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Priorities for Advancing Mental and Social Health Among People Presenting for Care of Musculoskeletal Symptoms

International Consortium for Mental and Social Health in Musculoskeletal Care

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Abstract

An international group of clinicians and researchers formed a consortium to advance mental and social health among people seeking musculoskeletal specialty care: The International Consortium for Mental and Social Health in Musculoskeletal Care (I-MESH). As a first step to organize the work of the consortium, we sought to identify important, appropriate, and feasible interventions to address mental and social health. Members of I-MESH responded to a list of 10 queries intended to elicit mental and social health priorities. Open text answers were analyzed by 2 researchers to elicit individual themes. A modified RAND/UCLA Delphi Appropriateness process was conducted of 32 candidate social and mental health priorities using a 15-person panel of I-MESH members, using 2 rounds of independent voting with intervening discussion via surveys and video teleconferences. Panelists rated each potential priority for importance, feasibility, and appropriateness on a 9-point Likert scale. Top level priorities scored both mean and median greater than 7 in all 3 categories. Second level priorities scored a median 7 or greater on the final scoring in all 3 categories. Candidate priorities were organized into 9 themes: viable business model, coordination of specialty and non-specialty care, actionable measurement, public health/cultural interventions, research, adequate and timely access, incorporating assessment in care, strategies to develop the patient-clinician relationship, communication strategies that can directly enhance health, and support for mental and social health. Twelve top level (met mean and median criteria) and 17 s level priorities (met median criterion) were identified. Implementing evidence-based strategies to efficiently diagnose, prioritize, and begin addressing mental and social health opportunities has the potential for notable impact on both musculoskeletal and overall health. It is our hope that the results of this Delphi panel will generate enthusiasm and collaboration for implementing the mounting evidence that social and mental health are integral to musculoskeletal health.

Keywords Mental health · Social health · Psychology · Social work · Musculoskeletal medicine

Introduction

Mental and social health opportunities are often misdiagnosed and may be misclassified in terms of pathophysiology that is often speculative and may be socially constructed (e.g., complex regional pain syndrome, fibromyalgia) (Bachoura et al., 2009; Crijns et al., 2018). There is mounting evidence that mental and social health have notable contributions to symptom severity (Bernstein et al., 2019; Crijns et al., 2020a; Crijns, Bernstein, et al., 2019; Crijns, Liu, et al., 2019; Maulik et al., 2009; Menendez & Ring, 2016; Nota et al., 2015, 2016; Oflazoglu et al., 2016; Wright et al., 2019), yet, there is a lack of consensus regarding the important influence of mental and social health to symptom intensity and magnitude of limitations. To consolidate the evidence that mental and social health are as important as physical health (pathophysiology) to symptom severity (Aarons et al., 2008; Duivenvoorden et al., 2013; Jayakumar et al., 2018; Kim et al., 2017; Ring et al., 2006; Vranceanu et al., 2014; Wright et al., 2019), and to implement it into

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daily musculoskeletal specialty care (Draeger & Stern, 2014), an international group of clinician s and researchers interested in mental and social health opportunities among people seeking musculoskeletal specialty care were motivated to form a consortium. Each of us encounter, in our varied circumstances, several cultural and organizational barriers to adjusting our daily practice to match the mounting scientific evidence. As part of this process, we also used a series of meetings and polls to begin to develop a common language on these topics.

As a first step to organize the work of the consortium, we used a modified Delphi panel process to identify priorities for addressing mental and social health in musculoskeletal specialty care. The goal of this study was to identify important, appropriate, and feasible interventions to address mental and social health in musculoskeletal care.

Materials and Methods

Identification of Mental and Social Health Priorities

Members of the International Consortium for Mental and Social Health in Musculoskeletal Care (I-MESH; an interdisciplinary group of clinicians and researchers) responded to a list of 10 queries intended to elicit mental and social health priorities (Appendix 1). Open text answers were analyzed by 2 researchers to elicit individual themes (Appendix 2). This study was performed under a protocol approved by the Institutional Review Board for studies that perform survey-based experiments with clinician colleagues.

Mental and Social Health Evaluation

A modified RAND/UCLA Delphi Appropriateness process was conducted of 32 candidate social and mental health priorities using a 15-person panel of I-MESH members to evaluate the importance, feasibility, and appropriateness of the candidate priorities. This was a subset of the full I-MESH which had about 30 participants at the time and includes surgeons, psychologists, social workers, physical and occupational therapists, trainers. We did not track gender, age, race, or ethnicity of participants. We evaluated quality measures using the criteria established by the National Quality Forum. The RAND/UCLA Appropriateness methodology was followed to produce appropriateness criteria and quality measures that have face, construct, and predicative validity (Beerekamp et al., 2011; Brook et al., 1986; Hemingway et al., 2001; Kravitz et al., 1995; McGory et al., 2006; Merrick et al., 1987; Moktar et al., 2014; Shekelle, 2004; Shekelle, Chassin, et al., 1998; Shekelle, Kahan, et al., 1998). The panelists were provided with the list of candidate quality measures (Appendix 2) and their supporting literature, along with a definition of terms based on criteria from the National Quality Forum. (Forum et al., 2021).

RAND/UCLA Delphi Scoring

We performed 2 rounds of independent ratings with intervening discussion via surveys and video teleconferences (Ghannoum et al., 2014; Khodyakov et al., 2017; McGory et al., 2006; Roberts et al., 2014; Wang et al., 2013). Panelists rated each potential priority for importance, feasibility, and appropriateness on a scale from 1 = definitely not, to 5 = uncertain or equivocal, to 9 = definitely. We classified 2 levels of priorities: top level priorities scored both mean and median greater than 7 in all 3 categories (Appendix 2); second level priorities scored a median 7 or greater on the final scoring in all 3 categories.

Results

The 32 candidate mental and social health priorities offered were organized into 9 themes: viable business model, coordination of specialty and non-specialty care, actionable measurement, public health/cultural interventions, research, adequate and timely access, incorporating assessment in care, strategies to develop the patient-clinician relationship, communication strategies that can directly enhance health, and support for mental and social health (Appendix 2).

All three research priorities met both mean and median criteria. We decided to exclude them as they were non-specific and did not match the primarily clinical goals of the process. Research has been and will continue to be a priority, and this process was more about implementing evidence into daily care. None of the business model priorities moved forward, largely due to lower feasibility scores. Twelve top level (met mean and median criteria) and 17 s level priorities (met median criterion) were identified (Tables 1 and 2).

Discussion

An international consortium was formed to move from evidence to implementation in diagnosing and addressing mental and social health opportunities among people seeking care for musculoskeletal symptoms. Musculoskeletal symptoms are often a somatic focus for stress and distress (Bernstein et al., 2019; Briet et al., 2016; Crijns et al., 2020a, 2020b; Jayakumar et al., 2018; Overbeek et al., 2015; Vissers et al., 2012), and symptom intensity has notable correlations with stress, distress, and common misconceptions such as “pain always indicates harm” or “all pains can be eliminated.” Musculoskeletal specialists have sufficient expertise to discern accurate from inaccurate thoughts and

Table 1 I-MESH suggested terminology

Mental health is thoughts, emotions, and behaviors that help us thrive
Social health is role, relationship, job, financial, home, and food security
The ability to maintain or evolve one's roles, purpose, and identity
Part of social health is the degree to which one can avoid discrimination
Patient reported outcome measures (PROMs) measure:
Public facing: Capability
Professional use:
Patient reported physical function, or
Activity tolerance
Pain is
Public facing: Pain is an unpleasant emotional and sensory experience
Professional use (IASP 2020 definition): Pain is an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage
Illness and disease
Wellness: The state of being safe, healthy, and happy
Illness is the state of being unwell
Disease is objectively verifiable pathology in body structures or processes
Biomedical model of human illness = disease causes illness
Biopsychosocial model of human illness = illness reflects how health states are impacted by societal and personal factors

emotions in response to symptoms and are best equipped to recognize when symptom intensity and magnitude of activity intolerance are disproportionate to the level of pathology. Musculoskeletal specialists may often be the first clinician, or even the first person, to identify a mental or social health opportunity. Implementing evidence-based strategies to efficiently diagnose, prioritize, and begin addressing mental and social health opportunities has the potential for notable impact on both musculoskeletal and overall health. These non-traditional and non-technical aspects of musculoskeletal specialty care may, at times, be inappropriately marginalized as outside of the appropriate realm of expertise, and this must change.

Although a relatively small group of experts participated, and this can be considered one of the first steps in a lengthy process, our opinion is that the process was able to identify the most feasible and appropriate priorities, and these are likely to be replicated in future work. These are the priorities specific to our group of enthusiasts from various disciplines that would like to see the evidence that mental and social health are integral to musculoskeletal health implemented in daily practice. Important aspects, such as a viable business model, were excluded based on feasibility, which points to the existing barriers we face in the process of prioritizing mental and social health in musculoskeletal specialty care. The financial aspects received high priority scores but were not considered feasible at this time.

We developed action items based on the identified priorities, which can be summarized as (1) developing a common language for discussing social and mental health opportunities that is understandable across disciplines; (2) introducing regular interprofessional communication strategies about specific patients and evolving evidence; (3) sharing best practices and aiming for standardization of measurement, concepts, language, and interventions; (4) teaching each other our expertise; (5) using technology to increase access to knowledge and care; and (6) developing effective communication and implementation strategies.

It is our hope that the results of this Delphi panel will generate enthusiasm and collaboration for implementing the mounting evidence that social and mental health are integral to musculoskeletal health. (Bernstein et al., 2019; Crijns et al., 2020a, 2020b; Das et al., 2013; Donthula et al., 2020; Fischerauer et al., 2018; Jayakumar et al., 2018; Teunis et al., 2015; Wright et al., 2019) One efficient way forward is to be curious about what other experts, such as social workers, psychologists, and psychiatrists, can add to our understanding of the illnesses for which people seek care from musculoskeletal specialists, from athletic trainers to orthopedic surgeons.

Appendix: Round 1: Open Text Survey

1. Please provide as many suggestions as you can think of for improving musculoskeletal health in general, and the mental and social components of health in particular.

2. Please provide as many suggestions as you can to improve the way we measure mental aspects of musculoskeletal health.

Table 2 I-MESH action plan based on initial delphi

Theme 2: Coordination of non-specialty and specialty medical care with social and mental care
First priority
Improved communication and coordination between clinicians
Teach each other our expertise and skills (SW, psychologist, PT, MD); develop a common language
Share best practices and lessons learned between clinicians and clinical units internationally
Aim to standardize language, concepts, measurement, and interventions across centers
Second priority
Simplify musculoskeletal knowledge/expertise and make it accessible (web info, e-consult, video visit)
Identify mental and social health needs early on using early access to MSK expertise
Ideas
Subgroup to develop strategies for interprofessional communication and coordination, including earlier MSK specialty expertise
List-serve to share best practices, teach across disciplines, and standardize
Develop web-based material that helps simplify MSK treatment strategies and identify social and mental health opportunities early on. Future: Incorporate E-consult option
Theme 3: Comfortable, meaningful, actionable measurement of social (meaning, role, purpose, connectedness, independence, stress, support) and mental (thoughts, emotions, comfort with uncertainty and ambiguity) health
First priority
Achieve alignment with patients on desired outcomes and measure them
Apps that are easy to use and provide meaningful data points
Standardize instruments, timing, and recording
Second priority
Develop and use measurement that enhances health and relationships (strengths, conversation starters)
Use general health measures (symptoms, limitations) to identify mental and social health opportunities (given their correlation)
Ideas
Subgroup to standardize measurements, align with patients, ensure they are comfortable for patients, and facilitate recording and storage
Theme 4: Public health/cultural interventions to reduce stigma, increase appeal of addressing social and mental health
Reduce the traditional and ingrained mental/social and physical health separation
Lessen stigma and make mental and social health desirable; reduce false mind/body dichotomy;
Cultural and local leadership including researchers and educators: establish the biopsychosocial paradigm
Policy that improves health: examples drunk driving laws, speed cameras, seatbelt laws, occupational safety
Ideas
Work with the Center for Health Communication Think Tank and similar organizations to develop public health measures, organizational strategies, and individual talking points to achieve these goals
Theme 5: Adequate and timely access to mental and social health interventions
First priority
Virtual care to address transportation, distance, work, childcare, etc
Second Priority
Specialist e-consult to guide the care of non-specialists prior to formal specialist visit
Ideas
Subgroup to develop MSK specialty E-consult and telehealth strategies
Theme 6: Incorporate mental and social health assessment and treatment into the daily work of clinicians of all types. Don't rely on appointments with mental health professionals
First priority
Even when mental/social factors are non-modifiable, awareness of them and appreciation of their impact can improve care
Emphasis on healthy habits: intake, activity, mindset, circumstances
Second Priority
Emphasis on the health benefits of accommodating changes related to disease, injury, and ageing
Monitor and learn from adherence to, and engagement with, each team member (MD, PT, SW, etc.)
Ideas
Combine with Theme 4

Table 2 (continued)

Theme 7: Develop strategies to enhance patient-clinician relationship
First priority
Use technology to enhance connection, incrementalism, and coordination
Second priority
Train clinicians to attend to mental and social health at all care touch points while navigating stigma
Ideas
Combine with Theme 4
Theme 8: Communication strategies can directly enhance health
Strategies that limit nocebo, optimize placebo, reorient cognitive bias, and avoid unhealthy concepts and social constructions
Ideas
Combine with Theme 4
Theme 9: Develop support for mental and social health
First priority
List of and access to mental health, social health, physical activity resources
Second priority
Provide peer support (individual or group)
Best practices for guiding people to resources
Web-based self-management strategies
Mobile applications for mental, social, and physical skills training
Ideas
Subgroup to collate resources and identify where more resources are needed

3. Please provide as many suggestions as you can to improve the way we measure social aspects of musculoskeletal health.

4. Please provide as many suggestions as you can to further the development of new tools or interventions to advance mental aspects of musculoskeletal health.

5. Please provide as many suggestions as you can to further the development of new tools or interventions to advance social aspects of musculoskeletal health.

6. What are the potential barriers to the improvement of mental and social care for patients with musculoskeletal illness?

7. What are the potential barriers to the improvement of mental health for patients with musculoskeletal illness?

8. What are the potential facilitators of improvement of mental health among people with musculoskeletal symptoms?

9. What are the potential barriers to the improvement of social health for patients with musculoskeletal illness?

10. What are the potential facilitators of improvement of social health among people with musculoskeletal symptoms?

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Data Availability Data available.

Code Availability Not applicable.

Declarations

Conflict of interest David Ring declares that there is no conflict of interest.

Human and Animal Rights and Informed Consent This study is based on voluntary participation of a subset of individuals from a professional group with voluntary membership and no ethical approval is required.

Ethical Approval Not applicable.

Consent to Participate Not applicable.

Consent for Publication Not applicable.

Informed consent Not applicable.

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