Advisory Opinion

Clinical, research and educational action plans to comprehensive strategies to improve musculoskeletal pain



27 September 2023

Science Council of Japan

Subcommittee on Chronic Pain,

Committee on Clinical Medicine

This Advisory Opinion is issued in accordance with the outcome of the deliberations of the Subcommittee on Chronic Pain of the Committee on Clinical Medicine, Science Council of Japan.

Subcommittee on Chronic Pain, Committee on Clinical Medicine of Science Council of Japan

Chair	NAKAMURA Masaya	(Associate Member)	Professor, Keio University, School of Medicine, Department of Orthopaedic Surgery
Vice-chair	SUMITANI Masahiko	(Associate Member)	Associate Professor, The University of Tokyo Hospital, Department of Pain and Palliative Medicine
	OCHI Mitsuo	(Section II Council Member)	President, Hiroshima University
	TOYAMA	(Associate Member)	Chief Executive Officer,
	Yoshiaki		International Medical Information
			Center
	MURAI Toshiya	(Associate Member)	Professor, Kyoto University,
			Graduate School of Medicine,
			Department of Psychiatry
	KONNO	(Designated Associate	Professor, Fukushima Medical
	Shinichi	Member)	University, Department of
			Orthopaedic Surgery
	SEKIGUCHI	(Designated Associate	Professor, Fukushima Medical
	Miho	Member)	University, Laboratory Animal
			Center

The following members have contributed to this Advisory Opinion.

USHIDA Takahiro Professor, Aichi Medical University, Graduate School of

Medicine, Department of Pain Medicine

TAJIMA Fumihiro Professor, Wakayama Medical University, School of

Medicine, Department of Rehabilitation Medicine

TSUDA Makoto Professor, Kyushu University, Graduate School of

Pharmaceutical Sciences, Department of Molecular

and System Pharmacology

MATSUMOTO Morio Professor, Keio University, School of Medicine,

Department of Orthopaedic Surgery

YABE Hirooki Professor, Fukushima Medical University, Department

of Neuropsychiatry

The following staff members were responsible for administration and research in this advisory opinion.

SCJ Office	MASUKO Noriyoshi	Director, Division for Scientific Affairs I (until April 2023)
	NEGORO Kyoko	Director, Division for Scientific Affairs I (since May 2023)
	YAMADA Hiroshi	Deputy Director, Division for Scientific Affairs I (until March 2023)
	WAKAO Kimiaki	Deputy Director, Division for Scientific Affairs I (since April 2023)
	SAKUMOTO Asuka	Official, Division for Scientific Affairs I (until March 2023)
	OKIYAMA Kiyomi	Unit Chief, Division for Scientific Affairs I (since April 2023)

This English version is a translation of the original written in Japanese.

Executive Summary

I Background

Japan is the first country all over the world that has stormed into an ever-intensifying superaged society and where the age-adjusted prevalence of musculoskeletal pain (low back pain, stiff shoulders and joint pain, etc.) associated with musculoskeletal diseases and disorders has become more than 10%. Musculoskeletal pain affects not only late middle-aged to very elderly population but also the age of maturity to middle-aged in Japan. We here discuss challenges of medical care, research and education systems required for resolving musculoskeletal pain as the public health issue.

I The current situations and propositions of musculoskeletal pain in Japan

Chronic musculoskeletal pain can cause inactivity and avoidance behaviors, lead to a sedentary lifestyle, exacerbate general health conditions including lifestyle-related diseases, and finally increase the risk of shortening the life-span and the healthy life expectancy. Further, in recent circumstances with the novel coronavirus, fitness habits and maintaining individuals' living range have shrunk. Musculoskeletal pain can trigger a growing threat to both the healthcare burden and the welfare state spending. The Japanese Ministry of Health, Labour and Welfare launched government-financed research projects for chronic pain. However, the prevalence has not yet decreased but remained and rather a little bit increased. Comprehensive strategies for improving musculoskeletal pain consists of avoiding development of musculoskeletal pain, early detection and intervention for musculoskeletal pain before and very immediately after the onset of clinical signs and symptoms, and

managing musculoskeletal pain after diagnosis to halt or delay progression of the disease. These phased prevention strategies are corresponded by medical institutes functionally stepped from physicians' clinics, general hospitals to interdisciplinary pain centers of the medical districts. The comprehensive healthcare system reform for musculoskeletal pain from the acute to chronic phases should be built. Moreover, a variety of medical and healthcare professions including physicians with varied specialties and other professionals is really important. However, cultivation of such human resources for musculoskeletal pain has not yet been sufficiently succeeded. The ministry should fundamentally reframe the government-financed research and educational projects based on the recognition that musculoskeletal pain is a major public health issue.

II The proposed action plans of this expertise

- (1) It is necessary for the government to raise awareness of musculoskeletal pain by public health communication national movement and campaign about musculoskeletal pain toward each and every individual in Japan.
- (2) It is necessary for the government to fundamentally reframe the government-financed research projects for musculoskeletal pain, focusing on prevention of susceptible conditions, prompt treatment at early development phase and improvement of chronic and severely-ill conditions associated with disability.
- (3) It is necessary for the government to present practical examples of fitness habits and daily activities in the 'with-coronavirus era' for improving and maintaining individuals' living range in the current circumstances under the Infectious Diseases Act.
- (4) It is necessary for the government to establish hierarchical structure and functional differentiation of medical institutes for medical and healthcare system for reducing complaints of musculoskeletal pain in the National Livelihood Survey and also reducing

patients with musculoskeletal pain in the medical care system, and ideally accomplishing scale-down of social welfare cost. A hierarchical structure and functional differentiation of medical institutes, which correspond respectively to primary (i.e., avoiding development), secondary (i.e., early detection and intervention) and tertiary (i.e., halting or delaying progression of disability) prevention strategies, in the medical fields should be built and managed for controlling musculoskeletal pain.

(5) As it is necessary for the government to cultivate human resources who diagnose and treat musculoskeletal pain for providing integrated and interdisciplinary pain approaches, a variety of medical and healthcare professionals including physicians with a variety of expertise and other professionals should be cultivated.