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Health informatics — Categorial structures for representation of acupuncture —

Part 3: **Moxibustion**

Informatique de santé — Structures catégoriques pour la représentation de l'acupuncture —

Partie 3: Moxibastion

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STANDARDS ISO.







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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

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can be click to com. Click to A list of all the parts in the ISO 16843 series can be found on the ISO website.

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Introduction

Acupuncture therapy is widely practised as a part of complementary and alternative medicine treatments in western countries. Moxibustion is a therapeutic procedure using ignited material to apply heat to certain points or areas of the body surface for treating diseases through regulation of the functions of meridians/channels and visceral organs.

A guideline for reporting acupuncture intervention in clinical trials has already been provided and a large number of clinical trials have been conducted to assess the efficacy and efficiency of acupuncture therapy. However, the descriptions of moxibustion as an acupuncture intervention in clinical reports tend to be insufficient for interpretation of heterogeneity among trials, often causing difficulties in synthesizing data in meta-analysis. This arises from three reasons:

- an appropriate information structure of moxibustion is not formulated;
- b) peculiar concepts within traditional medicine in the western pacific-rim region originated in China are not considered sufficient:
- semantic associations between concepts of moxibustion need to be explicit.

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Health informatics — Categorial structures for representation of acupuncture —

Part 3:

Moxibustion

1 Scope

1.1 Main purpose

This document aims to specify categorial structure in the field of moxibustion by defining a set of domain constraints for use within terminological resources.

This document describes a concept system detailing domain constraints of sanctioned characteristics, each composed of a semantic link and applicable characterizing categories.

Specification of categorial structures for representation of acupuncture points and other sites of the body, indications, prohibition and effect are out of the scope of this document.

The potential uses for this document include:

- supporting developers to provide new terminological systems concerning moxibustion;
- supporting developers to provide new detailed content areas of existing terminological systems concerning the moxibustion process to ensure its conformance;
- facilitating the representation of the moxibustion process using a standardized core model in a manner suitable for computer processing;
- providing a conceptual framework for the generation of a compositional concept representation of moxibustion;
- facilitating the mapping and improved semantic correspondence between different terminologies by proposing a core specification for moxibustion;
- providing a core model to describe the structure of moxibustion, and facilitate improved semantic correspondence with information models;
- providing a tool for moxibustion text mining, database construction, ancient document processing over a wide area of acupuncture information collection and processing;
- Sproviding a new method for researchers to conduct relevant research, and ideas for the development
 of acupuncture and moxibustion disciplines.

1.2 Target groups

The target groups for this document are:

- developers of terminological systems;
- developers of information systems that require a structured framework of concepts to facilitate implementation and communication;
- informaticians and analysts who require common models of knowledge to facilitate analysis of current and legacy data from one or more information systems;

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clinicians and coders to provide greater consistency in structure and organization when entering and retrieving data using one or more terminological resources.

Normative references

There are no normative references in this document.

Terms and definitions 3

For the purpose of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

moxibustion

therapeutic procedure involving ignited material [usually moxa (3.3)] to apply heat to certain points or areas of the body surface for curing disease through regulation of the function of meridians/channels and visceral organs

[SOURCE: WHO IST 2007, 5.2.1]

3.2

cotton-like material for *moxibustion* (3.1) made from mugwort leaves

[SOURCE: WHO IST 2007, 5.2.3]

3.3

plant from which moxa floss (3.2) is prepare

[SOURCE: WHO IST 2007, 5.2.2]

3.4

moxa cone

cone-shaped moxibustion material (see 4.2.6) made of moxa floss (3.2) for moxibustion (3.1)

[SOURCE: WHO IST 2007, 5.2.4]

3.5

moxa cone moxibustion

moxibustion (state with an ignited moxa cone (3.4) either directly on the skin or indirectly using an insulating medium

Note 1 to entry: See 4.2.2.

[SOURCE: WHO IST 2007, 5.2.5, modified]

3.6

direct moxibustion

moxibustion (3.1) in which an ignited moxa cone (3.4) is applied directly to the skin surface at certain points or areas of the body surface

[SOURCE: WHO IST 2007, 5.2.6]

3.7

indirect moxibustion

moxibustion (3.1) performed by placing some insulating material between the moxa cones (3.4) and the skin

[SOURCE: WHO IST 2007, 5.2.8]

3.8

moxa stick

round long stick made of *moxa floss* (3.2)

[SOURCE: ISO/TS 18666:2015, 3.6]

3.9

moxa stick moxibustion

moxibustion (3.1) with an ignited moxa stick (3.8)

[SOURCE: WHO IST 2007, 5.2.13]

3.10

warm needling therapy

therapy involving warm needling *moxibustion* (3.1) that uses a warm needle as a moxibustion device (see 4.2.3)

[SOURCE: WHO IST 2007, 5.2.30]

3.11

moxa burner

receptacle as a moxa device (see 4.2.5) designed to fold burning moxa floss (3.2)

[SOURCE: WHO IST 2007, 5.2.31]

3.12

moxa burner moxibustion

moxibustion (3.1) with a moxa burner (3.11) as a moxa device (see 4.2.5) to hold the ignited moxa floss (3.2)

[SOURCE: WHO IST 2007, 5.2.32]

3.13

electro-moxibustion

moxibustion (3.1) using a non-moxa device (see 4.2.4) and electrical dermal stimulation used in place of moxa (3.3)

[SOURCE: WHO IST 2007, 5.2.36]

4 Categorial structure

4.10 General

Moxibustion in the context of this document is one part of moxibustion treatment, one of multiple moxibustion actions to the moxibustion sites. The formal concept representation system in the field of moxibustion has semantic links to the following characterizing categories and semantic links among them.

The outline of those characterizing categories and semantic links is illustrated in a concept diagram in Figure 1.

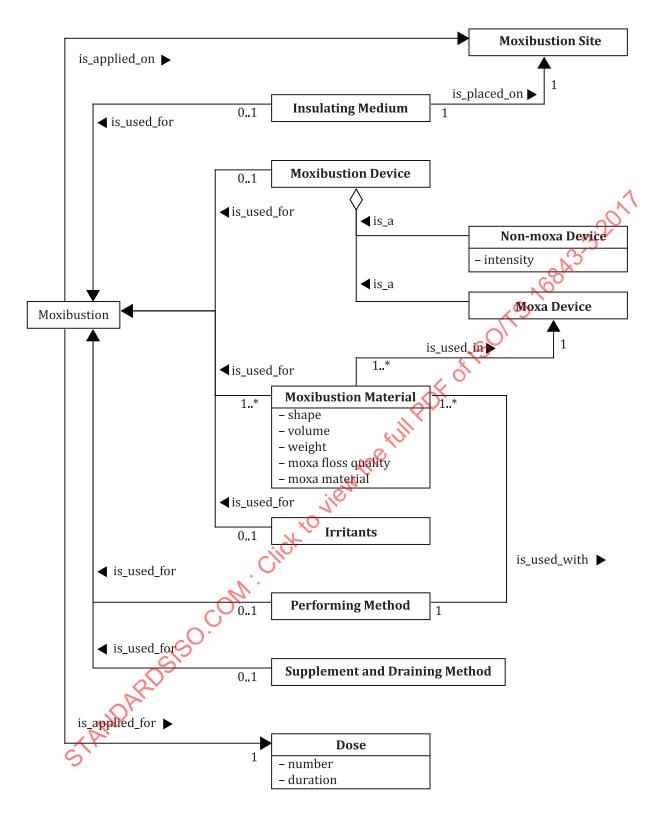


Figure 1 — Concept diagram for representation of moxibustion

4.2 Characterizing categories

4.2.1 Moxibustion site

Certain points or areas of the body surface to which moxibustion (3.1) is applied.

4.2.2 Insulating medium

The material used for insulation during indirect moxibustion (3.7).

EXAMPLE 1 Ginger, garlic, salt, prepared aconite, black pepper, red clay [WHO IST 2007, 5.2.9 to 5.211].

EXAMPLE 2 Layer(s) of cloth or paper for pressing moxibustion [WHO IST 2007, 5.2.24].

4.2.3 Moxibustion device

A piece of apparatus that uses moxa floss (3.2) as the main combustion material in a traditional way or provides heat instead of moxa floss (3.2).

EXAMPLE Moxibustion tube.

NOTE A moxibustion tube is a type of moxibustion device, such as a short moxa stick with a cardboard base and a moxa tube (made of cardboard) that is single use and developed as an alternative to direct moxibustion. Moxibustion devices include those accessories as defined by the manufacturers that are necessary to enable the normal use of moxibustion devices.

4.2.4 Non-moxa device

A piece of apparatus that does not use moxa floss (3.2) as a source of heat; a device used in place of the moxibustion device (4.2.3) to achieve the desired effect.

EXAMPLE Far-infrared radiation, electro [WHO IST 2007, 52.36].

NOTE A non-moxa device has a function of controlling its intensity. Intensity is an instance of magnitude of applied strength or power for non-moxa moxibustion.

4.2.5 Moxa device

A piece of apparatus that uses moxa floss (3.2) as the main combustion material and intended for single or repeated usage.

EXAMPLE Moxibustion tube, moxa burner [WHO IST 2007, 5.2.31].

NOTE A warm needle can be used for warm needling therapy (3.10) as a moxa device.

4.2.6 Moxibustion material

Combustible material comprising mainly moxa floss (3.2) and used in moxibustion (3.1) [ISO 18666:2015, 32].

EXAMPLE Moxa cone, moxa stick [WHO IST 2007, 5.2.4 and 12].

NOTE 1 The shape could be a cone, a stick, a cylinder, or a grain.

NOTE 2 The volume of this is double value.

NOTE 3 The volume could be calculated using its size or it could be measured.

NOTE 4 The mass could be measured and the hardness could be represented by its volume and weight.

NOTE 5 Quality of moxa floss (3.2) can be defined in various ways and its quality has an effect on the supplement and draining method (4.2.9).

4.2.7 Irritant

A substance that causes blistering and local congestion.

4.2.8 Performing method

The particular method used to implement moxa stick moxibustion (3.9).

EXAMPLE Gentle moxibustion, circling moxibustion, pecking sparrow moxibustion, suspended type [WHO IST 2007, 5.2.17 to 5.2.20].

4.2.9 Supplementation and draining method

A particular way of implementing moxibustion (3.1) to achieve the desired effect.

NOTE Supplementation means to activate and restore a decreased function to normal, while draining means to expel pathogenic factors and thus to restore hyperactivity to normal, the same as reinforcement and reduction [WHO IST 2007, 5.1.134].

4.2.10 Dose

The quantity of moxibustion material (4.2.6) used and the length of time that moxibustion (3.1) is applied.

4.3 Semantic links

4.3.1 is applied on

Materials and tools used for moxibustion treatment are laid or spread on a point of the human body.

The semantic link (B.2.2.3) between the moxibustion (3.1) and the moxibustion site (4.2.1) where moxibustion (3.1) is applied.

EXAMPLE 1 Moxibustion is applied on LI4.

EXAMPLE 2 Moxibustion is applied on Hegu.

NOTE LI4 is the abbreviation code for the acripuncture point, Hegu. Instead of an acupuncture point, the anatomical site or body part could be used but semantically precise names or codes of specific points are required for accuracy.

4.3.2 is used for

Materials, tools and methods are employed or applied for moxibustion treatment.

The semantic link (B.2.2.3) between moxibustion (3.1) and one among the insulating medium (4.2.2), the moxibustion device (4.2.3), the moxibustion material (4.2.6), the irritants (4.2.7), the performing method (4.2.8), the supplementation and draining method (4.2.9), which is used for the moxibustion (3.1).

EXAMPLE 1 Salt is used for moxibustion.

EXAMPLE 2 A moxibustion tube is used for moxibustion.

EXAMPLE 3 A moxa cone is used for moxibustion.

EXAMPLE 4 Irritants are used for moxibustion.

EXAMPLE 5 Circling method is used for moxibustion.

EXAMPLE 6 Supplementation method is used for moxibustion.

4.3.3 is placed on

Materials are put in or as if in a particular place or position.

The semantic link (B.2.2.3) between the insulating medium (4.2.2) and the moxibustion site (4.2.1) where moxibustion (3.1) is applied.

EXAMPLE Salt is placed on Hegu.

4.3.4 is used in

Materials are employed or applied in devices for treatment.

The semantic link (B.2.2.3) between the moxibustion material (4.2.6) and the moxibustion device (4.2.3) when the moxibustion device (4.2.3) is used for moxibustion (3.1) and the moxibustion material (4.2.6) is used in the moxibustion device (4.2.3) for moxibustion (3.1) as a heat source.

EXAMPLE A moxa stick is used in a moxibustion tube.

4.3.5 is used with

Methods are employed or applied when materials are used for treatment.

The semantic link (B.2.2.3) between the performing method (4.2.8) and the moxibustion material (4.2.6) when the moxibustion material (4.2.6) is used for moxibustion (3.1) as an indirect moxibustion (3.7).

EXAMPLE The circling method <u>is used with</u> a moxa stick for moxa stick moxibustion.

4.3.6 is applied for

Indicates the duration of time that materials, tools and methods are employed or applied for treatment.

The semantic link (B.2.2.3) between moxibustion (3.1) and the dose (4.2.10) to express the time or quantity used for moxibustion (3.1).

EXAMPLE 1 Moxibustion is applied for one moxa cone burning.

EXAMPLE 2 Moxibustion is applied for 10 min.

5 Conformance

To conform to EN 12264 and ISO 17115, any categorial structure for representation of acupuncture (moxibustion) in a system shall provide the following:

- categories (B.2.14) that organize the health care objects (A.3.1.1) for representation of acupuncture (moxibustion) and subdividing their representation in the domain (A.3.1.2);
- a list of the semantic links (B.2.2.3) authorized by domain constraints (B.2.3.2);
- the goal for which the categorial structure (B.2.4.5) is set;
- a list of minimal domain constraints (B.2.3.2) required by the goal of the categorial structure (B.2.4.5).

Annex A

(informative)

Selected definitions from ISO 1087-1:2000

The following terms and definitions are selected from ISO 1087-1:2000. They are included here as background to the key terms and definitions in <u>Clause 3</u> of this document. The numbering in this amex reflects the numbering in ISO 1087-1:2000, for consistency. 15,6843.3.2

A.3.1 Language and reality

A.3.1.1

object

anything perceivable or conceivable

Objects may be material (e.g. an engine, a sheet of paper, a diamond), immaterial (e.g. conversion ratio, ior the full PDF a project plan) or imagined (e.g. a unicorn).

A.3.1.2

subject field

domain

field of special knowledge

The borderlines of a subject field are defined from a purpose-related point of view. NOTE

A.3.2 Concept

A.3.2.1

concept

unit of knowledge created by a unique combination of characteristics (A.3.2.4)

Concepts are not necessarily bound to particular languages. They are, however, influenced by the social or cultural background which often leads to different categorizations.

A.3.2.4

characteristic

abstraction of a property of an object (A.3.1.1) or of a set of objects

Characteristics are used for describing concepts (A.3.2.1). NOTE

A.3.2.5

type of characteristics

category of characteristics (A.3.2.4) which serves as the criterion of subdivision when establishing concept systems (A.3.2.11)

The type of characteristics "colour" embraces characteristics (A.3.2.4) being red, blue, green, etc. The type of characteristics "material" embraces characteristics made of wood, metal, etc.

A.3.2.6

essential characteristic

characteristic (A.3.2.4) which is indispensable to understanding a concept (A.3.2.1)

A.3.2.7

delimiting characteristic

essential characteristic (A.3.2.6) used for distinguishing a concept (A.3.2.1) from related concepts

NOTE The delimiting characteristic support for the back may be used for distinguishing the concepts (A.3.2.1) "stool" and "chair".

A.3.2.8

extension

totality of objects (A.3.1.1) to which a concept (A.3.2.1) corresponds

A.3.2.9

intension

set of characteristics (A.3.2.4) which makes up the concept (A.3.2.1)

A.3.2.11

concept system

system of concepts

set of concepts (A.3.2.1) structured according to the relations among them

A.3.2.12

concept diagram

graphic representation of a concept system (A.3.2.11)

A.3.2.13

superordinate concept

broader concept

concept (A.3.2.1) which is either a generic concept (A.3.2.15) or a comprehensive concept (A.3.2.17)

A.3.2.14

subordinate concept

narrower concept

concept (A.3.2.1) which is either a specific concept (A.3.2.16) or a partitive concept (A.3.2.18)

A.3.2.15

generic concept

concept (A.3.2.1) in a generic relation (A.3.2.21) having the narrower intension (A.3.2.9)

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A.3.2.16

specific concept

concept (A.3.2.1) in a generic relation (A.3.2.21) having the broader intension (A.3.2.9)

A.3.2.17

comprehensive concept

concept (A.3.2.1) in a partitive relation (A.3.2.22) viewed as the whole

A.3.2.18

partitive concept

concept (A.3.2.1) in a partitive relation (A.3.2.22) viewed as one of the parts making up the whole

A.3.2.21

generic relation

genus-species relation

relation between two concepts (A.3.2.1) where the intension (A.3.2.9) of one of the concepts includes that of the other concept and at least one additional delimiting characteristic (A.3.2.7)

NOTE A generic relation exists between the concepts (A.3.2.1) "word" and "pronoun", "vehicle" and "car", "person" and "child".

A.3.2.22

partitive relation

part-whole relation

relation between two concepts (A.3.2.1) where one of the concepts constitutes the whole and the other concept a part of that whole

NOTE A partitive relation exists between the concepts (A.3.2.1) "week" and "day", "molecule" and "atom".

A.3.2.23

associative relation

pragmatic relation

relation between two concepts (A.3.2.1) having a non-hierarchical thematic connection by virtue of experience

NOTE An associative relation exists between the concepts (A.3.2.1) "education" and "teaching", "baking" and "oven".

A.3.3 Definitions

A.3.3.1

definition

representation of a concept (A.3.2.1) by a descriptive statement which serves to differentiate it from related concepts

A.3.3.2

intensional definition

definition (A.3.3.1) which describes the intension (A.3.2.9) of a concept (A.3.2.1) by stating the superordinate concept (A.3.2.13) and the delimiting characteristics (A.3.2.7)

NOTE The following is an example of an intensional definition for the concept (A.3.2.1) "incandescent lamp": incandescent lamp

electric lamp in which a filament is heated by an electric current in such a way that it emits light.

A.3.3.3

extensional definition

description of a concept (A.3.2.1) by enumerating all of its subordinate concepts (A.3.2.14) under one criterion of subdivision

EXAMPLE Noble gas (helium, neon, argon, crypton, xenon, or radon). Statement which provides further information on any part of a terminological entry (A.3.8.2).

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