



What Do We Mean By Integrative Pain Care?

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Various definitions have been proposed for integrative care, which generally addresses the combination of two or more healthcare strategies, but which also incorporate elements of being: 1) [multidisciplinary](#), 2) [interdisciplinary](#), 3) collaborative, 4) consultative, and 5) coordinated [1-3]. Integrative care may combine treatment strategies from different areas of complementary/alternative medicine, traditional medicine, or both.

For the purposes of the IASP 2023 Global Year, we define integrative pain care as the carefully planned integration of multiple evidence-based treatments – offered to an individual suffering from pain – that strives to be individualized (person-centered), mechanism-guided, and temporally coordinated. For the introduction of general principles, we will focus on the simplest example of integrating only two different interventions.

What are the benefits of integrative pain care?

Clinical pain conditions are associated with various biological, psychological, and social dimensions and manifestations including, but not limited to, sensation of pain, fear, anxiety, sleep disturbance, fatigue, depression, and impaired physical, sexual, cognitive, domestic, occupational, and social function. Preclinical study of the neuroscience of pain has revealed multiple concurrent pathways and mechanisms of pain perception. Since pain involves these complex biopsychosocial

interactions^[4], any single intervention is unlikely to completely relieve pain or any adverse pain-related manifestations. This provides the rationale for thoughtful integration of multiple different interventions that are targeted against the most troublesome, and/or modifiable, clinical features for successful person-centered treatment outcomes.

Two different interventions – acting via different putative mechanisms – could be **integrated simultaneously**, if feasible, with the expectation of an additive, or even synergistic treatment interaction (e.g. exercise and cognitive-behavioral therapy for pain-related anxiety). Alternatively, it may be preferable for two different interventions to be integrated sequentially (e.g. epidural steroid injection followed by guided back exercises) if the first intervention is expected to facilitate the delivery, and success, of the second intervention.

Available, albeit limited, evidence may guide mechanism-based selection of which interventions to integrate for which treated person – either simultaneously, or sequentially. However, another benefit of integrative care is the acknowledgment to the person receiving treatment that several possible diverse treatments could provide meaningful benefit. This illustrates to the person being treated the complexity of the pain experience and its modulation but also introduces the potential role of personal preference and engagement of the person being treated when developing a pain treatment plan.

What are some of the complexities of integrative pain care?

Two or more pain treatment interventions should only be given together if their combined cost-benefit and/or risk-benefit profiles are more favorable than those of either treatment alone. Therefore, any additive costs, risks, side effects and benefits of the interventions being combined should ideally be evaluated in comparison with each singular intervention.

Compared to a single pain treatment intervention provided by one clinician, integrating two or more interventions is potentially associated with: 1) greater cost (to the person being treated and/or the healthcare system); 2) higher utilization of healthcare personnel; 3) more complex logistical planning (e.g. scheduling and specific timing of each intervention), 4) a lack of shared understanding and/or motivation to collaborate between clinicians of different disciplines ("silo effect"), and, also, 5) a greater demand of time and resources from the person being treated.

What is the future for the implementation of integrative pain care?

Producing valid evidence for pain treatments is vital but challenging and resource intensive. For complex interventions, provider training and treatment protocols need to be standardized for consistency of results. Rigorous studies may require a sizeable participant population, the most highly skilled providers of the intervention of interest and a suitable control intervention (sham, placebo, or another active comparator). Further to that, rigorous evaluation of two combined interventions may require comparison

to both interventions on their own and possibly also comparison to a sham control for as many as 6 comparisons within the study.

The most favorable combinations of pain treatment interventions will be those which are as safe (or safer) and broadly more cost-effective than each treatment alone. Future success of integrative pain care will depend on: 1) effective collaboration between clinicians and researchers from diverse pain treatment settings; 2) standardization of treatment protocols for complex interventions; 3) development of valid, high quality evidence (e.g. see references 5 & 6) to support the merits of integrating two or more interventions (as well as evidence supporting each intervention on its own); and 4) evidence supporting preferences of the person being treated for an integrative pain management approach.

References

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