physical activity and healthy diet) for people with ID. The first two sections specifically focused on concepts from the TTMBC.

Table 3: Key questions and examples of prompting questions from interviews and focus groups

Topic	Main question/Probing questions
Awareness of health promotion needs of people with ID and level of organisational priority attached to health promotion.	**1. Questions for staff** How important is health promotion to your service user needs? **Probes** What health issues do you think your service users face? How could a health program address these needs? Have you engaged in any previous health promotion Programs or activities with your service users? *2.* **Questions for managers** How important is health promotion in meeting the needs of your service users? **Probes** Are the clients in your unit at risk of specific issues such as obesity, diabetes or CHD in your unit? What level of priority is given to health promotion within your specific unit? How are health promotion activities integrated into every day practice within your specific unit?
Barriers and enablers of implementing health promotion activities	**1. Questions for staff** What works when trying to encourage your service users to think about eating healthy/exercising more? What works when encouraging your service users to make plans to eat healthier/do more exercise? *2.* **Questions for managers** What challenges have you experienced when encouraging your service users to eat healthy/exercise more? Did your staff undertake any activities to promote the health of your service users? (exercise, healthy eating) How useful were these activities in supporting their clients to engage in a healthy lifestyle?

Incentives for participation in health promotion interventions	**1. Questions for staff** What would encourage you to undertake health promotion education or intervention with service users in the future? **2. Questions for managers** In your opinion, how could a health promotion intervention work more effectively within your specific unit?

This first section looked at staff and managerial awareness of health promotional needs of people with ID (pre-contemplation/contemplation). The second section explored whether staff and managers were committed to promoting healthier lifestyles with people with ID (preparation), and whether they were reinforcing or maintaining these health promotion activities (action/maintenance). The third section looked at incentives and strategies to enable participation in health promotion interventions.

The initial staff focus group and telephone interview with a manager were used as pilots. Participants' feedback indicated that all topics and probes were comprehensive, therefore no changes were made to the interview schedules and this data was included in the analysis. Identification codes were applied in order to preserve confidentiality and anonymity of the participants. The four staff focus groups were numbered FG1 to FG4. Individual cases within each focus group were assigned a participant number. The telephone interviews were coded Manager 1 to Manager 11. The staff focus groups and manager interviews were integrated and analysed together.

Data analysis

The focus groups and interviews were audio-recorded and transcribed verbatim. The

lead author coded the transcripts using QSR NVivo (Version 10) software. Thematic analysis of the focus groups and telephone interviews was undertaken to identify patterns of meaning relating to organisational enablers and barriers to health promotion for people with ID (Morse & Field, 1996). Braun & Clarke's (2006) six steps guided the thematic analysis (see Table 4). The concepts related to the organisational barriers and enablers to engaging in health promotion in line with the TTMBC (Prochaska *et al.,* 2008). The codes and themes were discussed and verified with the second and third authors. The research team reached a consensus on the final thematic framework. As there were only three organisations that participated in this study, themes/subthemes were only examined across organisations and no comparisons were made between organisations.

The job descriptions were also examined, in order to identify whether health promotion was mentioned as an area of responsibility within the managerial and staff roles.

Table 4: Stages of thematic analysis

1	Familiarity with the data was achieved through transcribing the interview/focus recordings verbatim and repeated reading of the transcripts.
2	The data was coded and organised into meaningful groups, with reference to the context surrounding each extract.
3	The codes were sorted into potential themes, through considering how the codes relate and differ to each other.
4.	The themes were reviewed and refined, on the basis of whether they form a coherent pattern. This involved splitting new themes and disbanding some themes.
5.	The themes were refined and named
6	The themes were interwoven into a concise, coherent and logical account of the findings, with appropriate reference to quotes as evidence.

(Adapted from Braun & Clarke, 2006)

Ethics

The study was granted ethical approved by Office for Research Ethics Committee Ireland (ORECNI) and research governance permission was obtained from the participating sites. Participant information sheets and consent forms was distributed to the managers and staff. These forms clarified participants' involvement in the study. All personal identifiers were stored on a password protected file. Participants were made aware of how their confidentiality would be preserved. Participants were informed that their involvement was entirely voluntary and they could withdraw from the study at any point without explanation.

The study uncovered some potentially unethical practice whereby staff used food to control challenging behaviour and reinforce good behaviour. Individuals who made the quotes concerned with these practices were not identified, but organisations were provided with feedback/summaries about the results of the study.

Findings

The focus groups and telephone interview findings are presented below. Three core themes were identified. The first two themes related to organisational barriers to promoting health for this population. The third theme related to enablers or strategies for implementing health promotion activities:

1. Limited health promotion culture

2. Lack of health promotion capacity

3. Strategies for building capacity for health promotion culture

These themes are mapped on to the TTMBC in order to convey the organisational enablers and barriers to staff and managers supporting people with ID to engage in and maintain a healthy diet and regular physical activity (see Figure 2). Table 5 below illustrates the number of staff and managers that expressed the subthemes and themes. There was little difference between managers and staff in relation to the expression of these themes.

Table 5: Number of expressions for themes

Limited health promotion culture	Reactive approach to health problems	9 managers
	Lack of policies/guidelines underpinning health promotion	11 managers, 11 staff
	Limited health promotion priorities	10 managers, 16 staff
	Lack of awareness of health education and training opportunities	3 managers, 9 staff
Lack of health promotion capacity	Lack of staff empowerment	10 managers, 19 staff
	Lack of external health promotion support	7 managers , 17 staff
	Lack of consistent organisational commitment to health promotion	6 managers, 10 staff
	Lack of resources and time	8 managers , 19 staff
Strategies for building health promotion capacity and culture	Outcome focussed strategies	4 managers ,17 staff
	Helping relationships for health promotion	10 managers, 12 staff

Theme 1: Limited health promotion culture

This theme depicts evidence that staff and management were working in an organisational culture that had a limited healthy promotion focus. The cultural ethos appeared to be centred on treating health problems rather than promoting physical activity and a healthy diet.

The majority of managers and staff were aware that their clients were at risk of weight problems potentially leading to health conditions such as Type II diabetes and coronary heart disease (CHD):

"One of the biggest health risks would be diabetes … heart disease in the future ...they don't look after their health." (Staff 55, FG4)

"We have two clients who are attending a dietician for obesity related conditions; we have another client who has CHD." (Manager 2)

"CHD hasn't kicked in yet but we would have a lot of clients who would be obese." (Manager 9)

There was little evidence to suggest that these staff and managers were pro-actively avoiding these problems, as there were no serious plans within the organisation for staff to encourage people with ID to engage in a healthy diet or regular physical activity.

Four sub-themes were identified within this over-arching theme:

Reactive approach to health problems

Analysis of the interviews with managers revealed how strategies for addressing health concerns were implemented in a reactive rather than a proactive manner:

"Some service users in this unit don't really need a care plan, it's mostly for the people who are obese that we would try and promote healthier eating options." (Manager 7)

This demonstrates little evidence of a strong health promotion ethos within the organisation. Also, other comments indicated that there was a system of waiting until individuals developed health problems rather than strategically preventing them:

"As regards health promotion, there's nothing clear cut it's just as and when things come up" (Manager 4).

Lack of policies/guidelines underpinning health promotion

There was a consensus that no clear guidelines informed staff practice regarding the health promotion needs of the ID population. There was no formal system for recording their involvement in promotion of physical activity and healthy diet for clients with ID. These activities were undertaken sporadically:

"We wouldn't have any policies in place as regards health promotion."
(Manager 5)

"*It wouldn't be written down as health promotion. They are doing health promotion activities every day, just in a non-official sense.*" (Manager, 4)

It was recognised that staff may not adhere strictly with health action plans, as responsibility for health promotion was not specified in any of their job descriptions:

"You can't force health promotion on anybody or tell staff its part of your job."
(Manager, 5)

Hence the evidence suggested that health promotion activities were perceived as optional, rather than integral to the staff role. Both managers and staff did not feel empowered to actively engage in health promotion activities within their role.

Limited health promotion priorities

Focus group and telephone interview analysis revealed that low priority was attached to promoting physical activity and a heathy diet. Role responsibilities (management of challenging behaviour, finances and housework, attendance at medical appointments etc.) were prioritised:

"If you're short staffed your priorities change, it's making sure clients' laundry, banking and shopping is done. Exercise would be the one thing that gets left

out." (Manager 9)

"If one of the tenants isn't mentally well, health promotion is not going to be your top priority." (Staff 44, FG2)

The above comment points to the dichotomy between mental and physical health that was apparent for this specific staff member. This staff was not attuned to the holistic concept of health, and did not perceive the promotion of physical activity as potentially influencing mental health improvements. The comment from Manager 9 echoed this lack of a holistic approach to personal care, health and well-being, as only specific tasks such as laundry, banking and shopping were prioritised over exercise.

This limited health promotion approach was also reflected wherein the promotion of choice (health or unhealthy) was prioritised over the promotion of regular healthy lifestyle behaviours within the staff role:

"If the tenant insists on buying things, we can say that's good or that's bad, but it's their choice." (Manager 11)

"We can draw a healthy menu plan up and discuss that with the tenant but we can't tell them you have to eat this." (Staff 54, FG3)

The need to avoid risk was prioritised over promotion of regular physical activity for people with ID, as staff and managers did not encourage people with ID to engage in exercise during the winter or in bad weather:

"If someone has agreed they would go out for a daily walk, weather permitting because you don't want somebody out in the pouring rain." (Manager 1)

*"Coming into the winter it's going to be too cold and wet for them to go for a walk outside, so that has a big influence on getting them to do physical activities." (*Staff 43*, FG2)*

Mobility impairments and health issues were perceived as a barrier to physical activity promotion for people with ID. Hence the promotion of 'choice', regardless of health consequences, and risk avoidance appeared to take precedence over supporting people with ID to make healthy lifestyle choices. Responsibility for these health promotion activities did not seem integral to the staff role.

Lack of awareness of health education and training opportunities

Many of the staff were unaware of opportunities for developing the knowledge, resources and confidence to engage in health promotion activities:

"*Training is not always advertised and it probably already started a couple of weeks when you hear about it." (Staff 39, FG1)*

"There is no health promotion training *that I can think of." (*Manager, 4)

Analysis of the participant quotes and job descriptions revealed that the managerial

and staff role was aligned to management of challenging behaviours, health risks and treating illness/overweight instances. In this respect health promotion involvement was restricted, as their role was not centered on preventative strategies such as promoting physical activity and a healthy diet.

Hence in line with the TTMBC, the staff appear to be disempowered from engaging in processes such as 'Consciousness Raising' (see Figure 2) that would enable them to develop an awareness of solutions to health promotion and weight management issues for clients with ID. Therefore a restrictive health promotion culture within the organisation reduced staff capacity to progress from pre-contemplation to contemplation on the promotion of physical activity and a healthy diet for people with ID.

Theme 2: Lack of health promotion capacity

This theme provides evidence of staff not having the training, knowledge, resources, confidence and time to invest in promotion of regular physical activity and a healthy diet for people with ID. Instead, staff and managers focused on environmental and resource problems, which restrained capacity to implement health promotion activities on an organisational level. Three subthemes emerged within this overarching theme.

Lack of staff empowerment

Staff and managers identified that they lacked the authority, knowledge and confidence to formally support individuals with ID to engage in physical activity and a healthy diet:

"If the tenant is in the mood to work with you and try and change things, then it's great but if they're not then, you're just banging your head against a brick wall." (Staff 50, FG2)

"You don't win, you just leave it to the clients, it's their choice." (Staff 43, FG2).

Low staff confidence was emphasised by comments on how health promotion was the responsibility of other '*experts'* such as a GP or nutritionist:

"The clients are saying that person is just nagging me… if there was a dietician coming in and saying this is what you should be eating, they are going to listen a bit more." (Staff 50, FG2)

There was also evidence that some staff may not have acquired cooking skills prior to assuming their role and were less likely to prepare healthy meals:

"I've seen staff who have just left home at 18 years and have been students and have had ready meals." (Staff 43, FG 2)

Lack of consistent organisational commitment to health promotion

This sub-theme provides evidence that there was a lack of consistent commitment to promotion of active lifestyle and healthy balanced diet for individuals with ID amongst the staff and mangers in this study. This prevented staff from

consistently encouraging people with ID to adhere to exercise programs:

"Staff come and go, so it's probably only something that would happen every now and again." (Staff 43, FG 2)

The above comment indicates how the clients' inconsistent engagement in exercise was influenced by staff turnover. This inconsistent approach to health promotion was also impacted by managers and staff within the team having different knowledge, motivation and skill levels to engage in health promotion with their clients:

"If you have someone who is enthusiastic or health aware that helps dramatically. If you haven't that drive within the team, it can affect everything." (Manager 1)

This inconsistent health promotion investment was reflected in the staff attitudes and capacity for acting as a role model in influencing behaviours aligned with health promotion. For example one manager stated:

"I was asked to do health promotion years ago, I said a man in a glass house can't throw stones because I know I'm overweight, so how could I sit and tell other people do not take this, do not take that." (Manager 10)

This quote illustrates the cognitive dissonance experienced by a manager who refused to engage in health promotion practice because of his perceived poor weight

status. Therefore an increased focus on the health promoting aspects of organisations supporting people with ID also has implications for empowering staff.

Lack of resources and time

Attempts to commit to a consistent health promotion approach were further challenged by shift patterns and resource/time constraints:

"Sometimes you're flying past each other and you don't always get that minute to communicate." (Staff 58, FG4)

"We do find it difficult to be consistent because of staff shortage, lack of time." (Manager 11)

Some managers reported difficulties allocating time for staff to support individuals with ID to sustain a regular physical activity and a healthy diet regime, due to prioritisation of other demands:

"*I do not think that we could keep up a major health promotion change because the staff have many other balls to juggle."* (Manager 11)

Management argued that there were insufficient funding in the organisation(s) to support people with ID to attend structured physical activity programmes*,* and purchase fresh fruit and vegetables.

A lack of organisational capacity prohibited managers from appraising health promotion as a core part of the staff role. This also disempowered staff and managers from making a commitment to encourage clients to engage in regular physical activity and a healthy diet (see Figure 2).

Lack of external health promotion support

This sub-theme conceptualises whether staff were supported within their external environment to encourage individuals with ID to sustain a healthy and balanced lifestyle. The organisational and wider environmental context did not facilitate staff to sustain physical activity/healthy diet for their clients. Family visits represented difficult situations for people with ID, wherein staff identified how their clients would feel urged to consume unhealthy food items offered by the family:

"*Family members come and visit and may bring unhealthy food items." (*Manager 2)

This lack of environmental support emerged wherein staff talked about the challenge of breaking a "*habit of a lifetime*" (Staff 54, FG2), relating to an unhealthy dietary habit. There was a staff consensus that there was a system of using unhealthy foods such as "*chocolate*" to control challenging behaviour within their living context. Hence in line with the TTMBC Change (see Figure 2), staff were disempowered from engaging in 'reinforcement management, stimulus control, counter conditioning and social liberation' processes. This was evident from the observation that a lack of

organisational capacity and environmental support prevented staff from encouraging and sustaining regular physical activity and a healthy diet for their clients.

Theme 3: Strategies for building health promotion capacity and culture

This theme refers to strategies identified by managers and staff for enabling organisational capacity for promoting healthy lifestyle behaviours for people with ID. Four underlying sub-themes conceptualised these strategies.

Outcome focused strategies

This subtheme conceptualised evidence of staff finding intrinsic and extrinsic rewards for supporting physical activity and healthy diet for people with ID within their role. Observing weight reduction and emotional satisfaction for individuals with ID was perceived as an intrinsic reward that could motivate staff to promote physical activity and a healthy diet with clients.

"Seeing the tenants becoming fitter, losing weight, this motivated the staff to engage with a health promotion programme." (Manager 2)

Managers and staff also referred to how extrinsic rewards such as certificates could encourage engagement in health promotion activities.

Helping relationships for health promotion

There was evidence that 'helping relationships' within the organisation and external environment should be strengthened, in order to enable staff capacity to implement and sustain a health promotion change.

"If everybody is singing from the same hymn sheet and follows it, then you have more chance of it being successful." (Staff 14, FG 1)

Management support and flexibility was important in order to encourage staff to change and sustain practice.

"If you are sitting with allocated hours to cover a rota, sometimes it's difficult to get them fitted in. Luckily I was able to accommodate it through revamping shifts." (Manager 1)

Managers and staff also reported using more educational and training opportunities from external bodies, in order to facilitate engagement and maintenance of health promotion activities. This potentially reflects a prevailing view that health promotion is an activity that belonged outside of their organisations and roles.

"If a health promotion programme was somewhere separate, not in the home, it would be more beneficial for them." (Staff 42, FG2)

Managers and staff highlighted the need for support from 'nutritionists, clinicians and day centers' with training staff and people with ID to prepare healthy and cost-effective meals. It was also suggested that a 'motivational person' should come into the

residential unit and deliver regular physical activity sessions with the staff, and that this would have a *"knock on effect on whether staff are going to be fitter."* Again, this reflects a prevailing view that these health-promoting skills do not currently exist within these organisations, and so wider environmental support was important in order to facilitate and sustain health promotion activities.

Therefore in line with the TTMBC (see Figure 2), managers and staff identified the need for intrinsic/extrinsic rewards and the need to cultivate 'helping relationships' within the external environment. These processes were identified as enabling maintenance of promotion of physical activity and healthy diet for people with ID within the staff role.

Discussion

This is the first study to explore the organisational barriers and enablers to promoting regular physical activity and a healthy diet for people with ID in residential facilities using the TTMBC with managers and frontline staff. This study demonstrates how interrelated factors that were centered on the absence of health promotion within organisational culture prevented managers and staff from fully engaging and sustaining health promotion activities for their clients with ID. These findings will have some implications in how care providers educate, encourage and prepare their staff to support people with ID to engage in and maintain a healthy lifestyle. They may improve the health outcomes of people with ID.

Current organisation culture as a barrier

Promotion of regular physical activity and a healthy diet for people with ID within the staff role was not valued within the ethos of the organisations involved in this study. Hence in theory, the organisations have not moved from Pre-contemplation to Contemplation in line with the TTMBC (Figure 2).

Telephone interviews were conducted with participants acting in a middle management position. The middle management role is focused on translating policies and strategic objectives into practical daily activities for staff, and is also centered on communicating strategic information and priority tasks to frontline staff (Engle *et al.,* 2017).

Analysis of the job descriptions revealed that the promotion of physical activity and a healthy diet were not defined as a core responsibility of the staff role. There was a greater emphasis on risk avoidance. This implied that resources and time were not invested in the promotion of physical activity and a healthy diet.

Management were disempowered from assigning staff tasks related to promoting regular physical activity and a healthy diet for people with ID. They were also disempowered from appraising staff, as health promotion was not prioritised on a policy or strategic level. Hence individuals operating in a middle management capacity were disempowered by the current organisational culture from encouraging staff to engage in health promotion. Previous studies have also identified a lack of clear policies related to the promotion of physical activity for people with ID (Temple & Wakley, 2007; Caton *et al.,*2012; Dixon Ibarra *et al.,*2017).

This lack of health promotion culture may have influenced the managers to adopt a

reactive approach in delegating tasks. This was evident wherein managers spoke about the health promotion dimension of the role as *'not being clear cut'* and reflected on how preventative measures against weight management problems were not integrated into care plans.

A top down approach needs to be adopted to health promotion, so that job descriptions and policies relating to care of people with ID in residential settings have a defined health promotion focus. This would enable middle management to adopt a strong health promotion focus when recruiting, training and appraising staff. This is important as strong health promotion policy and leadership is vital to ensure that managers and staff are committed to health promotion (Durlak & Dupre, 2008; Dixon Ibarra *et al.,* 2017). Strong leadership is important to ensure intervention fidelity and sustainable outcomes for participants (Humphries *et al.,* 2009, Schijndel-Speet *et al.,* 2014).

Staff and managers focussed on barriers to health promotion and did not identify many solutions to these barriers, as is evident from the proportion of quotes allocated to the themes (see Table 5). In theory this demonstrates that the staff and managers in these organisations have not moved from pre-contemplation on the barriers to contemplation on the benefits of a health promotion change. Glisson (2007) identified how this focus on barriers and lack of attention to solutions is characteristic of an organisational culture that resists change. Clearly time and attention should be invested in helping management and staff to address this resistance.

The need to respect the client's right to make a choice was also identified as a barrier to health promotion. According to the Mental Health Capacity Act (2005), paid carers

should empower individuals with ID with accessible information, so that they can make the best decision. Staff and mangers in this study understood the clients' right to make their own choice (healthy or unhealthy). However they were defiant that they did not have the capacity and authority to influence individuals with ID to make a concrete healthy choice.

Managers and staff were operating in an organisational culture where it was acceptable to manage challenging behaviour and reward good behaviour using unhealthy foods, and to encourage sedentary activities in the absence of time for regular exercise. The Mental Health Capacity Act (2005) is designed to protect and empower individuals who lack capacity to make a healthy life choice. Therefore, it is argued that the organisational culture was not completely aligned with this legislation, as honoring unhealthy food and sedentary choices implies lack of protection against weight management and health problems such as Type 2 diabetes and heart disease.

It is important to recognise that a lack of accessible and available equipment for healthy eating and physical activity within supportive living and day service contexts is an important challenge to addressing health outcomes of people with ID (Drum *et al.*, 2005; Spanos *et al.,* 2013). These organisational and environmental cultures should be challenged, in order to promote healthy options for people with ID within these care contexts.

Importance of evidence-based practice

It has been demonstrated that health promotion interventions that target physical

activity and dietary behaviours on an individual level do not lead to significant and sustainable weight management/health related outcomes for people with ID.

These interventions have been informed by cognitive restructuring models that focus on self-control and intention as intrinsic and motivational sources for behaviour change. These models many not work effectively for individuals with ID, as some individuals may not have the comprehension and/or the competence to engage in and maintain healthy behaviours. Therefore, their behaviours may be shaped by environmental support (Brehmer-Rinderer *et al.,* 2014; Emerson & Hatton, 2014).

This requires staff and managers to be empowered with the knowledge and skills to address key health promotion issues for people with ID (Taggart & Cousins, 2014).

Extensive training across the staff team should focus on developing evidence-based knowledge of the consequences of not supporting people with ID in these areas. Staff should be encouraged to reflect on the pros rather than the cons of encouraging people with ID to engage in an active lifestyle and healthy diet (Norcross *et al.,* 2011). This is vital to ensure that staff progress from pre-contemplation to contemplation on the value of supporting people with ID to engage in a healthy lifestyle. This is also important, as Heller *et al* (2002) emphasised the value of staff being attuned to the benefits of exercise.

It is important that this evidence-based knowledge of how to promote health for people with ID is translated into practice. Therefore health promotion change needs to be facilitated within the organisational context (Kitson *et al.,* 2008). Hence organisations need to negotiate the stages of change in terms of initially building an awareness of the

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need to promote healthy lifestyle behaviours within the organisational culture, and implementing strategies to maintain a healthy lifestyle.

Staff needed reinforcement within the organisational culture, that their work leads to benefits for their clients (Hatton *et al.*,1999). This emerged in the current study wherein focus group discussion and interviews revealed that outcome focused interventions were a motivational source for the staff. Therefore interventions need to have concrete outcomes, in order to motivate staff to encourage people with ID to engage in exercise or a healthy diet. Previous research has identified how a lack of understanding, low motivation and poor self-efficacy prevented people with ID from engaging in health promotion activities (Heller *et al.*, 2011). Therefore there is need to further explore the perspectives of people with ID, in order to identify specific health promotion strategies that are most likely to motivate individuals with ID to achieve effective and sustainable outcomes. Formal appraisal of health promotion within the staff role is also needed, so that staff are accountable for their health promotion involvement with people with ID.

Need to facilitate helping relationships within external environment

Organisational capacity to implement a health promotion change is dependent on the wider environment. Evidence for this emerged, where it was identified how organisational capacity to implement a health promotion programme was challenged by a lack of support for promoting health food options and regular physical activity within the wider community context

According to the TTMBC (see Table 1), social support is paramount in order to facilitate

change on an organisational level. Hence it is important to develop helping relationships between organisations that provide residential/supportive living services for people with ID and other agents such as health professionals, lifestyle coaches, nutritionists, and physicians.

A stronger policy ethos on promoting healthy lifestyles needs to be integrated into the wider health context, so that health professionals in primary, secondary and tertiary care can encourage staff and people with ID to engage in regular physical activity and a healthy diet.

NHS or other health service initiatives such as health promotion and weight management groups should be tailored and accessible to people with ID and their carers. This is important in light of the evidence that organisational capacity to implement a health promotion change is dependent on wider environmental support. This need to build a multi-level approach to health promotion was also identified in previous studies targeting behavioural, environmental and policy factors (Bodde *et al.,* 2012; Sisirak & Marks, 2014; Sundblom *et al.,* 2015).

More accessible information should be made available within these care contexts, so that managers and staff have the resources to educate and encourage people with ID to make healthy choices. Also policy and strategies needs to be introduced to make physical activity accessible and adaptable for people with disabilities and or health conditions. These strategies are important, as the UN convention (2008) is focused on enabling persons with disabilities to fulfill all human rights and fundamental freedoms.

This is the first known study to explore management and staff perspectives of organisational barriers and incentives to the promotion of healthy lifestyles for people with ID within supported living and residential settings. Previous pilot studies and process evaluations have identified that organisational factors can limit fidelity and outcomes of interventions. For example Sundblom *et al's* (2015) evaluation of a physical activity and diet intervention within a Swedish context revealed that politics, policies and local environment limited program fidelity. Also Dixon Ibara *et al's* (2017) process evaluation of physical activity health promotion program within a US context revealed that lack of health promotion buy in and policies reduced fidelity.

However this is the first study that aimed to provide an in-depth qualitative exploration into organisational barriers and enablers to the promotion of healthy diet and physical activity for people with ID.

It is important to acknowledge the limitations of this study, which comprised a sample of managers and staff from three organisations in Northern Ireland (small region in the UK). Therefore a conservative approach must be taken in applying these findings on an international level.

This study focused on one model of care i.e. organisations providing supported living and residential services for individuals with ID, but there are many other models of care such as day services and family settings. These settings may have distinctive cultures, and unique barriers/enablers to health promotion. More extensive research is needed to explore organisational barriers and facilitators to health promotion for people with ID on a wider scale and in diverse organisational/care contexts. This study did not capture the

views of people with ID in relation to the organisational influences on their engagement in physical activity and a healthy diet. This is another area that requires specific exploration.

Conclusion

The concept of health as a foundation for enabling people to achieve their human potential has important implications for all concerned with the care and wellbeing of people with ID. The UN (2006) charter recognises that persons with disabilities have the right to attain the highest potential health status without discrimination on the grounds of their disability. However findings from the current study indicate that the organisational context in care settings does not facilitate people with ID to achieve their best possible health status. Therefore individuals with ID may be excluded from achieving their human rights .

The findings have demonstrated that the promotion of healthy lifestyles for people with ID was not normalised or valued within the organisation cultures. Stronger values were attached to reacting to health issues as opposed to taking steps to promote healthy behaviours, thereby leading to a healthier population. Also greater value was attributed to addressing administration tasks, daily routines and behavioural problems within the culture of the organisation and role of the staff members. Staff within the organisations appeared to resist change, and identified resource barriers related to time and workload as challenging capacity to implement and sustain a health promotion change.

Some staff were keen to support people with ID with changing lifestyles, but as these

activities were not valued within the organisational culture, staff could not consistently influence these behaviours. Hence health promotion needs to be embraced from a multi-level approach. These findings could be of value to informing the implementation of health promotion interventions within supported living schemes, so that health promotion is integrated into the culture and climate of the organisation. This is critical so that staff have the resources and are prepared to motivate people with ID to engage in healthy lifestyle behaviours.

Just as health is a multi-factorial issue, health promotion is itself a multi-dimensional endeavour. Fleming (1999) defined it as not a single activity, but an approach that encompasses several activities that are focused on promoting health status of individuals and people groups. This implies empowerment of individuals with ID through a range of enabling measures, which may have some policy, education and service provision implications.

A clear opportunity exists for health promotion efforts to improve the health prospects of people with ID and the quality of life of this population. These improvements could also influence health care cost reductions.

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