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The assumption dilemma: do healthcare professionals have the teaching skills to meet the demands of therapeutic neuroscience education?

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Introduction

The contemporary paradigm shift from a biomedical understanding of pain to a more comprehensive biopsychosocial model comes with many personal and professional challenges for both sufferers and clinicians.[1] When we consider the rising epidemiological nature of persistent pain within the Western world,[2] and the poor clinical outcomes resulting from conventional, passive interventions,[3] the need for such a fundamental paradigm shift becomes clear.

Recent epidemiological data bring our need to meet these challenges into alarmingly sharp focus. Van Hecke et al.[4] found that persistent pain affects over 14 million people in England alone. It also accounts for 4.6 million general practitioner (GP) appointments per year. Butler and Moseley[5] suggest that by reframing pain as an epidemic, we may begin to draw useful comparisons with other epidemics.

Historically, epidemics from measles to cholera have been contained through education and communication.[6] Therefore, for clinicians to adequately meet the demands of the biopsychosocial model, it is imperative that they develop their knowledge and skills as practice-based educators. Dreeben[7] (p. 4) argues that patient education forms 'a significant component of modern health care'. However, most clinicians have a limited educational toolkit.[8] As the pain epidemic continues to grow, we must ensure that all clinicians feel equipped to guide their patients through the complexities of therapeutic neuroscience education (TNE).

As a sufferer, an inability to make sense of the often worrying and persisting uncertainties of pain forces many to retreat from life's pleasures. As a clinician, it is therefore vital to ensure a collaborative facilitation of meaning in those who live with pain. Bolton[9] argues that educational skills are merely assumed in both practice and research, while Briggs et al.[10] found that, in many disciplines, pain education accounted for less than 1% of undergraduate programme hours within the United Kingdom.

This persistent undervaluing of our educational role and the need for an increased awareness of facilitatory skills within healthcare places a practical dilemma at the heart of pain education. In his call for a transformative medical education system, Quintero[11] states, 'In order to respond to the current needs of society, which is education's main objective, the learning processes of physicians and their instruction must change'. While highlighting the need for clinicians to gain a greater understanding of educational facilitation within practice, this article will also consider how a greater awareness of collaborative learning and learning styles would better enable practice-based educators when helping people make sense of pain.

Facilitation and collaborative learning

To facilitate an understanding of pain's complexities and the importance of self-determined, sustained self-management, we must first develop facilitatory skills. Facilitation can be defined as 'A technique by which one person makes something easier for others'.[12] (p. 177). Helping and enabling are central to meaningful facilitation. Yet, Knowles et al.[13] (p. 257) suggest the desire for practice-based educators to ensure efficient and effective learning 'often leads to concentration on what they are doing rather than what the learner is doing'.

This traditional, copy and paste, dualistic approach to education stems from a lack of understanding regarding andragogy and a fear of losing control as an educator within learning environments.[14] The novelist E. M. Forster provides a striking grasp of the dilemma facing contemporary pain education by suggesting, 'Spoon feeding

in the long run teaches us nothing but the shape of the spoon', while Gilmartin[15] suggests healthcare professionals need to develop three key qualities in order to meet the facilitatory demands of practice-based education:

1. An ability to actively listen
2. Best use of peer-learning opportunities
3. An understanding of group dynamics

Whether healthcare professionals endeavour to facilitate a meaningful understanding of pain through either one-to-one clinical interactions or group settings, Fredricks[16] suggests that in order to engage patients in the process of TNE, we must embrace collaborative learning. Cross et al.[17] highlight the distinct differences between cooperation and collaboration within practice-based education. While cooperation involves a superficial level of joint engagement, collaborative learning involves a wholehearted desire and active interest in collectively solving problems.

By moving from more conventional, didactic teaching methods and by embracing collaborative learning activities, both practice-based educators' and sufferers' sense of connection is amplified.[18,19] However, many practice settings remain implicitly unconducive to collaborative engagement.[20] When we consider the diametrically opposed seating arrangements seen within most clinic settings, it is easy to see how something so simple as where we sit in relation to our patients can impact on our ability to facilitate a meaningful understanding of pain. Jaques[21] suggests that collaborative learning must involve side-by-side, close positioning, not the more traditional, dualistic stance of sitting opposite one another where the implicit, physical metaphor is one of division.

The move away from an expert model of teaching is considered by Turner-Bisset[22] to be a reaction against the technical rationale paradigm.[23] Schon[24] argues professional practice is chaotic and requires ongoing reflection. To adequately explore the cluttered complexities of biopsychosocialism, the learning environment must seek to promote reflective engagement.

Learning styles and gaining interest

As practice-based educators aiming to deliver patient-centred care, it is crucial that we understand the undoubted differences between how people learn. Ewan and White[25] argue that educators must become acquainted with each individual's learning needs in order to optimise learning. While learning styles questionnaires (LSQ) provide some insight and promote discussion,[26] research suggests that they don't stand up to peer review. Coffield et al.[27] found that Honey and Mumford's[26] questionnaire failed to meet most of the minimum criteria for validity, while Rayner[28] argues LSQ risk labelling learners and therefore must be viewed in context.

Our ability to adapt our educational delivery and tailor meaningful pain education to individual needs is vital. Silvia[29] suggests this process must begin with a better understanding of interest. Interest is an emotion that serves two main functions: motivation and performance.[29] Without an ability to actively facilitate an interest in TNE, patients will likely remain disengaged, and practice-based educators will miss opportunities for sustained cognitive and behavioural change towards self-efficacy.

As practice-based educators, we must understand what lies behind the emotion of interest. Silvia[29] states, 'Finding something understandable is the hinge between interest and confusion'. Through an appreciation of an individual learner's coping potential and an understanding of the dynamic relationship between challenge and support,[30] clinicians would feel better equipped to respond to the ever-changing demands of contemporary pain education.

Conclusion

As the multifaceted and complex demands of persistent pain continue to mount on Western healthcare systems, we must stop assuming that our understanding of how to educate others is merely reached through our professional status. Instead, it is vital that we wake up to our obligation to expand our educational toolkits.

Daloz[30] summarises our educational duties by suggesting, 'Like guides, we walk at times ahead of our students, at times beside them, and at times we follow their lead. In sensing where to walk lies our art'. While there is an undoubted art to practice-based education,[9] an appreciation of the theoretical models that underpin TNE and an active and continued development of facilitatory skills will enable healthcare professionals to meet the demands of contemporary pain education.

Although this article aims to explore whether healthcare professionals possess the teaching skills to meet the demands of TNE, it can only offer a brief insight into how an appreciation of andragogy and adult learning theories would better equip clinicians for the challenges of contemporary pain education. Further research is needed to develop our understanding of how the integration of established educational knowledge and skills within practice might impact on clinical outcomes and the experiences of both sufferers and healthcare professionals.

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