

## Future challenges for JAOMPT-East, Japan clarified through the views of workshop participants and leaders

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**【Abstract】** The East Japan Branch of the Japan Academy of Orthopedic Manipulative Physical Therapy (JAOMPT-East, Japan) holds a workshop on manipulative physical therapy for physical therapists on a regular basis. Many of the workshop participants are affiliated with orthopedic clinics. The reason for this might be that manipulative physical therapy is thought to be a technique limited to orthopedics, so physical therapists who are rarely involved in orthopedics may be less likely to participate. To verify this hypothesis, I conducted a survey. The results showed that 3.0% of participants worked for a rehabilitation hospital in the recovery phase, and 9.0% were affiliated with a nursing care department. Further, 51.5% of participants and 40.0% of instructors/assistants regarded manipulative physical therapy as a special manipulation for orthopedic disorders. When asked if manipulative physical therapy was felt to be a special technique for orthopedic diseases, there was no significant difference between the participants and instructors/assistants. The problem JAOMPT-East, Japan is currently facing is that manipulative physical therapy is strongly regarded as a physical therapy specialty, and few JAOMPT-East, Japan workshop participants are physical therapists affiliated with hospitals in the recovery phase or nursing care departments. I believe that JAOMPT-East, Japan can provide even higher quality physical therapy if JAOMPT-East, Japan let all physical therapists, including those who rarely treat orthopedic disorders, acquire manipulative physical therapy skills as basic, rather than specialized, techniques. Thus, it is JAOMPT-East, Japan's duty to discuss ways to have physical therapists who are active in a range of fields participate in this workshop in the future.

### Introduction

The East Japan Branch of the Japan Academy of Orthopedic Manipulative Physical Therapy (JAOMPT-East, Japan) holds a workshop on manipulative physical therapy for physical therapists on a regular basis. For each workshop, the executive office of JAOMPT-East, Japan creates a list of the participants. From

these lists, a deviation in the participants' affiliations has been identified. The workshop topics involve the evaluation and treatment of various joints (for example, "evaluation and treatment of the knee joint"). For any joint disease, it is necessary to expand the joint's range of motion and strengthen the relevant muscles, which thus makes it necessary to

evaluate and treat each joint as appropriate. The workshop does not focus on specific orthopedic diseases, such as “orthopedic diseases of the knee joint.” However, many participants tend to be affiliated with orthopedic surgery clinics, and few tend to be affiliated with nursing care departments or rehabilitation hospitals in the recovery phase. The reason for this might be that manipulative physical therapy is thought to be a technique limited to orthopedics, so physical therapists who are rarely involved in orthopedics may be less likely to participate in the workshop. To verify this hypothesis, I conducted a survey on how participants regard manipulative physical therapy (which is the main theme of the workshop) and how they have applied it in their daily practice, as well as their affiliations. I surveyed previous workshop participants, instructors, and assistants. Based on the analysis of the results of the questionnaire, I report the challenges that JAOMPT-East, Japan must take on as part of its activities.

#### Conflicts of interest

No companies or organizations have a conflict of interest in association with the presentation of the results of this study.

#### Survey method

I surveyed 53 individuals who participated in the workshop more than twice and 16 individuals who were involved in the workshop as instructors or assistants. I evaluated their affiliations, their views of manipulative physical therapy, how they have applied the techniques from the workshop, the results of those applications, and their satisfaction with the workshop. All the instructors/assistants were members of

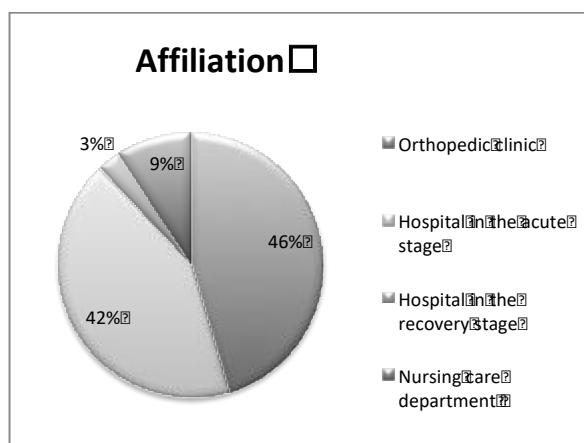
JAOMPT-East, Japan, and five of them were orthopedic manipulative physical therapists. During the workshop, the instructors/assistants teach kinematics and anatomy, deliver instruction on evaluation and treatment, and teach practical skills. There have been six workshops focused on single body sites, including “Clinical reasoning, and finger and wrist,” “Forearm and elbow joint,” “Shoulder joint,” “Hip joint,” “Knee joint,” and “Ankle joint.”

The seating capacity of each of these six workshops was 40. I distributed the questionnaires by e-mail and collected the responses on the internet using answer forms. The answers to the questionnaire were converted to percentages and compared between the two groups (participants and instructors/assistants) using Pearson’s chi-squared tests. In accordance with the Declaration of Helsinki, I explained the purpose of the survey and obtained all respondents’ prior approval of the study.

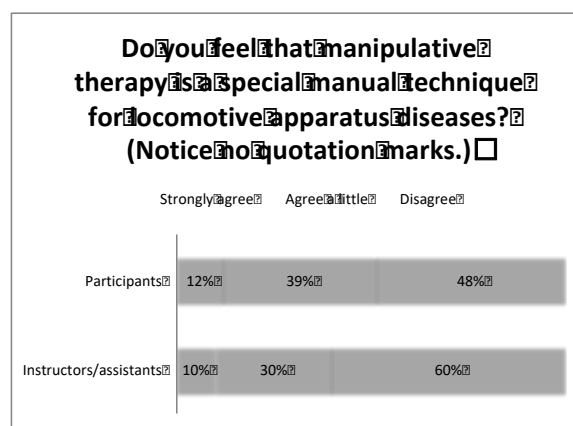
#### Survey results

I received valid responses from 33 participants (collection rate: 62.0%) and 10 instructors/assistants (collection rate: 63.0%). Most of the participants were affiliated with an orthopedic surgery clinic (45.5%), while 3.0% worked for a rehabilitation hospital in the recovery phase and 9.0% were affiliated with a nursing care department (Figure 1).

In addition, 51.5% of participants and 40.0% of instructors/assistants regarded manipulative therapy as a special manipulation for orthopedic disorders. There was no significant difference between the participants and the instructors/assistants



(Figure 1)



(Figure 2)

(Figure 2).

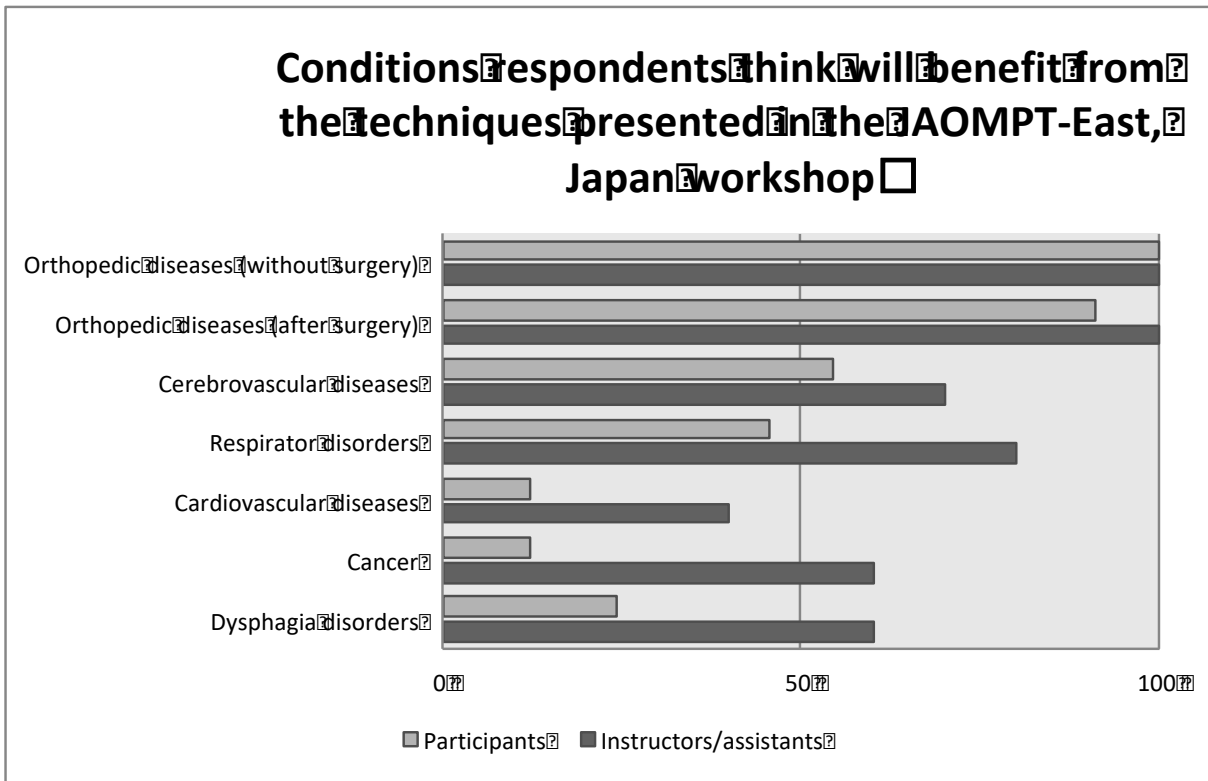
When asked which conditions they thought could benefit from the techniques learned in the workshop, the participants responded: orthopedic diseases without surgery (100.0%), orthopedic diseases with surgery (90.9%), cerebrovascular diseases (54.5%), respiratory diseases (45.5%), dysphagia disorders (24.2%), and cancer (12.1%). In response to the same question, the instructors/assistants picked: orthopedic diseases with or without surgery (100.0%), respiratory diseases (80.0%), cerebrovascular diseases (70.0%), dysphagia disorders (50.0%), and cancer (60.0%) (Figure 3).

When asked about actually applying the techniques learned in the workshop, the participants indicated orthopedic diseases with or without surgery (90.0%), cerebrovascular diseases (27.3%), respiratory diseases (24.2%), dysphagia disorders (6.1%), and cancer (3.0%). In response to the same question, the instructors/assistants picked orthopedic diseases with or without surgery (100.0%), cerebrovascular diseases (60.0%), dysphagia disorders (50.0%), respiratory diseases (10.0%), and cancer (10.0%) (Figure 4).

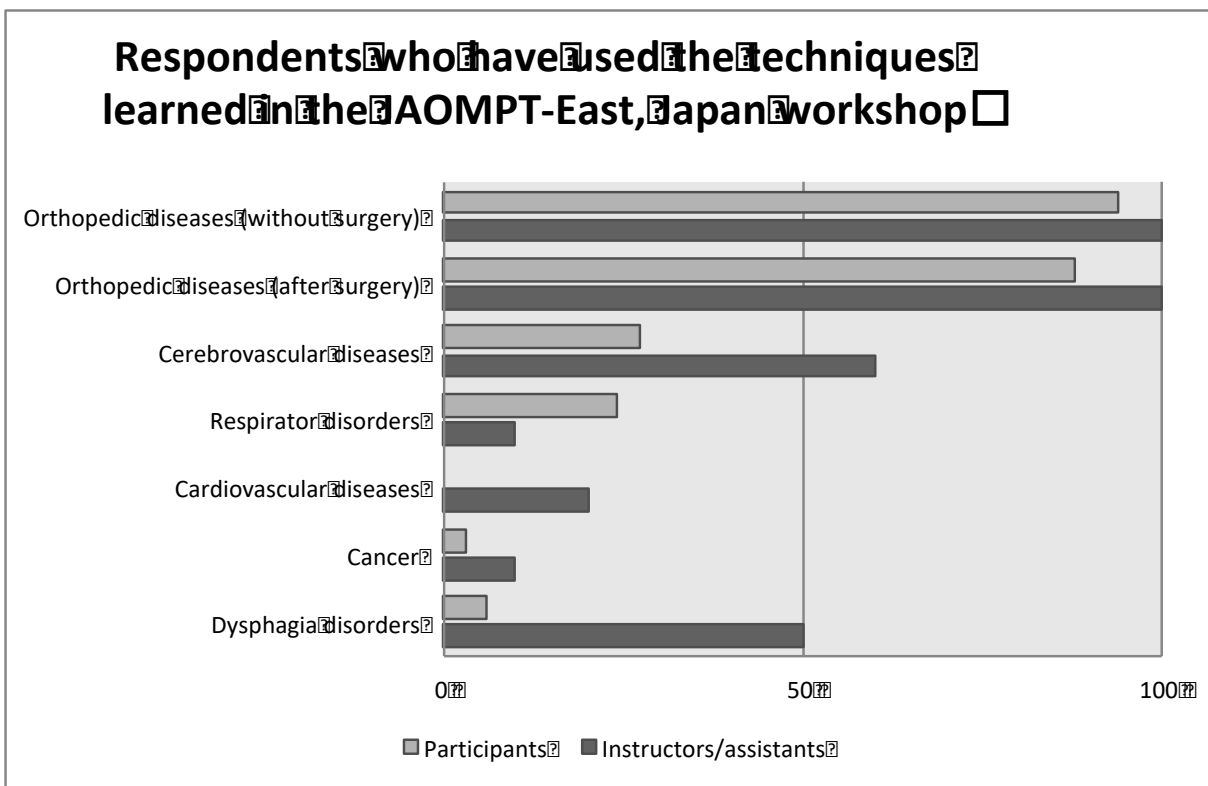
About 85.0% of the participants were satisfied with the workshop, and no respondents indicated dissatisfaction with the workshop (Figure 5).

#### Discussion

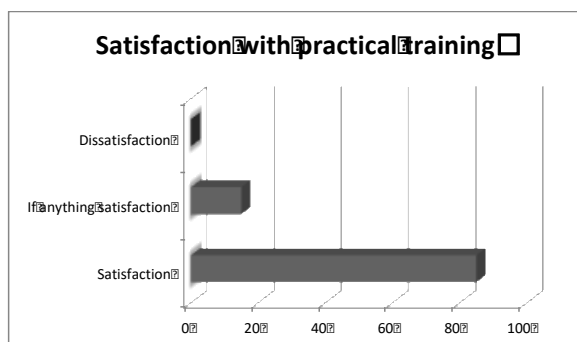
Of the respondents, 51.5% of the participants and 40.0% of the instructors/assistants had the image of manipulative physical therapy as a special technique for orthopedic diseases. Since approximately half of the physical therapists in this survey had this view, it can be inferred that physical therapists who have never participated in manipulative physical therapy workshops have an even stronger impression. However, no matter which diseases they are asked to treat, physical therapists usually provide treatments (such as pain alleviation, joint range of motion expansion, muscle building, postural regulation, and motion training) best suited to each particular disease after managing any risks. I myself work for medical facilities that do not have outpatient orthopedic surgery departments and often treat patients with dysphagia disorders and vertigo. In the course of treatment, I find that the knowledge of manipulative physical therapy techniques is very helpful for treatment. Only a few physical therapy schools



(Figure 3)



(Figure 4)



(Figure 5)

in Japan provide students with enough training on evaluation, which requires senses like end feel. I was trained in the correct usage of a goniometer in my school days, but I did not receive practical training for the end feel of a joint. I studied this in the manipulative physical therapy course and acquired the correct knowledge of the end feel technique with the proper supervision of orthopedic manipulative physical therapists. It is my opinion that knowledge of the end feel technique is indispensable in the treatment of muscles and joints. Judging from the responses given by the instructors/assistants, they seem to believe that manipulative therapy is applicable not only to orthopedic disorders but also to diverse diseases, including dysphagia disorders. When responding to the fields in which manipulative physical therapy may be applied, the instructors/assistants gave lower values than the participants. This is supposedly because the number of patients for whom they have applied manipulative physical therapy is small. Instructors/assistants plan to apply manipulative physical therapy techniques as needed when facing patients suffering from respiratory diseases. In the case of dysphagia disorders, for example, the jaw joint matters most to mastication, but the

stability and position of the cervical spine are also important for normal movement. Likewise, the swallowing function is affected strongly by the jaw joint, cervical spine, and scapular arch. At the same time, these movements are caused by the contraction and relaxation of muscles epitomized by the masseter muscle, suprahyoid muscles, and infrahyoid muscles. Even the swallowing reflex, which is an involuntary movement, may be improved by postural regulation and muscle-strengthening exercises.

Dysphagia disorders are caused mainly by cerebrovascular diseases and cancer. However, the therapeutic objectives are the joints and muscles, which are the main objectives of manipulative physical therapy. Physical therapists who have studied manipulative physical therapy thoroughly can apply both technique and theory because they have learned them thoroughly. Except for the workshops authorized by IFOMPT, the workshops held in Japan mostly assign one instructor/assistant to every 20-40 participants. However, the workshops organized by JAOMPT-East, Japan assign one instructor/assistant to every 4-5 participants, without fail. In JAOMPT-East, Japan's opinion, this has allowed the instructors/assistants to teach the participants minutely and provides the participants an environment in which they can ask questions openly, which makes it possible for them to get a higher degree of understanding and satisfaction.

#### Conclusion

The problem we now face is that manipulative physical therapy is strongly regarded as a specialized field of physical therapy, and physical therapists who specialize in nursing

care or internal diseases are not interested in studying manipulative physical therapy. JAOMPT-East, JAOMPT-East, Japan planed 11 workshops in 2 year, 6 of which were held. Participants could choose to focus only on the body sites that they have studied in detail, or they could join any of the 11 workshops along the way. However, about 70.0% of the participants have participated in the workshop without interruption, and there were standby participants in each of the past six workshops. Taking these facts into consideration, I can say that the questionnaire results are justified and that the workshops have given participants a high degree of satisfaction. JAOMPT-East, Japan needs to make efforts to let even more physical therapists specializing in nursing care and internal medicine participate in the next workshop.

I believe that JAOMPT-East, Japan can provide even higher quality physical therapy if JAOMPT-East, Japan let all physical therapists, including those who rarely treat locomotive apparatus diseases, acquire manipulative physical therapy skills as basic, rather than specialized, techniques. Thus, it is JAOMPT-East, Japan's duty to discuss ways to have physical therapists who are active in a range of fields participate in future workshops.

For this purpose, JAOMPT-East, Japan must take initiative in making presentations that treatment by manipulative physical therapy on respiratory diseases, cancer, and dysphagia disorders.

Another challenge JAOMPT-East, Japan must face is the shortage of instructors/assistants. JAOMPT-East, Japan had 50 members as of June 2019. Of these 50 members, only 15 could take on the position of an instructor/assistant. It is JAOMPT-East, Japan's opinion that instructors/assistants can improve their presentation skills by teaching participants and enhance their practical skills by showing techniques to participants. In the future, I want JAOMPT-East, JAPAN members who are aiming for OMPT to actively experience instructors and assistants. To make JAOMPT-East, Japan's plan a reality, I think that it is the JAOMPT-East, Japan's duty to take on the challenge of building a system with a focus on developing orthopedic manipulative physical therapists.

#### Acknowledgements

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