

Effectiveness Of The MEDY Approach On Lifestyle Modification Among Hypertensive Patients

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Abstract

Background: Hypertension is a major public health challenge and a leading risk factor for cardiovascular morbidity and mortality, particularly in rural India where lifestyle modification awareness and practices are often inadequate. Non-pharmacological interventions such as meditation, yoga, physical exercise, and dietary regulation play a crucial role in blood pressure control.

Objective: To evaluate the effectiveness of the MEDY approach (Meditation, Exercise, Diet, and Yoga) on knowledge and practice regarding lifestyle modification among hypertensive patients in a selected rural area of Nandod Taluka, Narmada district, Gujarat.

Methodology: A true experimental pre-test and post-test control group design was adopted. The pilot study included 40 hypertensive patients (20 experimental and 20 control) selected using systematic random sampling. The experimental group received the MEDY intervention for four weeks, while the control group received routine care. Knowledge and practice were assessed using structured questionnaires.

Results: The experimental group showed a statistically significant improvement in both knowledge and practice scores after the MEDY intervention ($p < 0.05$), whereas no significant change was observed in the control group.

Conclusion: The MEDY approach is an effective, feasible, and culturally acceptable lifestyle intervention for improving knowledge and practice related to hypertension management in rural settings.

1. Introduction

Hypertension, a leading non-communicable disease globally, contributes significantly to cardiovascular morbidity and mortality. In India, the prevalence of hypertension is alarmingly high, especially in rural areas where awareness, treatment, and control remain suboptimal. Lifestyle interventions, such as meditation, physical exercise, diet regulation, and yoga—collectively referred to as the MEDY approach—offer a promising strategy for blood pressure management. This systematic review evaluates the evidence from a pilot study conducted in Nandod, Narmada, Gujarat to assess the effectiveness of the MEDY approach on knowledge and practice regarding lifestyle modification among hypertensive patients.

2. Objective

To systematically evaluate the impact of the MEDY approach on knowledge and practice levels regarding lifestyle modification among hypertensive individuals in rural Gujarat.

3. Methodology

Design

A true experimental, pre-test and post-test control group design was used. The study was conducted in two phases:

- Phase I: Assessment of knowledge.
- Phase II: Assessment of practice.

Sample

- **Pilot Sample Size:** 40 patients (20 control, 20 experimental).
- **Sampling Technique:** Systematic random sampling.
- **Criteria:** Patients aged 30–60, diagnosed with primary hypertension for more than 6 months, able to read/write Gujarati/English.

Intervention

The experimental group received the MEDY intervention for 4 weeks, once a week for 30 minutes per session. The control group received no intervention.

4. Data Collection Instruments

- **Structured Knowledge Questionnaire** (20 items).
- **Structured Practice Questionnaire** (20 items).
- Scores were categorized into poor (1–6), average (7–13), and good (14–20).

5. Results

Knowledge Score (Experimental Group)

Test	Mean	Mean Difference	t-value	Significance
Pre	10.65	-		
Post	17.30	6.65	13.63	Significant (p<0.05)

Practice Score (Experimental Group)

Test	Mean	Mean Difference	t-value	Significance
Pre	11.3	-		
Post	17.5	6.2	11.76	Significant (p<0.05)

Control Group Results

No statistically significant difference was observed in the control group between pre- and post-test scores for both knowledge and practice (t-values < 2.09).

6. Discussion

The pilot study findings strongly suggest that the MEDY approach has a statistically significant impact on enhancing knowledge and practice related to lifestyle modification among hypertensive patients. The intervention group's post-test scores showed substantial improvement compared to the control group. This aligns with existing literature that supports lifestyle interventions—including yoga, exercise, and diet—as effective non-pharmacological strategies for blood pressure control.

Moreover, the structured nature of the MEDY intervention and its delivery in a familiar, community-based rural setting may have contributed to its effectiveness. The use of simple language and the culturally acceptable nature of the MEDY components may also explain the observed positive outcomes.

7. Limitations

- Small sample size in the pilot phase.
- Short duration (4 weeks) of intervention and follow-up.
- Reliance on self-reported data for practice assessment.

8. Conclusion

The pilot study demonstrates that the MEDY approach significantly improves both knowledge and practice regarding lifestyle modification among hypertensive patients. These findings support the scalability of the intervention in larger populations and call for further longitudinal studies to assess long-term effects.

9. Recommendations

- Implement the MEDY approach in primary healthcare settings, especially in rural areas.
 - Conduct larger randomized controlled trials.
 - Include follow-up assessments at 3- and 6-month intervals to evaluate sustainability of behavioral change.
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