Interdisciplinary Collaboration in ICU

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- Presentation of qualitative study results
- Group discussion barriers and strategies
- Research evidence

Research study

- An Exploratory Study of Physiotherapists Views of Early Rehabilitation in Critically III Patients
- Aim To explore physiotherapists understanding and experience of early rehabilitation in critically ill patients

Background

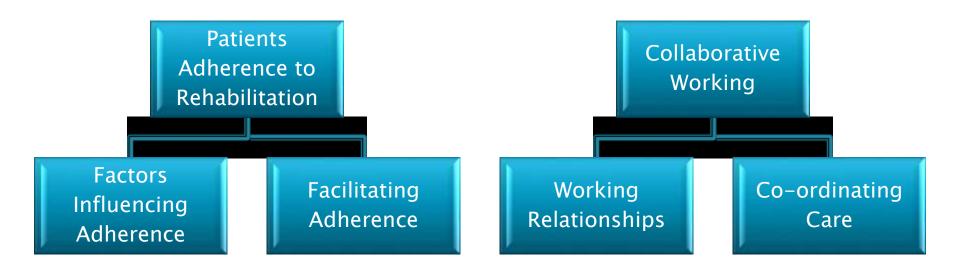
- Survival from critical illness is considered a major public health issue (1)
- Issues physical limitations, cognitive impairments and psychosocial issues (2-5)
- Impact ↓ HRQoL (6-10), ↑healthcare costs (11-12)
- Rehabilitation key ↓ long-term issues(3, 13-14)
- Limited evidence (15-20)
- Surveys of clinical practice (21-25)
- No qualitative enquiry into Physiotherapists views

Method

- Participants 6 female physiotherapists from 1 Hospital Trust with different levels of post qualification experience
- Semi-structured interview design
- Thematic content analysis

Results

- Conceptualisation of early rehabilitation
- 2 themes



Working Relationships

"the third person tends to be the nurse looking after that patient which it is useful because ... they will usually take lines watch the vent tubing for us ...it's good to have that extra person there who's been with them for the last six seven hours" (IP1)

"if we help them, they help us, so it does work both ways even though it's not in their job description to help us and it's not in ours to do that but it's all part of the MDT and that's what you need to do for patient care"(IP2)

Working Relationships

"Sometimes they (nursing staff) can be a bit ... over cautious sometimes, obviously we don't want to do anything that's not right for the patient, or if they're just busy and maybe they just don't want to help" (IP5)

"Education to the nurses of our role and why we're trying to do it (early rehabilitation) might help with some of the nurses who are set on keeping the patients a bit more still and um not moving as much" (IP3)

Coordinating Care

"we'll each try to accommodate each other ...
we'll try in the morning to find out what the
plans are for the patient in the day and if there
is any way that we can co-ordinate our visit
with what ties in with the nurses" (IP1)

"I think we'd get a lot more refusals or declines if we didn't work so well with the nursing staff" (IP2)

Interdisciplinary Collaboration

"Collaboration promotes and optimises active participation of all healthcare professionals in clinical decision making focusing on patient needs while ensuring respect for team member contributions" (Herbert, 2005)

Interdisciplinary Collaboration

- Interdisciplinary collaboration is essential in ICU environments 26-28
- Promotes a culture of safety 28, 29
- Improves outcomes ↓ mortality, LOS, staff turnover, ↑quality of care & patient satisfaction 28, 29
- ▶ Implementation suboptimal or inconsistent ²⁶

Group Discussions

- Discuss barriers to collaboration in your units.
- What strategies can be implemented to improve collaboration?

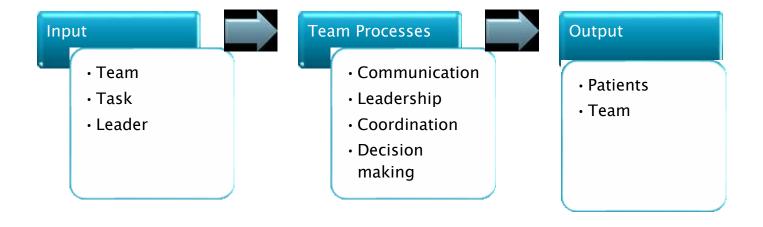
Barriers

- Team membership not constant 26
- ▶ Poor communication 30, 31
- Problematic power dynamics 32, 33
- Hierarchical structures 32
- High levels of autonomy 26
- ▶ Poor understanding of roles ³⁶
- Conflict with different approaches to care 26
- Staff attitudes 35
- Organisational issues 32
- ▶ Resource and time issues 32

Strategies

Team Performance Framework

(Reader et al, 2009)



Input - Team

- Culture shared vision/values/perceptions 35
- Supportive environment ³⁶
- Abolishing hierarchies ³⁷
- Knowledge of team member roles and responsibilities 36
- ▶ Interdependence ³⁸
- Team based training ³⁹

Team Processes

- ▶ Communication Checklists 30, 35, 39
- ▶ Team leader behaviour ³⁶
- Multi-disciplinary ward rounds 40
- Collective ownership and responsibility for goals (daily goal sheets) 41, 42

Outputs

Patients

 ↓ mortality, ↓LOS, ↑quality of care & patient satisfaction ^{33, 34}

Staff

Job satisfaction, ↑ morale, ↓stress, ↓ staff turnover

Thanks for listening Any questions?

How can collaboration be improved in your unit?

- (1) National Institute for Health and Clinical Excellence. Rehabilitation after Critical Illness. 2009.
- (2) Jackson JC, Ely E, Morey MC, Anderson VM, Denne LB, Clune J, et al. Cognitive and physical rehabilitation of intensive care unit survivors: Results of the RETURN randomized controlled pilot investigation*. Crit Care Med 2012;40(4):1088.
- (3) Desai SV, Law TJ, Needham DM. Long-term complications of critical care. Crit Care Med 2011 Feb;39(2):371-379.
- (4) Iwashyna TJ, Ely EW, Smith DM, Langa KM. Long-term cognitive impairment and functional disability among survivors of severe sepsis. JAMA: The Journal of the American Medical Association 2010;304(16):1787-1794.
- (5) van der Schaaf M, Beelen A, Dongelmans DA, Vroom MB, Nollet F, Nollet FB. Poor functional recovery after a critical illness: a longitudinal study. J Rehabil Med 2009;41(13):1041-1048.
- (6) Oeyen SG, Vandijck DM, Benoit DD, Annemans L, Decruyenaere JM. Quality of life after intensive care: a systematic review of the literature. Crit Care Med 2010 Dec;38(12):2386-2400.
- (7) Hopkins RO, Jackson JC. Short-and long-term cognitive outcomes in intensive care unit survivors. Clin Chest Med 2009;30(1):143-153.
- (8) Dowdy DW, Eid MP, Dennison CR, Mendez-Tellez PA, Herridge MS, Guallar E, et al. Quality of life after acute respiratory distress syndrome: a meta-analysis. Intensive Care Med 2006;32(8):1115-1124.
- (9) Herridge MS, Tansey CM, Matté A, Tomlinson G, Diaz-Granados N, Cooper A, et al. Functional disability 5 years after acute respiratory distress syndrome. N Engl J Med 2011;364(14):1293-1304.
- (10) Cuthbertson BH, Roughton S, Jenkinson D, MacLennan G, Vale L. Quality of life in the five years after intensive care: a cohort study. Crit Care 2010;14(1):R6.

- (11) Williams TA, Leslie GD. Challenges and possible solutions for long-term follow-up of patients surviving critical illness. Australian Critical Care 2011.
- (12) Cheung AM, Tansey CM, Tomlinson G, Diaz-Granados N, Matté A, Barr A, et al. Two-year outcomes, health care use, and costs of survivors of acute respiratory distress syndrome. American journal of respiratory and critical care medicine 2006;174(5):538-544.
- ▶ (13) Needham DM, Feldman DR, Kho ME. The Functional Costs of ICU Survivorship. American journal of respiratory and critical care medicine 2011;183(8):962-964.
- (14) Herridge MS. Legacy of intensive care unit-acquired weakness. Crit Care Med 2009 Oct;37(10 Suppl):S457-61.
- (15) Bourdin G, Barbier J, Burle JF, Durante G, Passant S, Vincent B, et al. The feasibility of early physical activity in intensive care unit patients: a prospective observational one-center study. Respir Care 2010;55(4):400-407.
- (16) Schweickert WD, Pohlman MC, Pohlman AS, Nigos C, Pawlik AJ, Esbrook CL, et al. Early physical and occupational therapy in mechanically ventilated, critically ill patients: a randomised controlled trial. Lancet (London, England) 2009;373(9678):1874-1882.
- (17) Burtin C, Clerckx B, Robbeets C, Ferdinande P, Langer D, Troosters T, et al. Early exercise in critically ill patients enhances short-term functional recovery. Crit Care Med 2009;37(9):2499-2505.
- (18) Morris PEE. Early intensive care unit mobility therapy in the treatment of acute respiratory failure *. Crit Care Med 2008;36(8):2238-2243.
- (19) Thomsen GE, Snow GL, Rodriguez L, Hopkins RO. Patients with respiratory failure increase ambulation after transfer to an intensive care unit where early activity is a priority. Crit Care Med 2008;36(4):1119-1124.
- (20) Bailey P, Thomsen GE, Spuhler VJ, Blair R, Jewkes J, Bezdjian L, et al. Early activity is feasible and safe in respiratory failure patients. Crit Care Med 2007;35(1):139-145.

- (21) Appleton R, MacKinnon M, Booth M, Wells J, Quasim T. Rehabilitation within Scottish intensive care units: a national survey. 2011.
- (22) Stockley RC, Hughes J, Morrison J, Rooney J. An investigation of the use of passive movements in intensive care by UK physiotherapists. Physiotherapy 2010;96(3):228–233.
- > (23) Hodgin KE, Nordon-Craft A, McFann KK, Mealer ML, Moss M. Physical therapy utilization in intensive care units: results from a national survey. Crit Care Med 2009;37(2):561.
- (24) Skinner EH, Berney S, Warrillow S, Denehy L. Rehabilitation and exercise prescription in Australian intensive care units. Physiotherapy 2008;94(3):220–229.
- (25) Lewis M. Intensive care unit rehabilitation within the United Kingdom: Review. Physiotherapy 2003;89(9):531-538.
- (26) Rose L. Interprofessional collaboration in the ICU: how to define?*. Nurs Crit Care 2011;16(1):5-10.
- (27) Zwarenstein M, Reeves S. Knowledge translation and interprofessional collaboration: Where the rubber of evidence-based care hits the road of teamwork. J Contin Educ Health Prof 2006;26(1):46-54.
- (28) Wheelan SA, Burchill CN, Tilin F. The link between teamwork and patients' outcomes in intensive care units. American Journal of Critical Care 2003;12(6):527-534.
- > (29) Schmalenberg C, Kramer M. Types of intensive care units with the healthiest, most productive work environments. American Journal of Critical Care 2007;16(5):458-468.
- (30) Reader TW, Flin R, Mearns K, Cuthbertson BH. Interdisciplinary communication in the intensive care unit. Br J Anaesth 2007;98(3):347-352.
- (31) Suter E, Arndt J, Arthur N, Parboosingh J, Taylor E, Deutschlander S. Role understanding and effective communication as core competencies for collaborative practice. Journal of interprofessional care 2009;23(1):41–51.
- (32) Thomas EJ, Sexton JB, Helmreich RL. Discrepant attitudes about teamwork among critical care nurses and physicians*. Crit Care Med 2003;31(3):956.

- > 33) Nathanson BH, Henneman EA, Blonaisz ER, Doubleday ND, Lusardi P, Jodka PG. How much teamwork exists between nurses and junior doctors in the intensive care unit? J Adv Nurs 2011;67(8):1817-1823.
- > (34) Kvarnström S. Difficulties in collaboration: A critical incident study of interprofessional healthcare teamwork. Journal of Interprofessional Care 2008;22(2):191-203.
- (35) Bailey PP, Miller RR,3rd, Clemmer TP. Culture of early mobility in mechanically ventilated patients. Crit Care Med 2009 Oct;37(10 Suppl):S429-35.
- (36) Manthous C, Nembhard IM, Hollingshead AB. Building effective critical care teams. Critical Care 2011;15(4):1-6.
- (37) Lingard L, Espin S, Evans C, Hawryluck L. The rules of the game: interprofessional collaboration on the intensive care unit team. Critical care 2004;8(6):R403-R408.
- (38) Bronstein LR. A model for interdisciplinary collaboration. Soc Work 2003;48(3):297–306.
- (39) Hopkins RO, Spuhler VJ, Thomsen GE. Transforming ICU culture to facilitate early mobility. Crit Care Clin 2007;23(1):81-96.
- (40) Pronovost P, Berenholtz S, Dorman T, Lipsett PA, Simmonds T, Haraden C. Improving communication in the ICU using daily goals. J Crit Care 2003;18(2):71-75.
- (41) Halm MA, Gagners S, Goering M, Sabo J, Smith M, Zaccagnini M. Interdisciplinary rounds: impact on patients, families, and staff. Clinical Nurse Specialist 2003;17(3):133-142.
- (42) Narasimhan M, Eisen LA, Mahoney CD, Acerra FL, Rosen MJ. Improving nurse-physician communication and satisfaction in the intensive care unit with a daily goals worksheet. American Journal of Critical Care 2006;15(2):217-222.