

Improving adherence: Nurses perceptions of patients inhaler needs

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Background

In the absence of detailed evidence to guide inhaler selection, health professionals use clinical experience and treatment-based asthma management guidelines to select the appropriate delivery device. The aim of this study was to identify influences on inhaler device selection and the rationale behind them.

Methods

Influences on inhaler selection: 1-5 rating questionnaire

- A questionnaire was constructed using statements from interviews with asthma trained nurses
- 44 influences on device selection were identified
- The questionnaire was then piloted on a wider sample to identify ambiguities and errors
- Final Questionnaire was sent to 1500 randomly selected asthma trained nurses, who were asked to rate each statement on a Likert scale of 1 (strongly disagree) to 5 (strongly agree)
- Results expressed as mean (±SD) importance score

Rationale for inhaler selection: qualitative questionnaire

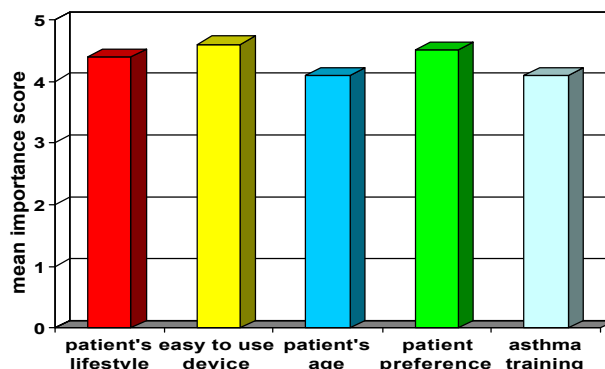
- An open-ended questionnaire was devised to explore asthma nurses' perceptions of how and why these factors influenced their choice of inhaler and was sent to 20% (300) of the original study population.
- Responses were analyzed by thematic analysis.

Results

Influences on inhaler device selection: 1-5 rating questionnaire

- 573 (32.8%) replies to the first questionnaire were received.
- The 5 most important influences on device selection were patient age (mean 4.1; SD 0.9), lifestyle (4.24; 0.72) inhaler ease of use (4.6; 2.0), patient's preference (4.5;0.6) and asthma training (4.1;0.9)

Five most important influences on inhaler selection



Rationale for inhaler selection: qualitative questionnaire

- Response rate to the second questionnaire was 21% (n=63)
- Rationales for inhaler selection (themes) were:
 - ♦age-related considerations including patients and carers' ability to use the device, satisfaction with and acceptability of the device, lifestyle and availability
 - ♦cost
 - ♦asthma training, including increased knowledge and awareness of different devices and increased skills and confidence in selecting an inhaler
 - ♦availability of placebo devices

Age-related considerations

Ability

Respondent 44: "The child's ability to co-ordinate the inhalation to the device dispensing the drug. The drug is of no use in the mouth or nasal passages – spacers are always a first consideration"

Satisfaction with and acceptability of the device

Respondent 24: "Acceptability to young person – right device will encourage compliance"

Age-related considerations (cont'd)

Lifestyle

Respondent 32: "Consideration of size, portability to school/work"

Availability

Respondent 60: "I am sometimes limited by the available devices in the prescribed drug"

Cost

Respondent 22: "I consider how many actuations there are per inhaler...whether the inhaler is cost effective"
Respondent 38: "Cost – the Primary Care Trust tells us"

Asthma training

Increased knowledge

Respondent 5: "Since training, I know more about lung deposition and the importance of patients liking the device for adherence"

Awareness of different devices

Respondent 8: "I now have more knowledge about the different types of inhaler available and assess patient suitability"

Increased skills and confidence

Respondent 16: "I am more confident about the suitability of inhalers for children and adults"

Placebo device use

Respondent 1: "It is important for patients to actually try the device before deciding which is right for them. Saves cost of unsatisfactory inhalers being prescribed and disregarded".

Respondent 2: "Major concern with placebo devices is the risk of cross infection."

Key messages

- According to asthma trained nurses, inhaler selection is based on optimising adherence to treatment by assessing age-related ability, satisfaction and lifestyle
- Exploration of these themes during consultations will ensure that the most appropriate inhaler device is selected and may increase adherence to treatment.