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YOGA INTERVENTION WITH DIETARY GUIDANCE FOR WEIGHT CONTROL AN OBSERVATIONAL CLINICAL STUDY ASSESSING THE IMPACT ON OBESITY

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Abstract:

As obesity emerges as a global health crisis, this study explores a novel approach to address its multifaceted challenges. Integrating yoga intervention with dietary guidance, our research aims to comprehensively understand their collective impact on obesity. Grounded in ancient practices, yoga's synergy with modern dietary strategies presents a unique lens for weight control. Our study distinguishes itself by proposing a nuanced adjustment in the intake format, offering a fresh outlook on obesity management. Employing a pre-post evaluation study, Yoga group participants exhibited a substantial decrease in BMI ($p < 0.0001$) and weight ($p < 0.0001$), contrasting with the control group. The visual representation underscores yoga's potential efficacy in promoting healthy weight management. The study contributes to the evolving landscape of integrative approaches for obesity management, suggesting personalized interventions for further exploration in diverse populations. This research marks a significant step towards holistic weight control strategies, combining ancient wisdom with contemporary insights.

Key Words: Obesity, Yoga intervention, Dietary guidance, BMI reduction, Integrative weight control

1. Introduction

Obesity, a burgeoning global health concern, poses multifaceted challenges that extend beyond physical well-being[1]. Conventional weight control methods often fall short, necessitating novel approaches that consider the interplay of physical activity, mental health, and dietary habits. This study embarks on a journey to explore an integrative model by combining yoga intervention with dietary guidance, seeking a comprehensive understanding of their collective impact on obesity.

As the prevalence of obesity rises, the need for innovative interventions becomes increasingly apparent[2]. While dietary modifications and exercise remain pivotal, the integration of holistic practices such as yoga holds promise in addressing not only the physical aspects of obesity but also its psychological dimensions[3]. Understanding the ancient roots of yoga and its potential synergy with modern dietary strategies provides a unique lens through which to approach weight control.

This study recognizes that a singular approach to obesity may prove insufficient. The fusion of yoga, a practice rooted in mind-body harmony, with dietary guidance offers a holistic avenue for tackling the intricate web of factors contributing to obesity. By delving into the synergy between these interventions, we aim to unearth insights that can reshape how we perceive and manage obesity.

Research Objectives

- Assess the impact of yoga intervention and dietary guidance on BMI.
- Evaluate changes in weight resulting from the combined approach.
- Provide insights into the feasibility and sustainability of integrating yoga and dietary guidance for long-term weight control.
- Contribute valuable data for shaping holistic and culturally sensitive approaches in the battle against obesity.

2. Literature Review

A plethora of studies have explored the impact of yoga on weight management, unraveling a complex interplay between yogic practices and physiological well-being. From dynamic

asanas to mindfulness techniques, evidence suggests that yoga not only aids in weight reduction but also fosters a sustainable and holistic approach to overall health[4]. This section delves into key findings, methodologies, and divergent outcomes from prior research endeavors. Dietary interventions stand as pillars in the realm of obesity management[5]. This subsection scrutinizes existing literature on various dietary approaches, ranging from calorie restriction to specific dietary patterns. By analyzing the effectiveness, challenges, and nuances of dietary guidance, we aim to contextualize its role in comprehensive obesity management when coupled with yoga practices.

While numerous studies have probed the symbiotic relationship between yoga, diet, and obesity[6], a distinct gap persists. Existing research primarily focuses on altering dietary habits, and advocating for specific nutritional plans or caloric restrictions. However, our study endeavors to chart unexplored territory by emphasizing a unique approach. Instead of advocating substantial alterations in dietary habits, our intervention proposes a distinctive paradigm – a nuanced adjustment in the intake format. This novel perspective aims to bridge an existing gap in understanding the impact of yoga coupled with dietary guidance, not on dietary content, but on the manner of intake, offering a fresh outlook on obesity management strategies.

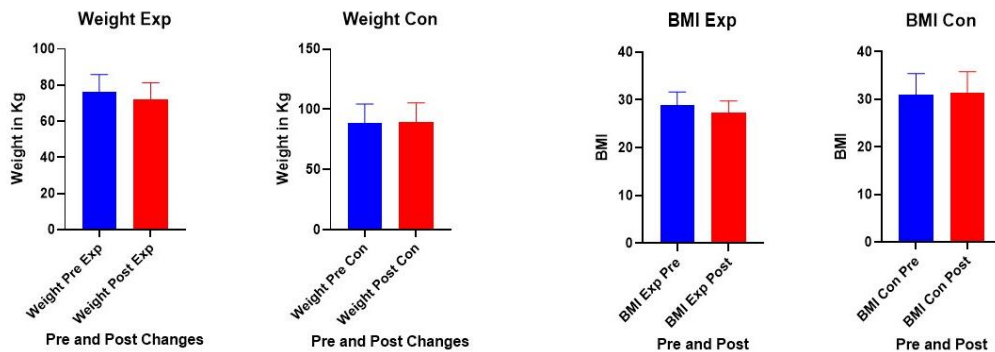
3. Methodology

This research employs a pre-post evaluation study design to assess the impact of a unique yoga intervention combined with dietary guidance on individuals with a BMI exceeding 25, following Asian Pacific standards. The study includes healthy participants meeting the BMI criteria. Exclusion criteria involve individuals with major health issues or recent surgeries within the last six months. A total of 23 participants were enrolled, with 16 in the yoga and diet guidance intervention group and 7 in the control group. Standard case history procedures are followed, including anthropometric measurements and clinical reports for those available, to comprehend the participants' medical condition. Standard statistical tools are employed for comparing pre and post results. The paired t-test is applied to discern any significant changes resulting from the intervention.

4. Results

The collected data were meticulously analyzed using appropriate statistical tools to unveil the effects of the unique yoga intervention combined with dietary guidance. The findings indicate significant changes in various parameters before and after the study.

Detailed results, including statistical significance represented by p-values, are presented in the accompanying tables and graphs. These offer a comprehensive overview of the impact of the intervention on the selected parameters, providing valuable insights into the efficacy of the implemented approach.



The graph illustrates the compelling impact of yoga interventions on Body Mass Index (BMI) and weight among participants in the yoga group compared to the control group. Over the intervention period, the yoga group experienced a statistically significant and noteworthy decrease in both BMI and weight. In contrast, the control group exhibited no substantial changes in these parameters. This visual representation underscores the potential efficacy of yoga in promoting healthy weight management, highlighting its significance as a holistic approach to combatting obesity.

Table 1: Statistical Analysis Results: Yoga Intervention vs. Control Group

Parameters	Groups	Mean Values		p-value
		Pre	Post	
BMI	Yoga Group(n=16)	28.90	27.26	<0.0001
	Control Group(n=7)	30.95	31.32	0.0698
Weight	Yoga Group(n=16)	76.20	71.91	<0.0001
	Control Group(n=7)	88.62	89.58	0.0828

The results of the statistical analysis comparing the Yoga Intervention Group (Yoga Group) and the Control Group are presented in Table 1. The Yoga Group demonstrated a significant reduction in BMI from a mean of 28.90 pre-intervention to 27.26 post-intervention ($p < 0.0001$). This indicates a notable decrease in body mass index after the yoga and diet suggestion intervention. Similarly, the Yoga Group exhibited a significant decrease in weight, with a mean reduction from 76.20 to 71.91 ($p < 0.0001$). In contrast, the Control Group showed no significant changes in BMI (30.95 to 31.32, $p = 0.0698$) or weight (88.62 to 89.58, $p = 0.0828$). These findings suggest that the yoga intervention had a distinct impact on BMI and weight, emphasizing its potential effectiveness in promoting weight management compared to the control group.

5. Discussion

Our findings on the significant reduction in BMI and weight through yoga intervention align with prior studies, emphasizing yoga's efficacy in weight management [7]. Notably, our study extends this understanding by incorporating dietary suggestions alongside yoga, creating a comprehensive approach to address obesity.

The integration of yoga with dietary guidance presents a holistic strategy for managing weight and promoting overall health. This synergy is supported by research indicating that combining yoga with dietary modifications enhances the effectiveness of weight management programs [8]. Our study reinforces the idea that a multimodal approach, involving both physical and dietary aspects, holds promise for obesity interventions.

Acknowledging the limitations, such as the relatively short intervention period and the sample size, it is essential to recognize that our study lays the groundwork for future investigations. Despite these constraints, the combined approach of yoga and dietary guidance offers a novel avenue for research, emphasizing the need for further exploration into integrative strategies for obesity management.

The outcomes of this study suggest that integrating dietary guidance with yoga interventions can yield more robust outcomes in terms of BMI and weight reduction. This aligns with the concept of holistic well-being, recognizing the interplay between physical activity and

nutrition in achieving optimal health. Further research in this direction holds promise for refining lifestyle interventions in the context of obesity.

6. Conclusion

In conclusion, our study provides compelling evidence for the efficacy of integrating yoga with dietary guidance, emphasizing intake format, in managing obesity. The observed reductions in BMI and weight align with established literature, positioning this approach as a valuable addition to holistic weight control strategies. While acknowledging study limitations, these findings hold promise for personalized interventions and warrant further exploration in larger, diverse populations. This research contributes to the evolving landscape of integrative approaches to obesity management.

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