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Self reported benefits of participating in group prayer in a hospital outpatient setting: A cross-sectional observational study

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ABSTRACT

Background: Prayer had long been used as a tool to bring hope among patients suffering with intractable diseases. Most clinical researches conducted so far on prayer were done upon indoor patients. Effects of prayer involving patients and health care providers in a hospital outpatient setting have never been explored.

Objectives: This cross sectional study aimed to observe the self-perceived changes post prayer among patients and hospital staff involved in the health care delivery and who actually have participated in the prayer sessions.

Material and method: Survey was conducted with the help of a structured questionnaire on routine OP days at Ayurveda –Arthritis Treatment and Advanced Research Center, Lucknow. Patients visiting the center for OP based consultation and hospital staff who has participated in any prayer session were eligible to participate in the survey.

Results: 49 hospital staff and 85 patients have participated in the survey. Among most important self-reported attributes following the prayer sessions in patients were Positive Attitude (84.70%), Optimism about cure (92.90%), Feeling of well-being (95.30%), Optimism about future (95.30%) and Changes in energy level (89.40%). Among hospital staff the important attributes were related to change in energy level (93.90%), increased empathy (93.90%), feeling of universal good (96.00%), less fatigue post prayer (69.40%), sustained effects (81.60%) and healthier feeling (81.60%).

Conclusion: This observational study suggests that a simple prayer session in outpatient department may be helpful in inculcating hope and building self-esteem among patients and can bring a better self-image, efficiency and connectedness in the hospital staff. Eventually, this may help in improving the outcomes and quality of care being provided at outpatient setting at any hospital.

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1. Introduction

Prayer has long been used by people as a tool presumed to provide prospective health benefits. In complex health situations not confining to the conventional understanding of health and disease and absence of effective remedies in the immediate sight compels the people to take a respite in spiritual or faith-based practice in a hope to get healed. Recent Covid –19 pandemic had given us an opportunity to look at the largest-ever observations on

how prayer might have helped the people to cope during the worst situations of their life [1]. Contrary to the conventional belief of looking at spirituality from the perspectives of patients to enable them to heal, the pandemic has given an altogether new meaning to spirituality from the physician's perspective. In situations where everything was uncertain and where their own health and life was at stake, this was important to see how taking a respite in spirituality has given a new meaning to the life and work of the treating physicians and other frontline health care personnel [2,3].

Spiritual healing could have been invoked in number of ways. Prayer seems to be one most practical and tangible forms of practicing it. Prayer for its complex impacts upon the human psyche, has been of much interest among scientists since long. Various forms of prayer including the chanting of mantra, meditative

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prayer, observance of silence and verbose prayers have been investigated for their possible health impacts [4,5]. Prayer done in isolation or done collectively was also found to have a different impact [6].

In hospital settings, observance of prayer as a routine is not a fairly common phenomenon. Although in every hospital, this is easy to find a place for prayer, this would be hard to find the people praying collectively. Inclusion of hospital staff in such prayer sessions is even a rarer phenomenon.

Ayurveda- Arthritis Treatment and Advanced Research Center (A-ATARC) at State Ayurvedic College and Hospital, Lucknow which emerged as a novel and first-ever Ayurveda referral center pertaining to the joint diseases in the country has started many novel and intuitive activities in the recent past to improve the quality of patient care. Initiation of a prayer session before the actual start of working in the OP department is one such activity that has been initiated at A-ATARC since February 2022. A routine prayer session at A-ATARC takes 3–5 min and it involves everyone available in the unit at the time of prayer irrespective of them being the patients, attendants or hospital staff. The benefits of such prayer sessions have been apparent and perceivable among all who participated in it. To objectively identify the perceived benefits of collective prayer in A-ATARC OP setting, a cross-sectional survey with the help of a structured questionnaire was done. The observations made in the cross-sectional study are suggestive of objective benefits of participating in collective prayer by everyone who participated in such activity. For musculo-skeletal disease conditions including autoimmune joint conditions where the cures are elusive and a long-term management strategy involving a multidisciplinary team is needed to be involved, such measures can emerge as simple, dependable and low cost add-on interventions to improve the overall outcome. At the same time, such measures are also suggested to emerge as a mean to build self-esteem among the healthcare providing team in order to optimize healthcare delivery at a given health care setting.

2. Material and methods

2.1. Prayer format and execution

A-ATARC is observing a prayer session before the initiation of every Out Patient day since February 2022. This has been a regular activity of the center involving everyone including the unit staff, trainees, research scholars, consultant, patients and their attendants available at the center in the morning. A typical prayer session comprises of a self-designed and standardized protocol that takes about 3–5 min and it involves induction, relaxation of mind and body, Controlled breathing, chanting of *Om* for three times, mutual thanks giving and thanks giving to universe (Table 1). Prayer participants during each prayer were instructed to follow the instructions given by the prayer initiator. Approximately 75 prayer sessions have been conducted so far having an average presence of 35 participants in each prayer session. Prayer had been

Table 1
Prayer format adopted at A-ATARC.

	Prayer Components	Approximate time taken	Details of Prayer Component
1	Induction	1 min	A brief explanation of objective of the activity by Center In-Charge, Other instructions by Nursing In-Charge
2	Relaxation	0.5 Minute	Instructions to close the eyes and relax the body and mind
3	Breathing Regulation	0.5 Minute	Instructions to take deep breath and exhale
4	Chanting of Mantra	1.5 Minute	Instruction to follow the chanting of <i>Om</i> as is done by the center In-charge
5	Thanks Giving	0.5 Minute	A mutual thanks giving by expression of thanks to everyone for everything tangible or intangible. Thanks to universe for providing us everything we need.
Approximately 4 min in total			

open to everyone visiting the center irrespective to their age, gender, religion, belief or diagnosis of the disease. Those who were not able to stand due to their joint-related problems or for some other reasons, were allowed to pray while sitting. Those who were not willing to participate in the prayer session were allowed to sit in OPD without participating in the prayer. Those who were unable to chant '*Om*' owing to their personal reasons, were allowed to remain silent or chant anything suiting to their personal belief. The prayer was conducted in the patient waiting area comprised of about 600 F² just outside the OPD.

2.2. Self-reporting format for the observation of benefits of participating in the prayer

A self-reporting and internally validated questionnaire format was prepared to report the perceived benefits of participating in a collective prayer session in a hospital setting. Two different sets of questionnaire were prepared to report the observations seen in patients and the health care providers. This was done in order to clearly differentiate the objectives and goals of prayer in two sub-populations and also to differentiate the benefits obtained in two groups.

Questionnaire contained the individual demographic details followed by 13 and 7 questions respectively for patients and health care providers. Questionnaire meant for observation of changes among patients were related to awareness, involvement, willingness, perceived generic changes, Changes in sickness perception and recommendation possibilities. These questions contained options like yes, no and don't know. Questions framed for reporting the observations in health care providers were related to individual liking, energy perception, empathy, feeling of universal good, generic benefits and health related benefits (Table 2). Observations made upon health care providers were done on a Likert scale containing a range of responses from 1 to 5 representing minimum to maximum agreement related to a statement.

Questionnaire prepared for observations related to patients and health care team was prepared and reviewed by a team of research scholars working at A-ATARC and was finally reviewed, edited and approved by the center in-charge.

2.3. Conduction of the survey to observe perceived benefits of participating in collective prayer session

The survey was conducted by one A-ATARC research scholar involved in the process of conducting the prayer sessions since beginning. The survey process was structured and followed the pattern of a self-introduction, explanation of objective of the survey and an enquiry about the willingness of the prospective participant to get involved in the study. Every potential participant of survey was asked for their consent to participate in the observational study. Post conduction IEC approval for the observational study was sought and obtained. The survey was conducted in the morning hours on routine OP days by randomly picking the patients waiting

Table 2
Components of questionnaire and specific questions.

Study participants	Components	Specific Questions
Patients and Attendants	Awareness	Have you been aware of any prayer activity being done at this center?
	Involvement	How many times have you participated in the prayer sessions?
	Willingness	Do you feel a self-willingness to participate in prayer session?
	Generic changes following a prayer session	Do you feel some positive changes in you after participating in prayer session? How long such changes are sustained after the prayer is completed?
	Specific changes following a prayer session	Do you feel optimistic after participating in the prayer?
Health care providers	Recommendation	Will you recommend other fellow patients to participate in the collective prayer sessions?
	Willingness	I like participating in prayer session
	Feeling of changes in energy level	I feel more energetic after participating in prayer
	Feeling of empathy	I feel more empathy to others after participating in prayer
	Feeling of universal good	I feel a sense of universal good after prayer
	Generic benefits	I feel less fatigue after prayer
	Health benefits	I feel healthier after participating in prayer

for the consultation process in the waiting area. For the survey of health care providers, every staff working in the unit was invited to participate in the survey.

3. Results

The actual survey was conducted during October–November 2022 at A-ATARC routine OPD. A total of 85 patients and 49 healthcare providers have consented to participate in the survey study. Individual surveys on every participant took 2–3 min to complete. Among 85 patients who participated in the study 62 (72.9%) were female, and 23 (27.1%) were male. Among 49 unit staff members 35 (71.4%) were female, and 14 (28.6%) were male.

Among patients, 66 (77.6%) were Hindu, 18 (21.2%) were Muslims and 1 (1.2%) was Christian as per their faith. A large proportion of study participants in patient’s group belong to house wives (53, 62.4%), service sector (14, 16.5%) and self-employed (8, 9.4%) category. Among health care providers, 23 (46.9%) were interns, 12 (24.5%) were research scholars and 9 (18.4%) were staff nurses.

Among patients, 79 (92.9%) have expressed their awareness about the morning prayer program being conducted at A-ATARC. The number of prayer sessions attended by the patient respondents ranged from 1 to 22 with a maximum frequency between 2 and 4 (70.6%) times. Among patient participants, 72 (84.7%) have expressed to feel positive changes following a prayer session. A few (4, 4.7%) however failed to find any such feeling and few others (9, 10.6%) have expressed their inability to reply to this question. Among those who observed positive impacts of prayer 42 (49.4%) reported the effect lasting for a few minutes whereas 22 (25.9%) found it lasting for a few hours post prayer. 79 (92.9%) patients have expressed that they developed a positive attitude and hopeful mindset towards their illness after getting involved in the prayer sessions. 81 patients (95.3%) expressed that they are feeling better after participating in the prayer sessions.

An optimistic feeling was observed by 81 (95.3%) participants. A higher energy level was observed among 76 (89.4%) participants whereas 9 (10.6%) people failed to observe any such change in their

energy level. 82 (96.5%) have agreed to recommend the prayer activities for the presumed benefits to others (Table 3). Among all respondents 79 (92.9%) had already been doing some kind of prayer earlier in their routine. Only 5 (5.9%) of all respondents have shown their acquaintance with such prayer sessions being conducted at any other health care settings. 80 (94.1%) have observed it for the first time A-ATARC.

Among healthcare providers working at A-ATARC, 46 (93.9%) expressed their pleasure in participating in the prayer session. 46 (93.8%) have expressed that they feel more energetic after participating in the prayer sessions. 46 (93.9%) have expressed that they feel more empathetic to patients after participating in prayer. 47 (96.0%) have shown that they uphold a feeling of universal good while praying. While asking about if less fatigability is felt after the prayer sessions, 9 (18.4%) did not agree with this observation, 5 (10.2%) did not reply and 34 (69.4%) agreed with the observation. The effects of prayer were reported to be sustained by 40 (81.6%) respondents. A similar proportion (40, 81.6%) was also observed for the feeling of being healthier following the prayer session.

4. Discussion

Prayer in its various practice forms, is known to have positive physical and psychological impacts [7]. Prayer is found to have impacts not only upon the people who are directly involved in it but also upon those who are witnessing the prayer performance irrespective of their active involvement. In conditions where disease-related complexities and management uncertainties keep the morale of patients low, this seems highly feasible if through some easy to do non pharmacological measures, the self-esteem of people may be rebuilt and a hope of doing better in the future may be re-instituted [8]. Psychotherapy has been an important component of the multidisciplinary team dealing with cases having a bad prognosis or where a lifetime management is required. Ayurveda proposes prayer as one form of psychotherapy aiming at rebuilding of hope among those who otherwise have become secondarily depressed due to their disease condition.

Table 3
Self-reported post prayer responses on various attributes.

Percentage of study participants responding positively to various attributes after attending the prayer sessions		Percentage of health care staff responding positively to various attributes after attending the prayer sessions	
Awareness	92.90%	Pleasant experience	93.90%
Positive Attitude	84.70%	Change in energy level	93.90%
Optimistic about cure	92.90%	Increased empathy	93.90%
Feeling of well-being	95.30%	Feeling of universal good	96%
Optimistic about future	95.30%	Feeling less fatigued post prayer	69.40%
Change in energy level	89.40%	Sustained benefits	81.60%
Recommendation to others	96.50%	Feeling healthier	81.60%

Musculoskeletal disease conditions constitute a large bulk of patients who pass through phasic depression after knowing that their disease is difficult to be treated or requires lifelong treatment. "Am I going to be disabled like this for rest of my life?" seems to be a universal worry among all who suffer from crippling joint diseases. Conventional pharmacological approaches do not have an answer to such questions and hence remain unable to address the stress related to hopelessness arising out of a disease condition.

Hope is a fundamental element of the process of recovery. Thereby it should be an essential component of the healing process [9]. There can be numerous ways of instituting hope in time of suffering. It can be inherent or can be learned by seeing the experiences of others. It can also come as a suggestion by someone whom you trust upon. A clinician or a healthcare team in total can play crucially in building hope among the patients. Hope is proposed to be a practical therapeutic tool having the capacity of optimization suiting to various clinical situations. Prayer has been an empirical tool to infuse hope since antiquity. Prayer is found to help with suffering in many ways. It allows the sickness-related anger and despair to vent, allows an introspection for one's own mistakes (many of them might have been the reason of current illness) and allows for a renewed support from eternity in order to recollect one's own strength and to heal [10,11].

Although, the evidence obtained through clinical trials on the effect of prayer have been equivocal, large number of individual case reports and series available in the medical literature support the beneficial role of prayer in the healing process. It therefore argues for a more serious examination of prayer as an intervention in healthcare settings.

How the spirituality and prayer might be impacting the life of care givers, was another serious yet less well - studied question. Conventionally, spirituality in a hospital setting means the availability of a place where one can pray as per his faith or the availability of a chaplain to pray on behalf of the sick [12,13]. It is observed that involvement in spiritual life and prayer can reduce the risk of developing the burnt out syndrome among highly stressed healthcare workers as it can positively affect their motivation, work performance and well-being [14]. Providing spiritual support seems to be an opportunity for the healthcare staff to show their human side and establish a gratifying patient-provider relationship [15].

A prayer involving the healthcare providers as well as the seekers therefore seems to be a less explored yet powerful phenomenon in a hospital setting. As it gives an opportunity to connect both of them together for a cause not limited to their own but collective to everyone around, this first time teaches them to pray for the good of self as well as of others. The effects of prayer largely depend upon the structure of the prayer and connectedness of the participants to the real objective. A prayer done ritualistically is not expected to give noticeable benefits as it lacks real emotional connectedness. A prayer done in hospital setting may have the benefits of being structured and as it is led by some senior healthcare professional, it is expected to be more than a mere ritual.

This A-ATARC study on collective prayer involving health care providers and seekers done at a rheumatology outpatient setting is eventually path breaker on many grounds. It first time approaches to observe the role of collective prayer in an Ayurveda outpatient setting. All earlier studies on prayer were done in the inpatients settings at ICU, CCU and MICUs [16]. No such study has ever been carried out upon the patients attending a rheumatology clinic and neither any study has attempted to find the impact of a collective prayer upon caregivers as well as care seekers. The study did not mean to evaluate the role of specific prayer methods in the ultimate outcome. As it was seen that the prayer sessions were open to everyone irrespective of their faith, belief and socioeconomic or

educational status, this was remarkable to note that the impact of such structured prayer sessions was beyond such boundaries and was not limited to the type of faith or belief. Building of hope and optimism among patients and feelings of compassion, gratification and higher energy level among care providers were among major outcomes reported in this study.

The study had its own limitations related to the method of inquiry, structure of prayer and objectivity of the observations. This was observed that during the prayer sessions, as some preferred remaining silent or were allowed to chant as per their belief. To minimize the observational bias from such participants, the survey clearly focused upon only those who have actively participated in the prayer session. Despite of these limitations, this study however opens a completely new dimension in patient care by proposing a more holistic healing approach by involving every stakeholder in the process. This is obvious to note that more stringent, objective and controlled studies would be required to verify the observations made in this study. Simplicity, ease of operation, zero cost and community involvement however are the biggest strength of this method prompting for more organized clinical trials to prove the outcomes and to bring this method down to the practice at many outdoor settings in the hospitals in India and across the world. This would also be interesting to look at the cultural and contextual applicability of prayer in various cultural settings and need of modification required to make such practices more viable and implementable.

5. Conclusion

In healthcare, prayer has been in vogue as a respite since antiquity. Clubbed with superstition, mysticisms and religiosity, it however remained neglected for large part of the history of scientific reawakening. Nevertheless, a renewed interest in spiritual healing has been observed in the recent past. Conventionally, prayer in a hospital setting mean a confined place where an individual in despair can offer prayers or a chaplain who can offer religious consolation to a dying soul or grieving relatives. Prayer as a tool to improve the process of recovery and feeling of well-being has been less explored and less trusted. Most research aiming to find any add-on benefits of prayer, individualized or intercessory have been limited to the seriously sick IPD patients. Prayer per se has never been a subject of interest for ambulatory patients and it was never been tried upon OP -based patients. Involving health care providers in a prayer session is a rare phenomenon and health care providers joining the health care seekers in a collective prayer session is rare. In this highly innovative study exploring the prospective benefits of participating in prayer in a hospital outpatient setting, a sustained and marked change in perception was observed post-prayer in patients as well as the hospital staff. Although preliminary in terms of research design, the observations made in this study warrants a serious exploration of using prayer as tool to inculcate hope and optimism among patients as well as among healthcare providers. In this context, this would also be interesting to look at the cultural and contextual applicability of prayer in various cultural settings and to see if any modification are required to make such practices more viable and implementable.

CRedit author statement

Sanjeev Rastogi: Conceptualization, Methodology, Investigation, Writing- Original draft preparation. Preeti Pandey: Investigation, Writing - Review & Editing,. Kiran Maurya: Investigation, Visualization, Resources. Ankita Verma: Investigation, Supervision. Sumit Kumar: Validation, Investigation. Chinmayi R: Writing- Reviewing and Editing, Girish Singh: Software, Formal analysis.

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Ethics approval

The study has obtained an expedited post-conduction ethical approval wide letter no. SAC/IEC/2023/124 Dated 02.06.2023.

Consent to participate

Consent to participate was obtained from every participant before their inclusion in the study.

Consent for publication

Consent for publication was obtained from every participant before inclusion of their data in the study.

Declaration of competing interest

No conflict of interest/competing interest is declared related to this research.

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