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Pedagogical Approaches In Multidisciplinary Education for Internal Medicine Physicians: A Scoping Systematic Review

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Introduction

"'To Err is Human: Building a Safer Health System" depicts the downfalls of the healthcare and its relation to medical error and poor multidisciplinary communication is often a hallmark cause in the patient safety. However, there is a lack of emphasis towards team communication education within the internal medicine community. Medical educators have not been providing internal medicine (IM) physicians with communication skills sufficient to function within a team. Thus, the aim of this scoping systemic review is to map the current literature available for improving multidisciplinary communication in postgraduate internal medicine residents.

Methods

A comprehensive search was conducted on 8 databases including Pubmed, Embase, PsycINFO, Scopus, CINAHL, ERIC, JSTOR, and Google Scholar. The initial search strategy yield 17,493 title and abstracts after duplicates removal and 2 authors systematically excluded and coded the papers to yield a final total of 24 papers. Date filter was applied to include articles between 2000 and 2018. Thematic analysis outlined by Braun and Clarke's methodology was then applied and COREQ and MERSQI were utilized to grade the quality of the included papers. Any discrepancy were resolved with Sambunjak et al.'s "negotiated consensual validation".

Discussion

This systematic scoping review highlights ithe key approaches in improving multidisciplinary communication education and in so doing underscores the dearth of data on assessment methods and effective means of ensuring consistency in training methods and experiences. In this review, experiential learning in clinical practice provided the most success in the Kirkpatrick model of evaluation, within the level 3 and 4 domains. However, the methods presented are not mutually exclusive, and a blended approach offers the key towards a formal pedagogical communication education.

As physicians adopted a collaborative communication, improvements in team spirit, easing tensions and hierarchical barrier ultimately contributed to quality care of patients, and achieving desired outcomes. From a clinical perspective, members of MDT were more inclined to speak, and physicians were actively seeking opinions from MDT members on patient care. However, The conflation of multidisciplinary, trans-professional, multi-professional education limits the effective design of goal-sensitive and context-specific program structure with appropriate and timely learning support. In turn, this predisposes multidisciplinary communication to malpractice and abuse. Acting as a compass for future studies this systematic scoping review points the way for future areas of research and development.

Results

Facets of Multidisciplinary Communication

a. Experiential Learning in Clinical Practice

- 10 papers related to the theme of experiential learning in clinical practice and subthemes identified as team meeting, collaborative rounding and home visits.
- Staff advisory teams were deployed to establish common goals, pitfalls and potential challenges
- Team meetings with an allocated time slot involving MDT members with comprehensive discussion on care plans and concerns
- Collaborative rounding was undertaken with the inclusion of other team members into rounds to elicit concerns specific to their discipline
- Home visits were aimed for physicians to collaborate with the management and exchange professional concerns in the management of a patient

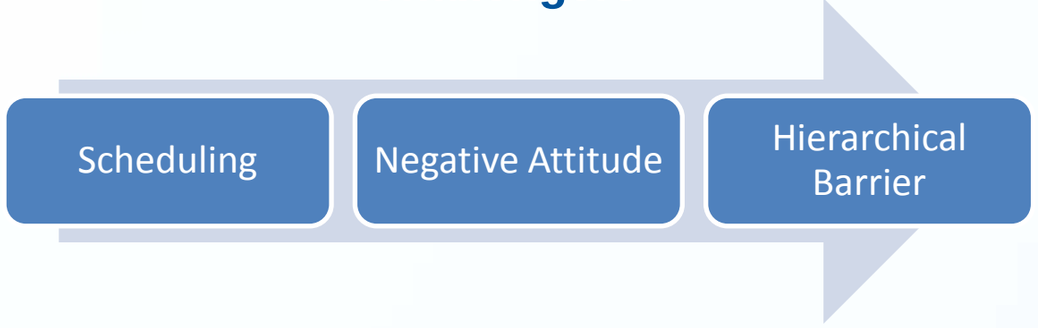
b. Simulation Scenario Training Programme

- The conduct of simulations occurred in replicated hospital rooms with simulated patients (SP) were either faculty students, trained SPs or mannequins.
- Developed cares were aimed at challenging both the physicians medical and interpersonal skills
- Training of facilitators was initiated to establish a common baseline to provide standardised assessments and feedbacks
- Debriefing and Peer feedbacks were provided at the end of the event to depend the understanding towards communication event
- 2 used Objectively Structured Performance Education (OPSE) or Team OPSE as an objective evaluation tool

c. Structured Based Programme

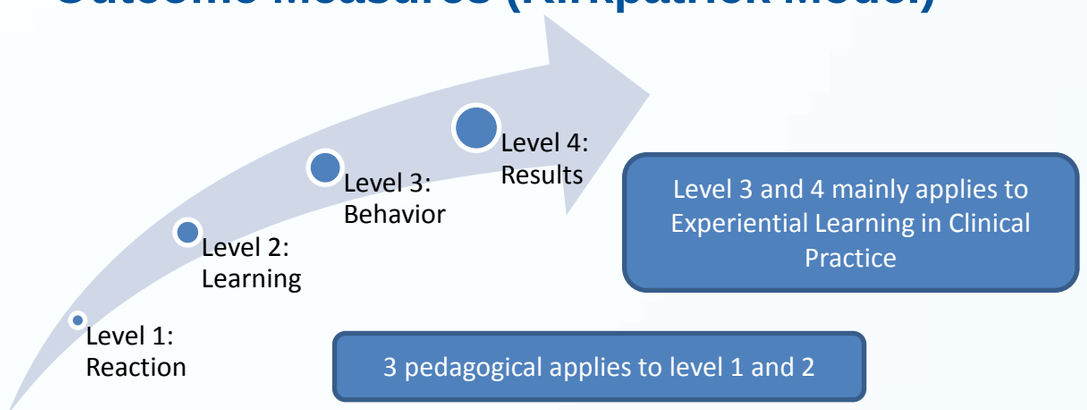
- We defined it as a formal pedagogical structure within which encompassing both conferences and workshops
- Conferences, were used as an efficient method of a scaled educational event for MDT towards effective cooperation and communication
- Multidisciplinary workshops can be used in the discussions of medical cases to build collaborative communication
- ice-breaking sessions were conducted that explored the backgrounds and predispositions of participants, debunking stereotypes, and negative assumptions of other members
- Use of presentation to highlight barriers and strategies for effective communication.

Challengers



- Physicians are often faced with difficulties balancing clinical duties and educational efforts, creating difficulties for educators in organising timetables
- Negative attitude creates strain within sessions, and is often detrimental to the success of educational events
- Hierarchical barrier often creates friction and prevention of open discussions

Outcome Measures (Kirkpatrick Model)



- Level 1: Participants generally express satisfaction to the programme
- Level 2: Improve attitudes, confidence, opportunity and competency towards MDT education
- Level 3: Improvements in teamwork and team function and MDT members felt more included in communication and decision making. MDT members also felt greater ease towards voicings concerns and reduction in hierarchical barrier
- Level 4: Improvements was found towards patient outcomes, including reduction in miss medication orders significantly reduce, diabetic patient, benefited with improve control over HbA1C and ease in scheduling of appointments

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