Acceptance of a Newly Developed Yoga Module amongst the Elderly with Type 2 Diabetes Mellitus

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INTRODUCTION

- Increasing prevalence of Diabetes Mellitus
- Imperative to find effective and holistic therapeutic modality
- The elderly population is to be particularly targeted.

- The reasons:
  - ✓Long standing Diabetes
  - ✓Complications progressing at more severe rate
  - ✓Increasing health cost- Difficulty in accessibility?

- The present study- Pilot studies the feasibility of Yoga Module 1 on elderly population

METHODOLOGY

- Yoga programme comprising of 3 modules recently standardised.
- Compiled from books, research articles; validated by team of experts
- Yoga module 1 was tested in Hasseraghatta, Bangalore in a yoga center- 10 days camp

- Inclusion Criteria:
  - ❑Patients diagnosed as type 2 diabetics as per ADA standards
  - ❑Age 60 years and above; Both Male and Female
  - ❑Language: English, Hindi, Tamil, Telugu, Kannada
  - ❑Patients willing to undergo *yoga* for the study

- Exclusion Criteria:
  - ❑Patients with major co-morbid illness for which they require intervention.
  - ❑Those who practiced yoga for the last 3 months.

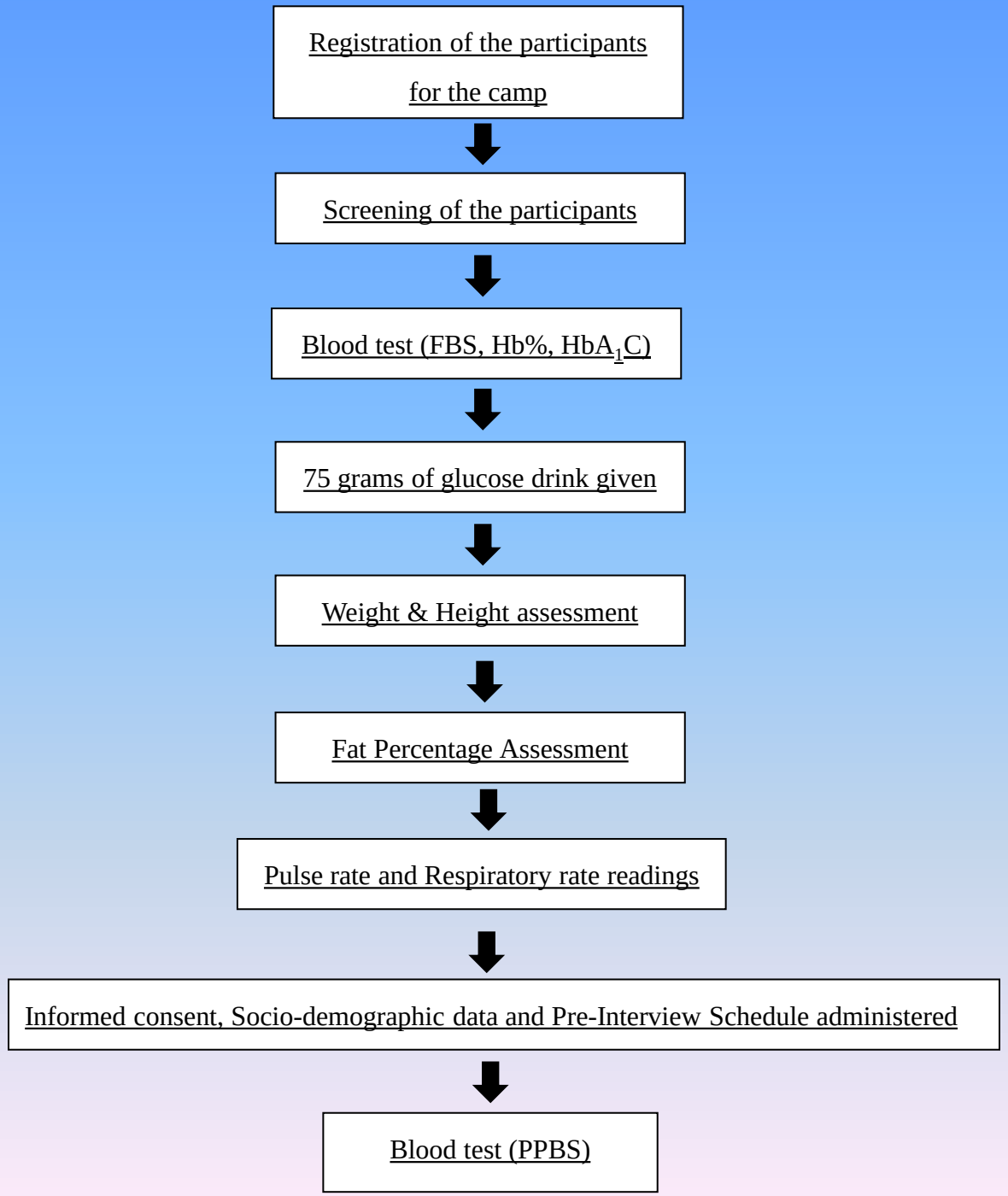
- Total number of participants- 9 (after fulfilling the criteria)
- **Ethical considerations-** Institution Ethics Clearance and Informed consent of participants taken.
- Purposive sampling technique was employed for the study.
- Pre post experimental design- Suitable to conduct feasibility study

- Assessment were done on the following variables:
  i. Fasting Blood Sugar (FBS)
  ii. Post Prandial Blood Sugars (PPBS)
  iii. Blood Pressure
  iv. Pulse Rate
  v. Respiratory Rate

Quantitative Data

- Qualitative data was also collected- Pre and Post interview schedules and intermediate observation

PROCEDURE IN THE CAMP


Registration of the participants for the camp
Screening of the participants
Blood test (FBS, Hb%, HbA_1C)
75 grams of glucose drink given
Weight & Height assessment
Fat Percentage Assessment
Pulse rate and Respiratory rate readings
Informed consent, Socio-demographic data and Pre-Interview Schedule administered
Blood test (PPBS)

Yoga programme followed during the 10 days camp

S.No.	PRACTICE	TIME DURATION & ROUNDS
1.	Starting Prayer (Sahavavathu)	2 minutes
2.	Loosening practices (Neck movement, Shoulder rotation, Elbow movements, Wrist movements, Finger movements, Waist rotation, Knee rotation, Ankle rotation, Toe movements)	20 minutes (5 Rounds)
3.	Suryanamaskara (12 counts)	6 minutes (3 rounds)

4.	Asanas (Standing- Tadasana, Ardhakatichakrasana, Katichakrasana; Sitting- Vajrasana, Janusirshsana, Vakrasana; Supine- Viparitakarani, Pavanamukthasana, Prone- Bhujangasana)	9 minutes (15 seconds to 1 minute each)
5.	Relaxation (In DRT)	10 minutes
6.	Pranayama (In sitting- Kapalabhati, Abdominal Breathing, Nadi Shuddhi, Bhramari)	12 minutes
7.	OM Meditation	5 minutes
8.	Closing Prayer (Sarve Bhavanthu Sukinaha)	1 minute
	Lecture (On selected topics)	30 minutes

RESULTS

QANTITATIVE

FBS & PPBS reduced significantly

- FBS Pre mean=192.89, Post Mean= 184.11
- PPBS Pre mean= 306, Post mean= 299.62

Blood Pressure reduced

- Pre mean= 130/76 mm Hg
- Post mean= 128/76 mm Hg

Pulse Rate improved markedly

- Pre mean= 79 b/m
- Post mean= 71.7 b/m

Respiratory Rate decreased

- Pre mean= 18.77c/m
- Post mean= 16.11 c/m

QUALITATIVE

- Significant improvement in mental-well being
- Overall credibility for the quality of module as well as training imparted
- Intermediate observation- overall acceptance and ease of practices seen by the participants; training was commendable

- Post Interview had even shown that the Yoga module helped one participant quit smoking too with marked improvement in breathing.

- Few components of the lecture was not delivered. E.g.: Lectures

CONCLUSION

- Newly developed Yoga Module- Efficient and acceptable.
- Paves way for the implementation of the other 2 modules of the programme.
- The efficacy of the module would depend on:
  - ❖Content
  - ❖Quality of the training imparted
  - ❖Adherence of the patients

IMPLICATIONS OF THE STUDY

- ✓ Yoga institutions could use this standardised module for treating elderly diabetics
- ✓ Proven results could be used to motivate diabetics as well as patients suffering from other co-morbidities to undergo yoga therapy.
- ✓ The module could be tested in larger trials with controlled designs to prove its efficacy in large samples


THANK YOU!