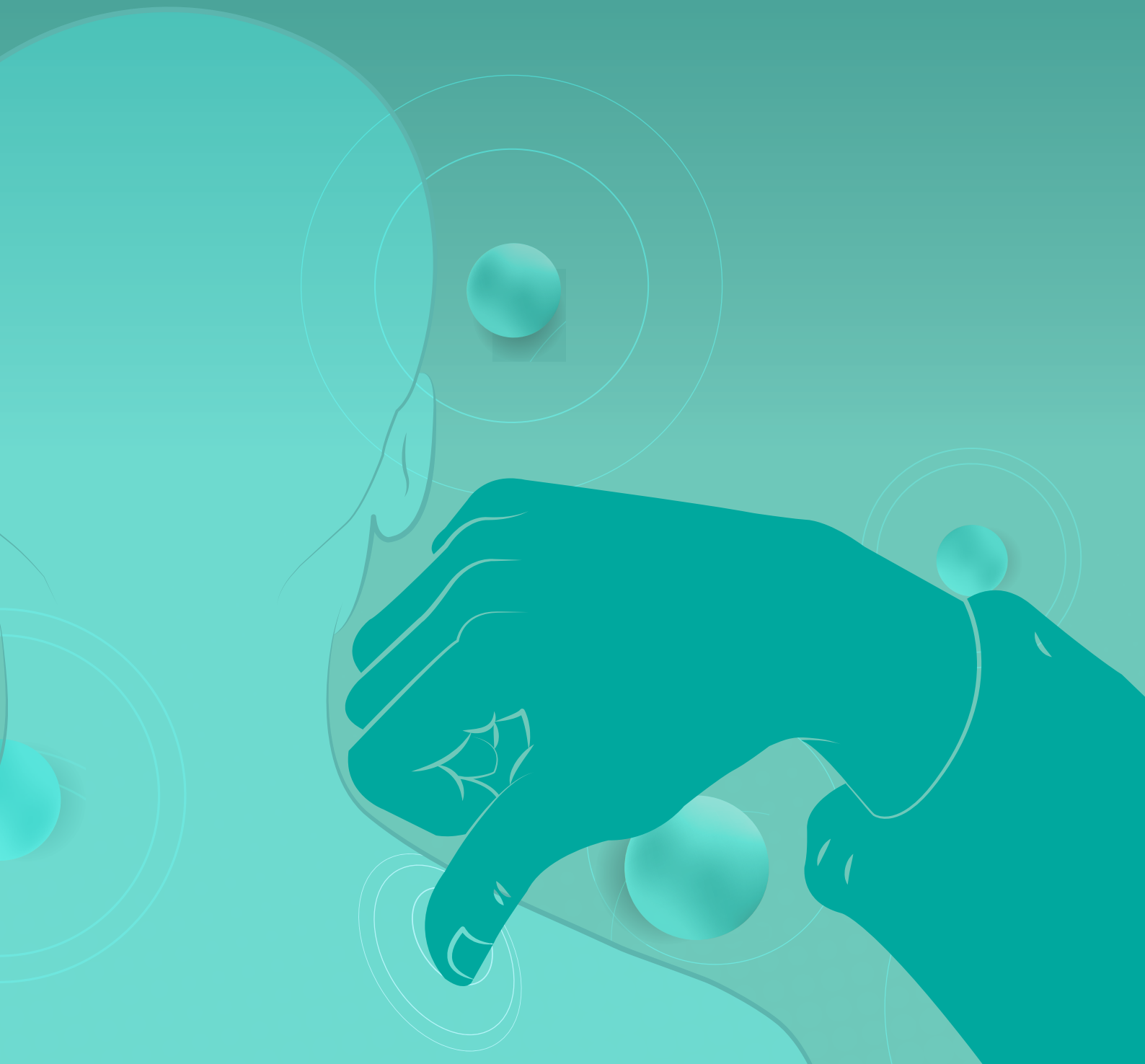
World Health Organization

WHO BENCHMARKS FOR THE PRACTICE OF TUINA



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WHO benchmarks for the practice of tuina

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Foreword

The World Health Organization (WHO) is currently implementing its 13th General Programme of Work (GPW13) to support countries in reaching all health-related Sustainable Development Goals (SDGs). GPW13 is structured around three interconnected strategic priorities: achieving universal health coverage; addressing health emergencies; and promoting healthier populations. These strategic priorities are supported by three strategic shifts: stepping up leadership; driving public health impacts in every country; and focusing global public goods on impact.

Traditional medicine has always had a role in this collective endeavour. The Declaration of Astana, renewed from the Declaration of Alma-Ata towards universal health coverage and the SDGs, reaffirms the role of traditional medicine in strengthening primary health care, a cornerstone of health systems, in pursuit of health for all. This has also been reflected in the *WHO global report on traditional and complementary medicine 2019*, in which 88% of WHO Member States acknowledge the use of traditional and complementary medicine in health care.

Taking note of the growing importance of traditional medicine in the provision of health care nationally and globally, WHO and its Member States have strived to explore ways to integrate, as appropriate, safe and evidence-based traditional and complementary medicine services within national or subnational health systems, as committed to in the Political Declaration of the High-level Meeting on Universal Health Coverage.

WHO aims to provide policy and technical guidance to Member States; promote the safe and effective use of traditional and complementary medicine through appropriate regulation of products, practices and practitioners; and support Member States in harnessing the contribution of traditional and complementary medicine to people-centred health care in implementing the *WHO Traditional Medicine Strategy 2014–2023*.

Setting norms and standards is a unique function of WHO. The normative work is driven by needs and could be translated into real impact in relevant countries through appropriate policy options. This series of benchmarks, covering various systems and interventions of traditional, complementary and integrative medicine, aims to provide a reference point to which actual practice and practitioners can be evaluated.

I am very pleased to introduce this series to policy-makers, health workers and the general public, and I firmly believe it will serve its purpose.

Zsuzsanna Jakab

Deputy Director-General
World Health Organization

Preface

Integrated health services are essential for the World Health Organization (WHO) in the implementation of its 13th General Programme of Work, which aims to support countries in achieving universal health coverage and the health-related Sustainable Development Goals. The overarching mission for the Department of Integrated Health Services is to accelerate equitable access to quality health services that are integrated and people-centred, and that can be monitored and evaluated.

WHO is unique in its mandate to provide independent normative guidance. Its normative products encompass a wide range of global public health goods, including norms and standards. It is therefore the primary role of the Department of Integrated Health Services to generate and produce relevant global goods. Key to improving its work in this area is ensuring global public health goods are driven by country needs and can deliver tangible impacts at the country level.

As of 2018, when 88% of WHO Member States acknowledged the use of traditional and complementary medicine, WHO's support in evaluating the safety, quality and effectiveness of traditional and complementary medicine has continuously ranked in the top areas of need, according to the *WHO global report on traditional and complementary medicine 2019.*

WHO prioritizes normative products based on an assessment of demands. To address increasing needs and to drive impact in countries, this series of benchmarks captures the main systems and interventions of traditional, complementary and integrative medicine by setting up required norms and standards on training and practice.

WHO's guiding principles and quality assurance procedures have been strictly followed in designing and formulating these benchmarks. WHO will not only assess the quality of these normative products but also streamline systems and plans for monitoring and evaluation.

I am pleased to present this series of benchmarks and invite you to join us in measuring and documenting their impact.

Edward Kelley

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Acknowledgements

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Thanks are due to Changchun University of Chinese Medicine, China, the World Federation of Chinese Medicine Societies, and the China Association of Acupuncture-Moxibustion, which kindly provided logistic support to the WHO working group meetings on this document.

Special thanks go to Zhihong Wang, Mingjun Liu, Bruce Bentley and Nicola Robinson, who have actively and diligently contributed to the drafting and editing of this document. WHO is indebted to all experts who have provided their inputs to the WHO working group meetings and the peer review process.

Qi Zhang and Qin Liu undertook revision work under the guidance of Edward Kelley. Colleagues within the WHO headquarters team for traditional, complementary and integrative medicine provided secretarial support.

Glossary

Tuina manipulation

The standard techniques of manual therapy performed by tuina professionals, including but not limited to one-finger pushing, rolling, kneading, pushing, rubbing, grasping, pressing and palm-twisting.

Tuina medium

A medicated preparation applied to the skin during the tuina treatment to facilitate the manipulation and enhance curative effects, including liniment and ointment.

Executive summary

Why this benchmark?

In 2010, the World Health Organization (WHO) published the *Benchmarks for training in tuina*. This presented what professional experts and health regulators considered to be appropriate training programmes for tuina practitioners.[1]

A standardized protocol for tuina treatment, against which actual practice can be compared and evaluated, has been lacking. With the increasing use of tuina in clinical settings worldwide, there is an urgent need to develop benchmarks for the practice of tuina to ensure its safety, quality and effectiveness.

This document will join the updated benchmarks for the training of tuina to form an integral part of the serial benchmarks, targeting key modalities of traditional medicine intervention and contributing to the establishment of a reference toolkit for countries.

How was this benchmark prepared?

Four drafts were prepared during the development of this benchmark document, with intensive technical support from an expert group based in China. Two WHO working group meetings and an extended peer review were organized to facilitate the production of these drafts. This process has involved hundreds of experts in relevant areas worldwide.

In line with WHO established principles and processes for benchmark development, the WHO Secretariat made the planning proposal and clarified the scope of work. The first draft was prepared by selected leading experts based on the framework provided by WHO. This draft was presented to the working group meeting for discussion.

Eighteen experts from 11 countries across the WHO regions joined the first working group meeting. After three days of intensive discussion on the scope, structure and content of the draft document, the meeting was concluded with consensus and advice on further improvement, which guided production of the second draft. This draft was then ready for extended peer review.

A total of 229 experts from 69 countries covering all six WHO regions were consulted in the external peer review process. They represented a wide range of expertise needed in developing these benchmarks. Eventually, 364 concrete suggestions encompassing every aspect of the document, from overall structural arrangement to a specialized technical issue, were received. This valuable feedback strongly informed the production of the third draft, which was then ready for further review at the second working group meeting.

The second working group meeting aimed to conclude the consulting process by inviting selected experts to finalize the document. Eleven experts from six countries across the WHO regions joined the consultation and contributed to the development of the fourth draft, which became the last technical version of the benchmark before formatting and printing.

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[1] See: https://apps.who.int/iris/bitstream/handle/10665/44358/9789241599689_eng.pdf

What does this benchmark cover?

This document is structured in four parts:

- Introduction: gives a short briefing on the background and objectives of the document.
- Procedures: presents stepwise guidance for the administration of tuina treatment.
- Facilities: provides the minimum infrastructure requirements for delivering a tuina service.
- Safety: emphasizes the key elements for the safe practice of tuina.

These four parts constitute a complete set of benchmarks for the practice of tuina.

Who is this benchmark for?

By setting norms and standards, this document helps to address the gap between the increased demands and the uncertified delivery of tuina services. It offers a useful reference point to evaluate tuina practice which will benefit policy-makers, health workers, education providers and the public in general.

Qi Zhang

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1 Introduction

Tuina is a manual therapy aimed at treating various disorders and enhancing health. It is one of the most commonly used modalities of traditional medicine practice.

In 2010, the World Health Organization (WHO) published the *Benchmarks for training in tuina (1)*. These benchmarks presented what professional experts and health regulators considered to be adequate training levels and appropriate learning modules.

There has, however, been a lack of standardized protocols for tuina treatment by which the practice can be compared and evaluated. By setting up benchmarked requirements for the practice of tuina, this document tries to reduce the gaps and ensure the safety, quality and effectiveness of tuina services.

In addition to the introduction, this document incorporates three essential components – procedures, facilities and safety – to constitute a set of benchmarks for the practice of tuina.

2 Procedures

2.1 Preparation

2.1.1 Treatment region

- Locating: the practitioner should locate the regions to be treated by the most appropriate methods.
- Disinfecting: the practitioner should prepare the treatment region correctly according to local infection control guidelines.

2.1.2 Body positions

- Lying:
  - supine position is suggested for tuina treatment to the face, abdomen and limbs;
  - prone position is suggested for tuina treatment to the back, waist, pelvis and limbs;
  - lateral position is suggested for tuina treatment to the side of the body.

- Sitting:
  - forward-sitting position is suggested for tuina treatment to the neck and shoulders;
  - backward-sitting position is suggested for tuina treatment to the shoulders and upper limbs.

Other positions can be decided by the practitioner and patient for the convenience of providing treatment.

2.1.3 Other preparations

- The practitioner should maintain a professional attitude and personal hygiene.
- The patient should dress appropriately for the convenience of the treatment.

2.2 Manipulations

Multiple manipulations can be used as appropriate for tuina treatment. The following provides the key elements of major manipulations *(2)*.

2.2.1 One-finger pushing

One-finger pushing manipulation exerts force to the treatment region with the tip or the lateral side of the thumb by swaying the forearm. The key elements of the manipulation are:

- clenching a hollow fist and suspending the flexed wrist and palm;
- stretching the thumb naturally to cover the hollow fist;
- exerting force on the treatment region with the tip or lateral side of the thumb;
- swaying the forearm to bring the wrist-swing inwards and outwards;
- extending or flexing the thumb joint to adjust the force exerted;
- maintaining the frequency at 120–160 times per minute.

2.2.2 Rolling

Rolling manipulation exerts force to the treatment region with ulnar dorsum by swaying the forearm to drive the extent and flexion of the wrist. The key elements of the manipulation are:

- stretching the thumb naturally and clenching a hollow fist;
- bending the other four fingers naturally to make the palm round and hollow;
- pressing on the treatment region with the dorsum of the hand;
- swaying the forearm and rotating the wrist smoothly;
- maintaining the frequency at 120–160 times per minute.

2.2.3 Kneading

Kneading manipulation exerts force to the treatment region with the thumb, major thenar or palm root by rotating slowly and softly. The key elements of the manipulation are:

- keeping the thumb, major thenar or palm root on the treatment region;
- flexing the fingers naturally and stretching the wrist joint slightly backwards;
- taking the elbow joint as a pivot and swaying the forearm to rotate;
- maintaining the frequency at 120–160 times per minute.

2.2.4 Pushing

Pushing manipulation exerts force to the treatment region with the thumb, palm or other part of the body by making rectilinear or arc movement. The key elements of the manipulation are:

- keeping the thumb on the treatment region and supporting it with other fingers;
- pressing on the treatment region with the palm and exerting force with the palm root;
- flexing the elbow and exerting force on the treatment region with the tip of the elbow;
- pushing the thumb, palm or elbow slowly in a one-way direction along the meridian or muscular fibre;
- repeating the manipulation 5–15 times continuously.

2.2.5 Rubbing

Rubbing manipulation exerts force on the treatment region with the thenar or palm by performing a straight to-and-fro movement. The key elements of the manipulation are:

- stretching the wrist joint and keeping the thenar or palm on the treatment region;
- taking the shoulder joint as a pivot and moving the upper arm regularly;
- enabling the thenar or palm to move back and forth;
- maintaining the frequency at 100–120 times per minute.

2.2.6 Grasping

Grasping manipulation exerts force to the treatment region with the thumb and other fingers by lifting, pinching or clipping the skin and tissue. The key elements of the manipulation are:

- clipping the treatment region tightly with the thumb, index finger and middle finger, or with the thumb and other four fingers;
- lifting the skin, and then kneading and pinching the tissue alternatively with strong and gentle force;
- repeating the manipulation 5–15 times continuously.

2.2.7 Pressing

Pressing manipulation exerts force to the treatment region with the finger, palm or elbow by suppressing a particular acupoint or part of the body. The key elements of the manipulation are:

- fixing the thumb, palm or elbow on the treatment region;
- pressing downwards with gradually increasing strength;
- repeating the manipulation 5–15 times continuously.

2.2.8 Palm-twisting

Palm-twisting manipulation exerts force to the treatment region with both palms by performing a swift twisting movement. The key elements of the manipulation are:

- clipping the treatment region with both palms;
- performing a twisting movement swiftly and alternatively with opposite force;
- moving up and down along the treatment region during the twisting;
- repeating the manipulation 5–15 times continuously.

2.3 Records

2.3.1 Information to be recorded

- chief complaint and medical history;
- physical examination;
- pattern differentiation and therapeutic principle;
- treatment plan and patient's consent;
- manipulation details and patient's response;
- treatment outcomes and any incidents *(3)*;
- further advice, including follow-up, if needed.

2.3.2 Maintenance of records

The practitioner should keep complete patient records in the correct manner, as specified by local laws and regulations.

3 Facilities

3.1 Physical space

- The working environment and surrounding area should be clean and tidy.
- The treatment area should be well lit, be of an appropriate temperature, and have adequate ventilation.
- The treatment area should comply with the local requirements for patient privacy and protection.
- The physical space should be appropriate for disabled access.

3.2 Equipment and devices

- bed and stool for the treatment;
- screen and towel for patient privacy and protection;
- appropriate tuina medium for the treatment;
- equipment and devices for the hygiene requirements;
- emergency equipment for first aid.

3.3 Waste management

- Infectious waste should be handled appropriately according to local infection control guidelines.
- Non-infectious waste should be disposed of properly in a timely manner.

4 Safety

4.1 Precautions

4.1.1 Before treatment

- The patient should be informed of the possible benefits and potential risks associated with treatment.
- The practitioner should obtain informed consent from the patient before treatment, either orally or in writing.

4.1.2 During treatment

- The selection, force and duration of manipulation should be decided based on the patient's health condition and response and the main objectives of the treatment.

4.1.3 After treatment

- The practitioner should document the patient's records pertaining to the treatment.
- The practitioner should provide the patient with further advice after the treatment, as needed.

4.2 Contraindications

4.2.1 By disease and syndrome

- Tuina treatment should not be applied to people with acute heart or cerebrovascular diseases.
- Tuina treatment should not be applied to people with severe infectious diseases.
- Tuina treatment should not be applied to people with acute abdominal pain.
- Tuina treatment should not be applied to people with a tendency to bleed.
- Tuina treatment should not be applied to people intoxicated by alcohol or drugs.

4.2.2 By condition

- Tuina treatment should not be applied to people who are uncooperative or who have an extremely weak physical constitution.
- Tuina treatment should not be applied to the abdomen or lumbosacral region in women who are pregnant or menstruating.

4.2.3 By treatment region

- Tuina treatment should not be applied to body regions where there is skin sensitivity or a dermatological condition.
- Tuina treatment should not be applied to body regions that are infected or with an abscess, sepsis or malignant tumour.
- Tuina treatment should not be applied to body regions where there is an injured tendon or ligament.

4.3 Infection prevention and control

Annex 1 gives detailed information on the requirements of disinfection. Key elements for infection prevention and control during tuina treatment are:

- hygiene of the practitioner's hands *(4)*;
- hygiene of the treatment region;
- disinfection of the materials;
- disinfection of the treatment area.

4.4 Incident management

Annex 2 gives detailed information on managing incidents that may be encountered during tuina treatment *(5)*. Examples of such incidents include injury to the skin, injury to the tissues and injury to the bones. Essential components of the response protocol are:

- Stop treatment immediately when an incident occurs.
- Relieve symptoms accordingly for mild cases.
- Refer to relevant health-care professionals urgently for severe cases.
- Supply first aid if appropriate.

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3. Minimal information model for patient safety incident reporting and learning systems. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/255642/WHO-HIS-SDS-2016.22-eng.pdf, accessed 28 July 2020).

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Annex 1. Disinfection requirements during tuina treatment

Disinfection required during tuina treatment should be conducted according to local infection control guidelines by considering the following principles:

- Hygiene of the practitioner's hands: the practitioner should clean and disinfect their hands and fingers before and after providing tuina treatment.
- Hygiene of the treatment region: acupoints, meridians and the surrounding areas should be clean and intact before tuina treatment is given.
- Disinfection of the materials: materials in direct contact with the patient, including but not limited to sheets and towels, should be disinfected or disposable. Materials without direct contact, including but not limited to mattress and pillow, should be hygienically maintained for each use.
- Disinfection of the treatment area: the treatment room, equipment and devices should be kept clean and tidy.

Annex 2. Protocol for incident management during tuina treatment

A2.1 Injury to the skin

- Main symptoms:
  - burning sensation with pain;
  - persistent reddening or blisters;
  - bleeding.

- Response:
  - stop tuina immediately;
  - no special treatment required for minor damage;
  - drain and disinfect local area for large blisters;
  - keep the area clean to prevent secondary infection.

- Preventive measures:
  - make informed selection of manipulation and practice on sensitive skin with caution;
  - apply non-irritating tuina medium for manipulations with abrasive movements;
  - pay close attention to the skin when performing forceful manipulations.

A2.2 Injury to the tissues

- Main symptoms:
  - petechia or purpura due to subcutaneous haemorrhage;
  - acute pain with swelling, hematoma or dysfunction.

- Response:
  - stop tuina immediately;
  - no special treatment required for limited subcutaneous haemorrhage;
  - apply cold compress on the injured area;
  - immobilize local area when detecting evident dysfunction;
  - refer to relevant health-care professionals if deemed necessary.

- Preventive measures:
  - make informed selection of manipulation and practice with caution for people with sensitive skin or bleeding disorders;
  - gradually strengthen the force of manipulation within the tolerable range;
  - avoid intensive manipulations on the same region;
  - apply non-irritating tuina medium when necessary;
  - relax the joint beforehand if its movement is involved in the manipulation.

A2.3 Injury to the bones

- Main symptoms:
  - acute pain with evident dysfunction indicating bone fracture;
  - empty glenoid, elastic fixation or bone extrusion indicating joint dislocation.

- Response:
  - stop tuina immediately;
  - conduct necessary fixation or immobilization;
  - refer to relevant health-care professionals immediately.

- Preventive measures:
  - make informed selection of manipulation and practice with caution for patients with possibility of bone injury;
  - keep joint movements within the normal range of motion during manipulation;
  - avoid applying joint-moving tuina manipulations on elderly people and people with history of habitual dislocation.

Annex 3. First working group meeting

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