



Contents lists available at ScienceDirect

Journal of Ayurveda and Integrative Medicine

journal homepage: <http://elsevier.com/locate/jaim>

Short Review

Universal significance of the principle of *Samanya* and *Vishesha* beyond AyurvedaDeep Narayan Pandey^{a, *}, Neha Pandey Prakash^b^a Rajasthan State Medicinal Plants Board, Department of Ayurveda, Government of Rajasthan, AYUSH Bhawan, Jaipur, Rajasthan, India^b Yajurved Ayurveda, 106 Roop Vilas, Usha Colony, Malviya Nagar, Jaipur 302017, Rajasthan, India

ARTICLE INFO

Article history:

Received 12 September 2017

Received in revised form

9 March 2018

Accepted 7 June 2018

Available online 3 November 2018

Keywords:

Principle of similarity and difference
Ayurveda

Charaka samhita

Evidence-based Ayurveda

Yukti-vyapashraya

ABSTRACT

There is a fundamental principle in Ayurveda, known as the principle of *Samanya* (similarity) and *Vishesha* (difference). While the principle was essentially propounded in the context of yuktivyapashraya (rational medicine) in Ayurveda, here we would like to argue that it has universal applicability in Ayurveda and beyond, across systems and domains of knowledge, including science, technology and humanities, as well as scientific, experiential and traditional knowledge systems. Taking examples of some of the most well-known problems of ecology, economy and society, we demonstrated the universal significance of the principle of *Samanya* and *Vishesha*. To illustrate our argument, we have discussed three brief cases, as diverse as family, climate governance, and poverty reduction, and discussed in the light of the *Samanya* and *Vishesha*. Evidently, these issues also have larger relevance to public health. Bringing an Ayurveda concept out from its premises is a new order of thinking. The path-breaking insights that were provided, have important implication for deciphering other basic principles of Ayurveda from the perspective of their wider applicability, and thus their robustness. We have indicated a way forward for future research in Ayurveda to develop knowledge-base for evidence-based clinical practice in contemporary society.

© 2018 Transdisciplinary University, Bangalore and World Ayurveda Foundation. Publishing Services by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

There is a fundamental principle in Ayurveda, often referred as the principle of *Samanya* (similarity) and *Vishesha* (difference). These principles came into being in the present form about 3000 years ago, and draws on the *Vaisheshika* school of thought. It has contributed immensely to the cause of rational therapy and diet in Ayurveda. In a simple verse, the principle of *Samanya* and *Vishesha* propounds that similarity of all substances is always the cause of increase and dissimilarity is the cause of decrease. Both have an impact by their application. Similarity brings unity, dissimilarity brings diversity. Similarity is understood as equal and dissimilarity is the opposite [1].

Although the principle was essentially developed in the context of yuktivyapashraya (rational medicine) in Ayurveda, here we argue that it has universal applicability across systems and domains

of knowledge, including science, technology and humanities, as well as scientific, experiential and traditional knowledge systems. Taking example of some of the most well-known problems of ecology, economy and society, and drawing on the published work on these issues, we have demonstrated extensive applicability of *Samanya* and *Vishesha*.

Novel approaches for preventing diseases and protecting health through holistic principles of Ayurveda and Integrative medicine are now gaining renewed momentum globally [2–6]. Exploring and comprehending wider applicability of fundamental principles of Ayurveda, can offer novel approaches to the contemporary scientific efforts for innovations in addressing the health challenges of our times [7,8].

Here, with this brief introduction, the remainder of the article is organized as follows. Section 2 briefly provides various connotations of *Samanya* and *Vishesha* as applicable in Ayurveda. This description is useful in clarifying the context, beyond which we extend its applicability. Subsequently, Section 3 elucidates three examples of universal applicability of the principles. Finally, concluding section discusses opportunities for future.

* Corresponding author.

E-mail: dnpandey@gmail.com

Peer review under responsibility of Transdisciplinary University, Bangalore.

2. *Samanya* and *Vishesha* as applicable in Ayurveda

Interdisciplinary and transdisciplinary research is becoming the norm in mainstream Ayurveda research community. Thus, for the benefit of a wider, interdisciplinary and transdisciplinary audience, a concise description of *Samanya* and *Vishesha* given in this section.

An exploration of different meanings of *Samanya* and *Vishesha* has varied according to different sources shall be in order here, so that the concept presented in succeeding section becomes clearly discernible.

The exact translation of *Samanya* and *Vishesha* vary according to authors, although that does not compromise fundamental meaning or applicability of the core concept in any way. For example, it has been called variously as principle of generality and specificity [9], the principle of sameness and antagonism [10], homologous and heterologous [11], and similar or dissimilar [12]. The generality (i.e., sameness, homology, similarity) unifies similar substances having similar properties and action, and specificity (i.e., particularity, antagonism, heterology, dissimilarity) denotes dissimilarity of substances. The generality promotes the increase of substances with similar properties, and particularity decreases substances with dissimilar properties.

This principle has come to Ayurveda from *Vaisheshika* school of thought, yet the sequence of listing has been changed in Ayurveda. *Samanya* and *Vishesha* are placed as first and second, unlike *Vaisheshika* darshana, where *dravya* and *guna* occupy that position. This departure seems to have been driven by the reality of developing a practical science of life from metaphysical and philosophical material. *Samanya* and *Vishesha* have great relevance throughout Ayurveda, and that probably defines resequencing in the list of six *padarthas*. This interesting turn in the history of Indian philosophy, evident in converting a philosophical concept to practical scientific application, made the *Samanya* and *Vishesha* widely applicable. Indeed, as we argue here, the principle has universal applicability beyond Ayurveda.

Driven by the necessity of a practical science of life, in addition to changed sequence, these terms also carry a fairly changed meaning. As per *Vaisheshika* school of thought, a property residing in many things denotes *Samanya* or general, while it denotes *Vishesha* if it distinguishes from others. In Ayurveda, however, *Samanya* has been used to convey unifying (*ekatvakaram*), resemblance, sameness or similarity (*tulyarthata*) in substances, and it is the cause of increase (*vriddhikaranam*). *Vishesha* on the other, is opposite to *Samanya*, and denotes antagonism or difference (*viparyayah*), separation (*prithaktvakrat*), and is the cause of decrease of all things (*hrasaheturvisheshashashcha*).

Various tissues (i.e., *dhatu*) in human body can develop if these are nourished by the nutrients similar in nature to them. For example, *shukra dhatu* can be nourished by intake of milk. Likewise, lifestyle interventions too affect *dosha* (*vata*, *pitta*, *kapha*) in the body such that hard exercise leads to increase in *vata* and regular immobility leads to increase of *kapha*. This depicts the principle of similarity (*Samanya*). On the contrary, the principle applicable to opposites like application of oil that has properties opposite to *vata*, and thus decreases aggravated *vata*, denotes the principle of dissimilarity (*Vishesha*).

Samanya can also be understood as likeness or homogeneity, and *Vishesha* as the unlikeness or heterogeneity between different things. For instance, the common denominator in two different species of medicinal plants would be that both are composed of the five basic elements of nature, while the *Vishesha* would be their specific attributes, *rasa* (taste), *guna* (quality), *virya* (potency), *vipaka* (taste after digestion), and *prabhava* (effect). It is also noteworthy that while diseases would be caused due to

aggravation of *tridosa*, the degree of their relative aggravation would determine the nature of treatment offered in Ayurvedic system. Finally, both these principles also help understand the properties of drugs and their actions, as well as the similarity and connectedness of humans and nature or microcosm and macrocosm [13].

3. Examples of universal applicability of *Samanya* and *Vishesha* beyond Ayurveda

The principle of *Samanya* and *Vishesha*, developed sometimes during 1000 BC, has universal applicability across knowledge systems, and domains including science, technology and humanities, as well as scientific, experiential and traditional knowledge systems. To illustrate our argument, three brief cases were chosen and applied the principle of *Samanya* and *Vishesha*, in the context of issues as diverse as family, climate governance, and poverty reduction. While these cases pertained to domains of society, ecology and economy, they also have relevance to health care in general.

3.1. Case of family

Behavioural corrections of teenage child for anger, smoking, alcohol abuse, smartphone obsession, irrational eating (all borne out of irrationality) are often addressed by parents by expression of anger (here too, borne out of irrationality) towards the child. This is a serious health issue in contemporary society world-wide. This tactic seldom solves the problem. Indeed, parental anger actually aggravates anger in teenage children (applicability of *Samanya*). On the contrary, successful approach that has been found robust in vast research on teenage-psychology is mentoring with love, compassion and empathy (i.e., *Vishesha* in this context) [14,15].

Children imitate what their parents do. A good behavioural conduct by parents, therefore, increases the good behaviour in children (i.e., *samanya*). A bad parental behaviour increases the bad behaviour too (i.e., *samanya*). Thus, controlling of *Arishadvarga* or enemies of human mind namely *kama* (lust), *krodha* (anger), *lobha* (greed), *moha* (attachment), *mada* (pride), and *matsarya* (jealousy) needs to be taught to children by example. Indeed, positive emotions can control negative emotions (i.e., *vishesha*). In this context, we need to answer a vital question. What if parents only preach and do not practice, and yet believe that the principle of *samanya* and *vishesha* will help them? It is a mistaken assumption for the reason that it is not a virtuous method to correct the behavioural-deficit in younger generation.

3.2. Case of climate change induced biodiversity depletion

Climate change has a large significance for human health, as shown by a large body of research. Indeed, negative anthropogenic impact on air-quality, hydrological cycle, landscape, seasonal cycles and climate change, and consequent disruption in human health also finds expression in the description of *janapadoddhvamsa*, which is becoming a thrust area of research in Ayurveda [16,17]. There is a vast body of research suggesting climate change is causing geographical redistribution of plant and animal species globally. These distributional shifts are leading to disruptive changes in ecosystems and ecological communities, and thus are already affecting human society [18]. This has implication for Ayurveda as well in terms of non-availability of specific medicinal plants that once existed in particular regions, forests and ecosystems [19]. Strategies that once worked for the conservation of medicinal plants in original ecosystems will not work in changed

circumstances, simply because of the altered biological diversity in impacted ecosystems. This challenge requires strategies that are capable of countering the negative impact of climate change in ecosystems and biodiversity therein (i.e., *Visheshha* in this context). For instance, 'protected areas as isolated habitat-islands', alone may not work due to climate change induced shift in natural range of specific species of plants. Given the enormity of the challenge for ecosystem and human health, the responses required to adapt to the climate-driven species redistribution would need to be very innovative and unprecedented. Strategies may include farming and germplasm conservation of important Ayurveda plants in climatically-altered zones suitable for the species (i.e., *Visheshha* in this context) [20]. Otherwise, in addition to rarity of medicinal plants, production of secondary metabolites responsible for therapeutic action will also be seriously compromised [21,22]. Planning and implementation for the maintenance of medicinal plants populations valued in Ayurveda would also require changing (i.e., *Visheshha* in this context) harvest, conservation and restoration strategies not merely within the protected areas, national parks and sanctuaries, but over the 'landscape-continuum' spanning cultural landscapes, agroecosystems and wilderness.

3.3. Case of poverty reduction and access to health care

In general, people in less-developed countries have less access to health services than those in economically developed countries. Likewise, within countries, poorer the people, lesser the accessibility of health services for them. It is not easy to discern the links between poverty and health, mainly because the hardest causal factor of poverty-trap to identify is the one that is universally present—poverty itself. With three billion people subsisting on the equivalent of \$2.50 per day globally, there is a serious poverty and health implication. Alleviating poverty, thus, is one of the most urgent challenges facing the world today. Among numerous solutions that have been implemented around the world for centuries, one solution to this problem has been to encourage the growth of small enterprises through microlending. A successful innovation has been to match citizen lenders with low-income entrepreneurs [23]. It has been found that lenders who form and join a team (*Samanya*), contribute significantly more compared with those who do not (i.e., *Visheshha*). The principle of *Samanya* and *Visheshha* can be clearly seen applicable in an another angle. Joining the team and strategy-implementation, in team of people similar in terms of wealth status, actually results in poverty reduction. While staying away (i.e., application of dissimilar dravya, guna and karma), result in strengthening of poverty-trap.

We wish to clarify here that the case we discussed, concentrates on microlending, and it may be a specific way to alleviate poverty, but we were not saying that microlending alone was the strategy for poverty alleviation. There are many other approaches that may bring similar reduction in poverty. For example, education can equally contribute to economic and financial independence, and consequently improved family health care.

4. Conclusion

In summary, as shown here through the analysis of three cases, the principle of *Samanya* and *Visheshha* has applicability not just in Ayurveda, but beyond as well. To the best of our knowledge, we are the first to propose and prove that the Ayurveda principles may not merely be applicable in Ayurveda; rather some of these are so robust that they have universal applicability even beyond Ayurveda, across systems and domains of knowledge, including science, technology and humanities, as well as scientific, experiential and

traditional knowledge systems. The finding has important implication in support of the necessity of exploring other principles of Ayurveda from the perspective of wider applicability, that in turn can demonstrate their robustness across knowledge domains. Another, implication was that scientific studies should make efforts to understand the relative impact of *Samanya Visheshha* in clinical settings. This can provide further insights on developing more robust clinical interventions. For instance, Ayurveda suggests numerous food items as healthy and wholesome for the body, yet to decide which type of diet would be more beneficial for patients suffering from a particular disease, can be subject of research to understand the degree of *Visheshha* or particularity. Such research shall be very helpful in developing therapeutic and prophylactic knowledge for evidence-based clinical practice in Ayurveda.

Sources of funding

None.

Conflicts of interest

None.

Acknowledgements

We are grateful to Government of Rajasthan, Department of Ayurveda, Jaipur. Insightful discussions and feedback on an earlier version of the paper with Prof. Dr. Rajesh Kotecha (Secretary, AYUSH, Government of India, New Delhi); Dr. V.B. Mishra (Ksharsutra Surgeon, Ayurvedapuram, Allahabad); Dr. Monika Agrawal (Baidaki Panchkarma Centre, Allahabad); Dr. Sanjeev Sharma (Director, National Institute of Ayurveda, Jaipur); Dr. Madhav Singh Baghel, Jaipur; Dr. Anupama Patra (Associate Professor, Shalakyatantra, Ayurjyoti Ayurvedic College & Hospital, Sirsa); Dr. Surendra A. Soni (Associate Professor, Department of Kayachikitsa, Government Ayurveda College, Vadodara, Gujarat); Dr. A. Rangaprasad Bhat, (Venkataramana Ayurveda College, Chennai); Dr. Sharad Trivedi (Sirmour, HP); Dr. Pankaj Chhayani (Assistant Professor, Department of Panchakarma, Nadiad); Dr. Pawan Madan (Jalandhar City, Punjab) are gratefully acknowledged. Insightful comments by two anonymous reviewers and the Editor have also been very useful.

References

- [1] Sharma PV, editor. Caraka samhita (text with English translation), sootasthan, dirghanjivitiya: chapter 1, verse 44-45. Varanasi: Chaukhambha Orientalia; 2012. p. 6.
- [2] Rao GHR. Integrative approach to health: challenges and opportunities. *J Ayurveda Integr Med* 2015;6:215–9.
- [3] Sujatha V. What could 'integrative' medicine mean? Social science perspectives on contemporary ayurveda. *J Ayurveda Integr Med* 2011;2:115–23.
- [4] Raut AA. Integrative endeavor for renaissance in ayurveda. *J Ayurveda Integr Med* 2011;2:5–8.
- [5] Shankar D. Conceptual framework for new models of integrative medicine. *J Ayurveda Integr Med* 2010;1:3–5.
- [6] Patwardhan B. Ayurveda and integrative medicine: riding a tiger. *J Ayurveda Integr Med* 2010;1:13–5.
- [7] Patwardhan B. Strengthening the ayurveda ecosystem. *J Ayurveda Integr Med* 2016;7:73–5.
- [8] Patwardhan B. Envisioning Ayush: historic opportunity for innovation and revitalization. *J Ayurveda Integr Med* 2014;5:67–70.
- [9] Valiathan M. The legacy of Caraka. Hyderabad: Universities Press; 2009.
- [10] Debnath PK, Banerjee S, Debnath P, Mitra A, Mukherjee PK, editor. Ayurveda - opportunities for developing safe and effective treatment choices for the future. Elsevier Inc; 2015. p. 428–43.
- [11] Singh RH. The basic tenets of ayurvedic dietetics and nutrition. In: Rastogi S, (Ed.) New York: Springer; p. 15–23.
- [12] Khanna A. Theoretical foundations of ancient indian medicine - part II. *Ancient Sci Life* 1988;3–4:126–33.

- [13] Viswanathan MV, Unnikrishnan PM, Komatsu K, Fushimi H, Basnet P. A brief introduction to Ayurvedic system of medicine and some of its problems. *Indian J Trad Knowl* 2003;2:159–69.
- [14] Fehr B, Sprecher S, Underwood LG. *The science of compassionate love: theory, research, and applications*. United Kingdom: John Wiley & Sons; 2009.
- [15] Kirby JN. The role of mindfulness and compassion in enhancing nurturing family environments. *Clin Psychol Sci Pract* 2016;23:142–57.
- [16] Sharma M. Thirst areas of research in ayurveda. *Ayu* 2011;32:1–2.
- [17] Samal J. Fundamental tenets of epidemiology in Ayurveda and their contemporary relevance. *Indian J Health Sci* 2016;9:20–6.
- [18] Pecl GT, Araújo MB, Bell JD, Blanchard J, Bonebrake TC, Chen IC, et al. Biodiversity redistribution under climate change: impacts on ecosystems and human well-being. *Science* 2017;355:6332.
- [19] Ratha KK, Mishra SS, Arya JC, Joshi GC. Impact of climate change on diversity of himalayan medicinal plant: a threat to ayurvedic system of medicine. *Int J Res Ayurveda Pharm* 2012;3:327–31.
- [20] Rana SK, Rana HK, Ghimire SK, Shrestha KK, Ranjitkar S. Predicting the impact of climate change on the distribution of two threatened Himalayan medicinal plants of liliaceae in Nepal. *J Mount Sci* 2017;14:558–70.
- [21] Gairola S, Shariff NM, Bhatt A, Kala CP. Influence of climate change on production of secondary chemicals in high altitude medicinal plants: issues needs immediate attention. *J Med Plants Res* 2010;4:1825–9.
- [22] Das M, Jain V, Malhotra S. Impact of climate change on medicinal and aromatic plants. *Indian J Agric Sci* 2016;86:1375–82.
- [23] Ai W, Chen R, Chen Y, Mei Q, Phillips W. Recommending teams promotes prosocial lending in online microfinance. *PNAS* 2016;113:14944–8.