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The Signs and Symptoms Comparison of Gastrointestinal Diseases between Classic Medicine and Iranian Traditional Medicine: A Hybrid Qualitative Study

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Authors' contributions

This work was carried out in collaboration among all authors. Authors SSES, MA and SVM designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author MGF managed the analyses of the study and managed the literature searches. All authors read and approved the final manuscript.

Article Information

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Original Research Article

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ABSTRACT

Background: Iranian traditional medicine is the oldest form of medical structure and is, in fact, an inseparable part of the life of various Iranian societies. On the other hand, gastrointestinal and liver diseases are one of the most common causes of morbidity in the world, including in Iran. Such that 10% of diseases are allocated to them and their diseases are spreading increasingly.

Objective: Considering the mentioned issues and the high prevalence of gastrointestinal symptoms, the aim of this study is to investigate the compliance of the symptoms of gastrointestinal diseases in classical medicine with Iranian traditional medicine from the viewpoint of Iranian traditional medicine experts.

Methods: This is a hybrid qualitative study which was conducted in three phases, including 1-

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theoretical, 2- field and 3- combinational phases. In the theoretical phase, two types of medical textbooks i.e. Iranian traditional and classic medicine textbooks. In the field stage, 13 academic Iranian traditional medicine experts with at least 5 years of work experiences in Iranian traditional medicine were interviewed. Then, in the combinational phase, the results of two early phases have been summarized using descriptive statistics.

Results: The results of the study show that 12 of the 40 symptoms in this study had a compliance of 100%. These 12 symptoms are Increase of Salivation, Pica, Borborygmi, Hiccups, Abdominal distention, Melena, Anal Fissure, Anal Stenosis, Cryptitis, Anal pruritus, Halitosis, Rectal pain; also, the results showed that 10 of the 40 symptoms in this study had over 70% compliance. These 10 symptoms are as Dysphagia, Belching, Regurgitation, Hematemesis, Flatulence, Increased Bowel sound, Abdominal pain, Diarrhea, Jaundice and Anal prolapse. Also, the percentage of compliance with the other 18 symptoms was less than 70%.

Conclusion: Considering the results of this study and the capabilities of Iranian medicine in relation to symptoms of gastrointestinal diseases with classical medicine, it is possible to design appropriate patterns to expose it. Also, an integrated approach to clinical research is recommended to improve the efficacy and safety of gastrointestinal treatments.

Keywords: Sign; symptom; gastrointestinal; traditional Persian medicine and classic medicine.

1. INTRODUCTION

Traditional and complementary medicine is a collection of knowledge, skills and activities that are established based on theoretical and culturally different experiences which are used in the prevention, diagnosis, and treatment of the physical and psychological conditions of patients. In recent years, researchers and physicians all around the world have paid increased attention to complementary medicine in such a way that, annually the use of complementary medicine in addition to commonly used medicine is used as a solution [1,2]. No complete success in common medicine in the definite treatment of many diseases on the one hand and the popular acceptance of complementary medicine for the non-use of chemical compounds and the use of herbal and natural medicines, on the other hand, are among the main factors of this attention [3]. The great attention paid by international organizations such as the WHO to the development and use of traditional medicine in the health services and treatment system has led to a greater appreciation of the valuable heritage of traditional medicine and taking action in relation to traditional treatments used in the different disease [4]. Iranian traditional medicine is the oldest form of medical structure and is, in fact, an inseparable part of the life of various Iranian societies. Traditional medicine in Iran, with several hundred years of existence, has a high capacity for the prevention and treatment of diseases. which this point solves many health and medical problems [5]. In traditional medicine textbooks, symptoms and signs have sometimes

been raised as illnesses and have been discussed independently in the titles of the book. In modern medicine texts symptom is defined as "Any mental evidence of a disease or condition of a patient that is felt by him". It also suggests a change in the patient's state of health, which indicates a physical or mental state, for example, pain and itching. A sign is an objective finding received by the examiner, for example, a rash of skin [6]. The gastrointestinal and liver diseases are one of the most common causes of morbidity in the world, including in Iran. So that they cause 10% of the deaths. And the incidence of this disease is increasing [7-9]. The prevalence of gastrointestinal symptoms is high. Among the symptoms of the gastrointestinal tract, heartburn, abdominal pain, diarrhoea, constipation, nausea, vomiting, and anorectal problems are among the most common symptoms [10]. In a study of Reviews of System, the prevalence of symptoms is as abdominal pain 8-54%, heartburn, 48-10%, regurgitation, 45-9%, and heartburn together with regurgitation were reported about 59-29% [11]. Considering the mentioned issues and the high prevalence of gastrointestinal symptoms the aim of this study was to investigate the compliance of the symptoms of gastrointestinal diseases in classical medicine with Iranian traditional medicine from the viewpoint of Iranian traditional medicine experts.

2. MATERIALS AND METHODS

This is a hybrid qualitative study carried out in three phases, including 1- theoretical, 2- field and, 3- combinational phases.

The theoretical phase was conducted in two steps. In step 1, the description, aetiology, physiology gastrointestinal sign and symptom in Iranian traditional medicine also the importance of matching in viewpoints of Iranian traditional medicine resources were studied. In step 2, we reviewed the sign and symptom using recent articles and projects, in addition, traditional resources. We searched these references via several reliable sources such as PubMed. Google Scholar, Scopus, Irandoc, Mag Iran, SID, Iran MEDEX, Iranian traditional book like Qanoon-fet-tteb. Tebbe-Aakbari, kamel-osssanae. Zakhire, Sharh-ol-asbab. using "sign", keywords including "symptom", "gastrointestinal", "Iranian traditional medicine", "comparison ", " classic medicine. The flowchart of the study can be seen in diagram 1.

2.2 Phase II: Data Collection

In the phase, we provided a semi-structural interview with 20 Iranian traditional experts, of whom 13 of them completed the interview. The experts had at least 5 years history of work experiences in Persian medicine at Tehran province. This interview was performed in October and November 2017. Each interview lasted for 30 to 50 minutes in which answers were saturated at 7th interview. Findings of the interview and analysis which are summarized in Table 1.

The interview contained the following subjects:

- The definition of gastrointestinal sign and symptom base on Iranian traditional and classic medicine.
- Request to match defined gastrointestinal sign and symptom-based on their experience.
- 3) Collecting the data and primary analysis
- Feedback of primary result presented to the expert and some problems or corrective comments have been made
- 5) Final result prepared and Tabled in Table1.

3. RESULTS

The comparison between Iranian traditional and classic medicine sign base on Iranian traditional experts presented in Table 1, the results of this study show that 12 of the 40 symptoms in this study had a compliance of 100%. These 12 symptoms are Increase of Salivation, Pica,

Borborygmi, Hiccups, Abdominal distention, Melena, Anal Fissure, Anal Stenosis, Cryptitis, Anal pruritus, Halitosis, Rectal pain; also, the results showed that 10 of the 40 symptoms in this study had over 70% compliance. These 10 symptoms are as Dysphagia, Belching, Regurgitation, Hematemesis, Flatulence, Increased Bowel sound, Abdominal pain, Diarrhea, Jaundice and Anal prolapse. Also, the percentage of compliance with the other 18 symptoms was less than 70%.

4. DISCUSSION

Considering the role of complementary medicine and traditional medicine in the treatment of known diseases, the aim of this study was to investigate the adaptation of the symptoms of gastrointestinal diseases of classical medicine to traditional medicine of Iran from the viewpoint of Iranian traditional medicine experts. The results of this study showed that from 40 identified symptoms in the library study phase the following results were shown: Compliance of 12 symptoms was 100%, compliance of 10 symptoms was more than 70%, and the compliance of 18 other symptoms was less than 70%. Of course, the first point in examining this compliance is that the low or high compliance of a symptom does not necessarily mean that it is of less or more important, and in some cases, the low compliance indicates more precision of traditional medicine in comparison with the recognition of the symptoms of the disease in the classical medicine. One of the reasons for low compliance in some common symptoms, such as nausea and vomiting is due to the continuity of the definitions and the causes of their causes in traditional medicine. The term nausea and vomiting is used in classical medicine to express the symptoms of nausea and vomiting. The same symptoms in traditional medicine are known as "tahawwo ghathayanqay" and "taqallobonnafs" [12] "gay", is called gastric motility, which results in the repulsing of the substance through the mouth [13], however, this movement is existed in "tahawwo" but there is not any substance repulsed. Traditional medicine, "ghathavanis" the primary cause of nausea, in which the person feels uncomfortable, but the movement of the substance has not yet happened. In all the above-mentioned items such as "tahawwoghathayanqay" the causative agent of the disease can either be related to the stomach itself or from another part of the gut [12]. If the substance is specifically related to the stomach, it is called "tagallob o nnafs" [14].

Other Iranian traditional sign		Classic medicine sign	Major Iranian traditional sign	
			Salivation (increase)	ehraqriq (100%)
			Halitosis	bakhharol- famm (100%)
	intib a gkhmeri (10%)	khon a q (30%)	Odynophagia	osrol- bal (60%)
	khonāq (11%)	ʻosrol- balʻ (33%)	Globus hystericus	intibagkhmeri (56%)
	other (17%)	khonāq (8%)	Dysphagia	ʻosrol- bal ʻ (75%)
thiql (9%)	tokhamah (8%)	daʿfol-hạdm (35%)	Dyspepsia	sū ʿol-haḍm (48%)
tokhamah (11%)	ḍaʿfol-hạdm (16%)	sūćol-haḍm (28%)	Indigestion	thiql (45%)
	waji [°] ol- mi ʿdah (10%)	nafkh (10%)	Belching	joshā (80%)
	jū ʿol- kalbī (8%)	jū ʿol-baqarī (29%)	Anorexia	Faqdshahwahol- (63%)
			Pica	waḥam (100%)
	other (11%)	jū ʿ (29%)	Polyphagia	jū °ol- kalbī (57%)
	other (24%)	jūćol-baqarī (18%)	Bulimia	jū ʿol- kalbī (58%)
	Horqatol-mi ʿdah (10%)	joshā (18%)	Regurgitaition	ḥomūḍah (72%)
		tahawwo ʿ (47%)	Nausea	ghathayān (53%)
	tahawwoʻ(11%)	inqilāb mi ʿdah (22%)	Vomiting	qayʿ (67%)
		other (15%)	Hematemesis	qay ʿod-dam (85%)
		other (14%)	Flatulence	nafkh (86%)
		other (11%)	Bowel sound (increase	qar a qir (89%)
			Borborygmi	qar a qir (100%)
			Hiccups	fow a q (100%)
	other (11%)	waja ʿol-fo ʿ a d (24%)	Heart burning	Horqatol-mi ʿdah (65%)
		tashannoj mi ʿdah (33%)	Abdominal rigidity	josʿ at ol- mi ʿdah (67%)
		other (23%)	Abdominal pain	waji ʿ ol- mi ʿdah (77%)
			Abdominal distention	nafkh (100%)
		birāzyabas (45%)	Constipation	ḥaṣr (55%)
		other (29%)	Diarrhoea	ishāl (71%)
zaḥīr (7%), khilfah (6%), zarab (6%)	hayḍah (10%)	ishāl (14%)	Dysentery	ishālol-dam (57%)
	other (37%)	khilfah (25%)	Dumping syndrome	zarab (38%)
	other (37%)	zaḥīr (25%)	Bloody stool	ishālol-dam (38%)
	other (16%)	qīyāmol-kabidī (17%)	Hematochezia	ishālol-dam (67%)
			Melena	ishalol-dam (100%)
		other (50%)	Stool,clay_colored	Zalaqol-ʿamʿāʿ (50%)
		other (8%)		yaraqan (92%)
			Anal Fissure	shiqaqmaq'ad (100%)
			Anal Stenosis Cryptitis	warammaq [°] ad (100%)
		other (33%)	Fecal incontinence	warammaq ad (100%) istirkhā sharaj (67%)
		other (1/%)		Knori liman an isevei
		other (14%)	Anal prolapse Anal pruritus	khorūjmaq ad (86%) hikkahmag ad (100%)

Table 1. The comparison between Iranian traditional and classic medicine symptom base onIranian traditional experts

To provide further evidence in this regard, it is possible to differentiate the definitions and causes of digestive problems in the classical and traditional medicine perspective. Digestive problems are described in classical medicine with the words Indigestion and Dyspepsia [15]. Meanwhile, in traditional medicine, this problem is expressed in terms of mild, moderate and severe digestion problem, as well as bloating, as more prominent manifestations [16-19]. In Iranian traditional medicine, the problem of digestion is considered as a syndrome in which the severity of the symptoms is expressed by different definitions. Mild digestion problems are defined as "da fol-hadm", moderate digestion problems as "su ' ol-hadm" and sever digestionproblems as "tokhamah" [20,21]. Consequently, the lack of convergence of views of traditional medicine professors can be justified [12]. For example; traditional medicine experts have reported dyspepsia as 48% "sū ' ol-hadm", 35% ofda folhadmand 8% of" tokhamah and indigestion as 45% thiql, 28% sū ' ol-hadm, 16% da fol-hadm, and 11% tokhamah.

Another important point to justify the mismatch of traditional medicine experts' opinions is that some of the symptoms cause some other symptoms. Constipation, for example, has been mentioned in traditional medicine with the term "Hasr", that means constraint. the equivalent of constipation and "birāzyabas which means (Dried faecal materials) is its cause [22-25] in this study. constipation is about 55% in compliance with Hasr and 45% with birāzyabas, Also, some of the symptoms or results of a patient in traditional medicine are equated with a sign or symptom in classical medicine. For example, swelling is due to Cryptitis, Anal Stenosis and Rectal pain [26].

5. CONCLUSION

Regarding the results of this study and the Iranian medicine's competence is in terms of the symptoms of gastrointestinal diseases with classical medicine, it is possible to design appropriate patterns for dealing with it. Also, an integrated approach to clinical research is recommended to improve the efficacy and safety of gastrointestinal treatments.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- 1. Hall HG, Griffiths DL, McKenna LG. The use of complementary and alternative medicine by pregnant women: A literature review. Midwifery. 2011;27(6):817-24.
- Tiran D. The use of herbs by pregnant and childbearing women: A risk-benefit assessment. Complementary Therapies in Nursing and Midwifery. 2003;9(4):176-81.
- 3. Van der Watt G, Laugharne J, Janca A. Complementary and alternative medicine in the treatment of anxiety and depression. Current Opinion in Psychiatry. 2008;21(1): 37-42.
- Adams J, Andrews G, Barnes J, Broom A, Magin P. Traditional, complementary and integrative medicine: An international reader. Ed: Macmillan International Higher Education; 2012.
- 5. Amri E, Kisangau DP. Ethnomedicinal study of plants used in villages around Kimboza forest reserve in Morogoro, Tanzania. Journal of Ethnobiology and Ethnomedicine. 2012;8(1):1.
- Glanze WD, Anderson K, Anderson LE. Mosby's medical, nursing, and allied health dictionary: Mosby; 1998.
- Massarrat MS, Tahaghoghi-Mehrizi S. Iranian national health survey: A brief report. Arch Iranian Med. 2002;5(2):73-9.
- Alireza S, Mehdi N, Ali M, Alireza M, Reza M, Parkin D. Cancer occurrence in Iran in 2002, an international perspective. Asian Pacific Journal of Cancer Prevention. 2005;6(3):359.
- Mahdavinia M, Bishehsari F, Ansari R, Norouzbeigi N, Khaleghinejad A, Hormazdi M, et al. Family history of colorectal cancer in Iran. BMC Cancer. 2005;5(1):112.
- Ganji A, Safavi M, Nouraie S, Nasseri-Moghadam S, Merat S, Vahedi H, et al. Digestive and liver diseases statistics in several referral centers in Tehran 2000-2004. Govaresh. 2006;11(1):33-8.

- 11. Heading RC. Prevalence of upper gastrointestinal symptoms in the general population: A systematic review. Scandinavian Journal of Gastroenterology Supplement. 1999;231:3-8.
- 12. Arzani M. TebbeAkbari. Qom, Iran: Institute EhyayeTebeTabiei; 2008.
- 13. Nazari M, Taghizadeh A, Bazzaz MM, Rakhshandeh H, Shokri S. Effect of medicine Persian remedy on chemotherapy induced nausea and vomiting in breast cancer: A double blind, randomized. crossover clinical trial. Electronic Physician. 2017;9(1):3535-43.
- 14. Ibn e Sina AAH M. Al-Qanon Fi Al-Tibb. Beirut, Lebanon: Alamy Le-Al-Matbooat Institute; 2005.
- Enck P, Azpiroz F, Boeckxstaens G, Elsenbruch S, Feinle-Bisset C, Holtmann G, et al. Functional dyspepsia. Nature Reviews Disease Primers. [Primer]. 2017;3:17081.
- Larijani B, Esfahani MM, Moghimi M, Shams Ardakani MR, Keshavarz M, Kordafshari G, et al. Prevention and treatment of flatulence from a traditional Persian medicine perspective. Iranian Red Crescent Medical Journal. 2016;18(4): e23664-e.
- Naseri M, Babaeian M, Ghaffari F, Kamalinejad M, Feizi A, Mazaheri M, et al. Bloating: Avicenna's perspective and modern medicine. Journal of Evidencebased Complementary & Alternative Medicine. 2016;21(2):154-9.
- Pasalar M, Nimrouzi M, Choopani R, Mosaddegh M, Kamalinejad M, Mohagheghzadeh A, et al. Functional dyspepsia: A new approach from traditional Persian medicine. Avicenna Journal of Phytomedicine. 2016;6(2):165-74.
- 19. Tafti LD, Shariatpanahi SM, Damghani MM, Javadi B. Traditional Persian topical

medications for gastrointestinal diseases. Iranian Journal of Basic Medical Sciences. 2017;20(3):222-41.

- Babaeian M, Borhani M, Hajiheidari M, Sharifi Olounabadi A, Elsagh M, Yavari M, et al. Gastrointestinal system in the viewpoint of traditional Iranian medicine. Journal of Islamic and Iranian Traditional Medicine. 2012;2(4):303-14.
- Hajiheidari M, Babaeian M, Mazaheri M, Elsagh M, Yavari M, Kamali M, et al. A review on causes of gastric pain in traditional Iranian medicine. Journal of Islamic and Iranian Traditional Medicine. 2012;2(4):337-44.
- 22. Badiee S, Nazari SM, Anushiravani M, Hosseini SMa-R, Noras M. A brief review on constipation in Persian and Chinese traditional medicine. Journal of Mazandaran University of Medical Sciences. 2015;25(123):222-9.
- Fattahi MR, Alorizi SME, Nimrouzi M, Zarshenas MM, Parvizi MM. A randomized clinical trial on treatment of chronic constipation by traditional persian medicine recommendations compared to allopathic medicine: A pilot study. International Journal of Preventive Medicine. 2017;8.
- Iraji N, Keshteli AH, Sadeghpour S, Daneshpajouhnejad P, Fazel M, Adibi P. Constipation in Iran: SEPAHAN systematic review No. 5. International Journal of Preventive Medicine. 2012;3(Suppl1):S34.
- 25. Ramkumar D, Rao SS. Efficacy and safety of traditional medical therapies for chronic constipation: Systematic review. The American Journal of Gastroenterology. 2005;100(4):936.
- Hashempur MH, Khademi F, Rahmanifard M, Zarshenas MM. An evidence-based study on medicinal plants for hemorrhoids in Medieval Persia. Journal of Evidencebased Complementary & Alternative Medicine. 2017;22(4):969-81.

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