Guinness world record attempt as a method to pivot the role of Yoga in Diabetes management

Atul Kumar Goyal^a, Sanjay Bhadada^b, Neeru Malik^c, Abhilasha Anand^d, Raman Kumar^e, Sridhar Bammidi^f, Rahul Tyagi^f, Shweta Modgil^f, Kaushal Sharma^f, Parul Bali^f, Deepak Kumar Pal^f, Saurabh Kumar^f, Navneet Kaur^g, Sushant Kaushal^f, Abha Tiwari^f, Jyoti Saini^f, Vinod Bhatt^f, Amit Chahal^g, Sharmila Rani^g, Jyoti Tiwari^g, Jagdeep Singh^g, Sudhir Kumar^g, Jaspreet Kaur^g, Arti Tiwari^g, Mandeep Kaur^g, Gagandeep Kaur^g, Kiran Sharma^g, Parminder Singh^h, Akshay Anand^{f*}, R. Nagarathnaⁱ, H. R. Nagendraⁱ

- ^aDepartment of Otolaryngology and Head & Neck Surgery (ENT), PGIMER, Chandigarh, India
- ^b Department of Endocrinology, PGIMER, Chandigarh, India
- ^c Smaj College of Education, Chandigarh
- d Healing Hospital, Chandigarh, India
- ^e Yoga Federation of India
- ^f Neuroscience Research lab, Department of Neurology, PGIMER-Chandigarh, India
- ⁹ Department of Physical Education, Panjab University, Chandigarh, India
- ^h Yoga Association, India
- ¹Directorate of Sports, Panjab University, Chandigarh, India
- ^j Division of Yoga and Physical Sciences, S-VYASA, Bengaluru.

KEY WORDS

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*Corresponding Author:

Akshay Anand, Professor

Neuroscience Research Lab
Department of Neurology
Postgraduate Institute of Medical
Education and Research, Chandigarh
India

Contact no +91 9914209090 E-mail: akshay1anand@rediffmail.com

ABSTRACT

Background: Attempts for Guinness world record have continued worldwide but these attempts were rarely aimed to promote public health. Diabetes is one of the rapidly growing lifestyle disorders in India which requires awareness reinforcements among the local population. In recent studies, Yoga has proved to be useful in lifestyle modification and Diabetes management. However, most individuals from rural and urban localities in the country are unaware of this fact. **Purpose:** The purpose was to organizing a nationwide attempt under the Niyantrit Madhumeh Bharat (NMB) programme to break the world record to be the largest Diabetes lesson, to spread awareness among general population.

Methods: Present article represents the perspective of the Chandigarh chapter of NMB programme and its experience in Guinness world record attempt. Diabetes awareness lesson was organized in the city as per the standards defined by the Guinness Book and outcomes of the entire campaign were assessed at the end of the campaign.

Result: Total 498 individuals participated in the campaign. Among them, 268 participants were questioned at the end of the campaign about the role of Yoga in Diabetes. 247 participants (92%) were agreed that Diabetes can be modified by Yoga and 9 participants (3%) disagreed. The remaining 12 participants (5%) did not give any response.

Conclusion: We noticed that most of the participants became aware of the role of Yoga in Diabetes.

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Introduction

Growing interest towards in setting world records has resulted in increased number of applications which Guinness book of world records receives every year across the world. To date, many new world records have been made and the previous ones have been surpassed [1] with a few attempts centered towards the promotion of public health. In 2014, new Guinness world record for largest hand hygiene campaign was made in which a total 277 participants performed hand hygiene before two officials and a few witnesses [1]. Diabetes is one of the most common lifestyle disorder rapidly growing in India [2] and recent

studies on Yoga intervention have shown that Diabetes could be modified by practising Yoga [3]. However, general awareness needs to be spread among local population [4] before any cost-effective intervention or policy, for its nationwide implementation, is considered.

The "Niyantrit Madhumeha Bharat (NMB)" or control Diabetes campaign was a nationwide research-based diabetes prevention program implemented in rural and urban parts of India [5]. Under the NMB program, the Diabetes screening camps were organized followed by Yoga sessions for those identified as pre-diabetics or diabetics at initial screening phase [5]. The Yoga Volunteers for Diabetes Management (YVDM) were the

Yoga volunteers who were trained for the implementation of standardized Yoga protocol for Diabetes, as a national effort [5]. YVDMs conducted the Yoga sessions at various locations across the country. At the end of NMB campaign, a nationwide attempt was made to create a new world record on Diabetes awareness on the International Day of Yoga i.e. June 21, 2017. Under this world record attempt, a 35-minute Diabetes awareness lesson was organized all over the country. The individuals who participated in this country wide-world record attempt were listed. The present case study represents the Chandigarh chapter of that nationwide world record attempt.

We organized a Guinness world record campaign in Chandigarh as a part of the nationwide campaign. The aim of this campaign was to spread the awareness among the local population about the role of Yoga in Diabetes management. At the end of the campaign, participants were questioned about the possible benefits of Yoga in Diabetes. The responses were compiled and are represented in the current article.

Methods

Propaganda

The campaign was conducted at the Gymnasium Hall, Panjab University, Chandigarh on 21st June 2017. The event was publicized in the whole city through the social media and local publicity means. A media release was also given to ensure more individuals were made aware of the event.

Inclusion/exclusion criteria

Individuals within the age range of 18 to 60 years were included in the campaign. Although the entry to the campaign was free and open for everyone, only those individuals who willingly agreed to witnessthe whole session were permitted to attend the campaign.

Entry to the campaign

The entry of participants was made on the basis of entry tickets which were distributed a day before as well as on the day of the campaign. One steward was assigned to each group of 50 participants. The entry of the participants began following a statement and the entry of their respective steward was duly recorded by videography. Each group of the 50 participants sat with their respective stewards in anassigned block.

Counting Method

For counting of participants, the Gymnasium venue hall was divided into 20 blocks. Each block was designed in such a way that 50 participants could sit and be supervised by one steward (Figure 1). Entry tickets counterfoils were also counted in order to match the number of participants.

Whistle

The session was started by the guest speaker after the 3 whistles were made by a certified individual who was qualified by an authorized agency in order to do the same. The

end of the lesson was marked by 3 whistles announced by the same individual.

Time Keeping

Two individuals, who were qualified from an authorized agency for timekeeping in National of International events, were present in the event. They recorded the timing of the session by using a calibrated stopwatch.

Witnesses

Two officially approved witnesses were invited to the premises before the start of the program and before the entry of participants and remained present throughout the session. One of the witnesses was a medical professional with registration to practice medicine and the other witnesses were a Gazetted officer. The witnesses noted the empty premises, the start of entry of participants, the number of people present in the session, the talk and its duration, timekeepers as well as the stewards. All the procedures were documented, duly counter signed by the witnesses.

Video Recording

Three video cameras and one still camera were used to capture the whole session. The first camera man recorded the session inside the premises. The second camera man initially recorded the empty premisesand then recorded the statement of two witnesses. After that, the second cameraman recorded the entry of all participants. The entry gate was closed soon after the entry of all participants but the recording continued throughout the session. After completion of the session, when participants started leaving the venue, the second cameraman recorded the exit gate until all the participants had left. The third camera man recorded the session from the rooftop. One photographer was also present during the whole session who captured the still pictures of the session from vantage points (Figure 1). The whole session was continuously recorded without switching off any cameras in order to minimize the scope for editing.

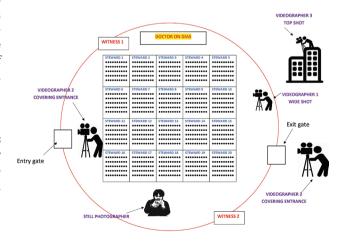


Fig. 1: Map designed for the campaign location representing the 20 blocks (□) with 50 volunteers (•) and one steward in each block, locations of entry/exit gates, video cameras and witnesses.

Diabetes lesson

The Diabetes lesson was conveyed by a Professor of Endocrinology in Hindi and the duration of the lesson was of 35 minutes. The contents of the lesson included a definition of Diabetes, updated on the methods for treatment, the recommendations for diet, the need for self-monitoring of blood glucose levels, the use of medical devices and role of Yoga in Diabetes. The lesson was given in accordance with the current national and international guidelines and it was also consistent with the health authority's recommendations.

End of the campaign

After the lesson was over, all the participant's exit was maintained from a singular exit door. The speaker, timekeepers, and the whistle person provided their closing statements. In the end, the video of the empty hall was recorded and the event ended with the closing statement of two witnesses.

Questionnaire

At the end of the campaign and before the exit of participants, they were asked about their views on the role of Yoga in Diabetes management. Out of 498 participants, the responses of only 268 participants could be recorded due to time constraints described above.

Data Analysis

The initial count of participants was obtained by the counting the entry ticket counterfoils. Initial count was then verified by the count of official witnesses to obtain the final count. The final count was then duly validated by counting the number of participant's through video recording and still photography. Responses of participants through questionnaire were documented in form number and percentage.

Results

A total of 498 participants attended the campaign. Out of those 498, responses from 268 participants were collected therefore the data from 268 participants is presented in results. Among 268 participants, 144 participants were males (54%) and 124 participants (46%) were females (Figure 2). 212 participants (79%) were belonging to the urban area while 56 participants (21%) were from the rural localities (Figure 3). Participants belonging to different age groups ranging from 20–60 years and education level was varied from illiterate to postgraduates and doctorate fellows. 247 individuals (96%) agreed that Diabetes could be prevented by Yoga whereas 9 individuals (4%) disagreed with it while remaining 12 individuals did not give any response (Figure 4).

Discussion

Yoga has been shown to be helpful in dealing with many lifestyle disorders [6,7] including Diabetes [3]. Therefore, attempts to break world record on International Day of Yoga by organising the Diabetes awareness lesson is a unique method of academic social responsibility. In this

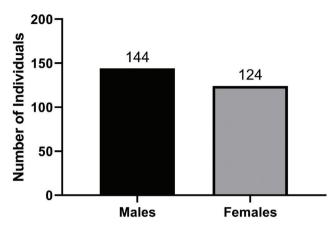


Fig. 2: Number of males and females participated in the campaign.

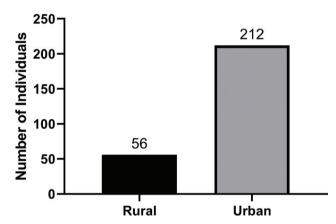


Fig. 3: Number of rural and urban participants in the campaign.

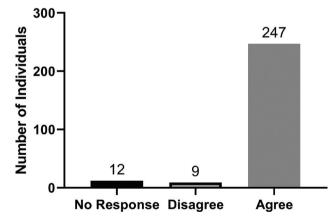


Fig. 4: Number of individual agreements towards the role of yoga in diabetes management.

present campaign a total of 498 individuals participated which is significantly higher than the previous Guinness record attempt on hand hygiene in which total 227 individuals had participated [1]. The sex ratio of the participants was almost equal but a number of participants from

the urban area were more when compared to rural which indicates the need for an awareness campaign in rural localities of the country. The result of the study was consistent with the previous study in which increased awareness among participants was noticed after the world record attempt. In that particular study, the increase in hand hygiene compliance was identified after world record attempt [1]. Similarly, in our study, we found an increased level of awareness among participants about the role of Yoga in Diabetes management which is indicated by the fact that 96% participants acknowledged Yoga as a means of Diabetes management. As a limitation of the present study, we were not able to verify the attention span of the audience when the lecture was being given as our main focus was on the number of participants. Another limitation of our assessment is the observational before-after design, which limits the strength of evidence.

Conclusion

By present campaign, the general public was found to be motivated to adopt a healthy lifestyle by introducing Yoga into their daily routine. Increased awareness about Diabetes and Yoga can be generated by engaging people in world record attempts that can be used as an important tool for creating awareness. The data can be used to integrate Yoga through forthcoming wellness centers for the management of lifestyle disorders, which lacks the established treatment.

Authorship contribution

AKG wrote the manuscript, SB gave diabetic lessons, AA was referee in the study, NM, RK, SB, RT, SM, KS, PB, DK, SK, NK, SK, AT, JS, VB, AC, SR, JT, JS, SK, JK, AT, MK, GK, KS participated in the study, PS provided premises to the study, AA conceptualize and edited the manuscript, Nagarathna was the principal investigator of the study and HRN envisioned the concept.

Ethical statement

The written informed consents were obtained from participants in the study.

Source of funding

Not applicable

Conflict of interest

No conflict of interest

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References

- Seto WH, Li K-H, Cheung CWY, Ching PTY, Cowling BJ. Breaking a Guinness World Record on Hand Sanitizing Relay, initiating a call for vital research in overcoming campaign fatigue for hand hygiene. F1000 Research. 2014;3.
- Tripathy JP, Thakur J, Jeet G, Chawla S, Jain S, Pal A, et al. Prevalence and risk factors of diabetes in a large community-based study in North India: results from a STEPS survey in Punjab, India. Diabetology & metabolic syndrome. 2017; 9(1): 8.
- Pal DK, Bhalla A, Bammidi S, Telles S, Kohli A, Kumar S, et al. Can Yoga-Based Diabetes Management Studies Facilitate Integrative Medicine in India Current Status and Future Directions. Integrative Medicine International. 2017; 4(3–4): 125–41.
- Singh A, Acharya AS, Dhiman B. Awareness regarding diabetes and its complications in adults: A cross-sectional study in an urban resettlement colony of east Delhi. Indian Journal of Medical Specialities. 2017.
- Anand A. Narendra Modi's Citizen-Centered Yoga for Diabetes Management Program: Will the Indian State Install Integrative Medicine in Premier Institutes. Integrative Medicine International. 2017; 4(1–2): 66–8.
- Anand A, Goyal AK, Bakshi J, Sharma K, Vir D, Anita BK: Yoga as an integrative approach for prevention and treatment of oral cancer. International Journal of Yoga. 2018; 11(3): 177–185.
- Goyal AK, Bakshi J, Rani S, Anita BK, Anand A: Is rajyoga helpful in maintaining patient's biochemical and hematological profile during breast cancer treatment? Journal of Complementary and Integrative Medicine. 2019; 16(3): 1–7.