



Needs to Define Physical Fitness Centres in India - An Analytical Study

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ABSTRACT

Introduction: An increased awareness to promote physical fitness, especially gym goers was recorded globally. However due regulation and the needs of fitness industry including qualified trainers, due monitoring are logging in India. This original research aims a) to obtain an insight of gym goers b) to evaluate the role of physical therapist in gym centres.

Materials and Methodology: 13 questionnaires on a 4 point scale were administered among 100 gym attendees in Chennai during JAN – JUNE 2016 on various items related to physical fitness.

Results: 66% of participants were between 21-30 years, 955 were male, 38% subjects were obese, 47% had known family history of systemic illness, 28% were smokers and alcoholics, the physical trainer was not qualified with most of the subjects unaware of the purpose of attending and no due record of progress was known to them.

Conclusion: Proper regulatory mechanism including medical screening, qualified gym trainers and job potential for physiotherapists were the major thrust of this study.

Keywords: PA – Physical Activity, ACSM – American College of Sports Medicine, WHO – World Health Organization, BMI – body mass index, USDHS – US department of health and human services, NFPT – national federation of professional trainers, CPT –certified professional trainer.

Introduction

Life style diseases such as heart disease, cancer and diabetes with which 14 million globally die prematurely between the age group of 30 – 60 years (Pinto et al2015). It was evidenced that regular physical activity is associated with enhanced health and reduced risk of all cause mortality (Blair 1995), but only 25% of adults in

U.S engage in recommended daily 30 minutes moderate physical activity (USDHS 2010). ACSM suggested in U.S that every adult accumulated 30 minutes of mode physical activity / daily 20 minutes vigorous intensity a 3 days per week (Haskel 2007). An alarming rise in lifestyle disorders recorded in the past decade a major wake up call for health care professionals to plan,

prevent and promote lifestyle modification. In order to enhance quality of life in longevity as evidenced by the life expectancy of Indian population at 73 years (global study on Life expectancy – WHO 2011).

Aims and Objectives

This original analytical study throws light on physical fitness among gym goers / gym attendees on the following objectives as, Perception of fitness, Purpose of attending gym, Self evaluator methods as outcome of gym activity , Regularity , Anthropometric parameters, Dietary influence ,Nature of physical activity they perform in the gym and their Lifestyle.

The findings of this study outcome could be used for,

- a) Creating and promoting awareness on to be physically fit for good health.
- b) Need for regulatory norms for gym trainers.
- c) Importance of physical trainer with knowledge of the human body functioning
- d) Highlights the role of physiotherapists from availability to promote physical fitness
- e) Curriculum in physiotherapy should include physical fitness evaluation and promote its awareness among medical fraternities.

Materials & Methodology

This original observational analytical study was conducted during the period of JAN – JUNE 2016 in Chennai among 100 gym attendees of both the sex between the age group of 21- 50 years.

All the participants included in the study were administered with 13 questionnaires on a 4 point scale. The results of which are given below.

Results

Table of all the participants in percentage on 17 items related to fitness

Sr No	Parameters Analysed	Percentage Reported
1	Age group 21- 30 yrs	66%

	31- 40 yrs	25%
2	Gender – male Female	95% 5%
3	BMI – 18.5 – 24.9 25- 29-9	42 % 38%
4	Waist circumference - 31 – 40 cms	75%
5	Pulse rate 71- 80 beats / min 81- 90 beats /min	63% 21%
6	Purpose of joining – body building Weight reduction Aesthetic sense	48% 40 % 12%
7	Familial history reporting – nil Diabetes Hypertension Cardiac illness	61% 30% 11% 7%
8	Social habits – smoking Alcohol consumption Anabolic steroids No habits	10% 18 % 2% 75%
9	Complications – nil Joint pain Soreness injuries	88% 6 % 2% 3%
10	Nature of workout – cardio & aerobics strengthening	47% 39%
11	Diet – usual diet Advised diet	41% 36%
12	Warm up – cool down Occasional	62% 21%
13	Stretching	54%
14	Duration attending the gym 3 months 6 months Below 1 year	38% 27% 24%
15	Benefited – weight loss Body building	39% 26%
16	Attending gym – regular Occasional	69 % 28%
17	Fitness outcome – physical means Electronic means	60% 22%

Discussion

Benefits of Physical activity (PA) are not maintained without continuous and regular participation stopping and substantially reducing physical activity can lead to a loss of initial health improvement (Mijka and Padilla 2000) Diskman and Bucksworm 1996 have shown greater number of participants dropped out in exercise programmes during first 6 months relatively. Relatively little research examined the maintenance of PA (Masse et al 2011), social cognitive theory by Bandure 2004, which is frequently applied for PA behaviour, describes core set of psychosocial determinants including goals, perceived self efficacy, outcome expectancies, facilitators and impediments. In an observational study conducted in Germany in 2015 with 100 gym attendees with 20 weeks follow up, where 33% of the subjects were infrequent attendees which are similar to this

study findings of 28% to be irregular attendees (Darko et al 2015). In an Indian study among 60 people between 36 – 45 years attendees were analyzed where positive co relation of aerobic fitness with BMI (sagarika et al 2014) which is worthy here as 38% of this subject were overweight and 20 % were subjects were obese, who will benefit from attending the gym for obesity related fitness. As supported by many studies after 35 years ageing starts deteriorating the functional capacities of the body, (shepard et al 1998) as 34 % of this study subjects are above 35 – 50 years will benefit with their health by attending gym is evident . Lifestyle diseases like hypertension, diabetes mellitus, cardiac illness accounts for 30 % of all deaths globally (Papachan 2011) as inferred from this study findings where 48 % give known family history with lifestyle diseases, hence an increased vulnerability, will benefit from physical activities in the gym.

Critical Appraisal of This Research

- 1) Deana et al 2008 have recorded lack of regulation of physical trainers and ill effects of unqualified trainers who are devoid of proper motivation, skills, knowledge on exercise physiology, health conditions, disorder, exercise programming and prescriptions. Death of Goldberg, 47 years while in gym treadmill at Mexico (BBC 2015) had slip from the machine, which reports of incidents in gym centres. Injuries with weight training were widely recorded in US (Kerr et al 2010) .A Indian gym based study has reported 40 % increase in gym related musculoskeletal injuries , during 2010-2015 (Kiran 2014) and another study from Arkansas US, with 35 % increase in gym related injuries .
- 2) NFPT 2016 – CPT of US which offers fitness courses, ACSM certificate fitness training for aspiring trainers but Indian based regulatory mechanism as well training and certifying authorities , we do lack, where proper planning with

physiotherapist in gym and fitness industry getting trained as physical trainer creates job opportunities and professional fitness management. prevention of injuries, proper exercises planning, execution and evaluation in fitness related arena can enhance ethics and due reference to medical physicians then there if required is ensured.

Limitations

Limitations of this original research were only an observational analysis among the participants of gym attendees, and no therapy interventions were used here also sample studied was less.

Further recommendations of this research with larger sample size and larger duration follow-ups. Also modes of gym training, gym intervention specific studies could further be studied and outcome measures with gym activities with each subject are recommended.

Conclusion

With increased fitness awareness, pre gym medical screening should be made compulsory. Also due regulation of gym centres by the government , with professionally qualified trainers and safety of gym goers to be ensured .Major purpose of this original research analysis was to emphasize the lack of regulatory mechanisms and promote an awareness among physical therapist with untapped potential in the fitness industry .

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