

Trataka Kriya for Eye Health: A Bibliometric Analysis

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Abstract

A large number of clinical trials have investigated the therapeutic value of trataka interventions. This bibliometric analysis is aimed to provide a comprehensive review of the characteristics of trataka kriya research focused on eye health. A bibliographic search in the database was conducted for publications from 1994 to 2023 using the keyword “trataka”. A total of 98 documents were retrieved, and 58% were original articles. Bibliometric data, data on participants, and intervention were extracted and analyzed descriptively. India has published the most articles (88%). All studies focused on Bahiranga Trataka practice which varied from ten minutes to one hour per day. An overall upward trend in research in this area is evident. This bibliometric analysis presents a complete up-to-date overview of the benefits of trataka kriya to date and the analysis suggests that trataka kriya is effective in improving eye health.

Keywords: Digital eye strain, Eye health, Trataka, Shatkriya, Yoga

Introduction

Yoga Darshana is one of the six viewpoints or philosophies from the Indian subcontinent. Each of the Darshana allows a seeker, a pathway to reality or “seeing” the truth (Kanojia, 2022). Yoga consists of various practices which positively affect the physical, mental, and energy body by aligning these dimensions. The practices described in Yoga Darshana treat yoga as a tool or an instrument that helps a practitioner turn inward and realize his/her reality, often known as Universal Consciousness, Truth, Nirvana, or Moksha.

Yoga practices which include the discipline of the self, postures, breathing exercises, and meditateness help bring balance to what is currently known as the mind-body-spiritual complex which is our body (Bhadane & Kanojia, 2018). Kriyas are powerful cleansing techniques - the word “kri” means action and therefore kriyas are internal actions that a practitioner performs as part of yogic practices. Regular practice of kriyas has many benefits including helping unlock and opening up energy channels or chakras and enhancing inner well-being.

Shatkriya are six cleansing techniques typically used in Hatha yoga to balance the tridoshas or the body's three humors - Vata, Pitta, and Kapha. The six shatkarmas are neti (cleansing of the nasal passages), dhouti (cleansing of the alimentary canal), nauli (strengthening of the abdominal organs), basti (cleansing of the large intestine), kapalbhata (frontal lobe cleansing), and trataka (concentrated gazing) (Swathi et al., 2021; Yoga Point, 2023). Trataka involves staring at a single point and is considered to bring clarity of vision (Vasan 2022).

Trataka basics and types

Trataka means to gaze steadily at a small stationary point. There are two primary ways of trataka practices - Antaranga (internal visualization) and Bahiranga (external gazing) (Malik 2011; Patra 2017). Bahiranga Trataka also known as jyoti trataka, is seen as a more manageable form of the practice because it involves gazing at a candle and palming techniques. Antaranga trataka entails staring at the internal flame that is visualized between the eyebrows while the eyes are closed.

According to Hatha Yoga Pradipika, trataka ameliorates eye diseases, removes inertia, and brings calm when one gazes steadily at a small mark until the eyes are filled with tears (Ramchandra 2008; Raghavendra 2015). Trataka kriya leads to the purification of the eyes and the mind. A growing number of clinical trials have investigated the therapeutic value of trataka interventions.

This bibliometric analysis aimed to provide a comprehensive review of the characteristics of trataka kriya research focused on eye health.

Methods

A thorough literature search was conducted in three electronic databases (PubMed, Scopus, and Google Scholar) from 1994 to 2023. We also searched the reference lists of included papers and review articles. Database searches yielded 98 abstracts, which included the keyword “trataka.” For abstracts that appeared to meet the review criteria, full-text articles were retrieved and assessed. Master’s or Ph.D. thesis were also included if the publication was not available for the conducted research. Five articles were excluded due to the unavailability of a full article and seven more due to no significant discussion regarding trataka benefits. Thirty-six articles looked into other benefits of trataka and twenty-nine articles were review or narrative articles which were not included. A total of twenty-six original research articles were examined in this bibliometric analysis which focused on trataka intervention for eyes (Fig 1). Bibliometric data, demographic information, and intervention details were extracted and analyzed descriptively.

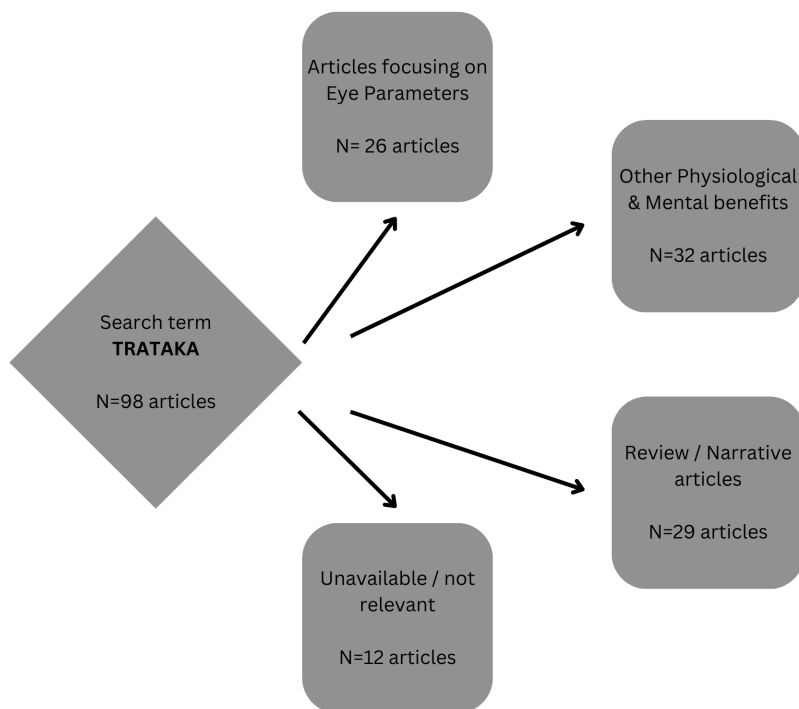


Figure 1: Search and Sorting Strategy for Trataka Articles.

Results and Discussion

The majority (88%) of research on trataka seems to be conducted in India. Egypt, Sri Lanka, USA each country had only one publication.

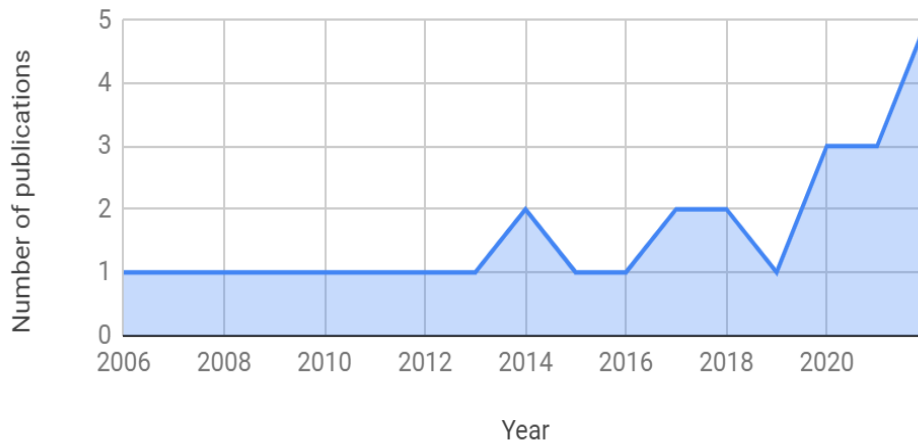


Figure 2: Number of Trataka Articles published over time.

Trataka research is on the rise; Figure 2 shows an increased interest in trataka research. The trend seems to increase steadily after 2013. Most research studies were conducted on young adults (58%) while only 20% focused on kids. Five studies had both kids and adults. The majority of the studies used both male and female populations, and only one study aimed at the male population. The sample size varied drastically from 5 - 291 subjects.

Maximum studies only used bahiranga trataka protocol while three studies included other yoga techniques such as pranayam and asanas as well. Duration of trataka intervention ranged from 1 day to 12 weeks while most study interventions were conducted between 2-8 weeks. Trataka practice varied between 10 min to one hour per day.

Twelve out of twenty-six studies were randomized control studies, while ten had a pre-post design. There was no significant trend in terms of the journal for publication; only four articles were published in the International Journal of Yoga.

The following parameters or tests were used as outcome measures:

Snellen's chart reading, clarity of vision, contrast sensitivity, fineness of objects, Dry eye questionnaire, refractive errors, visual acuity, blink rate, intraocular pressure, Visual Perception, Visual Fatigue Scale, CVS-Q, Shrimmer test, Critical flicker fusion test, Visual Evoked Potential.

Nine articles focused on myopia and the majority found a positive outcome. It was also concluded that trataka kriya was effective in reducing digital eye strain symptoms, and intraocular pressure. Overall eye health was significantly improved among subjects due to the trataka kriya practice.

Limitations

This bibliometric analysis had limitations due to missing data points. Few studies did not report all the demographic information of the subjects that participated in the trataka intervention. Also, some studies used other yoga aspects such as pranayam, and asana along with trataka practices and therefore it is difficult to attribute changes in outcome solely due to trataka.

Conclusion

The eye is an essential part of the sensory system and taking care of this precious and delicate organ has short and long-term benefits. Just as one keeps their living quarters neat and clean, keeping the internal organs clean and balanced is key to maintaining internal and external well-being. A surge in publications on trataka to mitigate eye disease-related symptoms has occurred despite challenges facing the field of yoga research, which include standardization and limitations in funding, time, and resources. Trataka-related research is an emerging field with copious scientific evidence and the growth of peer-reviewed articles in this area is expected to increase as the benefits encompass more than just an eye. The benefits of trataka are immense in contemporary times when the eyes are constantly stimulated, especially as human beings spend numerous hours in front of a computer screen and other devices given the work-from-home culture due to the pandemic.

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