



## Research Article

# Impact of Arham Purushakar Meditation on overall well-being of Patients with Chronic Kidney Disease on Hemodialysis

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### Abstract

**Background:** Meditation has been considered as a potential intervention to relieve stress, depression and anxiety in patients with chronic kidney disease on hemodialysis. Taking it into consideration, the present study is taken up to know the impact of Arham purushakar meditation on the overall well-being of patients with chronic kidney disease on hemodialysis.

**Material and Methods:** 175 chronic kidney disease patients on hemodialysis were selected as the base line cases and a follow up of 12 months, 17 months and 21 months is done, to know the impact of Arham purushakar meditation on the overall well-being of the hemodialysis patients. The study was carried out after taking the approval of the Ethics Committee of Bhagwan Mahavir Medical Research Centre, and written consent from the patients for participation in the study.

**Results:** The results showed significant decrease in depression, anxiety and stress in hemodialysis patients practicing Arham purushakar meditation, and also improvement in other physical and medical conditions.

**Conclusions:** The results evidently showed significant improvement in psychological, medical and physical conditions in chronic kidney disease patients on hemodialysis practicing Arham purushakar meditation, confirming that the meditation is an effective complementary therapy for patients undergoing hemodialysis.

**Keywords:** Chronic Kidney Disease; Arham Purushakar Meditation; Depression; Anxiety; Stress

## **1. Introduction**

Chronic kidney disease is defined as the kidney damage manifested by abnormal albumin excretion or decreased kidney function. Clinicians treat the physical symptoms of the kidney disease patients on dialysis, but the emotional and psychological aspects are unrecognized. Although pharmacologic interventions are available for handling depression and anxiety in patients on haemodialysis, they are futile in most of the cases [1]. In such patients meditation plays an important role in overcoming depression and to improve the quality of life. Meditation has been considered as a potential intervention to relieve stress, depression and anxiety. Meditation is a mind-body intervention, and it helps to influence the mind to acclimatize to the body's physical symptoms through mechanisms of the parasympathetic nervous system and to decrease stress hormone levels [2].

Arham Purushakar Meditation (APM) is a unique, universal, nonpharmacological, non-invasive and easy to follow method of meditation technique revived from Agamas by Jain Gurumaharaj Shri. Shri. Praveen Rishiji and it suits for people of all ages. Basically, it is a Colour therapy, Mantra therapy and Form therapy. In the present study chronic kidney disease patients on haemodialysis practising Arham purushakar meditation were selected as base line cases and 12 months, 17 months and 21 months follow up is done to know the positive effect of Arham purushakar mediation on the overall well-being of the patients. The present study is the follow up of the pilot study which was carried out in haemodialysis patients practising Arham purushakar meditation for 3 months and the results showed that the Arham purushakar meditation intervention during hemodialysis sessions reduce the presence and severity of medical conditions and physical impairments in patients on hemodialysis [3]. This is the first study attempted to evaluate the impact of Arham purushakar meditation on chronic kidney disease patients on hemodialysis for a period of 21 months.

## **2. Materials and Methodology**

A total of 175 patients with chronic kidney disease undergoing hemodialysis were enrolled at Bhagwan Mahavir Dialysis Centres at Government Hospital, King Koti and Kukatpally, Hyderabad to study the impact of Arham purushakar meditation on medical conditions, physical impairments, psychological condition and overall well-being of the patients. Further follow-up was done for 12 months, 17 months and 21 months. Patients who were enrolled for the study were explained about the objective of the study and those who were willing to participate in the study were included after taking their informed consent.

The investigation was undertaken after obtaining the approval of the Institutional Ethics Committee of Bhagwan Mahavir Medical Research Centre. The patients were clinically examined and information on age, sex, medical history, surgical history, family history, socioeconomic status, literacy, etc. was recorded using a questionnaire especially prepared for this purpose. In addition, information on medical conditions, and physical impairments in patients and quality of life was recorded.

### **2.1 Inclusion criteria**

Patients in the age group of 18-75 years who were physically and mentally fit only were included in the study.

### **2.2 Exclusion criteria**

The patients who were physically not fit and having cancer, neurological disorders, ischemic heart disease, post coronary artery bypass grafting, those with comorbid CAD, uncontrolled hypertension, those with single working kidney, congenital renal malformations, or any other renal pathology or surgery in the past, patients with HIV, leprosy, tuberculosis were excluded from the study. Patients with dementia, acute psychotic symptoms, and acute suicidal tendency were also excluded. Patients included in the study group (meditation group) were counseled about the importance of the Arham Purushakar Meditation in the treatment of various diseases by counselors who were experts in this area and then the patients were trained till they acquired the meditation technique. Patients who were included in the meditation group were asked to practice meditation for 45 minutes before/ during hemodialysis three times a week. The patients were also provided information on the role of meditation in health care and were advised to practice the technique at home during the sessions to master the technique. Detailed information on the medical

conditions and physical impairments was collected from all the patients enrolled for meditation after Arham purushakar meditation intervention.

### **3. Results**

The results on the effect of Arham Purushakar Meditation on the overall well-being of the patients with chronic kidney disease undergoing hemodialysis are shown in Table 1. The patients practiced Arham purushakar meditation showed improvement in medical conditions, physical impairments and also psychological problems. 54.2% of the patients on hemodialysis, before practicing Arham purushakar meditation were very thirsty and used to consume more water which is not good for their health, as it may lead to swelling, discomfort, high blood pressure, shortness of breath and heart problems. After practicing the mediation, the water intake gradually reduced to 37.3% in 12 months followed by 36.3% in 17 months and 35.2% in 21 months. Muscle cramps are thought to occur in 1/3 to 2/3 of the dialysis patients due to imbalances in fluid and electrolytes. Initially 58.2% of dialysis patients had muscle cramps, but after practicing mediation the percentage of muscle cramps reduced to 41.2% in 3 months, 39% in 17 months and 38.6% in 21 months. Nausea is experienced by many patients during hemodialysis due to rapid drop in blood pressure or urea levels. 49.1% patients reported nausea before mediation, which slowly reduced to 39%, 38.1% and 29.5% after 12, 17 and 21 months of meditation respectively. Patients on hemodialysis are likely to develop high blood pressure. However, low blood pressure is reported in majority of the patients, which is the most common side effect of dialysis caused due to drop in fluid levels and in turn causes nausea and dizziness. Maintaining normal blood pressure is of utmost important in patients on dialysis. Before meditation 59.4% of the patients had low

blood pressure, but after practicing Arham purushakar meditation the percentage of patients with low blood pressure dropped to 45.2%, 39% and 31.8% after 12, 17 and 21 months of meditation.

Likewise, there was a significant improvement in the dialysis patients after practicing Arham purushakar meditation, who had weakness, stress, leg pain, disturbed sleep, headache, body pains swelling of face, hands and legs, giddiness, skin problems. While, no improvement was observed in constipation after practicing mediation for 3 months. However surprisingly, good improvement was

observed after practicing meditation for 17 and 21 months. A good improvement was also observed in appetite. Long term practice of Arham purushakar meditation for 21 months improved the capability of dialysis patients to carry out daily activities in an efficient manner. Depression and anxiety are the primary health problems observed in patients on hemodialysis. 65.1% of patients were suffering with depression and anxiety before meditation, while it was reduced to 45% and 43% respectively after practicing Arham purushakar meditation for 17 and 21 months. Arham purushakar meditation improved the overall quality of life in patients undergoing hemodialysis.

Sl. No.	Parameter	Base Line Cases	12 Months Cases	17 Months Cases	21 Months Cases
		(N=175)	(N=126)	(n=110)	(n=88)
1	Water intake	95 (54.2%)	47 (37.3%)	40 (36.3%)	31 (35.2%)
2	Muscle cramps	102 (58.2%)	52 (41.2%)	43 (39%)	34 (38.6%)
3	Bp (mmHg) low	104 (59.4%)	57 (45.2%)	43 (39%)	28 (31.8%)
4	Nausea	86 (49.1%)	50 (39%)	42 (38.1%)	26 (29.5%)
5	Weakness	90 (51.4%)	49 (38.8%)	42 (38.1%)	38 (43.1%)
6	Dry or itchy skin	27 (15.4%)	12 (9.5%)	10 (9.09%)	7 (7.9%)
7	Stress	99 (56.5%)	53 (42%)	42 (38.1%)	38 (43.1%)
7	Depression	114 (65.1%)	57 (45.2%)	50 (45.4%)	39 (43.1%)
8	Anxiety	114 (65.1%)	56 (44.4%)	46 (41.8%)	33 (37.5%)
9	Quality of life	65 (37.1%)	71 (56.3%)	60 (54.5%)	65 (73.8%)
8	Legs pains	109 (62.2%)	51 (40.4%)	41 (37.2%)	29 (32.9%)
9	Giddiness	87 (49.7%)	54 (42.8%)	41 (37.2%)	30 (34%)
10	Disturbed sleep	104 (59.4%)	55 (43.6%)	44 (40%)	52 (59%)
11	Headache	73 (41.7%)	47 (37.3%)	27 (24.5%)	21 (23.8%)
13	Body pains	89 (50.8%)	51 (40.4%)	40 (36.3%)	36 (40.9%)
14	Vision problem	20 (11.4%)	15 (11.9%)	14 (12.7%)	9 (10.2%)
15	Constipation	36 (20.5%)	26 (20.6%)	14 (12.7%)	10 (11.3%)

16	Swelling of face, hands, legs	82 (46.8%)	34 (26.9%)	28 (25.4%)	18 (20.4%)
17	Appetite	68 (38.8%)	42 (33.3%)	35 (31.8%)	23 (26.1%)
19	Daily activities	90 (51.4%)	51 (52.7%)	58 (52.7%)	30 (34%)

**Table 1:** Impact of Arham purushakar meditation on medical conditions, physical impairments and psychological aspects in patients with chronic kidney disease on hemodialysis therapy.

#### 4. Discussion

The challenges dialysis patients endure are enormous. Managing with disease, treatment requirements and most of the patients with chronic kidney disease are confronted with diet and fluid intake restrictions. In addition to that social, financial and family stressor makes patients on haemodialysis experience poor quality of life [4, 5]. Depression is most common in chronic kidney disease patients on dialysis [6, 7], and causes poor quality of life [8, 9], low adherence to dialysis treatment [10] increased mortality [11] and suicidal tendency [12]. Sleep disorders in patients on haemodialysis can be attributed to stress and anxiety of kidney disease and dialysis [13, 14]. A lot of popularity has been gained in research for meditation interventions in treating chronic kidney disease patients on haemodialysis.

Benson's relaxation technique or the "Relaxation Response" is the most often reported mindfulness meditation technique used in haemodialysis, which involves eye closing, muscle relaxation, breathing awareness, breathing out stating a word, and returning to the "word" when participants' thoughts are distracted [15]. It can be practised anywhere between 10 to 20 minutes and reduces anxiety and stress [16], and reassures increased physical activity [17] and improves overall quality of life of

haemodialysis patients [18]. Anapanasati meditation, is additional form of mindfulness meditation that has developed from Buddhist traditions with the main emphasis centered on the breath, not changing the breathing, but simply focusing on it [19]. Contemplation of the body, feelings, mind, and mental qualities are the four steps involved in breathing focus and usually practiced in Thailand. Anapanasti meditation has been testified to decrease depression, and improve the physical domain of the quality of life in haemodialysis patients [20]. Mindfulness meditation has been used as an intervention to help with deep sleep for people on dialysis in the United States [21]. Twin Hearts meditation is a mind-body technique based on using visualization and guided imagery with a Tibetan origin, showed a good improvement in haemodialysis patients.

Arham Purushakar Meditation (APM) is a unique, universal, nonpharmacological, non-invasive and easy to follow method of meditation technique revived from Agamas and developed by Upadhyay Shri. Praveen Rishiji [3], for people of all ages. Basically, it is a Colour therapy, Mantra therapy and Form therapy. The main postulate of technique is that soul has five major properties such as knowledge, emotion, character, relationships and planning and the five perfect colours (white, red, yellow, green, blue)

and five universal mantra therapies in Arham purushakar meditation helps to receive the energies of the particular element. Any individual can practise the meditation irrespective of caste, creed, religion and can benefit from it. Every colour has a certain frequency of wavelength and energy is associated with it. Thus, once the colour is absorbed, it stimulates the neuroendocrine system and releases hormones [3] and the neurotransmitters control the disease. Earlier studies have shown significant improvement in the medical conditions and physical impairments in haemodialysis patients practised Arham Purushakar Meditation [3]. The present study showed positive effects of Arham purushakar meditation on stress, depression, anxiety, sleep disorders and quality of life.

## 5. Conclusion

Therefore, practising Arham purushakar meditation may provide relief to patients on hemodialysis and helps to cope up with stress, depression, anxiety, sleep disorder and improves the overall quality of life. Further studies are warranted in larger sample size to understand the efficacy of Arham Purushakar Meditation in patients suffering from various multi factorial diseases such as Diabetes, Hypertension and Cancer.

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## Conflicts of Interest

None to declare.

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