

DOI: <https://doi.org/10.5281/zenodo.5791725>

Research Article



KMF Publishers

www.kmf-publishers.com/phas/

OPEN  ACCESS

COVID-19 and Ayurvedic Industry: Impact on Ancient Science & Healthcare Business

Dr Mamta Joshi

Department of Commerce, D.S.B Campus, Nainital, Kumaun University, Uttarakhand, India

ABSTRACT

The Covid-19 outbreak has turned out an opportunity for a recent noticeable increase in Ayurvedic goods and methods consumption in India. Hence, this paper aims to discover how consuming behaviour changed during Covid-19 time in terms of perceived health alertness and wellness perspective. Based on the collected data from 100 online respondents during the social distancing period due to Covid-19, the research analyses the role of Covid-19 as a moderator variable in the relationship between benefits perception of the consumer and their insight and health benefits toward traditional medical activities. The result shows Covid-19 plays a moderating role in consumer's awareness of utilities, which encourages consumer towards Ayurvedic goods. These findings can contribute to understanding consumer behaviour comprehensively, help Ayurvedic pharmacy companies and methods deal with similar situation as well as recommendations for the Government to support our ancient science and healthcare trade that has been adopted by cultures globally.

ARTICLE HISTORY

Received 15 September 2021

Revised 20 October 2021

Accepted 30 October 2021.

KEYWORDS

Perception; ayurvedic; products; ancient; science

CONTACT Dr Mamta Joshi, Assistant Professor, Department of Commerce, D.S.B Campus, Nainital, Kumaun University, Uttarakhand, India. Email: mamata_j2005@yahoo.com

PRELUDE

The corona virus pandemic has reminded the world of the importance of good health and strong and resilient immune systems. While effective

and curative medicines are indispensable in fighting such aggressive viruses. Ayurveda is an immortal time tested repository of the healthcare system in the world. This panacea could certainly open new horizons of health and wellness by

creating immense opportunities of entrepreneurship and business development contributing to the global economy (Singh et al 2016).

The growing geriatric population and its increased awareness of nutritional values and preventive healthcare have further augmented the global herbal supplements market. It is expected to reach \$ 8.5 billion by 2025 and expand at a Compound Annual Growth Rate (CAGR) of 6.2 per cent. India has been largely successful in improving mortality rate and curbing malnutrition (Banerjee et al 2015; Insider 2019; Rakshit 2020). The Ayurvedic system goes beyond a curative treatment and emphasises a healthy and all-encompassing lifestyle instead (Cain 2020; Das et al 2012). The ancient healthcare system focuses on understanding the individual in addition to the disease and advocates for a holistic and individualistic approach in diagnosis and management of diseases. Apart from an individualised diagnosis, Ayurvedic prognosis also includes the extensive use of herbs, exercise, diet, and changes in lifestyle (Nasri et al 2014, Raj et al 2016).

Given this, the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy (AYUSH) issued an advisory amid the coronavirus pandemic in India, highlighting Himalaya Drug Company, a market leader in the nutrition and wellness segment, confirmed that during the lockdown, there has been a significant increase in demand for immunity and wellness products containing pure herbs, along with propriety formulations such as Himalaya Drug

Company's 'Septilin' and 'Immusante' (Ministry of AYUSH 2021).

Factors such as mounting health concerns over the side-effects of modern medicine are also driving consumer adoption of Ayurvedic and natural products. These include personal care and health care which incorporate Ayurvedic nutraceuticals, Ayurvedic medicines and dietary supplements. Ayurvedic medicines developed as nutraceuticals provide the following benefits:

- Cellular health support
- Immune health support
- Bio-chemical/neuroendocrine support
- Nutritional support through phytonutrients

CHANGING CONSUMER

Key drivers for growth of Ayurvedic Science-

- Economic growth and rising incomes.
- Rising per capita expenditures on healthcare products
- Low cost of production
- Improvement in the distribution network
- Increase in accessibility in both urban and rural regions.
- Awareness programs and subsidies
- Rise in non-communicable and chronic diseases

PROMINENT PLAYERS IN THE INDIAN INDUSTRY

- Charak Pharma Private Ltd
- Dabur India Ltd
- Emami Ltd
- Herbolab India Private Ltd
- Himalaya drug Company Private Ltd
- Nagarjuna Herbal Concentrates Ltd
- Patanjali Ayurved Ltd
- Shahnaz Ayurveda Private Ltd
- Shree Baidyanath Ayurved Bhawan Private Ltd
- Sandu Pharmaceuticals Ltd

In 2017, the global Ayurvedic market was valued at \$ 4.57 Bn and by 2026, it is expected to reach \$ 14.62 Bn, growing at a CAGR of 16.14 per cent through the forecast period (Maximize Market Research 2021). This upward trend brings India into the limelight as one of the largest producers of raw materials for Ayurveda products. As herbal medicines become main stream in many developed countries, India can emerge as a strong market leader for herb-derived drugs and dietary supplements. The sale of turmeric, for instance, is increasing manifold every year and India, as one of the largest cultivators of this antiallergenic, can use this opportunity to establish its presence as a preferred global supplier of such raw materials used in the production of natural and Ayurvedic products.

This is highlighted in a report published by Statista on global Ayurveda exports. In India, the total export value of Ayurvedic and herbal

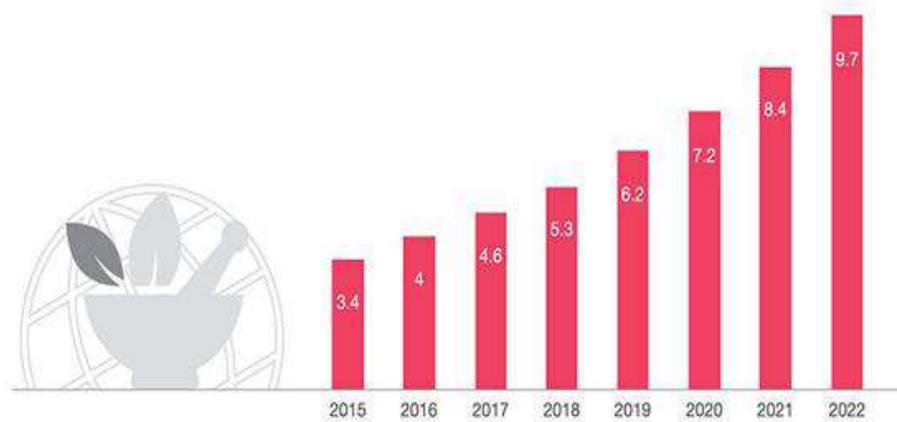
products amounted to \$ 446 million (Mn) in the 2019 fiscal year, marking a consistent increase in the total value of exports since FY 2015. Agriculture and allied sectors, of which Ayurvedic and herbal products are a part, contributed to about 8.6 per cent of India's total exports (STATISTA 2021).

According to Baidyanath, a leading industry player, India exports roughly five per cent of its manufactured products annually. Exports usually include ingredients or single ingredient products. Ingredients used in Ayurvedic products are sourced almost entirely from within India specific regions are known for their flourishing cultivation of certain ingredients.

Indian companies have also taken special initiatives to ensure the proper supply of raw materials, while positively impacting the farmer community. Himalaya Drug Company's Kisaan Mitra focuses on the economic empowerment of small and marginalised farmers across India. Baidyanath Group, similarly, has dedicated field research teams that gather data on the cultivation of herbs and disseminate its analysis among the farming community to better their results (Mohan 2019; Wele & Kolatkar 2016).

Despite the general upward global trend, the popularity of Ayurveda varies from one country to another. The Asia-Pacific (APAC) region spearheads the market growth due to the readily available raw materials and traditional presence of Ayurveda in the region while European countries like Italy, Russia, France and Germany, in particular, reflect the growing popularity.

Global Ayurveda Market (in \$ Bn)



OBJECTIVES

This research focuses on gaining a better understanding on how and in what respect the Ayurvedic medical science is effective in enhancing the effectiveness during this pandemics in the Indian context .The specific objectives are:

- To explore and explain how the ancient medical sector is expanding its market.
- To trace out the causes responsible for effective performance.
- To explore and suggest the best possible Ayurvedic medical methods for giving effective customer oriented services to meet the global challenges.

METHODOLOGY

This study is based on descriptive research design using online questionnaire as the key research instrument. Chi square was applied to test the research hypotheses in the study. Also based on

secondary data. The data required for the study are collected from the Government publications, Books, Journals, Websites and so on. The study covers a period from 2020-2021.

HYPOTHESIS

To fulfil the objectives of the study, following hypotheses were formulated:

H0: Health benefits and ayurvedic treatments are independent.

H1: Health benefits and ayurvedic treatments are not independent.

SAMPLE

The sample in this study comprise 100 online respondents during the social distancing period due to Covid-19, the research analyses the role of Covid-19 as a moderator variable in the relationship between benefits perception of the consumer and their insight and health benefits toward traditional medical activities. The result

shows Covid-19 plays a moderating role in consumer’s awareness of utilities, which encourages consumer towards Ayurvedic goods. Analysis of data has been done through chi square test, percentage and graphical representation.

INTERPRETATION AND ANALYSIS

A sample of 100 consumers was subjected to different types of ayurvedic goods as intensive, good and average and the effect was noted as above average, average and poor. The resulting data is presented in the table below using a 5%

level of significance to examine whether there is any relationship between the type of ayurvedic medical science and effectiveness during the current pandemic.

H0: Health benefits and ayurvedic treatments are independent.

H1: Health benefits and ayurvedic treatments are not independent.

The expected frequencies corresponding the i (th) row and the j(th) column in the contingency table are denoted by Eij,

Where i= 1,2,3

And j= 1,2,3

Effectiveness	Intensive	Good	Average	Total
Above Average	50	20	5	75
Average	15	5	2	22
Poor	1	1	1	03
Total	66	26	8	100

$E_{1,1} = 75 \cdot 66 / 100 = 49.5$ $E_{1,2} = 75 \cdot 26 / 100 = 19.5$ $E_{1,3} = 75 \cdot 8 / 100 = 6$ $E_{2,1} = 22 \cdot 66 / 100 = 14.52$ $E_{2,2} = 22 \cdot 26 / 100 = 5.72$ $E_{2,3} = 22 \cdot 8 / 100 = 1.76$ $E_{3,1} = 3 \cdot 66 / 100 = 1.98$ $E_{3,2} = 3 \cdot 26 / 100 = 0.78$ $E_{3,3} = 3 \cdot 8 / 100 = 0.24$
--

The table of observed and expected frequency corresponding to the i(th) row and the j(th)

column and the computation of the chi square (x)² is given in the table.

ROW/ COLUMN	Qij	Eij	(Oij-Eij) ²	Oij-Eij ² / Eij
1,1	50	49.5	0.25	0.0051
1,2	20	19.5	0.25	0.0129
1,3	5	6	1	0.167
2,1	15	14.52	0.2304	0.0159
2,2	5	5.72	0.5184	0.091
2,3	2	1.76	0.0576	0.033
3,1	1	1.98	0.9604	0.486
3,2	1	0.78	0.0484	0.063
3,3	1	0.24	0.5776	2.407

$$\text{Sample } \chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - E_{ij})^2}{E_{ij}} = 3.3268$$

The calculated value of $(\chi)^2$ is less than the table value of χ^2 at 5 % level of significance at 1 degree of freedom (3.841) there is not enough evidence to reject the null hypothesis. Hence the null hypothesis is accepted. Therefore there is no significance difference in health benefits and ayurvedic treatments.

A renewed interest in Ayurveda's holistic care coupled with the government's approval of 100 per cent foreign direct investment (FDI) in the sector has opened doors for all stakeholders to work together to harness Ayurveda's potential in India and across the world. Despite being a millennia-old tradition, the Ayurveda industry is actually at a nascent stage and therefore, primed for investments in several areas that are sure to yield high returns.

The vast scope for growth within the sector has allowed the division of investment opportunities into two distinct categories that will not only

advance industry knowledge but also Ayurveda's presence in consumer markets.

CONCLUSION AND FINDINGS

As this paper highlights, Ayurveda, as a segment, has scope for tremendous growth which can benefit from investments in identified spaces. They will allow Ayurveda to evolve itself to a form that is cognisant of the needs and trends of new generations. Today, the sector is more structured, has integrated technological advancements, environmental changes and evidence-based research methodologies to provide premium care. These advancements, built on Ayurveda's affordability and pre-existing user base, can help advance the system's benefits to the population at large.

Bringing Ayurveda into the mainstream requires a concerted effort which can be led by the Ministry of AYUSH. The ministry can also explore the incorporation of industry suggestions

towards designing standardisation and licensing norms that regularise Ayurveda products in India. The AYUSH Ministry can also help companies seeking overseas sales of their products, the requirements for which, as discussed, can be a cumbersome process. It can be streamlined with the ministry's intervention and outreach to other countries. As a positive move, the government recently introduced an economic stimulus package under the Atmanirbhar Bharat Abhiyan and has allotted INR 4,000 crore (\$ 535 Mn) to the herbal sector for promotion of herbal cultivation. The move aims to cover 10 lakh hectares (24.7 lakh acres) under herbal cultivation over a period of two years.

REFERENCES

- Banerjee, S., Debnath, P., & Debnath, P. K. (2015). Ayurnutrigenomics: Ayurveda-inspired personalized nutrition from inception to evidence, *Journal of Traditional and Complementary Medicine*, 19(4), 1-6.
- Cain, P. (2020). How does your immune system work?. *World Economic Forum*, April 7. Available at: <https://www.weforum.org/agenda/2020/04/immune-system-fight-off-disease-coronavirus-covid19-pandemic/>
- Das, L., Bhaumik, E., Raychaudhuri, U., & Chakraborty, R. (2012). Role of nutraceuticals in human health. *Journal of food science and technology*, 49(2), 173–183. <https://doi.org/10.1007/s13197-011-0269-4>
- Insider. (2019). The global herbal supplements market size is expected to reach USD 8.5 billion by 2025. Available at: <https://markets.businessinsider.com/news/stocks/the-global-herbal-supplements-market-size-is-expected-to-reach-8-5-billion-by-2025-1028047168>
- Maximize Market Research. (2021). Global Ayurvedic Market: Industry Analysis and Forecast (2021-2027) by Product, Mode of sale, Application, Distribution channel and Region. Available at: <https://www.maximizemarketresearch.com/market-report/global-ayurvedic-market/23882/>
- Ministry of AYUSH. (2021). Ayurveda's immunity boosting measures for self care during COVID 19 crisis. Available at: <https://www.mohfw.gov.in/pdf/ImmunityBoostingAYUSHAdvisory.pdf>
- Mohan, C. (2019). Himalaya Launches Quista kidz, A Super Tasty & Nutritional Supplement for Kids. Available at: <https://krishijagran.com/news/himalaya-launches-quista-kidz-a-super-tasty-nutritional-supplement-for-kids/>
- Nasri, H., Baradaran, A., Shirzad, H., & Rafieian-Kopaei, M. (2014). New concepts in nutraceuticals as alternative for pharmaceuticals. *International journal of preventive medicine*, 5(12), 1487–1499.
- Raj G. R. A., Uppinakudru, S., Rao, P. N., & Debnath, P. (2016). Nutraceuticals and Functional Foods in Ayurvedic Perspective. In book: *Nutraceuticals and Functional Foods* Edition: 42 Chapter: 10 Publisher: Studium Press LLC, Houston-Texas, USA Editors: JN Govil.
- Rakshit. A. (2020). Dabur, Himalaya witness spike in sales of Ayurvedic products amid Covid-19. *Business Standard*, May 2. Available at: https://www.business-standard.com/article/companies/dabur-himalaya-witness-spike-in-sales-of-ayurvedic-products-amid-covid-19-120042901042_1.html
- Singh, H. B., Bhargava, S. C., Ganeshan, S.; Kaur, R., Sethi, T., Sharma, M., Chauhan, M., Chauhan, N.,

- Chauhan, R. E., Chauhan, P. E., & Brahmachari, S. K. A. (2018). Big Data Analysis of Traditional Knowledge-based Ayurveda Medicine. *Progress in Preventive Medicine*, 3(5), p e0020 doi: 10.1097/pp9.000000000000020
- STATISTA. (2021). Export value of ayurvedic and herbal products from India from financial year 2015 to 2020. Available at: <https://www.statista.com/statistics/652418/export-value-of-ayurvedic-and-herbal-products-india/>
- Wele, A. D., & Kolatkar, A. (2016). Ayurvedic Herbs and Nutraceuticals: Can Ayurceuticals be the New Genre? *Nuffoods Spectrum*, December, 5. Available at: <https://www.nuffoodsspectrum.in/column/25/1651/ayurvedic-herbs-and-nutraceuticals-can-ayurceuticals-bethe-new-genre.html>