



Identifying strategies for improving adherence to airway clearance programmes in adolescents with cystic fibrosis – a qualitative approach

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Background

- The long-term stability of lung function in patients with cystic fibrosis is considered to be significantly supported through daily chest physiotherapy to address the abnormality in mucous clearance, [1].
- It is widely accepted that adherence to treatment deteriorates during adolescence, [2,3].
- The majority of literature relating to adherence in CF focuses on the adult population.
- Increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any specific medical interventions, [4].
- This study aimed to explore the experiences that adolescents and their parents have been exposed to and identify any strategies that they have found to have a positive impact on adherence to airway clearance regimens.

Method

- The research design was qualitative utilising in-depth, semi-structured interviews.
- Adolescents or parents of adolescents between the ages of 12 to 18 years with a diagnosis of cystic fibrosis were approached at clinic appointments to take part in the study.
- 13 participants were recruited and interviewed within their own homes.
- A phenomenological approach to the interviews was utilised to allow the researcher and participant to work as co-researchers.
- A grounded theory approach to data analysis, (aided by the NVIVO software package) identified effective strategies based on participants own experiences.
- Ethical approval was obtained and all participants gave informed consent.

Results

	SOURCES	NO. OF REFERENCES
ROUTINE	13	54
EDUCATION		
Blunt information	7	19
Peer contact/Case examples	8	29
Checking technique	12	26
Understanding rationale	8	18
MOTIVATION		
Lung function results	9	24
Observable results	12	37
Personal experiences	8	18
Short term health	8	23
Symptom recognition	12	43
LOCATION/FREQUENCY		
Home visits	8	17
Non face to face	7	10
Extra support	13	66
RELATIONSHIPS		
Familiarity with therapist	12	46
Parental encouragement	11	23
Therapist relationship	13	108
Trust	9	20
PATIENT CENTRED		
Individualised plans	9	29
Joint decision making	13	45

Joint decision making

- *“I don’t like it when I get nagged to do it. I’ll leave it until it’s out of my head and then I can realise it myself”. Subject 4*
- *“If you do it together its like you’ve got your point of view in what you want to do, so you’re combining it and you’re gonna do it.” Subject 9*

- Motivational interviewing has been proven effective at activating patients own motivation for change and improving adherence to treatment, [5-6].
- This is a strategy that could potentially be utilised by adolescents with cystic fibrosis to promote behaviour change.

Routine

- *“If you haven’t got a routine how do you start fitting it in when it all goes pear shaped because you’re already running with your other family....it would just get lost”. Subject 12*
- *“If you get in this routine when you’re younger then it just becomes a part of daily life so it, it’s just like something you do like naturally. So it’s not a chore or anything”. Subject 3*
- The model of human occupation, (MOHO) establishes habitual behaviour patterns thereby assisting patients in adhering to a particular behaviour, [7].
- This is a strategy that could potentially be utilised by adolescents with in cystic fibrosis to assist in improving adherence by establishing treatments as a routine.

Role of the Therapist

- *“I’d have to know them because then I can trust them because if I didn’t know them I probably just wouldn’t take it on board as much as if somebody else had told me that I know more.” Subject 11*
- *“I do think it’s important that you have that key, that one person that you can always refer to. Not only because you’ve got the personal relationship but because you’ve also got that trust to know that this is the way that it should be done.” Subject 2*
- All of the participants felt that in order to optimise adherence to airway clearance regimens consultations would need to be carried out with a health professional with whom they had a trusting relationship built up over time.

Conclusion

- Routine and being allowed to make their own decisions around treatment are important to adolescents with cystic fibrosis
- Motivational interviewing and MOHO are techniques utilised by other health professionals to improve adherence in health conditions
- Patients feel that it is important that interventions to address adherence are carried out with a known professional with whom they have a trusting relationship
- In the current NHS climate extending teams sufficiently to include health professionals experienced in other adherence interventions is not cost effective
- Physiotherapists therefore will require additional training to ensure effectiveness in carrying out strategies utilised by other allied health professions
- Further research is required to ensure effectiveness.

References

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