Examining the wider context of Evidence Based Occupational Therapy

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Evidence Based Occupational Therapy (EBOT)

Context:

- “Evidence-based Practice” appeared in OT literature from 1990s.
- Debate:
  - Art vs. Science
  - Client centred practice vs. research evidence.
- OTs initially slow on uptake, but since 2000s it has become an integral part OT education programmes.
- UK Drivers to demonstrate clinical and cost effectiveness plus pressure for more information to informed clients promoted EBOT

(Clare Taylor, 2007)
EBOT seeks to answer the question:

“Am I doing the right thing in the right way with the right person at the right time in the right place and am I the right person to be doing it?”

Anne Cusick Australian OT (2001, p.203)
What is the “best available” evidence?

- **SYSTEMATIC REVIEWS**
- **RANDOMIZED CONTROLLED TRIALS**
- **NONRANDOMIZED EXPERIMENTAL STUDIES**
- **DESCRIPTIVE STUDIES**
- **EXPERT OPINION**

Traditional hierarchy based on Sackett et al’s (2000)

Different agendas & priorities

Driven by outcomes for cost savings
Not a “Cookbook” approach!

“Evidence based medicine is not “cookbook” medicine. Because it requires a bottom up approach that integrates the best external evidence with individual clinical expertise and patients' choice, it cannot result in slavish, cookbook approaches to individual patient care.”

(Sackett et al, 1996)
Evidence Based Occupational Therapy

EBOT

BEST AVAILABLE RESEARCH EVIDENCE

CLIENT PREFERENCES

CLINICAL EXPERIENCE
Study Block Objectives

- Understand the framework for evidence-based occupational therapy
- Explore different types of research evidence.
- Consider what is meant by the “best evidence.”
- How to integrate research evidence with clinical reasoning and client preferences
Focus of EBOT Assessment

- To ascertain the ability of students to gather and assimilate a wide range of relevant evidence.

- Students to consider the client and select the most effective and relevant assessments, interventions and evaluations based upon the best available evidence.

- The students will be assessed on how they visually present and verbally communicate their knowledge, understanding and reasoning.
Assessment

- Poster Presentation (60%) & Viva voce (40%)
- Students to select their own case study and present case information within a poster.
- Students to design and create an A1 size poster which is professionally printed.
- Poster assessment criteria:
  - Poster Design, Layout and Presentation (20%)
  - Poster Content (30%)
  - Poster Abstract [300 words] (5%)
  - Poster Handout (5%)
Poster Content and Layout

- Summary of case study and profile
- Presenting condition
- Occupational Performance
- Identified needs
- Focus/Aims
- Assessment
- Intervention
- Evaluation
- Conclusion
- References (10 Max)
Viva Voce

- Each student will verbally present their poster to the examiners (5 mins).
- Each student will participate in a 15-20 minutes viva.
- Based upon the information presented within their poster:
  - Students will be asked to explain and justify their clinical decisions in selecting the appropriate assessments, intervention and evaluation.
  - Explained how they have used available evidence to support their choice of assessment, intervention and evaluations.
  - Demonstrate how they will communicate the evidence to the client/service user/carer or family member.
<table>
<thead>
<tr>
<th>Category</th>
<th>Please examine the poster according to each of the categories below and indicate an appropriate grade.</th>
<th>Marks</th>
<th>Percentage</th>
</tr>
</thead>
</table>
| Poster Design & Organisation  | • Title & authors identification and affiliation (Brunel student)  
• Logical flow to poster  
• Innovation and creativity  
• Appropriate amount and size of text on poster  
• Colour, contrast and background choice  
• Design consistency  
• Professional appearance of poster  
• Spelling/grammar  
• Appropriate use of graphs, tables and images  
• Graphs, tables and images clearly explained, presented, labelled and titled  
• Copyright issues addressed if relevant | 20%   |            |
| Poster Content                | • Originality  
• Relevant content included  
• Case study details  
• Occupational performance and needs  
• Focus and aims  
• Justification of assessment  
• Justification of intervention  
• Justification of evaluation  
• Relevant research evidence cited  
• Content is clear and concise  
• Good organisation of content  
• References indicated (Harvard)  
• Ethical issues e.g. confidentiality maintained throughout | 30%   |            |
| Viva Presentation Style       | • Eye contact and body language while presenting  
• Refrain from reading poster directly  
• Clarity of communication  
• Demonstrates ability to address questions  
• Answers questions in a calm and professional manner  
• Ethical tone and confidentiality maintained throughout | 10%   |            |
| Viva Content                  | • Questions answered  
• Clarity of answers  
• Demonstrates sound clinical reasoning  
• Justification of decisions indicated  
• Consideration of client’s context, culture and preferences in selection and application of evidence  
• Critique and selection of relevant literature explained  
• Claims supported by relevant evidence and/or theory from the literature  
• Communication of evidence demonstrated at an appropriate level for client | 30%   |            |
| Poster Abstract               | • Provides a clear description of the poster presented | 5%    |            |
| Poster Handout                | • Has been submitted on time | 5%    |            |
VOCATIONAL REHABILITATION & SCHIZOPHRENIA: A CASE STUDY

Case Study & Profile
Rebecca Chambers
- Female, 19 years old, Jamaican/Surinamese
- Mother of two children (8 yrs & 2 yrs old)
- Both in the care of social services
- Expelled from school due to knife incident
- Went to prison for Actual Bodily Harm (ABH)
- Wants to live independently with children
- Keen to complete health & beauty course
- Interested in reading, shopping & art

Presenting Condition
- Poor insight to condition
- Poor compliance with medication
- Hallucinations (voices hearing voices), though disordered (ears being controlled)
- Aggressive outbursts due to separation anxiety
- Hopelessness in job pursuit and recovery
- Self isolation feels lonely & unwanted
- Poor sleep patterns due to hallucinations
- Obese (~20% body mass index)

Focus & Aims
- To develop relationships and interaction skills through activity participation
- To stimulate interests and promote motivation
- To develop skills necessary for employment
- To promote self-esteem and confidence
- To improve quality of life

Occupational Performance & Needs
- Poor activity participation due to the belief of having no eyes and poor insight to see the benefit
- Poor social relationships with peers due to acts of violence and aggression
- Lack of strength and energy (feeling fatigued) due to weight and poor sleep patterns
- Experience backaches with prolonged standing due to weight
- Poor motivation of recovery and job pursuit
- Low self-esteem and confidence

Assessment
- Model of Human Occupation
- Social Occupational Performance Scale (SOPF)
- Social Occupational Functional Scale (SOF)
- Quality of Life Scale (QOLS)
- Gym Assessment

Evaluation
- All evaluations done after the 12-week programme to identify change
- WHO-QOL: Improvement on all areas with scores of 3
- A Significant Blade - 1 poor QOL, 0 = poor QOL
- MHQST: Rebecca has improved from 7-5 in occupational pattern, and though communication skills improved to 7-3 after some rehabilitation
- SOSF: Rebecca improved to a score of 2.5
- Rebecca reports the practice may help her in future by providing a calming escape for her when she feels her life is not going well
- Rebecca develops over the 12 weeks to work towards her recovery

Conclusion
- The areas of occupation targeted with vocational rehabilitation are work, productivity and social participation and the intervention approach is health promotion focused on occupational participation
- Rebecca has shown positive gains in her occupational involvement
- Rebecca's involvement in work, productivity and social participation has improved
- Rebecca has gained confidence in her work performance
- Rebecca's involvement in work, productivity and social participation has improved
- Rebecca has gained confidence in her work performance
- Rebecca's involvement in work, productivity and social participation has improved
- Rebecca has gained confidence in her work performance

References

Brunel UNIVERSITY LONDON
Effective End of Life Care
Sophia Harvey, Brunel University.

Case Study
- 85 year old Male
- Advanced Metastatic Prostate Cancer
- Palliative Programme

Occupational Profile
- Retired
- Spending time with wife
- Married
- Bird Watching
- Gardening
- Two supportive children

Identified Needs
- Facilitate Mobility
- Manage Fatigue and Strength
- Facilitate Occupational Engagement

Focus/Aim
- To improve occupational performance, enabling engagement in meaningful occupation

Goal
- To be able to spend time with his wife in the garden bird watching at least once a day, with the aid of assistive technology.

Affected Areas of Occupational Performance
- Restricted Engagement in leisure activities
- Inhibited mobilisation indoor and outdoor
- Limited endurance
- Reduced strength

Intervention
- Enable participation in meaningful occupation – sitting in the garden watching the birds with his wife
- Promote meaningful social interaction with wife
- Reduce fatigue, conserve energy and manage mobility via assistive technology

Assessment – COPM
Canadian Occupational Performance Measure
- Client-centred and holistic
- Self-rated occupational performance and satisfaction
- Identifies problem areas and meaningful occupations
- Appropriate for variety of client groups and settings
- Reliable, valid, responsive to change over time and feasible

Evaluation Outcome Measure – COPM
- Evaluates Client’s Occupational Performance and Satisfaction, Peer Intervention
- Measures Changes over Time
- Identifies achievement of goal(s) selected from assessment

Conclusion
- The COPM allows for client participation, collaboratively establishing meaningful occupational activities, to the client, and measurement of change, facilitating occupational engagement.

References
- Carson et al. (2004; COT, 2013), Gilmore et al. (2006, Kaeo et al., 2005)
Ischaemic stroke: Occupational Therapy intervention
Tiffany Ollivierre-Harris, Occupational Therapy student, Brunel University

Case study
Joan, 60
Previously fully independent with all self-care and activities of daily living (ADLs).
Now very unstable.
Lives with her husband in London.
Noted to have left side weakness.
Joan had a mild ischaemic stroke 2 weeks ago.

Occupational performance: identified needs and aims
Mobility with a frame independently
Difficulty with dressing assistance is required
Washing with minimal assistance
Transferring independently

Assessment: Identified focus and aim
The extended Barthel index was administered at the assessment of Joan's current functional level and requirements at the end of her intervention. Joan's aim is to be able to dress herself independently by the end of this intervention.

Canadian Occupational Performance Measure (COPM) was used to enable Joan to identify her current level of performance in dressing and a client-centered way of assessing Joan's needs.
Joan identified dressing as an area she was unsatisfied with and wanted to improve her performance on.

COPM can be administered before and after intervention and is a client-centered way of assessing Joan's needs.
This allowed the therapist to identify her current level of perception, her goal, and the gap between the two.
This gap is then worked on with the occupational therapist.

The extended Barthel index showed any improvements or change since intervention was implemented.

Conclusion
COPM will give a client-centered assessment while the NSDA an accurate assessment of Joan's performance in dressing as did the extended Barthel index.
The functional upper extremity training program enabled Joan to improve function in her weak side through a functional and meaningful tasks. There is strong (Level 1a) evidence that repetitive task-specific training techniques improve measures of upper extremity function. (Foley et al., 2013)
COPM re-assessed Joan's satisfaction while the extended Barthel index showed any improvements or change since intervention was implemented.

Evaluation
Another measure used is the COPM, which was given at the start and can now be used to reassess satisfaction and performance levels since the intervention.

Outcomes measures can be used to determine significance of intervention. The ease of performing the task and the degree of independence in any form of help were evaluated by the Extended Barthel index upon admission and before discharge. This is more sensitive to changes over time than the Barthel index. (Chadwick et al., 2012)

Intervention
The best intervention based on evidence chosen for Joan was a functional upper extremity training program. This intervention is task-specific and uses task-oriented functional training to facilitate real-world activities. (Davis, J., 2008) In Joan's case, the activity of putting on and off and buttoning her cardigan is her specific task, selected after the NSDA assessment highlighted her difficulty in this area. According to Classen et al. (1999) focal transcranial magnetic stimulation and functional magnetic resonance imaging now show task-specific training, compared to traditional stroke rehabilitation, has long-lasting cortical reorganization specific to the corresponding areas being used in training. This intervention is based on the framework of the ICF.

The use of environmental factors and personal factors in task selection can influence disability by reducing improvements related to body functions and structures and improve function by facilitating activity and participation. (Davis, J., 2008)

References
- *pseudonym, used
Student Comments

“I found it quite difficult at first as I was given so much choice with what I could do, but by the end I really enjoyed the opportunity to demonstrate my creativity and knowledge through my poster.” (Anna)

“I learn so much, searching, selecting and critiquing the evidence, thinking about whether the best evidence for assessments and treatments are always the most appropriate choice.” (Katie)
References


http://www.strath.ac.uk/Departments/Cap/poster/
http://ww.ncsu.edu/project/posters/index.html
http://www.youtube.com/watch?v=GJwcVWsLC4
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