A Proposed Revision of the International Classification of Diseases, 11th Revision, Chapter 26

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Abstract
In 2019, the World Health Assembly approved the International Classification of Diseases, 11th Revision (ICD-11), which included a traditional medicine chapter. This means that traditional medicine (TM) is incorporated into the mainstream medicine of the world. For TM to contribute to human health, the role of ICD-11, chapter 26 (ICD-11-26), is important. Since the ICD-11-26 is “a union set of harmonized traditional medicine conditions of the Chinese, Japanese, and Korean classifications,” it is advisable to supplement the essential patterns while maintaining the already adopted patterns. The ICD-11-26 was originated from the World Health Organization International Standard Terminologies on Traditional Medicine in the Western Pacific Region (WHO-IST), and the WHO-IST is the world’s most authoritative TM standard terminology system with an emphasis on traditional and conventional expression. In addition, it includes patterns that are widely used in TM clinical practice and have representative prescriptions at the same time. Therefore, future revisions of ICD-11-26 should make WHO-IST the main reference. Based on this spirit, this proposed revision is a modification of ICD-11-26’s structure, order, and expression (English translation) with more essential patterns.

Keywords
WHO-IST, ICD-11-Chapter 26, ICD-11-26, traditional medicine, pattern, revision, main reference

Submitted December 6, 2019; revised December 30, 2019; accepted January 24, 2020

Background
In May 2019, the World Health Assembly approved the International Classification of Diseases, 11th Revision (ICD-11), which included the names of disorders and patterns of traditional medicine (TM).1 It is very meaningful to the TM community since the Declaration of Alma-Ata in 19782 it was the first time international organizations recognized the role of TM. For TM to contribute to human health, the role of ICD-11, chapter 26 (ICD-11-26) is important, and the ICD-11-26, which contains TM disorders and patterns, like the development of ICD, must be continuously modified and supplemented in the future. The ICD-11-26 mentioned, “Coding should always include also a category from the chapters 1-24 of ICD”3 in addition to the disorder and pattern. The development of integrative medicine is possible through the comparison of the diagnosis of East-West medicine. Since pattern identification is a critical component for TM,4 this study is limited to patterns.

Since ICD-11-26 is “a union set of harmonized traditional medicine conditions of the Chinese, Japanese, and Korean classifications,”3 existing content should be preserved and inclusively supplemented with other essential patterns.

In 2004, the World Health Organization (WHO) Regional Office for the Western Pacific initiated TM standardization projects on the recognition that “standardization with evidence-based approaches” is the most urgent for the advancement of TM. Among the various standards in TM, such as acupuncture point locations, information, and clinical practice, the development of an international standard terminology (IST) was the very first step toward overall standardization of TM.5

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The WHO-IST was created through 4 years of collaboration by a number of experts, including China, Japan, Korea, the United States, and Australia. After 3 consultation meetings from 2004 to 2005, the draft was circulated 3 times for proofreading by English-speaking experts from around the world. At the consultation meetings, the expert working group showed its commitment through long discussions and debates, sometimes until the early hours of the morning, to craft an accurate definition for each term. Taking a glimpse at the contents of the book, a total of 3259 technical terminologies have been compiled from the commonly used in traditional Chinese medicine (TCM), Japanese (Kampo), Korean (KM), and Vietnamese medicine (TVM). Also, each term is expressed in English, and the original Chinese character and its definition are concisely expressed in English. The book covers 3106 terms from basic theories, diagnostics, diseases, various therapeutics including acupuncture and moxibustion, and even the English wordings of a total of 153 titles of important traditional medical classics published in those 4 countries.6

The WHO-IST was recognized as the only one set of TM terminology produced by the WHO and the most authoritative and reliable terminology reference in the field of TM at the global level; it also later became the origin of the ICD-11-26 via International Classification of Traditional Medicine.7 In addition, the WHO-IST emphasizes traditional and conventional expressions and includes patterns that are widely used in clinical practice and at the same time have representative prescriptions. If not, it will create confusion among the TM community that has been respecting their own traditions. Therefore, the WHO-IST would be the most important reference for the revision of ICD-11-26. Based on this background, a proposed revision of ICD-11-26 was devised as follows.

A Proposed Revision of the ICD-11-26

The pattern names below are italicized.

Structure

1. At the level of BlockL3, Combined organ patterns and Miscellaneous organ patterns should be added after Organ system patterns and the corresponding patterns should be classified separately.

The reason for setting up Combined organ patterns separately is that if 2 organs are contained in a single organ pattern, such as Liver and kidney yin deficiency pattern (SF3H), which belongs to the liver system patterns in the current version of the ICD-11-26, it is confusing to identify and unreasonable to define as a pattern solely under a specific organ system. In addition, the reason for the Miscellaneous organ patterns is that the uterus is classified as a miscellaneous organ, not belonging to the kidney system, in the visceral manifestation theory of traditional East Asian medicine. These are also based on the WHO-IST.

Order

1. According to the conventional way, it should be Yin, Yang, Exterior, Interior, Cold, Heat, Deficiency, and Excess pattern in order (principle-based patterns [TM1; BlockL2-SE7])
2. According to the conventional way, it should be SE80 Wind factor pattern (TM1), SE81 Cold factor pattern (TM1), SE85 Summer-heat factor pattern (TM1), SE82 Dampness factor pattern (TM1), SE83 Dryness factor pattern (TM1), SE84 Fire factor pattern (TM1), SE86 Pestilent factor pattern (TM1) in order (environmental factor patterns [TM1; BlockL2-SE8])
3. SF14 Phlegm-fire harassing the heart system pattern (TM1) should be sent to the heart system
4. Create Combined organ system patterns (TM1; BlockL3-SF) after Organ system patterns (TM1; BlockL3-SF), and include SF5H Liver and kidney yin deficiency pattern (TM1), SF5J Disharmony of liver and spleen systems pattern (TM1) Inclusions: Liver depression and spleen deficiency pattern (TM1); Imbalance between liver and spleen pattern (TM1), SF5K Disharmony of liver and stomach systems pattern (TM1). Inclusions: Liver qi invading the stomach pattern (TM1); Liver-stomach disharmony pattern (TM1); Disharmony between liver and stomach pattern (TM1), SF5L Liver fire invading the stomach system pattern (TM1), SF5M Liver fire invading the lung system pattern (TM1) Inclusions: Wood fire tormenting metal pattern (TM1), SF6G Heart and liver blood deficiency pattern (TM1), SF6H Heart and gallbladder qi deficiency pattern (TM1), SF6J Heart and spleen systems deficiency pattern (TM1), SF6K Heart and lung qi deficiency pattern (TM1), SF6L Heart and kidney systems disharmony pattern (TM1), SF6M Heart and kidney yang deficiency pattern (TM1), SF7L Lung and spleen deficiency pattern (TM1), SF7M Spleen and kidney yang deficiency pattern (TM1), SF7K Heart and kidney yin deficiency pattern (TM1)
5. Create Miscellaneous organ patterns (TM1; BlockL3-SF #), and include SF99 Blood and heat accumulation in the uterus pattern (TM1) Inclusions: Blood heat build-up in the uterus pattern (TM1), SF9A Phlegm obstructing the uterus pattern (TM1) Inclusions: Phlegm congealment in the uterus pattern (TM); Dampness phlegm obstructing the uterus pattern (TM), SF9B Dampness-heat in the uterus pattern (TM1), SF9C Cold stagnation in the uterus...
pattern (TM1) Inclusions: Cold congealment in the uterus pattern (TM1), SF9D Uterine deficiency cold pattern (TM1) Inclusions: Uterine yang deficiency pattern (TM1)

Expression (Translation)

1. Title of BlockL2
   a. Eight Principle patterns rather than Principle-based patterns (TM1; BlockL2-SE7)
   b. Disease cause (Exogenous pathogen) patterns rather than Environmental factor patterns (TM1; BlockL2-SE8)
   c. Qi, Blood, Fluid-humor, and Essence patterns rather than Body constituents patterns (TM1; BlockL2-SE9)
   d. Meridian patterns rather than Meridian and collateral patterns (TM1; BlockL2-SG2)
   e. Six-meridian stage patterns or Shanghan patterns rather than Six-stage patterns (TM1; BlockL2-SG6)
   f. Triple energizer patterns rather than Triple energizer stage patterns (TM1; BlockL2-SG7)

2. Title of BlockL3
   a. Fluid-humor patterns rather than Fluid patterns (TM1; BlockL3-SF1)

3. At the level of individual patterns
   a. Delete all the “system” in the individual pattern among the Organ system patterns. Since there is no consistency, and organs already contain the meaning of the system, they are redundant.
   b. SF10 Fluid deficiency pattern (TM1) should be replaced by Fluid-humor deficiency pattern (TM1)
   c. SF11 Fluid disturbance pattern (TM1) should be replaced by Water retention pattern (TM1)
   d. SF12 Dry-phlegm pattern (TM1) should be replaced by SF12 Dryness phlegm pattern
   e. SF13 Damp phlegm pattern (TM1) should be replaced by SF13 Dampness phlegm pattern
   f. Liver depression and qi stagnation pattern (TM1) of inclusions is a more conventional expression than SF57 Liver qi stagnation pattern (TM1)
   g. Cold stagnation in liver meridian pattern (TM1) of inclusions is a more conventional expression than SF5C Liver meridian cold stagnation pattern (TM1)
   h. SF63 Heart meridian obstruction pattern (TM1): vessel is a more conventional expression than meridian
   i. SF69 Fire harassing heart spirit pattern (TM1): Heat is a more conventional expression than Fire
   j. Heart Heart-kidney non-interaction pattern is a more conventional expression than SF6L Heart and kidney systems disharmony pattern (TM1)
   k. Spleen deficiency with dampness encumbrance pattern (TM1) of inclusions is more appropriate than SF79 Spleen deficiency with dampness accumulation pattern (TM1)
   l. Pattern of cold stagnating in stomach and intestines is more appropriate than SF7J Intestine cold stagnation pattern (TM1)
   m. SF7K Anxiety damaging the spleen system pattern (TM1): impairing is a more conventional expression than damaging
   n. Pattern of phlegm turbidity obstructing the lung is more appropriate than SF86 Turbid phlegm accumulation in the lung pattern (TM1)
   o. Intense lung heat pattern (TM1) of inclusions is more appropriate than SF88 Intense congestion of lung heat pattern (TM1)
   p. Kidney deficiency with water flooding pattern (TM1) of inclusions is more appropriate than SF92 Kidney qi deficiency with water retention pattern (TM1)
   q. Cold congealment in the uterus pattern (TM1) from inclusions is more appropriate than SF9C Cold stagnation in the uterus pattern (TM1)
   r. SG60 Early yang stage pattern (TM1) should be replaced by Greater yang pattern (TM1) of inclusions
   s. SG61 Middle yang stage pattern (TM1) should be replaced by Yang brightness pattern (TM1) of inclusions
   t. SG62 Late yang stage pattern (TM1) should be replaced by Lesser yang pattern (TM1) of inclusions
   u. SG63 Early yin stage pattern (TM1) should be replaced by Greater yin pattern (TM1) of inclusions
   v. SG64 Middle yin stage pattern (TM1) should be replaced by Lesser yin pattern (TM1) of inclusions
   w. SG65 Late yin stage patterns (TM1) should be replaced by Reverting yin pattern (TM1) of inclusions
   x. SH00 Nutrient qi and defense qi disharmony pattern (TM1) should be replaced by Disharmony between Nutrient and Defense pattern
   y. SH01 Heat in the nutrient phase pattern (TM1) should be replaced by Heat entering the nutrient phase pattern
   z. SH53 Small yang type yin deficit pattern (TM1) should be replaced by Small yang type noon fever due to yin deficit pattern
**Addition**

There are 256 pattern names in the pattern (TM1) part, ranging from SE70 to SJ3Z, but there are only 144 useful patterns that reflect the practical prescriptions, which is insufficient to support clinical practice in TM. The tradition of pattern identification and prescription in TM was started in “Shang Han Lun” as saying that “observing the pulse and the symptoms, identifying and prescription in TM was started in “Shang Han Lun” as saying that “observing the pulse and the symptoms, identifying what is wrong, and treating by the pattern.” The understanding of patterns began with the prescription, which is a combination of drugs to solve those disease patterns. As the basic theory, including physiology and pathology, was established, the pattern names were devised in consideration of disease phenomenon and prescription. They were first presented at the textbook level in China in the 1950s, and then gradually increased in number. Among them, the most essential patterns have been included in the WHO-IST through the recommendation and verification by the experts from 4 countries such as China, Japan, Korea, and Vietnam. In addition to the patterns adopted in ICD-11-26, 63 patterns that are frequently used in TM clinical practice were selected from the WHO-IST (Code number is from the WHO-IST).

1. Principle-based patterns (TM1; BlockL2-SE7; 8 Principle Patterns)
   - 2.5.30 yin collapse pattern, 2.5.31 yang collapse pattern, 2.5.35 half-exterior half interior pattern, 2.5.36 exterior cold pattern, 2.5.37 exterior heat pattern, 2.5.38 exterior deficiency pattern, 2.5.39 exterior excess pattern, 2.5.44 interior heat pattern, 2.5.51 pattern of exterior cold and interior heat, 2.5.55 pattern of internal block and external collapse, 2.5.64 heat block pattern, 2.5.65 pattern of extreme heat engendering wind (SF56), 2.5.69 deficiency cold pattern

2. Environmental factor patterns (TM1; BlockL2-SE8; Disease Cause Patterns)
   - 2.6.4 wind-stroke block pattern, 2.6.5 wind-stroke collapse pattern, 2.6.6 excess heat pattern, 2.6.12 internal dryness pattern, 2.6.13 cool dryness pattern, 2.6.14 warm dryness pattern, 2.6.15 pattern of dryness affecting the clear orifices, 2.6.19 pattern of deficiency fire flaming upward, 2.6.24 cold-phlegm pattern, 2.6.25 heat-phlegm pattern, 2.6.30 pattern of binding of phlegm and qi, 2.6.31 pattern of internal harassment of phlegm-heat, 2.6.41 pattern of dampness-heat pouring downward, 2.6.57 cold-dampness pattern, 2.6.58 dampness-heat pattern

3. Body constituents patterns (TM1; BlockL2-SE9; Qi-Blood-Fluid-Humor Patterns)
   - 2.7.6 qi block pattern, 2.7.14 sunken middle qi pattern, 2.7.15 pattern of qi deficiency with failure to constrain, 2.7.20 pattern of dual deficiency of qi and yin, 2.7.26 pattern of dual deficiency of qi and blood, 2.7.29 pattern of qi stagnation and blood stasis, 2.7.30 pattern of qi collapse following bleeding, 2.7.31 pattern of qi failing to control the blood, 2.7.33 pattern of blood deficiency engendering wind (SF56)

4. Organ system patterns (TM1; BlockL2-SF5; Visceral Patterns)
   - 2.9.16 pattern of phlegm clouding the heart spirit, 2.9.31 lung heat pattern, 2.9.37 pattern of heat toxin blocking the lung, 2.9.42 pattern of spleen failing in transportation, 2.9.54 spleen-stomach weakness pattern, 2.9.60 stomach yang deficiency pattern, 2.9.65 pattern of (blood) stasis in the stomach collateral, 2.9.67 pattern of blood deficiency and intestinal dryness, 2.9.69 intestinal dampness heat pattern, 2.9.70 pattern of intestinal heat and bowel excess, 2.9.72 pattern of yin deficiency with fire effulgence

5. Combined organ patterns
   - 2.9.6 pattern of heart deficiency with timidity, 2.9.120 lung-kidney yang deficiency pattern

6. Miscellaneous Organ Patterns
   - 2.10.4 pattern of (blood) stasis obstructing the uterus, 2.9.19 pattern of (blood) stasis obstructing the brain collateral

7. Six-stage patterns (TM1; BlockL2-SG6; Six-Meridian Patterns)
   - 2.11.23 pattern of heat entering blood chamber

8. Triple energizer (stage) patterns (TM1; BlockL2-SG7)
   - 2.13.7 lower energizer dampness-heat pattern

9. Four-phase patterns (TM1; BlockL2-SG8; Defense, Qi, Nutrient and Blood Patterns)
   - 2.12.9 pattern of dual blaze of qi-blood aspects, 2.12.12 pattern of exuberant heat stirring wind, 2.12.13 pattern of exuberant heat with bleeding, 2.12.14 pattern of heat entering the pericardium

**Discussion**

The ICD-11-26 is one of the most important milestones in the history of TM, and at the same time, it means that TM is integrated into the mainstream medicine of the world. In order to realize its real value, the ICD-11-26 must be continuously revised and supplemented under the leadership of WHO.

The future revisions of ICD-11-26 should rely on the WHO-IST, the most authoritative traditional medical terminology system at the global level, which emphasizes traditional and conventional expressions and contains patterns that are widely used in TM clinical practice. It is currently almost
impossible to provide the evidence for this revision. It is clear, however, that the ICD-11-26 originated from the WHO-IST so that views on the ICD-11-26 should be made in line with the WHO-IST. Thus, the basis for this amendment is not the personal opinion of the author, but a proposal that represents the WHO-IST as the achievement of collective intelligence made over the years by a number of experts in the field of TM and Chinese-English translation. The start of the revision should first identify the contradiction between the WHO-IST and the ICD-11-26 and adjust them to focus on the WHO-IST, which represents the core contents of TM. Only in this way can the ICD-11-26 be accepted stably in the TM community. Based on the above perspective, this proposed revision of the ICD-11-26, consisting of correction of structure, order, expression (translation), and addition of patterns, was prepared. Hopefully, it will devote to realize the confidence that “the ICD-11-26 will definitely change medicine around the world.”

Acknowledgments

I would like to express my special thanks of gratitude to Gi-in (The Man) Forum and Professor Omer Kucuk, Director of Emory Integrative Health and Medicine Center, for their valuable comments on this research.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by the research fund of Dankook University in 2018.

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References

1. World Health Organization. World Health Assembly update. https://www.who.int/news-room/detail/25-05-2019-world-health-assembly-update. Published May 25, 2019. Accessed October 3, 2019.
2. World Health Organization. Background of WHO Congress on Traditional Medicine. https://www.who.int/medicines/areas/traditional/congress/congress_background_info/en/. Accessed October 3, 2019.
3. World Health Organization. ICD-11 for mortality and morbidity statistics, 26 supplementary chapter traditional medicine conditions—module I. https://icd.who.int/dev11/l-m/en. Accessed October 3, 2019.
4. Zhang X, Tian R, Zhao C, et al. The use of pattern differentiation in WHO-registered traditional Chinese medicine trials—a systematic review. Eur J Integr Med. 2019;30:100945.
5. World Health Organization Western Pacific Regional Office. WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region. https://apps.who.int/iris/handle/10665/206952. Published 2007. Accessed February 7, 2020.
6. Choi SH, Chang IM. A milestone in codifying the wisdom of traditional oriental medicine: TCM, Kampo, TKM, TVM—WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region. Evid Based Complement Alternat Med. 2010;7:303-305.
7. Shim BS. Report on the development of WHO International Standard Terminologies and International Classification of Traditional Medicine/Western Pacific Regional Office. J Physiol Pathol Korean Med. 2007;21:776-780.
8. Zhang Z, Ye F, Wiseman N, Mitchell C, Feng Y. Shang Han Lun: On Cold Damage, Translation and Commentaries. Brookline, MA: Paradigm; 1999.
9. Nanjing University of Chinese Medicine. Introduction to Traditional Chinese Medicine. Shanghai, China: People’s Medical Publishing House; 1958.
10. Cyranoski D. Why Chinese medicine is heading for clinics around the world. Nature. https://www.nature.com/articles/d41586-018-06782-7. September 26, 2018, Accessed October 3, 2019.