

Medication-Related Education Preferences in the Intensive Care Unit: A Survey Questionnaire

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Background

- In critical care, patient centered care can be challenging as patient is often unable to communicate
- Family centered care (FCC) is an approach to healthcare that is respectful and responsive to individual families' needs and values
- Practicing FCC in the intensive care unit (ICU) improves patient, family, care provider, and health system outcomes
- Critical care literature and guidelines do not address preferences of family regarding communication of medication-related information

Objectives

Primary

- To describe medication-related information that family members of critically ill patients would like to receive

Secondary

- To determine family member preferences regarding delivery of medication-related information
- To determine the extent to which family members understand the role of the pharmacist on the ICU team

Methods

Design

- Survey study

Setting & Sampling

- Kelowna General Hospital (KGH) ICU, 11 beds
- Consecutive sampling

Participants

- Inclusion criteria:** substitute decision maker or next of kin of critically ill (but stable) patient admitted for ≥ 48 h

Data Collection

- Paper-based, 32 item survey questionnaire completed in ICU
- 5-point Likert scale (1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree)

Methods

Data Analysis

- Interim results presented using descriptive statistics

Primary Outcome

- Percentage of participants who answer agree or strongly agree to each survey statement regarding preferences for content of medication-related education

Secondary Outcomes

- Percentage of participants who answer agree or strongly agree to each survey statement regarding delivery of medication-related education preferences
- Percentage of participants who answer agree or strongly agree to each survey statement regarding perceived role of the ICU pharmacist

Table 1. Participant Characteristics

Characteristic	Result
Age, yr (median)	60
Female	3 (60%)
Race or ethnic group	
Caucasian	5 (100%)
Relationship to patient	
Partner or spouse	3 (60%)
Sibling	2 (40%)
Frequency of contact with patient	
Lives with them	3 (60%)
More than weekly	1 (20%)
Once yearly	1 (20%)

Table 2. Preferences for Content of Medication Education

Education Content	Strongly Agree or Agree
Have access to medication information	5 (100%)
Indication for medications	5 (100%)
Adverse drug reactions	5 (100%)
Mechanism of action	4 (80%)
Drug interactions	4 (80%)
Name of medications	3 (60%)
Route of administration	3 (60%)
Dosing frequency	2 (40%)
Strength of medications	2 (40%)
Evidence for use	2 (40%)

Table 3. Preferences for Delivery of Medication Education

Education Delivery	Strongly Agree or Agree
Educator	
Nurse	5 (100%)
Physician	5 (100%)
Pharmacist	3 (60%)
Timing	
Upon admission	5 (100%)
Upon discharge	5 (100%)
Medication change	4 (80%)
Arrival of family member	4 (80%)
Delivery method	
Verbally	3 (60%)
Paper handout	2 (40%)
Electronic handout	2 (40%)
Location	
Patient room	2 (40%)
Private room	2 (40%)
Hallway	0 (0%)

Table 4. Perceived Role of ICU Pharmacist

Perception	Agree or Strongly Agree
Presence on team	4 (80%)
Makes recommendations	3 (60%)
Dispenses medications	2 (40%)

Limitations

External Validity

- 5 survey respondents
- Single centre
- Family members only accessible during weekday hours

Internal Validity

- Response bias possible

Conclusions

- Family members of critical care patients want to receive medication-related education
- Family members are most interested in having access to information, indication for medications, and safety of medications
- Family members prefer a nurse or physician to deliver medication-related education
- Family members prefer to be educated at multiple times during ICU stay

