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Editorial

Is Indian's Economy Facing A Big Challenges of Slow Down ? Former RBI Governor Raghuram Rajan has said the economic slowdown in India is "very orrisome" and has called for a fresh look at the way GDP is being calculated.

There are a variety of growth projections from the private sector analysts, many of which are perhaps significantly below government projections, certainly the slowdown in the economy is something that is very worrisome, The Monetary Policy Committee recently lowered its growth forecast for FY20 to 6.9 per cent from 7 per cent in the June policy. India's GDP growth figure was overstated by about 2.5 percentage points per year in the post-2011 period. In other words, the actual growth rate is likely to have been a very tepid 3.5-5.5 per cent against a reported average growth of 6.9 per cent between 2011 and 2016. We need a fresh look from an independent group of experts at the way we compute GDP and make sure that we are not in a sense having GDP numbers that mislead and cause the wrong kinds of policy actions,

This is not the first time Rajan has expressed doubts about India's economic data after the government restructured the GDP methodology. India's tinkering with lead economic indicators and suppression of discomfoting economic data is prompting global economists to plan an independent index for the country.

All the sectors contributing the GDP are facing problems, Manufacturing ,Agriculture ,and to a little Services sectors. The unemployment is rising not only in Public Sector of telecom such as BSNL and MTNL thanks to the policy of this government to boost private sector in this field a big tycoon Reliance Jio but also the present government is planning to privatize the defense production resulting a big threat to Public sector in this field Ordinance companies which are facing the problems of retrenchment and nemployment. The introduction of economic reforms such as GST and Note bandhi had crashed small scale sector resulting in mass scale of these small and tiny units which is backbone of Indian Economy. The digitalization is spreading the absence of money supply India which had lowered the purchasing power of consumers resulting in mass scale reduction in consumer demand for goods which we fear mass scale closure of units and rising unemployment, we are witnessing the Parle large scale retrenchment of labor and un employment. Automobile sector is seriously damaged for slowing down of demand.

The situation is alarming, as claimed we are progressing is a debatable question. Our students are witnessing a very dim picture of their future. The large scale MBAs who are backbone of shaping India ,s Economy future are in very glim. Growth parameters of Indian economy are seriously affected ,recent Finance ministers propositions for revival of economy are not sufficient .We require large scale reforms by RBI to boost money supply which shall accelerate large scale demand by the consumers making investment opportunities ,setting of more units to boost production ,consumption and employment opportunities.

Country is looking to this government to revive Agro sector which is 70% of our economy. We are expecting a boost to this sector by rationalizing support prices of Input and base purchase prices of agro grains so that the growers shall really grow and subsidies of farmers shall come to the end.

Research of Selecting Advanced Exercises of Forehand Drive for Male Students Between 18 To 22 Years Old In Table Tennis Club – Danang University of Physical Education and Sports (Dupes)

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Abstract:

The research pointed out that the exercises used to improve the forehand drive technique is not yet effective and diversified. At the same time, the research suggested 10 exercises to improve the efficiency of forehand drive technique for students from 18 to 22 years old in the Table Tennis Club of DaNang university of Physical education and Sports (DUPES).

Keywords: *exercises, forehand drive, students, table tennis club*

Introduction:

Through the teaching of forehand drive technique for students in the Table Tennis Club in DUPES, it can be seen that the exercises dedicated to improve the forehand drive technique has not yet proved to be effective, together with the lack of stability in each shot. Therefore, it is necessary to select and apply some of the most effective exercises to help the students practice proactively and improve their forehand drive technique.

For research process, we used the following methods: *Analysis and synthesis method*, methods of pedagogical observation; Interview method; Pedagogical experimental method; Methods of pedagogical examination; Mathematical methods of statistics.

Research Results:

1. Evaluating the current status of teaching forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

1.1 Evaluating the status of applying exercises to improve the efficiency of the forehand drive technique for male students from 18 to 22 at the Table Tennis Club in DUPES

- The exercises are not yet fully completed. There is lack of exercises on reaction time. Especially, there are not many exercises that required complex movements. Specialized exercises and exercises to enhance endurance are still limited.
- The forms of training are not really diversified. The practice is monotonous and lack of creativity, students are not proactive in practicing.
- The amount of time spent on advanced technical exercises is not high. Only 10 - 15 minutes (about 20%) in a training session.
- Specialized exercises are too poor. Exercises with the ball are simple, lack of creativity and combination with other moves. Therefore, the students cannot experience playing a forehand drive in different situations.
- Exercise intensity is still low, the application of the drive technique of specialized students in the competitive exercise is poor and ineffective.

1.2. The current status of teaching forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

Table 1. Current status of using exercises to improve the forehand drive technique for members in the Table Tennis Club in DUPES (n = 10).

No.	Exercise	Times /Week	Amount of time	Break time
1	Speed jump rope	3/7	4 × 2 mins	4-5 mins
2	Push up	2/7	3 × 2 mins	3-4 mins
3	Move forward and backward combine with drive	4/7	4 × 90 secs	3-4 mins
4	Horizontal move combine with drive	5/7	4 × 90 secs	3-4 mins
5	Combining other techniques with drive	3/7	8 - 10 mins	
6	Countervailing competition	5/7	15 - 20 mins	

1.3. Assessing the tests to evaluate the forehand drive technique of male students from 18 to 22 years old in the Table Tennis Club in DUPES.

Table 2. Result of assessing the tests to evaluate the forehand drive technique skill for male students from 18 to 22 years old in the Table Tennis Club in DUPES (n = 10).

No.	Interview results Content of the tests	Very important (3 points)	Important (2 points)	Normal (1 point)	Total score
1	Preferred diagonal forehand drive (2 mins/set)	24	2	0	28
2	Two points moving forehand drive (2 mins/set)	12	6	2	20
3	The technique of topspin forehand serve combining with forehand drive (Only count good hit over the total of 20 hits).	18	4	1	23
4	Forehand drive combining with counterhit (3 mins/set)	15	4	2	21
5	Non preferred diagonal forehand drive (2 mins/set)	24	2	0	28
6	The technique of attacking topspin backhand serve (Only count good hit over the total of 20 hits).	12	6	2	20

1.4. Determine the informative characteristics and reliability of the tests

1.4.1. Determine the informative characteristics of forehand drive assessment test for male students from 18 to 22 years old in the Table Tennis Club in DUPES. In order to determine the informative characteristics of the selected tests, we determined the correlation from the selected tests by conducting preliminary tests on the subject of study.

The result of the above correlation is showed in Table 3 and 4.

Table 3. Results of assessing the tests to evaluate the forehand drive for male students from 18 to 22 years old in the Table Tennis Club in DUPES

No.	Test	Test results ($x \pm \delta$)
1	Preferred diagonal forehand drive (2 mins/set)	13.28 \pm 0.40
2	Non preferred diagonal forehand drive (2 mins/set)	12.35 \pm 0.34

Table 4. Results of assessing the tests to evaluate the forehand drive for male students from 18 to 22 years old in the Table Tennis Club in DUPES

No.	Test	Correlation coefficients (r)	Possibility (P)
1	Preferred diagonal forehand drive (2 mins/set)	0.825	< 0.05
2	Non preferred diagonal forehand drive (2 mins/set)	0.814	< 0.05

Results obtained from the tables 3 and 4 showed that most of the selected tests on the subjects of study exhibited strong correlation, fully informative ($|r| > |0.8|$ with $P < 0.05$), can be applied to assess the skill of attacking serve technique of male students of the Table Tennis Club in DUPES (test results are showed in bold of the Table 2).

From the above research results, we selected tests with sufficient and informative value to continue our research on their reliability, including the following two tests:

Test 1: Preferred diagonal forehand drive (2 mins/set).

Test 2: Non preferred diagonal forehand drive (2 mins/set).

1.4.2. Determine the reliability of the tests for forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

Table 5. Reliability of the tests for forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES

No.	Test	First time $x \pm \delta$	Second time $x \pm \delta$	Correlation coefficients (r)
1	Preferred diagonal forehand drive (2 mins/set).	16.48 \pm 1.35	16.78 \pm 1.23	0.801
2	Non preferred diagonal forehand drive (2 mins/set).	17.35 \pm 1.34	17.34 \pm 1.42	0.806

1.5. Developing criteria to evaluate the forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

Table 6. Criteria to evaluate the forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

No.	Test	Classification				
		Poor	Below average	Average	Rather good	Good
1	Preferred diagonal forehand drive (2 mins/set)	≤ 9	10-14	15-18	19-22	≥ 23,00
2	Non preferred diagonal forehand drive (2 mins/set)	≤ 9	10-14	15-18	19-22	≥ 23,00

2. Research on selecting exercises to improve the efficiency of the forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

2.1. Basis of selecting exercises to improve the efficiency of the forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

2.2. Research on selecting exercises to improve the efficiency of the forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES.

Table 7. Interview results about selecting exercises to improve the efficiency of the forehand drive technique for male students from 18 to 22 years old in the Table Tennis Club in DUPES (n=10)

No.	Content of the exercises	Results			Total score
		Priority 1 (3 points)	Priority 2 (2 points)	Priority 3 (1 point)	
A	Stamina developing exercises				
1	Speed jump rope 1 min 30 secs / jumps	6	2	2	24
2	Changing direction run following signals (5m /2 mins)	7	2	1	26
3	Perform preferred diagonal forehand drive using 0.5 Kg steel racket (1 min 30 secs/times)	7	1	2	24
4	Perform non preferred diagonal forehand drive using 0.5 Kg steel racket (1 min 30 secs/times)	8	2	0	28
5	Push up (1 mins 30 secs/times).	5	3	2	23
B	Technique developing exercises				
6	Forehand serve combining with forehand drive technique (3 mins/times)	7	2	1	26
7	1 point to 2 points straight line top spin drive technique (3 mins/times)	8	2	0	28

8	Non preferred diagonal forehand drive (3mins/times)	8	1	1	27
9	Preferred diagonal forehand drive (3mins/times)	7	1	2	24
10	Mixing technique of attacking backhand serve (3 mins/times)	8	2	0	28
11	Backhand drive technique (3 mins/times)	5	3	2	23
12	Horizontal moving while counterhit to the right with 1 point to 2 points topspin ball (3 mins/ times)	4	3	3	21
13	Forehand and backhand serve combining with forehand drive (3 mins/times)	7	2	1	26
14	Countervailing competition (Best of 7)	8	2	0	28

* Group of stamina developing exercise: 3 exercises

* Group of technique developing exercises: 6 exercises.

* Group of mental developing and improving the ability to apply the drive technique in a match: 1 exercise.

2.3. Experimental process

The results are showed in Table 8.

Table 8. Comparison of the results of the drive technique test between the control group and experimental group with the experiment ($n_A = 7, n_B = 7$)

No.	Tests	Group B	Group A	t	p
		$\bar{x} \pm \sigma$	$\bar{x} \pm \sigma$		
1	Preferred diagonal forehand drive (2 mins/set)	16.23 \pm 1.32	16.28 \pm 1.13	0.102	> 0.05
2	Non preferred diagonal forehand drive (2 mins/set)	16.25 \pm 1.34	16.34 \pm 1,22	0.180	> 0.05

Following the results of the above table, we can see that:

Test No.1: $t_{\text{result}} = 0,102 < t_{\text{table}} = 2,101$

Test No.2: $t_{\text{result}} = 0,180 < t_{\text{table}} = 2,101$

It can be concluded that the difference between the two groups is not significant at the threshold of probability of $t_{\text{result}} < t_{\text{table}} P > 0.05$. It means that the two groups have the same initial level.

2.4. Evaluating the initial test results of two groups in the forehand drive technique for male students between 18 to 22 years old in the Table Tennis Club in DUPES.

Table 9. Comparing the criteria to evaluate the drive technique of control and experimental groups with the experiment.

Rank	Control group (n = 7)			Experimental group (n = 7)		
	Test 1	Test 2	Total	Test 1	Test 2	Total
Good	0	0	%	0	0	%
	%	%		%	%	
Rather good	2	2	33,33%	3	2	38,09%
	28,57%	28,57%		42,85%	28,57%	
Average	3	3	38,09%	3	4	42,86%
	42,85%	42,85%		42,85%	57,14%	
Below average	2	2	28,58%	1	1	19,05%
	28,57%	28,57%		14,28%	14,28%	
Poor	0	0	%	0	0	%
	%	%		%	%	

2.5. Experiment results

Table 10. Comparing the results of the drive technique test of the control group and experimental group after 3 months of experiment ($n_A = 7$, $n_B = 7$)

No.	Test	Group B	Group A	t	P
		$\bar{x} \pm \delta$	$\bar{x} \pm \delta$		
1	Preferred diagonal forehand drive (2 mins/set)	20.12 \pm 1.03	22.41 \pm 1.22	4.926	< 0.05
2	Non preferred diagonal forehand drive (2 mins/set)	19.23 \pm 1.23	21.24 \pm 1.12	4.191	< 0.05

Table 11. Comparing the growth rate of the control and experimental groups after 3 months of experiment

No.	Tests	Control group		W%	Experimental group		W%
		Before experiment	After experiment		Before experiment	After experiment	
		$\bar{x} \pm \delta$	$\bar{x} \pm \delta$		$\bar{x} \pm \delta$	$\bar{x} \pm \delta$	
1	Preferred diagonal forehand drive (2 mins/set)	16.23 \pm 1.32	20.12 \pm 1.03	21.40	16.28 \pm 1.13	22.41 \pm 1.22	1.69
2	Non preferred diagonal forehand drive (2 mins/set)	16.25 \pm 1.34	19.23 \pm 1.23	16.80	16.34 \pm 1.22	21.24 \pm 1.12	30.45

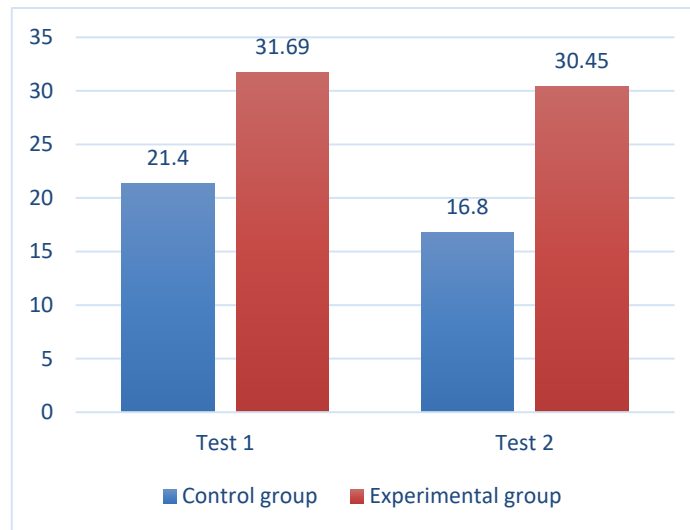


Chart 1. Comparing the results of the forehand drive technique of male students in the Table Tennis Club in DUPES

Conclusion: The results of the tests and the results of comparing the forehand drive technique of male students between 18 to 22 years old proved that the selected exercises are effective with confidence in the probability threshold of $P < 0.05$. The efficiency of the drive technique of the experimental group after 3 months of experiment is higher than the control group at the probability threshold of $P < 0.05$.

The selected exercises that improve the efficiency of the drive technique for male students between 18 to 22 years old demonstrated that they are more effective than the old training program.

Table 12. Comparing the criteria to assess the drive technique of the control group and experimental group with the experiment.

Rank	Experimental Group (n = 7)			Control Group (n = 7)		
	Test 1	Test 2	Total	Test 1	Test 2	Total
Good	5	4	66.67%	3	3	47.62%
	71.42%	57.14%		42.85%	42.85%	
Rather good	2	3	33.33%	3	3	42.86%
	28.57%	42.85%		42.85%	42.85%	
Average	0	0	%	1	1	9.52%
	%	%		14.28%	14.28%	
Below average	0	0	%	0	0	%
	%	%		%	%	
Poor	0	0	%	0	0	
	%	%		%	%	

Conclusion:

From the research results, we reached the following conclusions:

1. We selected 02 tests to assess the level of the drive technique, which are:
 - Test No.1: Preferred diagonal forehand drive (2 mins/set)
 - Test No.2: Non preferred diagonal forehand drive (2 mins/set)
2. On the basis of theory and practice, we have 10 exercises:
 - * Group of stamina developing exercise: 3 exercises.
 - * Group of technique developing exercises: 6 exercises.
 - * Group of mental developing and improving the ability to apply the drive technique in a match: 1 exercise.

According to our research results, exercises that we selected showed the efficiency in teaching table tennis for students in 3 months of experiment. Both tests that evaluate the drive technique for male students between 18 to 22 years old got the result that is $t_{\text{result}} > t_{\text{table}} = 2.101$ at the probability threshold of $P < 0.05$. In another words, the difference has the statistical meaning at the probability threshold of $P < 0.05$. In conclusion, the forehand drive techniques of the experimental and control groups have a significant difference after 3 months of experiment.

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Effects of Isometric Exercise Training on Blood Pressure

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Abstract:

Exercise training programmes represent a widely recommended component in the treatment and prevention to lower blood pressure (BP) could have important implications for management of hypertension. A growing body of research demonstrates that isometric exercise training (IET) is capable of lowering resting BP. The primary aim of this exploratory study was to explore whether 12-week of the new IET (360° TitaniUM Core Strength Exercise®) could elicit clinically relevant reductions (≥ 2 mmHg) in BP. Ten hypertensive participants had been recruited from University of Malaya and local community clinic through posters and email advert. They were included if they: (a) had a medical diagnosis of primary or idiopathic hypertension; (b) currently on antihypertension medications (β -blockers or/and non-dihydropyridine calcium channel blockers). Exclusion criteria: a) not on hypertensive medication. b) had target organ damage (i.e. heart failure, renal failure, hypertensive retinopathy or stroke). c) has any joint mobility issue especially the shoulder. Participants trained 3 sessions/week for 12 weeks, one session/week they carried out their intervention in the laboratory guided by the researcher and two sessions/week performing the new IET at home. The new IET consisted of twelve isometric exercises and the participants carried out the exercises in sequence with each exercise session consisted of 10-20 seconds/exercise progressively, 3 sets every session with the rest period of one minute between sets. Results revealed that 12 weeks of new IET induced a significant reduction of resting BP (Systolic Blood Pressure–SBP, Diastolic Blood Pressure–DBP) in medicated hypertensive patients. The finding in this study showed that the reductions of resting BP was ≥ 2 mmHg, it supported several studies used IET to induce reductions in resting BP in both healthy participants and medication hypertensive patients. In conclusion, such an accessible and cost-effective IET programme may help reduce some of the key barriers known to reduce exercise adherence and may provide a more effective lifestyle modification for the treatment and prevention of hypertension.

Keywords: A New Isometric Exercise Training, Resting Blood Pressure, 360° TitaniUM Core Strength Exercise®, Hypertensive Patients

Introduction:

Exercise training programmes represent a widely recommended component in the treatment and prevention to lower resting blood pressure (BP) could have important implications for management of hypertension (Pescatello et al., 2019). A large and emerging body of evidence supports isometric exercise training (IET) as an effective exercise modality to lower resting BP in both normotensive and hypertensive populations (Badrov, Freeman, Zokvic, Millar, & McGowan, 2016; Bigliassi, Karageorghis, Bishop, Nowicky, & Wright, 2018; Devereux, Wiles, & Howden, 2015; Gill et al., 2015; Millar & Goodman, 2014; Wiles, Goldring, & Coleman, 2017).

Furthermore, the results of two meta-analyses suggest that IET may be capable of eliciting greater BP reductions than traditional aerobic and resistance exercise training (Carlson, Dieberg, Hess, Millar, & Smart, 2014; Cornelissen, Fagard, Coeckelberghs, & Vanhees, 2011). As detailed in another meta-analyses (Owen, Wiles, & Swaine, 2010) isometric handgrip (IHG) and leg training are intriguing exercise alternatives which require substantially less time (~30–75 total min/week) while documenting significant reductions in resting BP in normotensive and medicated hypertensive populations (Carlson et al., 2014; Millar, Levy, McGowan, McCartney, & MacDonald, 2013; Wiles et al., 2017).

Based on this accumulating evidence, the American Heart Association suggests that IET and in particular, isometric handgrip (IHG) training, may be used as a potential alternative strategy to lower resting BP (Class IIB, Level of Evidence C) (Brook, Jackson, Giorgini, & McGowan, 2015). The emergence of this modality as a potential treatment strategy for individuals with hypertension and the need for additional investigation. The IHG is easily applicable (i.e. easy to use and can be performed anytime and anywhere), inexpensive, hence accessible to the global population, and may be preferred by individuals who find physical activity non pleasant and could offer a valuable new therapeutic adjunct in the overall approach for treating hypertension. At such, this method has been implemented using a programmable digital handgrip dynamometer (Badrov et al., 2016; Millar et al., 2013), which guides an individual through a complete IET session and can, therefore, be used without supervision (Millar & Goodman, 2014) in the home.

Also, it is suggested that the majority of previous IET studies are likely to have imposed exercise barriers, such as cost and time, which could reduce the effectiveness of IET as a potential physical therapy for altering BP (Millar, McGowan, Cornelissen, Araujo, & Swaine, 2014). It is proposed that an inexpensive, home-based IET program would help to promote the use of IET as a valuable tool in the fight against high blood pressure. An alternative exercise mode that may be more suitable for home-based training is the isometric wall squat which utilises a constant position isometric contraction style (Hunter, 2014), with participants required to keep their knee joint at a prescribed angle while supporting an inertial load (body mass) using the quadriceps.

From the literature search, the most widely IET studies utilized alternative exercise mode with isometric handgrip (IHG), leg training and isometric wall squat. These exercise modes only concentrate on either arm and leg muscles documenting significant reductions in resting BP in normotensive and medicated hypertensive populations. The new IET (360° TitaniUM Core Strength Exercise®) consists of 12 isometric exercises, performing in sequence and targeting on strengthened the core muscles, where by core in the human body was described as an anatomical box consisting of 29 pairs of muscles forming a front (abdominals), back (paraspinals and gluteals) and bottom (pelvic floor and hip girdle) (Richardson, Jull, Hodges, & Hides, 1999). This new IET defined as an IET because it sustained muscle contraction (i.e. increase in tension) with no change in length of the involved muscle group. The new IET activated 29 pairs of core muscle when performed this exercise, theoretically it should be better mode of IET in significant reductions of resting BP if compared to hand or leg muscle group mode of isometric exercises.

Additionally, the new IET can be another an alternative mode because it is an inexpensive and home-based IET which may remove the barriers of hypertensive patients enable them to carry out their exercise at home. Also, the new IET (360° TitaniUM Core Strength Exercise®) consists of 12 isometric exercises is easy and simple to perform,

requires very minimal equipment, and is, therefore, both economical and accessible.

Taken together, the primary aim of this exploratory study was to explore whether 12-week of the new IET (360° Titanium Core Strength Exercise®) could elicit clinically relevant reductions (≥ 2 mmHg) in resting BP among hypertensive patients. We hypothesised that a reduction in resting BP would be the effects of the new IET in 12-week. Further to this, the secondary aim of the study was to investigate the recovery of resting BP will have occurred either 5 minutes or 10 minutes after performing the new IET.

Methods:

Participants:

Ten hypertensive participants had been recruited from University of Malaya and local community clinic through posters and email advert. They were included if they: a) had a medical diagnosis of primary or idiopathic hypertension; b) currently on antihypertension medications (β -blockers or/and non-dihydropyridine calcium channel blockers). Exclusion criteria: a) not on hypertensive medication; b) had target organ damage (i.e. heart failure, renal failure, hypertensive retinopathy or stroke); c) has any joint mobility issue especially the shoulder.

Screening included body mass and height measurements. A medical history and a list of current medication were also obtained in order to identify other cardiovascular diseases. Ten out of fifteen patients met the inclusion criteria, all participants gave written informed consent prior to participation, and the University of Malaya Research Ethics Committee approved this study. Before testing, each participant received a written explanation of the procedures including any potential risks. Participants completed a health and medical questionnaire and reported that they were not suffering from any other injury or disease.

In all, five males and five females' hypertensive patients volunteered to participate, characteristics of the participants as table 1. All participants completed a familiarization visit to the laboratory and testing environment, followed by a baseline measurement session to assess resting BP. Within one week of baseline testing, participants began the new IET training (3 times/ week for 12 weeks). All participants were familiarised with the test procedures and performing the new mode of IET. Prior to testing, participants maintained an abstinence from food for 2 hours, caffeine for 4 hours, and alcohol for 12 hours and performed no strenuous exercise 24 hours before.

Table 1. General Characteristics of the Participants (n=10)

Characteristics	Values
Age (Mean \pm SD years)	46.1 \pm 8.35
Gender	
Male	5 (50%)
Female	5 (50%)
Ethnicity	
Malay (%)	10 (100%)
Weight (kg)	69.8 \pm 10.95
Height (m)	1.58 \pm 0.10
Body Mass Index (kg/m ²)	27.96 \pm 3.29
Period of Hypertensive Medication (Mean \pm SD Years)	4.04 \pm 4.12

Type of Medication	
ACE Inhibitor (%)	1 (10%)
Calcium Channel Blocker (%)	4 (40%)
Diuretic (%)	1 (10%)
B-Blocker (%)	4 (40%)
Monotherapy (%)	7 (70%)
Combination therapy (%)	3 (30%)

Values represented as mean \pm SD, number of participants and percentage

Study design

This study was conducted in Centre for Sport and Exercise Sciences. Baseline BP measurements and the new IET was performed between 10:00am–1:00 pm in the physiology laboratory. BP was measured with aneroid sphygmomanometer, Omron HEM 7120 fully automatic digital blood pressure monitor with intellisense technology for most accurate measurement on dominant arm based on American Heart Association guidelines. This laboratory testing session was repeated following 12 weeks of the new IET.

The new IET(360° Titanium Core Strength Exercise®)

Participants trained 3 sessions/week for 12 weeks, one session/week they carried out their intervention in the laboratory guided by the researcher and two sessions/week performing the new IET at home. When performing the new IET at home, all participants were guided by a new IET programme booklet provided to them. The new IET is a copyright protected under Copyright Act 1987 (Act 332) by the researcher. Each exercise session consisted of 10-20 seconds/exercise progressively (Table 2), 3 sets every session with the rest period of one minute between sets.

The new IET consisted of twelve isometric exercises: 1). double elbow prone bridge; 2). right elbow lateral bridge; 3). both legs supine bridge; 4). left elbow lateral bridge; 5). both hand prone bridge; 6). right hand lateral bridge; 7). left leg up supine bridge; 8). right leg up supine bridge; 9). left hand lateral bridge; 10). Alternate left hand right leg; 11). Alternate right hand left leg; 12). Superman. All these exercises should have performed in sequence.

Each exercise has to be maintained for 10 seconds in the first month and increases progressively in duration to perform these exercise from 10 seconds to 20 seconds as table 2. The researcher monitored during the participants performing these exercises to ensure that the technique is correct and timing each exercise during laboratory visits.

Table 2: Schedule of Performing the New IET Programme

Month	Frequency	Duration	Set
First month	3 sessions/week	10 seconds/exercise	3
	(1 session in laboratory guided by researcher and 2 sessions guided by the booklet at home)		
Second month	3 sessions/week	15 seconds/exercise	3
	(1 session in laboratory guided by researcher and 2 sessions guided by the booklet at home)		

	3 sessions/week		
Third month	(1 session in laboratory guided by researcher and 2 sessions guided by the booklet at home)	20 seconds/exercise	3

On each laboratory visit, participants rested in a seated position for 10 minutes and resting BP were measured. After completing the measurement of resting BP, participants performed the new IET guided by the researcher with the same duration and repetition when they carried their own training at home. Baseline resting BP was assessed prior to each IET session to investigate the effects of the new IET on resting BP adaptations. After each IET session, participants were requested to rest in the lab and the second resting BP were assessed in 10 minutes after the completion of the new IET, measurement of resting BP and resting HR were taken concurrently.

Experimental measures:

All testing was conducted in a quiet, darkened, and temperature-controlled laboratory (20–24 °C). All repeat testing (i.e., following 12 weeks of new IET) was conducted testing time of day according to their schedule set by them. All training sessions were separated by a minimum of 1 day of rest. Participants were required to complete training log books recording the date of exercise.

Statistical analysis

All data are expressed in mean and standard deviations (Mean \pm SD). Comparative analysis was carried out using Paired-samples t-test (statistical significance was set at $p < 0.05$). All statistical analyses were performed using IBM SPSS Statistics for Windows, version 23, Armonk, NY: IBM Corporation.

Results:

All participants ($n=10$) adhered and completed the required 36 sessions of the new IET over 12 weeks training period (one session in laboratory guided by researcher and two sessions at home guided by the booklet provided to them). Prior to each training session in the laboratory, resting measures were recorded for each participant during their 12 visits to the laboratory. All participants were informed not to change in their prescribed medications over the course of this study.

A paired samples t-test indicated that there was significant difference in SBP for baseline ($M=133.24\text{mmHg}$, $SD=10.33$) and 10 minutes after ($M=130.62\text{mmHg}$, $SD=10.12$; $t(9)= 13.90$; $p < 0.05$). Comparison of the DBP between the baseline ($M=83.51\text{mmHg}$, $SD=7.84$) with the 10 minutes after exercise ($M=79.64\text{mmHg}$, $SD=5.63$) also revealed that statistically significant ($t(9)= 4.06$; $p < 0.05$).

Discussion:

In current study, 12weeks of laboratory plus home-based of new IET induced a significant reduction of BP (SBP &DBP) in medicatedhypertensive patients. The resting BP reductions are similar in magnitude to those previously reported following IET that was partly laboratory based with participants performing constant force contractions (Millar et al., 2013; Millar et al., 2014)with bilateral-leg IET using the same acute programme variables and

exercise intensity in a laboratory setting. Therefore, the novel of new IET protocol utilised within this study appears to provide a viable alternative laboratory plus home-based method for the reduction of resting BP.

Important to point out that the hemodynamic results of this study confirm previous findings in medicated hypertensive participants (Taylor, McCartney, Kamath, & Wiley, 2003), which reported significant reductions in SBP and/or DBP following Isometric Handgrip (IHG) training. At such, another novel feature of the current study demonstrates that even in medicated hypertensive participants, the new IET has significant resting BP effects.

The finding in this study showed that the reductions of resting BP was ≥ 2 mmHg, it supported several studies used IET to induce reductions in resting BP in both healthy participants and medication hypertensive patients (Millar et al., 2013; Taylor et al., 2003; Wiley, Dunn, Cox, Hueppchen, & Scott, 1992). Greater insight into the effects of IET on minimal clinically important difference (MCID) (Page, 2014), the meta-analyses of IET studies reported average reductions in resting BP that were substantial -6.77 to -10.9 mmHg SBP and -3.9 to -6.7 mmHg DBP (Carlson et al., 2014; Cornelissen et al., 2011; Owen et al., 2010). The reduction in BPS and BPD ≥ 2 mmHg is considered clinically meaningful, since it is associated with significant risk reduction in the incidence of heart failure among normo- and hypertensive individuals. Clinically meaningful blood pressure reductions with low intensity isometric handgrip exercise. Reduction in BPS decreases stroke and coronary heart disease deaths rate by 6% and 4%, respectively; reduction of 5 mmHg will further cause reductions of 14% and 9%, respectively (Piikmann & Reisberg, 2018).

In current study, the intervention period was set for 12 weeks and the intervention was on medicated hypertensive patients because no study has been carried out to verify the effectiveness of this new IET with this group of patients before. Previous study reported that following 4 weeks home-based isometric wall squat training can elicit clinically relevant reductions in resting SBP and DBP in healthy normotensive males. Also, a few IET studies using larger muscles mass lower body exercise that have been able to produce reductions in all three BP components (SBP and DBP) following ≤ 8 weeks of isometric leg training (Devereux et al. 2010; Wiles et al. 2010; Gill et al. 2015). But, other finding reported no significant differences in any resting BP parameters at 4 weeks when bilateral-leg extension was performed at an intensity of 85% HR_{peak}, but significant reductions in SBP at the end of 8 weeks, whereas the other study showed that all parameters of resting BP were significantly reduced after only 3 weeks of bilateral-leg IET, but only when IET occurred at a higher intensity ($\sim 100\%$ HR_{peak} or 34% MVC) (Gill et al., 2015).

However, all these previous studies used bilateral-leg extension that required specialised equipment only available in a small number of sport and exercise science laboratories. Thus, the accessible and potentially cost effective training of this new IET protocol in current study may help to improve isometric exercise's efficacy as a physical therapy for altering resting BP, the major differences between current study with previous studies were the type of subjects, gender, location of intervention and intervention duration.

The new IET utilized consisted 12 isometric exercises, performing in sequence and targeting on 29 pairs of core strength muscles. At such, theoretically, it could be argued that the new IET might result in both a greater magnitude (and possibly a greater rate) of resting blood pressure reduction compared to other IET (isometric hand grip, bilateral-leg extension exercise and isometric wall squat). This is based primarily on the fact that isometric hand grip isolate on arm muscles (Pescatello et al., 2019), leg extensions isolate the quadriceps and wall

squat exercise use a smaller muscle mass in comparison with the new IET, which utilises additional muscle groups. It has been hypothesised that isometric contractions of a greater muscle mass require an increased central and peripheral drive (Mitchell, 1991; Soares et al., 2019).

Following more muscles recruited to perform the new IET, therefore, the cardiovascular control centres will be stimulated in parallel fashion with the motor cortex (Franke, Boettger, & McLean, 2000), thus producing a larger increase in cardiovascular response (a likely stimulus for BP adaptation) through greater central command (Soares et al., 2019). Additionally, evidence suggests that increased motor unit recruitment also enhances the exercise pressor response (Seals et al., 1985) due to either greater physical deformation that stimulates the mechanoreceptors (Soares et al., 2019) and/or increased metabolite production activating the metaboreceptors (Iellamo, Massaro, Raimondi, Peruzzi, & Legramante, 1999).

In conclusion, the current study demonstrates that 12 weeks of laboratory plus home-based of new IET can elicit clinically relevant reductions in resting SBP and DBP in medicated hypertensive patients. Such an accessible and cost-effective IET programme may help reduce some of the key barriers known to reduce exercise adherence and may provide a more effective lifestyle modification for the prevention of hypertension. Hypothetically, if this new IET could help to lower BP, the patient could exercise several times a day, and regularly to get more pronounced and longer lasting effect on BP, because training takes only couple of minutes and can be performed literally everywhere. This could potentially prevent and decrease the risk problems related to high blood pressure (Piikmann & Reisberg, 2018).

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Proposal for the Integration of Leisure Sports into Tourism in Thua Thien Hue Province

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Abstract:

Thua Thien Hue, with its existing potential, is an ideal place to promote leisure sports by integrating them into tourism to take its best advantage. Based on the assessment about current status of such integration in this province, the study selected and suggested certain sports to be integrated into tourism to improve the efficiency of local tourism and develop it to a higher level.

Keywords: leisure sports, tourism, sea, ecology

1. Introduction

Thua Thien Hue is a fascinating tourist spot with many cultural and historical sites, scenic landscape, diverse ecological features, romantic and majestic sightseeing, all of which makes this place an attractive destination that tourists cannot miss.

At present, the introduction of leisure sports is being appreciated and enjoyed by many people. Thua Thien Hue, with its existing potential, is an ideal place to promote leisure sports by integrating them with tourism activities bring the highest efficiency. Such successful combination would yield a great impact to the development of local tourism as well as to partly solve the problem of unemployment, prevent street begging, peddling, pickpocketing or soliciting tourists that contribute negatively to the province's image.

Additionally, the integration of leisure sports and tourism would create a new image for Thua Thien Hue, tackle the problem in the management and find a new approach for local tourism. It can be seen that this province is full of opportunities to promote Vietnamese tourism and culture to the world. However, such integration still has many drawbacks. It lacks suitable types of sports dedicated for each type of tourism. Besides, this form of tourism is still localized in certain places, yet the scale has not reached the expected popularity.

Based on the analysis, the importance and the urgency of this issue, we define the research topic to be Proposal for the integration of leisure sports into tourism in Thua Thien Hue province.

2. Research Methodology

- *Analysis and synthesis method*
- Interview method
- Sociological investigation
- Statistical method

3. Research Targets

- Research Subjects: Leisure sports integrated into tourism in Thua Thien Hue
- Research Objects: Thua Thien Hue Tourism

4. Research Results

4.1. Current status of integrating leisure sports into tourism in Thua Thien Hue

In order to assess the true status of the integration of leisure sports and tourism, we conducted an interview with 30 managers of local tourist sites. The survey results showed that the integration of leisure sports and 3 types of tourism, which are cultural tourism, eco-tourism and sea tourism, are still not commensurate with its advantages and potential, which was showed in Table 4.1.

Table 4.1. The level of consensus on integrating leisure sports into cultural attractions in Thua Thien Hue (n=30)

No.	Survey questions	High level	%	Average level	%	Low level or none	%
1	Role and position of leisure sports in tourist sites	1	3,33	10	33,33	19	63,33
2	Level of interest in leisure sports of tourists	3	10	15	50	12	40
3	The need for integrating leisure sports into tourism of tourists	5	16,66	15	50	10	33,33
4	Facilities for leisure sports	1	3,33	10	33,33	19	63,33
5	Rate of investment for the integration of leisure sports and tourism compared to entire operating expenses for tourism	2	6,66	13	43,33	15	50
6	Level of organizing sport competitions at the tourist sites	1	3,33	8	26,66	21	70
7	Organizing and assessing the result of integrating leisure sports into tourism	0	0	6	20	24	80
8	Percentage of tour guides, specialists who can guide sports activities at the tourist sites	0	0	5	16,66	25	83,33
9	Quality of services for leisure sports at the tourist sites	1	3,33	7	23,33	22	73,33
10	Profit getting from the integration of leisure sports and tourism compared to total profit at the tourist sites	1	3,33	1	3,33	28	93,33
11	Take the integration of leisure sports and tourism as the key to develop tourism	0	0	9	30	21	70

12	Promote tourist sites through organizing sport competitions	1	3,33	6	20	23	76,66
13	Promote the local culture through organizing sport competitions	2	6,66	15	50	13	43,33

Table 4.1 showed that the development of leisure sport – tourism integration is not commensurate with the existing potential and strengths of local tourism. The need of tourists regarding this tourism form is relatively high, yet the investment is not as high as expected, together with the inefficiency in organization and management. Facilities and human resources have not met the requirements, resulting in the difficulty in generating profit and promoting tourist sites, people and local culture.

Table 4.2. The level of consensus on integrating sports into ecotourism destinations in Thua Thien Hue (n=30)

No.	Survey questions	High level	%	Average level	%	Low level or none	%
1	Role and position of leisure sports in tourist sites	2	6,66	15	50	13	43,33
2	Level of interest in leisure sports of tourists	4	13,33	17	56,66	9	30
3	The need for integrating leisure sports into tourism of tourists	8	26,66	15	50	7	23,33
4	Facilities for leisure sports	2	6,66	10	33,33	18	60
5	Rate of investment for the integration of leisure sports and tourism compared to entire operating expenses for tourism	10	33,33	15	50	5	16,66
6	Level of integrating leisure sports at the tourist sites	3	10	17	56,66	10	33,33
7	Level of organizing sport competitions at the tourist sites	2	6,66	10	33,33	18	60
8	Organizing and assessing the result of integrating leisure sports into tourism	1	3,33	8	26,66	21	70
9	Percentage of tour guides, specialists who can guide sports activities at the tourist sites	1	3,33	5	16,66	24	80
10	Quality of services for leisure sports at the tourist sites	3	10	7	23,33	20	66,66
11	Profit getting from the integration of leisure sports and tourism compared to total profit at the tourist sites	3	10	14	46,66	13	43,33
12	Take the integration of leisure sports and tourism as the key to develop tourism	1	3,33	1	3,33	28	93,33
13	Promote tourist sites through	3	10	9	30	18	60

	organizing sport competitions						
14	Promote the local culture through organizing sport competitions	2	6,66	10	33,33	18	60

Table 4.2 showed that the level of integration of leisure sports and ecotourism destinations is higher than that of cultural tourism, but it was not significant. There are still many limitations such as high level of spontaneous tourism without management, lack of plan and proper investment to meet the demand of tourists, which lead to the waste of the existing potential.

Table 4.3. The level of consensus on integrating sports into sea tourism destinations in Thua Thien Hue (n=30)

No.	Survey questions	High level	%	Average level	%	Low level or none	%
1	Role and position of leisure sports in tourist sites	4	13,33	10	33,33	16	53,33
2	Level of interest in leisure sports of tourists	6	20	15	50	9	30
3	The need for integrating leisure sports into tourism of tourists	8	26,66	16	53,33	6	20
4	Facilities for leisure sports	3	10	10	33,33	17	56,66
5	Rate of investment for the integration of leisure sports and tourism compared to entire operating expenses for tourism	5	16,66	15	50	10	33,33
6	Level of integrating leisure sports at the tourist sites	3	10	17	56,66	10	33,33
7	Level of organizing sport competitions at the tourist sites	3	10	13	43,33	17	56,66
8	Organizing and assessing the result of integrating leisure sports into tourism	2	6,66	8	26,66	20	66,66
9	Percentage of tour guides, specialists who can guide sports activities at the tourist sites	2	6,66	8	26,66	20	66,66
10	Quality of services for leisure sports at the tourist sites	3	10	7	23,33	20	66,66
11	Profit getting from the integration of leisure sports and tourism compared to total profit at the tourist sites	3	10	10	33,33	17	56,66
12	Take the integration of leisure sports and tourism as the key to develop tourism	3	10	13	43,33	14	46,66
13	Promote tourist sites through organizing sport competitions	3	10	9	30	18	60

14	Promote the local culture through organizing sport competitions	0	0	9	30	21	70
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Table 4.3 showed that the integration of leisure sports and sea tourism is the highest compared to the other two types. However, in general, the level of development is only moderate, primitive and small, not yet utilizing its strengths. All three types of tourism meet the same problem: The demand of tourists for the activities is high, yet the number of leisure sports is low, the equipment and facilities are not good enough, human resources cannot meet the requirements. However, this problem still has not received proper concern from the authorities, which leads to boring activities and difficulty in increasing revenue.

4.2. Advantages and disadvantages of integrating leisure sports into tourism in Thua Thien Hue

4.2.1. Advantages

Thua Thien Hue is an interesting tourist destination with many famous historical and cultural relics, ecological diversity, beautiful and majestic landscapes that are worth-visiting.

The tourism industry of Thua Thien Hue is an important element for the development of Vietnam Tourism, especially with its potential and uniqueness. This province has rich and diverse culture, which includes tangible and intangible culture heritages, the Imperial City, the system of royal tombs: Tomb of Minh Mang, Tomb of Tu Duc, Tomb of Khai Dinh ... In which the Imperial City and the Royal defined music of Hue have been recorded by UNESCO as the world cultural heritages. The local tourism products are diverse and high-quality, which are developing and being strongly invested such as:

- Vast tourist area including Bach Ma National Tourism - Lang Co - Canh Duong - Hai Van.
- Many ecotourism destinations, sea tourism destinations, lagoons, mountainous areas; Lang Co beach, Thuan An beach, Tam Giang - Cau Hai lagoon, Truc Lam Bach Ma Monastery, Huong mountain, Ngu river, Elephant stream, Nhi Ho waterfall ...
- In addition to these advantages, there are also contributions from the tourists, local people, tourism products and services that positively affect the overall success of this industry.
- With the orientation of building Thua Thien Hue as a cultural center - an interference of different cultures in the world, the local authority organizes Hue Festival once every two years. This is a culture - tourism event that has national and international scale. Thua Thien Hue is striking to become the Festival City of Vietnam.
- Over the past years, tourism activities in Thua Thien Hue had many important achievements, which partly contributed to the socio-economic development, creating premise for Thua Thien Hue to be a fascinating cultural and tourist center of Vietnam.

4.2.2. Disadvantages

Tourism services are not diverse yet; entertainment and shopping centers have not received much investment; the connection between culture, heritage and tourism development is not as effective as expected. Tourist attractions and historical sites are becoming boring without any innovations to attract visitors. Besides, the lack of strict management and ineffective solutions result in temporary effect. To be able to bring innovations, there must be changes in the organization of tourism activities to attract more national and foreign tourists.

4.3. Proposing types of leisure sports to be integrated into tourism in Thua Thien Hue

On the principles of proposing leisure sports, we conducted an interview to get the opinions of 200 people about the suitability and favorability towards the integration of sport and tourism. Among 200 people, two thirds are tourists and the rest are working in local tourist destinations. The results were showed in the following tables:

Table 4.4. Interview results about integrating leisure sports into ecotourism in Thua Thien Hue (n=200)

No.	Leisure sports	Ecotourism destinations															
		Hai Van Pass		Bach Ma National Park		Elephant springs		Dream springs		Nhi Ho water-fall		Ngu Binh moun-tain		Tam Giang lagoon		Huong river	
		Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%
1	Hiking	50	25	150	75	40	20	38	19	26	13	167	88	0	0	0	0
2	Waterfall slide	0	0	176	88	163	81,5	89	44,5	178	89	0	0	23	11,5	14	7
3	Swim-ming	0	0	30	15	185	92,5	178	89	167	88	0	0	45	22,5	56	28
4	Scuba diving	0	0	24	12	76	38	56	28	87	43,5	0	0	187	93,5	165	82,5
5	Parachute	183	91,5	157	78,5	23	11,5	16	8	32	16	173	86,5	102	50	54	27
6	Boat racing	0	0	0	0	0	0	0	0	0	0	0	0	194	97	179	89,5
7	Fishing	0	0	0	0	33	16,5	23	11,5	45	22,5	0	0	184	92	157	78,5
8	Duck boat	0	0	0	0	23	11,5	12	6	5	2,5	0	0	12	6	187	93,5
9	Seafood catching	0	0	0	0	0	0	0	0	0	0	0	0	197	98,5	140	70
10	Double cycling	178	89	13	6,5	2	1	1	0,05	4	2	76	38	45	22,5	157	78,5
11	Air balloon	167	83,5	141	70,5	23	11,5	45	22,5	31	15,5	186	93	123	61,5	176	88
12	Wind-surfing	12	6	11	5,5	11	5,5	21	10,5	3	1,5	0	0	98	49	184	92

Table 4.4 showed that the selected leisure sports are very suitable with the natural conditions, terrain as well as service quality in tourist destinations. Based on the number of people who agreed, it could be seen that they accurately captured the information about tourist destinations.

Table 4.5. Interview results about integrating leisure sports into cultural tourism in Thua Thien Hue (n=200)

No.	Leisure sports	Cultural tourism destinations													
		Imperial city		Tu Duc's tomb		Minh Mang's tomb		Khai Dinh's tomb		Duc Duc's tomb		Thieu Tri's tomb		Gia Long's tomb	
		Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%
1	Kite flying	168	84	14	7	17	8,5	145	72,5	132	66	54	27	27	13,5
2	Roller-blade	186	93	43	21,5	25	12,5	15	7,5	76	38	32	16	54	27
3	Pitch Pot	45	22,5	63	31,5	154	77	78	39	175	87,5	67	33,5	140	7
4	Air balloon	187	93,5	76	38	82	41	154	77	102	51	27	13,5	86	43
5	Archery	76	38	46	23	87	43,5	45	22,5	154	77	167	83,5	173	86,5
6	Fishing	145	72,5	165	82,5	65	32,5	42	21	85	42,5	86	28	165	82,5
7	Human chess	167	83,5	56	28	175	87,5	165	82,5	44	22	52	26	65	32,5
8	Chess	78	39	145	72,5	95	47,5	103	51,5	120	60	59	29,5	90	45
9	Double cycling	167	83,5	54	27	87	43,5	130	65	145	72,5	176	88	132	66
10	Horse riding	156	78	76	38	86	43	34	17	53	26,5	65	32,5	34	17

Table 4.5 showed that the number of votes for the integration of leisure sports and cultural tourism increased significantly, especially in the central area. The Imperial City reached the highest vote compared to other places, which showed that the demand for entertainment in this place is big.

Table 4.6. Interview results about integrating leisure sports into sea tourism in Thua Thien Hue (n=200)

No.	Leisure sports	Beaches													
		Lang Co		Thuan An		Canh Duong		Vinh Thanh		Ham Rong		Vinh Hien		Phu Dien	
		Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%	Vote	%
1	Swim-ming	189	94,5	160	80	145	72,5	176	88	140	70	156	78	165	82,5
2	Scuba diving	187	93,5	127	63,5	113	56,5	132	66	145	72,5	119	59,5	78	39
3	Canoeing	123	61,5	98	49	146	73	102	51	122	61	98	49	68	34
4	Kite flying	165	82,5	140	70	154	77	156	78	132	66	156	78	149	74,5
5	Kayaking	156	78	101	50,5	145	72,5	67	33,5	87	43,5	83	41,5	92	46
6	Para-gliding	187	93,5	109	54,5	132	66	98	49	78	39	35	17,5	26	13
7	Fishing	132	66	92	46	78	39	165	82,5	145	72,5	167	83,5	156	78
8	Surfing	145	72,5	176	88	156	78	144	72	143	71,5	87	43,5	84	42
9	Beach volleyball	178	89	168	84	153	76,5	140	70	175	87,5	156	78	176	88
10	Beach football	187	93,5	156	78	173	86,5	176	88	154	77	147	73,5	164	82
11	Jogging, aerobics	113	56,5	123	61,5	123	61,5	165	82,5	173	86,5	143	71,5	148	74
12	Rowing	167	83,5	93	46,5	73	36,5	85	42,5	92	46	82	26	94	47

13	Water ball	125	62,5	173	86,5	152	76	133	66,5	143	71,5	141	70,5	132	66
14	Air balloon	182	91	120	60	162	81	132	66	111	55,5	102	51	98	49
15	Wind-surfing	182	91	163	81,5	152	76	123	61,5	164	82	142	71	145	72,5
16	Parachute	173	86,5	163	81,5	132	66	142	71	132	66	92	46	120	60
17	Sepak takraw	172	86	162	81	156	78	152	76	165	82,5	172	86	154	77
18	Boat sailing	164	82	124	62	112	56	134	67	96	48	84	42	122	61

Table 4.6 showed that the number of votes for the integration of leisure sports and sea tourism is very large, especially in Lang Co beach - the most beautiful and famous beach in Thua Thien Hue. The remaining beaches also have a high number of votes. Although the total number of leisure sports is not much, it increased significantly, which is a good signal for future development of this form.

Through the interview results, we selected the leisure sports whose number of votes is over 70% to propose integrating into tourism with the aim of improving the efficiency of tourism in local province. The results were showed in the following tables:

Table 4.7. Proposing the leisure sports to be integrated into ecotourism destinations in Thua Thien Hue

No.	Leisure sports	Ecotourism destinations							
		Hai Van Pass	Bach Ma National Park	Ele-phat springs	Dream springs	Nhi Ho water-fall	Ngu Binh moun-tain	Tam Giang Lagoon	Huong River
1	Hiking		x				x		
2	Waterfall slide		M	M		M			
3	Swim-ming			x	x	x			
4	Scuba diving							M	X
5	Parachute	x	M				M		
6	Boat racing							x	M
7	Fishing							x	X
8	Duck boat								M
9	Seafood catching							M	M
10	Double cycling	M				M			M
11	Air balloon	M	M				M		M
12	Wind-surfing								M

In Table 4.7, the (x) represented the leisure sports that have already existed, and the (M) represented the sports proposed for that tourist destinations. It showed that the number leisure sports in the dedicated destinations increased significantly, promising to bring many interesting and new experience for tourists. The sports include waterfall slide, seafood catching, double cycling, air balloon, etc.

Table 4.8. Proposing the leisure sports to be integrated into culture tourism destinations

in Thua Thien Hue

No.	Leisure sports	Culture tourism destinations						
		Imperial City	Tu Duc's tomb	Minh Mang's tomb	Khai Dinh's tomb	Duc Duc's tomb	Thieu Tri's tomb	Gia Long's tomb
1	Kite flying	x			x			
2	Rollerblade	x						
3	Pitch-Pot							
4	Air balloon	M			M			
5	Archery					M	M	M
6	Fishing	M	M					M
7	Human chess	M			M		M	
8	Chess	M		M	M			
9	Double cycling	M					M	
10	Horse riding							

In Table 4.8, the (x) represented the leisure sports that have already existed, and the (M) represented the sports proposed for that tourist destinations. The sports include air balloon, archery; fishing; chess, human chess, etc.

Table 4.9. Proposing the leisure sports to be integrated into sea tourism destinations in Thua Thien Hue

No.	Leisure sports	Beaches						
		Lang Co	Thuan An	Canh Duong	Vinh Thanh	Ham Rong	Vinh Hien	Phu Dien
1	Swimming	x	x	x	x	x	x	x
2	Scuba diving	x				x		
3	Canoeing			M				
5	Kayaking	x		M				
6	Paragliding	x						
7	Fishing				x	x	x	x
8	Surfing	x	x	x	M	M		
9	Beach volleyball	x	x	x	x	x	x	x
10	Beach football	x	x	x	x	x	x	x
11	Jogging, aerobics				x	M	x	M
12	Rowing	M	M		M	M	M	
13	Water ball	M	M	M		M	M	M
14	Air balloon	M		M				
15	Windsurfing	M	M	M		M	M	M
16	Parachute	M	M		M		M	
17	Sepak takraw			M	M			
18	Boat sailing	M						

In Table 4.8, the (x) represented the leisure sports that have already existed, and the (M) represented the sports proposed for that tourist destinations. The sports include rowing, water ball; air balloon; windsurfing; parachute; sepak takraw, etc.

5. Conclusion:

From the research results, the following conclusions were drawn:

Thue Thien Hue is an ideal tourism destination, especially for tourists who are passionate about exploring and getting to know the history and culture. The integration of leisure sports and tourism has developed in many countries around the world, and in Thua Thien Hue, the potential for development is huge.

The research evaluated the current status regarding the integration of leisure sports and tourism in Thua Thien Hue with 3 types of tourism: eco-tourism, cultural tourism and sea tourism. At the same time, it pointed out the advantages and disadvantages, and based on that basis, proposing the type of sports that could be integrated in local tourism as follows:

Ecotourism

- Waterfall slide
- Duck boat
- Seafood catching
- Double cycling
- Air balloon
- Parachute

Cultural tourism

- Air balloon
- Archery
- Fishing
- Chess
- Human chess

Sea tourism

- Rowing
- Water ball
- Air balloon
- Windsurfing
- Parachute
- Sepak takraw

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Comparison of Lower Limb Injuries in Different Level Football

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Abstract:

The primary aim of the present study was to compare lower limb injuries in three level competitive footballers. Accordingly three groups of footballers were targeted; international, national and state footballers aged between 14 to 30 years, information of occurrence of injuries was collected, Individually through a questionnaire from 300 footballers. 100 out of each groups from various Indian football teams which were participating in All India Mayor trophy football tournament, Aurangabad (2006) inter-varsity football tournament Goa (2007), Maharashtra state junior football tournament Jalgoan (2007). The investigator personally contacted the team managers and coaches of the all teams and the purpose of the study was explained to them. Further instructions were given by the investigator to the players for the completion of questionnaire. Means, Standard deviations, one way analysis of variance and post hoc test were utilized to compare and identify the occurrence of injuries among three groups of competitive footballers. National level football players was found to have got more injuries as compared to their counter parts.

Introduction:

Football requires a variety of physical attributes and specific playing skills, therefore participants need to train and prepare to meet at least a minimum set of physical, physiological and psychological requirements to cope with the demands of the game and to reduce the risk of injury (1, 2, 6, 8, 9). It is an enjoyable and social sport than can be played from childhood to old age, either at a recreational level or as a competitive sports (4, 5, 10, 12).

Fotball playing largely involves starting, running, slopping, twisting, jumping, kicking, and turning movements tat may occurs lower injuries .

Football is a high risk sport dominated by overuse injuries while recovery time from injuries is relatively long, but only a few working days are lost by the players to return back to play, thus leading to abuse of the injured sites (13, 14, 16). In football overuse injuries are the most frequent occurrences of injury; and injuries are traditionally divided into contact and non contact mechanism in which case contact refers to players contact (15, 18, 19). Some of the forces involved in a non contact injury are transmitted from the playing surface to the injured body part. The knee, ankle , foot, groin etc. are the lower limb injuries (20, 21, 23). Injuries to the knee may occur frequently in activities that require acceleration, deceleration, twisting, pivoting, cutting, and jumping (12, 6, 21). Foot and ankle injuries are very common and serious lower limb injuries to the footballers (8, 7, 9). There are a number of anatomic factors that contribute to Ankle injury in football, Ankle mortise asymmetry creates instability during inversion (14, 18, 20).

Methods:

Total 168 male competitive footballers; 67 out of International players, 52 National players and 49 State groups' football players from different Clubs, Academy, State and University were selected as a subject for the present study. Inter-varsity footballers have been considered as national players. Their age ranged from 14 to 30 years. Some questionnaires were sent to different Club, Academy, State and University who had participated in International, National, State and Inter-varsity tournament and some cases contacting footballer at the venue of State, University, and National tournament held at different places. Instructions were given to the footballers before filling these questionnaires by the researcher, football coach and football experts. For the present study, modified questionnaires design by investigator was utilized after the modification of these questionnaires and the test -retest reliability was found out 0.94 by the researcher. Data was collected individually through a questionnaire from competitive footballers of different Academy, Clubs, State and University separately, Some questionnaire were received to the researcher by the post and some by contacting footballers at the venue of Inter-varsity, State and National tournaments. The statistical computation of data of the present study is used by using SPSS package in the computer. The result computed also cross checked by using following statistical variables.

Table 1. Mean Scores and Standard Deviations of occurrence of injuries with respect to Lower Limb among three groups of Competitive footballers.

Footballers	Number	Mean scores	Standard Deviations
International	67	1.43	.47
National	52	1.65	.65
State	49	1.14	.32

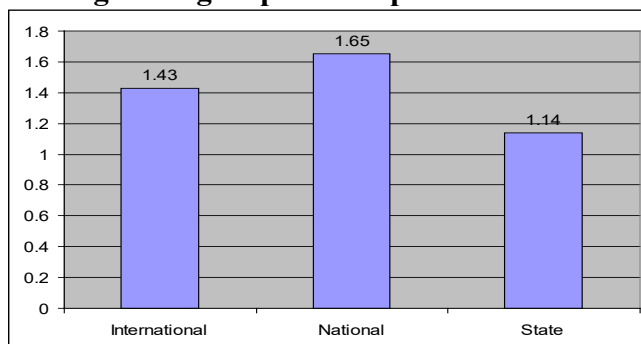
Table-1, shows that the mean scores and standard deviations of occurrence of injuries with respect to lower limb among three groups of competitive footballers.

The mean scores and the standard deviations obtained from Table 1, the highest mean score is in national groups footballers (1.65) and the lowest mean score is in state groups footballers (1.14) and the mean scores of the rest falls between these two competitive footballers.

The sample of footballers indicated by the standard deviation which is not higher than (.65) in case of national groups footballers and not lower than (.32) in case of state groups footballers. In other word, the mean scores and standard deviations of occurrence of injuries with respect to lower limb among three groups of competitive footballers are decreasing from national to state groups.

Mean scores of occurrence of injuries for three groups of competitive footballers with respect to lower limb have been depicted graphically in Figure-XXIV.

Figure-1 showing Mean Scores of occurrence Injuries with respect to Lower Limb among three groups of competitive footballers



In order to find out the significant difference of occurrence of injuries with respect to lower limb among three groups of competitive footballers; one way analysis of variance was used to compare the occurrence of injuries.

The results of Analysis of variance of occurrence of injuries among three groups of competitive footballers formed on the basis of occurrence of injuries is presented in Table 2.

Table 2. Analysis of variance of occurrence of injuries with respect to Lower Limb among three groups of competitive footballers.

Source of Variance	SS	DF	MSs	F- ratio
Between Groups	6.62	2	3.31	17.76 *
Within Groups	38.22	182	.21	

* Significant at .05 level.
(F = 17.76, P < .05)

Table-2 shows that statistically significant difference of occurrence of injuries with respect to lower limb was found among three groups of competitive footballers as above observed in F-ratio was 17.76 which is required to be 3.04 at 2,182 df at .05 level of significance. In order to find out the difference of occurrence of injuries with respect to lower limb among three groups of competitive footballers; Scheffe post hoc test was applied to compare the occurrence of injuries. Table 3 shows the possible comparisons for three groups means.

Table 3. Scheffe post hoc Statistical comparison for mean difference with respect to lower limb among three groups of competitive footballers.

Mean Scores			Mean difference	C.D. at 5% level
INA	NA	ST		
1.43	1.65		.22	.20*
1.43		1.14	.29	.20*
	1.65	1.14	.51	.69

* Significant at .05 level.

As per Table-3, shows that the Scheffe post hoc statistical comparison for mean difference of occurrence of injuries with respect to lower limb among three groups of competitive footballers.

Discussion:

The results obtained from Table 1 that the statistically significance difference of occurrence of injuries with respect to lower limb was found ($F=17.76$, $P<.05$) among three groups of competitive footballers. In order to find out the difference of occurrence of injuries; Scheffe Post hoc statistically comparison for mean differences of occurrence of injuries with respect to lower limb among three groups of competitive footballers reveals (Table-2) that the statistically significant difference of occurrence of injuries was found between three groups footballers. Table-3, reveals that significant difference of occurrence of injuries with respect to lower limb was found between international and national groups footballers; national groups footballers got having more occurrence of injuries as compared to international groups footballers. Significant difference of occurrence of injuries with respect to lower limb was found between international and state groups footballers; state groups footballers got having less occurrence of injuries as compared to international groups footballers and No statistically significant difference of occurrence of injuries with respect to lower limb was found between national, and state groups competitive footballers.

National footballers was found to have got more of injuries with respect to lower limb as compared to their counterparts. Parden E T (1987) reported forty to ninety percent of sports injuries involve the lower extremity. Sinku S.K. (2006) and Crombell F.J. Walsh Gromly (2000) also reported lower limb injuries predominated to the elite groups footballers. Results of this research can be used to prevent from further subsequent injuries, considering the strategies available. Consequently, the most important usage of this research is to prevent the occurrence of subsequent injuries by identifying injured athletes and to provide preventive strategies. This can be also used in rehabilitation of impairments and disabilities of injured athletes.

Limitations:

Results of this study are limited by a relatively survey of self-reported injuries rather than a study of actual behavior, which would be very difficult to achieve. As such, participants may have answered questions in a socially desirable manner to avoid the stigma associated with admitting personal inadequacies. A limitation of this study is that it reflects the findings of some football players.

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Meditation for Peace and Spirituality

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Abstract:

Meditation is a state of consciousness that can be understood only on a direct, intuitive level. The aim of the Meditation is to eliminate toxin and impurities within the body that accumulate due to dietary habit. Meditation provides mental relation is very much necessary to produce the desired results. Meditation provides a lasting spiritual rest, which must be experienced and to be understood. Meditation helps to prolong the body's period of growth and cell production, and reduces the decaying process Meditation is the act of focusing one's thoughts or engaging in self – reflection or contemplation. Some people believe that, through deep meditation, one can influence or control physical and psychological functioning and the course of illness.

Introduction:

Research interest on meditation back to the 1960s, the breakthrough in the scientific evidence on health benefits of meditation largely took place during the 1980s and 1990s. Meditation is a state of consciousness that can be understood only on a direct, intuitive level. Ordinary experiences are limited by time, space, and the laws of causality, but the meditative state transcends all boundaries. meditation, one slowly gains knowledge of the self, and gets freed from bondages, not merely the external ones, but in one's inner consciousness. Meditation is a process that anyone can use to calm oneself, cope with stress, and, for those with spiritual inclinations, Meditation is a distinct practice in Indian philosophy and it is mentioned in many Indian traditional texts. Meditation is the act of focusing one's thoughts or engaging in self – reflection or contemplation. Some people believe that, through deep meditation, one can influence or control physical and psychological functioning and the course of illness. For effective practice of meditation, regularity of time, place, and practice are most important, as they condition the mind to focus its energies. The mind seems to be particularly active.

Benefits of Meditation:

Meditation provides a lasting spiritual rest, which must be experienced and to be understood. Once you can meditate; the time you normally devote to sleep can gradually be reduced to as little as three hours per night, and you will still feel more rested and peaceful than before. By reducing heart rate and consumption of oxygen, meditation greatly reduces stress levels. People who meditate regularly tend to develop magnetic and dynamic personalities, cheerfulness, powerful speech, lustrous eyes, physical health, and boundless energy. Others draw strength from such people and feel elevated in their presence. In meditation, thoughts come to the surface and develop experience a new ideas of the universe, a vision of unity, happiness, harmony, and inner peace. Negative tendencies vanish, and the mind becomes steady. Meditation brings freedom from fear of death, which is seen a doorway to a new name and form.

Health Effects of Meditation:

The engaging in regular meditation practices is particularly apparent in the prevention of several chronic diseases, including: obesity, depression, cardiovascular disease, diabetes, cancer, Blood pressure, and osteoporosis. Physically active can enhance functional capacity among young people, and can help to maintain the quality of life and independence. The several studies shows that young people can benefit from meditation practices as it contributes to developing healthy bones, sound cardiovascular efficiency and, lung function as well as improved motor skills and cognitive function.

Meditation and Peace:

Meditation throughout the ages has been acclaimed for health and recreation. It provided fun and enjoyment. It also provided youthful exuberance and the elderly care. Meditation is essential for the enhancing of wholesome personality of an individuals which would depend upon the opportunities provided for universal development of the, physiological, psychological, physical, social and spiritual aspects. In meditation, new patterns of thinking come to the surface and develop experience a new ideas of the universe, a vision of unity, happiness, harmony, and inner peace. Meditation brings freedom from fear of death, which is seen a doorway to a new name and form. People who meditate regularly land to develop magnetic and dynamic personalities, cheerfulness, powerful speech, lustrous eyes, physical health, and boundless energy.

Meditation and Disease:

The engaging in regular meditation practices is particularly apparent in the prevention of several chronic diseases, including: obesity, depression, cardiovascular disease, diabetes, cancer, Blood pressure, and osteoporosis. Physically fit person, heart beats at a lower rate and pumps more blood per beat at rest. Many researchers strongly support the regular meditation helps one to keep a strong and healthy and to prevent cardio vascular diseases.

Concentration and Meditation:

The objective of concentration meditation is to develop a single-minded attention directed at some object: an image, a breath, a candle flame, or a word or phrase. Continually returning one's attention to this object develops one's ability to remain calm, focused, and grounded. Meditation and concentration are the two royal roads to perfection. Concentration is the process of focusing your mind on a singular object, either within or outside your body, and keeping this attention steady for a period of time. Only true concentration will lead to meditation.

Psychological Health and Meditation:

A number of studies have shown that meditation practices may play a therapeutic role in addressing a number of psychological disorders. Studies also show that meditation practices has a positive influence to reduce depression, anxiety, stress. Physical self-worth and physical self-perception, including body image, has been linked to improved self-esteem.

Conclusions:

Meditation is a process that anyone can use to calm oneself, cope with stress, and, for those with spiritual inclinations. meditation is the necessity of spiritual and moral remediation of the society. Everybody accepts the importance of meditation as a base for health of body and mind. It is very important to exercise the mind and body together. As well all know that India is a country of various caste and creeds. In order to achieve higher degree of unity in diversity, meditation play a major role in bringing all together under the feeling of oneness. Through games when the traits of co-operation, belongingness, love, affection, attachment develop strongly in students, then automatically we march towards national integration.

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Human Rights Violation of Women: A Meta-analysis

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Abstract:

Violence against women means any act of violence that results in or is likely to result in physical, sexual or psychological harm or suffering to women. Violence against Women is a Violation of Human Rights. Violence against women takes many forms – physical, sexual, psychological and economic. They are interrelated and affect women from before birth to old age. As societies change, patterns of violence alter and new forms emerge. Some forms of violence, such as trafficking, cross national boundaries. 15% of the women reported one or more incidents of forced sex in the last 12 months and this rate was consistent across rural, urban slum and urban non-slum areas. 85% of the men reported engaging in at least one form of violent behaviour in the past twelve months. Seventy two percent reported engaging in emotional violence, 46% reported control, 50% reported sexual violence and 40% reported of physical violence. 15.7% of the pregnancy related deaths in the community series and 12.9% in the community were because of domestic violence. In Western India related to dowry deaths and intentional injuries found that 59% of women had experienced physical violence, 28% mental torture, 10% molestation by family members and perversity, and 3% starvation. 50% of the women had experienced physical or psychological violence at least once in their married lives. About 44% reported at least one psychologically abusive behaviour and 40.3% women reported experiencing at least one form of violent physical behaviour such as slapping, hitting, kicking, beating, threats or use of weapons and forced sex.

Introduction:

Violence against women means any act of violence that results in or is likely to result in physical, sexual or psychological harm or suffering to women. (UN Declaration on the Elimination of Violence against Women, 1993).

In recent years, there has been increasing concern about violence against women in general and domestic violence in particular, in both developed and developing countries. Not only has domestic violence against women been acknowledged worldwide as a violation of the basic human rights of women, but an increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations General Assembly, 1991; Heise et al., 1994, 1998; Jejeebhoy, 1998). Violence against women takes many forms – physical, sexual, psychological and economic. They are interrelated and affect women from before birth to old age. As societies change, patterns of violence alter and new forms emerge. Some forms of violence, such as trafficking, cross national boundaries. Women who experience violence suffer a range of health problems and their ability to participate in public life is diminished. Violence against women harms families across generations, as well as communities and reinforces other violence throughout societies.

Violence against women also impoverishes women, their families, communities and nations. Violence against women (in its broadest sense) can occur throughout women's lives, irrespective of their class, caste, social status, race, religion, nationality or any other defining features (CRDC, 2002). Everyday life in urban slums is difficult for women. Shacks are inadequately equipped for daily needs, forcing women and girls to make early morning and late night treks to collect water or use the public toilet. These seemingly innocuous events

become sources of great risk and anxiety for urban poor women who fear for their safety both inside and outside of the home. Violence against women has become pervasive in slums: There, more than half of women have experienced abuse and violence. In South Asia, the statistics on women's physical insecurity are similar, though few reports, policies or interventions reveal what is likely one of the major obstacles to moving forward a poverty-reduction agenda.

Meta-analysis:

Margit Ganster-Breidler (2010) investigated research study into gender based violence in Papua New Guinea and the impact on women's health and well-being. Data were gathered using a validated WHO instrument designed for multi-country use. Two hundred women were surveyed from rural and urban areas in coastal, highland and island provinces. Despite United Nations conventions, government policies and laws, the finding is that the extent of violence against women in PNG is alarming. Two-thirds of the women had been victims of gender-based violence and this statistic was the same as a finding from a Law Reform Commission study more than twenty years ago (Toft and Bonnell, 1985; Toft, 1986). Despite extensive public awareness and education programs about gender equity and women's rights, women's acceptance of a submissive role and a man's right to hit a woman or demand sex are equally alarming. After a lifetime of women being socialised into a subservient role, there are no easy or quick solutions to achieving gender equality. It requires efforts by many stakeholders to address discrimination, promote women's equality and empowerment, and protect and uphold women's human rights.

There is mounting evidence that domestic violence (DV) has long-term negative consequences for survivors, even after the abuse has ended. This can translate into lower health status, lower quality of life, and higher utilization of health services. (Campbell et al. 2002) In comparison with non-abused women, abused women have a 50-70 per cent increase in gynecological, central nervous system (CNS) and chronic stress related problems (Campbell et al. 2002). These health impacts are most likely to be reported by women who have experienced physical and sexual abuse within their intimate relationships. Chronic stress-related problems include functional gastrointestinal disorders, appetite loss and viral infections such as colds and flu (Campbell et al. 2002). Central nervous system problems include headaches, back pain, fainting or seizures (Campbell et al. 2002). Gynecological problems include sexually transmitted diseases, fibroids, pelvic pain, vaginal bleeding or infection and urinary tract infections. Plichta and Abraham (1996) found that domestic violence tripled the odds of receiving a diagnosis of a gynecologic problem. An association has been found between domestic violence and HIV (Fischback & Herbert 1997; Molina & Basina-Smith 1998; Maman et al. 2002). This association has been linked to women in violent relationships being forced to engage in sexual intercourse and being unable to negotiate condom-use for fear of further abuse (Campbell et al. 2002; Maman et al. 2002). Physical impacts have been found to be 'dose-dependent' (Coker et al. 2000, p.1020). This means that the length of the relationship as well as the severity of the abuse and the frequency of incidents play a role in determining the extent of the injury and/or illness resulting from violence (Sutherland et al. 2002).

In an exploratory study, Coker et al. (2000) found that women who have been in an abusive relationship for a long period of time, who had injuries associated with physical violence and who had a high frequency and severity of physical and/or sexual abuse, may

have an increased risk of developing cervical neoplasia. Cervical neoplasia is associated with a history of having had a sexually transmitted infection (STI). This study also found that women experiencing physical and/or sexual violence without an STI were still at an increased risk of developing cervical neoplasia in comparison with non-abused women. This study's findings, which the author cautions should be seen as exploratory and hypothesis-generating in nature, support research which suggests a stress response theory of abuse. Women in abusive relationships suffer from fear and stress which may result in long-term health problems and may reduce women's immunity to illness overall (Coker et al. 2000; Campbell et al. 2002; Sutherland et al. 2002). In addition to specific associations between domestic violence and longer-term illnesses, there is evidence that abused women remain less healthy over time (Campbell et al 2002). International research finds that 'female victims of physical and/or sexual abuse have a significantly higher rate of common health problems, even after abuse ends, compared to women who have never been abused' (Campbell et al. 2002, p. 1162).

In Australia, the longitudinal Women's Health Australia (WHA) study, commissioned by the Commonwealth Department of Human Services to investigate the health and well-being of Australian women, provides the opportunity for population based national research (Parker & Lee 2002). Violence against women is one of five key themes in this study. Forty thousand Women were recruited in three cohorts, 18 to 23 years of age, 45 to 50 years of age, and 70 to 75 years of age. Parker and Lee (2002a; 2002b) have reported the results of a study for which participants in the mid-aged cohort were selected on the basis of their response to a WHA survey question about experiences of abuse in adulthood or childhood. Thirty five per cent of women answered that they had experienced physical, mental, emotional, sexual abuse or violence. Self-report questionnaires were then used to gather data on the nature of women's experiences of abuse, their help-seeking, subjective health status, psychological wellbeing and depression. The majority of women reporting abuse had experienced more than one type of abuse and multiple acts over time. Fifty per cent of women reported abuse in childhood; 37 per cent during adolescence; and 73 per cent had experienced abuse by a partner or ex partner.

With respect to their health, the study found that the experience of abuse significantly affected the general health and wellbeing of mid-aged women. Overall, the participants had poorer physical and mental health than non-abused women of a similar age, and a substantial number were psychologically distressed and depressed.

Parker and Lee (2002) assessed 'the extent to which the overall characteristics of abuse and help-seeking behaviours contribute to deficits in physical and emotional health in abused mid-aged women.' They found that the majority of variance on a number of measures of health and wellbeing was not explicable by characteristics of the abuse or by aspects of help-seeking. They conclude about these unexpected findings that: '...the results imply that a history of abuse is only one aspect of a woman's life that will impact on her well-being and that even the most extreme experiences of violence are not total determinants of general physical and emotional functioning.' (Parker & Lee 2002) These results are informing the ongoing research in this project which will involve asking women about the ways in which they dealt with the abuse and the factors which were helpful and unhelpful in this respect.

One of the few multi-centric study of intimate partner violence in India was carried out by ICRW (2000). This study was carried out in seven cities, namely, Lucknow, Bhopal, Delhi, Nagpur, Chennai, Vellore and Thiruvananthapuram. The study found that overall about 50% of the women had experienced physical or psychological violence at least once in their

married lives. About 44 % reported at least one psychologically abusive behaviour and 40.3% women reported experiencing at least one form of violent physical behaviour such as slapping, hitting, kicking, beating, threats or use of weapons and forced sex. The reporting of any form of violence was highest among rural women followed by women in urban slum areas. Similar proportions of women (45% to 50%) in rural and urban slum areas reported physical violence. Significantly fewer urban non-slum women reported either psychological or physical violence than rural or urban slum women.

In the ICRW study (2000), about one in every four of the 9, 938 women in the survey had experienced slapping, kicking, hitting, beating, threat or use of a weapon or forced sex in the 12 months preceding the survey. Nearly 15% of the women reported one or more incidents of forced sex in the last 12 months and this rate was consistent across rural, urban slum and urban non-slum areas. Similar findings emerged from the NFHS II survey (1998-1999) which collected information based on self-reporting by women, of experiencing violence from an intimate partner (NFHS-2 India). The survey found that at least 1 in 5 ever married women in India have experienced domestic violence since the age of 15 and at least 1 in 9 had experienced domestic violence in the 12 months preceding the survey.

There are a number of studies covering one or more states of India. Many of these provide information only on experience of physical assault from husbands by wives. The prevalence figures vary widely, probably as a result of varying definitions of what constitutes physical violence. For example, a study by Jejeebhoy (1998) from two districts of Uttar Pradesh in North India and Tamil Nadu in South India found that prevalence of physical violence on wives ranged from 42-48% in Uttar Pradesh and 36-38% in Tamil Nadu (Jejeebhoy (1998)). In another study among 983 women in Uttar Pradesh 45% of the women in the age group of 15-39 years had been physically assaulted by their husbands (Jejeebhoy and Cook (1997)).

A 1998 study by Visaria among the women in Gujarat found that 66% of the women reported verbal and physical assault while 42% of the women reported physical assault (Visaria (1999)). On the other hand, a study among the potter community in rural south India, Rao (1997) found that only 22% of the women were physically assaulted. Some studies have focused specifically on low-income households, and find a very high prevalence of intimate partner violence. In a study by Mahajan and Madhurima (1995) among lower caste households in Punjab, 76% of the women reported domestic violence, one third of who reported regular beatings (Mahajan and Madhurima (1995)). Another study by Mahajan (1990) a village among schedule castes and non-schedule castes found that 75% of the scheduled caste wives reported being beaten. A number of recent studies have interviewed men to find out how many of them report beating their wives. The most recent of these was by ICRW (2002) in four states in India, namely Rajasthan, Tamil Nadu, Punjab and Delhi (ICRW 2002). The men reported very high levels of violence. As high as 85% of the men reported engaging in at least one form of violent behaviour in the past twelve months. Seventy two percent reported engaging in emotional violence, 46% reported control, 50% reported sexual violence and 40% reported of physical violence.

Studies of men from single sites report lower rates of violence. A study from five districts of Uttar Pradesh by Narayana (Narayana 2000) found that 30% of the men reported of beating their wives. In the study by Mahajan (1990) reported above, 75% of the scheduled caste men and 22% of other caste men reported of beating their wives (WHO, 2000). Another

study among 6000 men in Uttar Pradesh found that wife abuse was a very common occurrence in the village and 50% of the men reported physically abusing their wives.

There are only a couple of studies that point to the fatal consequences of gender-based violence against women. In Western India, a study in 400 villages and seven hospitals by Ganatra found that 15.7% of the pregnancy related deaths in the community series and 12.9% in the community were because of domestic violence. Another study by Seshu and Bhosale (1990) in Western India related to dowry deaths and intentional injuries found that 59% of women had experienced physical violence, 28% mental torture, 10% molestation by family members and perversity, and 3% starvation. Causes of deaths in the cases of women who had died included burns in 46% cases, drowning in 34% (who 2000). The relationship of violence to gender-power relations becomes very clear from the above study, because 52% of the victims were childless while 22% had only female children. There is also a 1994 study in an urban slum (Bhattacharya and Pratinidhi 1994) which found that 19% of the women were physically assaulted because they were childless (who 2000).

A research study conducted by Ms.C.S.Chandrika (1998) on sexual harassment at the workplace as a part of the study for SAKSHI, an NGO in New Delhi found that 95% of the women felt that there was prevalence of sexual harassment at the work place in Kerala. Another phenomenon is that of 'missing girls' in Kerala. According to a report in the newspaper The Indian Express (23/11/97), 28 girls were found to be missing within 7 months in the district of Kasargode, presumably ending up in brothels. Prostitution and trafficking is also increasing in the state rapidly along with sex tourism (unifem 2000). Jayatunge (1998) conducted a study on women and violence at the Wendesiwatta settlement with a sample of 212 individuals including 63 women. The data was gathered using interviews and questionnaires. The author found out that 42% of the children of battered mothers were under stress. This was found to be further aggravated by the economic instability caused by violence at home. A link between having a history of physical and sexual abuse during childhood and becoming a victimizer later in life was discovered in a study done in the low income urban families of the Colombo district (Moonasinghe, 2002). Analysis of a series of cases of wife battering showed that, in 8% of the families. A number of studies on the prevalence of physical violence against women in different countries show that almost 20 to 50% of the women have experienced domestic violence (UNICEF 2000). Studies from WHO indicate that between 16% and 52% of women world-wide are physically assaulted by an intimate partner at least once in their lives (IPPF 2000). Statistics published in 1997 by the World Health Organisation (WHO) reveals that, according to 40 studies conducted in 24 countries on four continents, between 20% and 50% of the women interviewed reported that they suffered physical abuse from their male partners. Also, according to 'Where Women Stand - An international report on the status of women in 140 countries, 1997-1998', the number of women reporting physical abuse by a male partner during the period 1986-1993 were between 21% to 60% (IPPF 2000). Studies on wife abuse among selected countries in south-east Asia show that the prevalence ranges from 3.4% in Kyakutan, Myanmar, to 40% in a study in an OPD from a hospital in Thailand to 76% among lower caste women in rural India (Who 2000). Evidence from Sri Lanka shows that 60% of 200 women interviewed said they were beaten by their partners, 51 of the women said their partner used a weapon during the physical assault (IPPF 2000).

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Current Scenario of Marathi Medium Primary Schools in Maharashtra State

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Abstract:

Maharashtra has shown a remarkable growth in the field of primary education. Primary education in Maharashtra has come a long way in the last two decades. According to the Census 2011, Maharashtra has the literacy rate of 80%, keeping in pace with states like Kerala and Mizoram. Maharashtra Government has introduced several schemes and laws to encourage primary education in the state. Maharashtra is one of the top destinations for Education in India. With numerous school, colleges and other educational institutions operating in the state, Maharashtra is flocked by students from all over the country for pursuing a career in their own chosen field.

Introduction:

A child is eligible to attend school at the age of 5 years. Schools in Maharashtra are affiliated to Indian School Certificate Examination, Central Board of Secondary Education, or Maharashtra State Secondary Board. Few of the schools in the state are also managed by the Municipal Corporation. In the primary level education field, Maharashtra has taken giant steps. In the last couple of decades, the 2011 census has shown that rate of literacy goes to the extent of 80% literacy. Starting from 1951, the impetus to provide primary education in village areas was government program. This led to the compulsion to finish the primary education standardization. Gradually, the number of students seeking admissions into primary level schools has increased, textbooks are given to people and scholarships on merit are also given out for encouraging children.

About Current Scenario:

Activists, teachers, and managements of such schools had come together on Tuesday to protest against the government for “deliberately” turning a blind eye to the dearth of infrastructure and resources in Marathi-medium schools, which have been witnessing a high-dropout rate lately. The protesters had also demanded that the government publish a white paper on the state of these schools. In October 2009, Samajwadi Party MLA (Member of the Legislative Assembly), Mr. Abu Asim Azmi, demanded that he should be given the legislative documents in Hindi, as he is not fluent in Marathi. According to his own admission, he was living in Maharashtra for 40 years and had not learnt Marathi. Linguistic states were formed in the 1950s so state business could be conducted in the state language and all major languages of India get their due place and develop as modern languages. Politicians serving in the Maharashtra State Legislative Assembly must learn the state official language, and not demand that the language of the state where they were born be used. This destroys the very core of the formation of linguistic states.

Implementation of the Right to Education (RTE) Act has adversely affected the already waning popularity of Marathi medium schools in the city. According to civic authorities, till June 13,3,582 admissions took place in the city under RTE, and all of these were in English medium schools.

Education board officials said that parents, even from those from economically weaker sections (EWS), prefer English medium schools over Marathi. Now, with RTE in place, even EWS parents can easily enroll their wards in private English medium schools under the 25 per cent quota, they said.

According to the PMC education board report, submitted a few months ago, English medium schools have surpassed Marathi medium schools in numbers as well as student count. There are 165 Marathi medium schools in the city with 87,955 students and 202 English medium schools with 96,322 students. Of the total 1.92 lakh students in private primary schools, over 50 per cent study in English mediums, while 45 per cent are enrolled in Marathi medium schools.

While most Marathi medium primary private schools are aided, only two English medium schools are aided by the state government.

The reason for decline in the number of Marathi schools was only because the numbers of students enrolled in them were decreasing, Kumar said. "We have introduced spoken English in Marathi-medium schools in a bid to retain students," he added.

Maruti Mhatre, who runs a Marathi-medium school in Mumbai's Vikhroli, said: "On the one hand, they are promoting self-financed English schools. On the other, their (government's) apathy towards Marathi schools is leading to their closure. The state has been delaying sanctioning of teaching and non-teaching posts for our schools, making it extremely difficult for us to function."

However, Kumar claimed that nearly 50 per cent of the 10,000 self-financed schools approved were Marathi-medium.

The outfits also claimed that delay in issuing approvals and the lack of grants had forced several schools to shut down. The organisations have demanded making Marathi a compulsory language in state schools, across all boards, while demanding imposition of a cap of the number of English-medium schools.

Official data revealed that enrollment in English medium schools rose by over 2.65 lakh in 2015-16 compared to 2014-15. For the same period, Marathi schools witnessed a drop of 24,228. Further, a white paper by Praja Foundation on December 2016 revealed that the number of students in BMC-run Marathi medium schools had declined from 1,16,086 in 2011-12 to 71,454 in 2015-16.

Problems in Primary Education:

- 10,000 schools are in need of proper buildings and developed infrastructure. Drop-out rate needs to be reduced from 12.66% at primary level and 29% at higher-primary level.
- Education research institutions like NCERT, Goodearth, report by a social activist Mr. Herambh Kulkarni highlight that basic skills among primary level students in Maharashtra such as grasping level and solving simple mathematical equations are poor.
- Number of D.Ed. colleges, no performance appraisal, corruption in the education system and no self-sufficiency of educational institutes in rural areas are some of the major issues.

The major objective of the plan was to:

- Transform and change the current educational system and relate closely with the aspirations of the students and fulfill their requirements.
- To improve the process and standard of imparting education.

- To spot, recognize, and develop talent.
- To improve and increase facilities for students and teachers alike.
- Prevent absenteeism and dropout. Attract more students.
- Introduce mid-day meals to keep students interested in school.
- Work towards encouraging girl students to attend school.
- Provide free school supplies including meals, uniform, textbooks, slates, etc.

Result:

After making Marathi compulsory for all central board schools, the state government now wants to ensure that the students of Marathi-medium schools do not lag behind. The state education department is making efforts to ensure that those studying in Marathi schools learn English from an early age. The school education department is in the process of recruiting 15,000 teachers with a DEd degree. Of them, 20% seats will be reserved for candidates with English majors.

“We know that the standard of English taught in rural schools and other Marathi-medium schools is not very good,” school education minister Balasaheb Thorat told DNA. “Not only students, but even teachers struggle with the language. Hence, teachers with a strong background in the subject can help enhance the standard at the primary level.”

Apart from that, the department is determined to reach the remotest areas in the state to implement the Right to Education (RTE) Act. Thorat said they were chalking out a scheme which would help them in starting a movement for effective implementation of the RTE.

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Surgical and Radio Interventional Treatments of Atrial Septal Defect in Da Nang Hospital, Vietnam

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Abstract:

Objectives: The purpose of this study is to compare the efficacy and safety as well as the cost of treatment of the atrial septal defect(ASD) transcatheter closure and surgical closure.

Methods: Using data from records stored at Da Nang Hospital from 1/2010 to 12/2015, we compared the value of the transcatheter closure (TC)and surgical closure (SC) for ASD patients based on the success rate and complications of each technique. In addition, we also determined the treatment costs and the average days of hospital stayfor patients in two groups.

Results: There were 266 ASD patients including 43 surgeries and 223 transcatheter cases. The patient in TC group having an average age of 20.1 years compared to theSC group, is 20.3 years. There were no deaths in either group. The surgical group had a longer hospital stay (28.1 days compared to 18.6 in the transcatheter group, $p < 0.001$), and had more complications (14/43 cases compared to 7/223 cases in the transcatheter group). The cost for ASD transcatheter closure is lower than the cost for surgical closure, averaging 2306.8 USD compared to 3257.0 USD ($p < 0.001$).

Conclusion: Both closing transcatheter and surgery for patients with ASD have great results, but close by radio intervention having shorter hospital stay, lower infection rates and complications, resulting in lower overall costs. Therefore, patients with qualified ASD use better radio intervention method than surgery.

Keywords: Congenital heart disease, Atrial septal defect, Surgical closure, Transcatheter closure.

Abbreviations: CHD = Congenital Heart Disease; ASD = Atrial Septal Defect;
SC = Surgical Closure; TC = Transcatherter Closure

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Introduction:

Atrial septal defect (ASD) is the connection between the two atrial chambers of the heart, allowing the connection of blood flow between systemic circulation and pulmonary circulation. ASD is one of the most common types of congenital heart disease (CHD) after ventricular septal defect and patent ductus arteriosus. Atrial septal defect is a common CHD with a rate of 3.78 / 10000 live births (1). ASD accounts for about 7% -15% of all types of CHD, in which secundum ostium ASD is the most common type with 60% - 70% (3).

Surgical closing by patch is a ASD classic treatment with a high success rate, and ASD transcatheter closing by device that King and colleagues first reported in 1976 (1). However, it was not until the 1990s that the closure of ASD with interventional catheterization was more widely used clinically. Today, this treatment method has been able to replace open-heart surgery in the treatment of secundum ASD at most cardiac hospitals.

In developed countries, both ASD closure surgery and intervention have developed and facilitated life saving and increased actual life expectancy for patients with ASD compared to before. In developing countries, diagnosis and treatment of patients with ASD have many delays due to economic difficulties and underdeveloped health services. For low-income countries, CHD is a burden due to the cost of treatment of CHD in general and ASD in particular is very high compared to the income of patients.

In Vietnam, a number of studies on ASD have been conducted, but sample sizes are small and focus more on surgery (1). Today, with the development and progress of echocardiography, the incidence of ASD has increased due to improved diagnostic capabilities, especially in newborns (1). However, studies on the comparison of two treatment methods of ASD are still few. Therefore, the purpose of this study is to assess the effect on ASD patients who have used catheter intervention and surgery in Da Nang Hospital, in Vietnam.

Method:

Set up research: The study was conducted at Da Nang Hospital, which is Vietnam's fourth largest city with a population of over 1 million people. The health system in Da Nang city is relatively developed, managed and directed by Da Nang Department of Health. Da Nang Hospital is one of the largest hospitals in Central Vietnam and is responsible for treating patients in Da Nang City and neighboring provinces of Central Vietnam. Da Nang Hospital is one of the few hospitals that can perform open - heart surgery in Vietnam. Da Nang is the fourth largest center in Vietnam for the treatment of CHD, after Ha Noi, Ho Chi Minh City and Thua Thien Hue province.

Research data: Data were collected from medical records of CHD patients treated at Da Nang Hospital. Data were collected from all hospitalized patient records between January 1, 2010 and December 31, 2015. Inclusion criteria included all ASD patients who had been treated by transcatheter or surgery. Exclusion criteria are patients with ASD who are not eligible for intervention or surgery or who only undergo medical treatment. According to the inclusion and exclusion criteria, a total of 266 cases of ASD meeting the criteria were included in the study.

Research variables: The main outcome variable in this study is the ASD status based on the doctor's diagnosis from medical records. If the patient has a ASD surgery, we use a surgical report to get the final diagnosis. For intervened patients, the interventional doctor's report on the procedure of closure is used to get the final diagnosis. Anthropometric variables from patients including age, gender, weight, residence and awareness of ASD status ... were also recorded.

Data collection: After being approved by the Da Nang Medical Council, the research team worked with relevant departments to search for medical records. The questionnaire was developed based on research objectives to collect data. Because patients are not yet managed by electronic medical records, all data collection is based on medical records stored in paper. Data collected weekly will be checked by the team member's main doctor to check the logic and completeness of the data. In case of an error or incomplete finding of the data collection, the doctor will check and ask the data collector to check the record and supplement or correct the errors.

Statistical analysis: The proportion of ASD is categorized according to the characteristics of patients such as age, gender, weight, ASD size, residence and awareness of

CHD by descriptive statistical methods. Quantitative data is presented as mean and standard deviation. To compare the differences between two specific groups, test Student T-test or Mann Whitney U-test is used for quantitative and and test Chi-square test or Fisher test is used for qualitative variables. All statistical analyzes were performed using STATA® 13.1. The level of statistical significance is set at $p = 0.05$.

Ethics in research: The research proposal was approved by the Ethical Committee Board at Da Nang Hospital in Vietnam under Decision No. 380 / BVDN-YĐ on July 18, 2016. All data is encrypted, stored and secured according to hospital guidelines and requirements. This is a retrospective study, so there is no possible harm, risk or injury for patients in this study.

RESULT

Table 1. ASD patients in Da Nang Hospital by year and sex, 2010-2015

Year	Women	Men	Total
	N (%)		
2010	14 (7.5)	7 (8.8)	21 (7.9)
2011	37 (19.9)	16 (20.0)	53 (19.9)
2012	24 (12.9)	14 (17.5)	38 (14.3)
2013	34 (18.3)	14 (17.5)	48 (18.1)
2014	48 (25.8)	17 (21.3)	65 (24.4)
2015	29 (15.6)	12 (15.0)	41 (15.4)
Total	186 (100)	80 (100)	266 (100.0)

Table 1 presents the number and percentage of ASD patients in Da Nang Hospital by year and sex during 2010-2015. A total of 266 ASD patients were included in the study, of which 180 women (69.9%) and 80 men (30.1%). The distribution of male and female proportions was relatively similar between years. In particular, the number of ASD patients was low in 2010, then increased in 2011. The number of patients with ASD decreased after 2012, then continued to increase until 2014. ASD patients in the year 2015 decreased as compared to the number of 2014.

Table 2. Age and weight of ASD patients in Da Nang Hospital by year, 2010-2015

Year	n	Age (year)			Weight (kg)		
		Mean	Min*	Max	Mean	Min	Max
2010	21	23.5	17.0	57.0	33.6	5.0	60.0
2011	53	17.2	10.0	56.0	31.0	6.0	62.0
2012	38	27.2	5.0	61.0	38.5	6.8	62.0
2013	48	22.9	7.0	61.0	34.7	6.3	64.0
2014	65	17.1	6.0	72.0	27.7	6.5	74.0
2015	41	17.4	7.0	55.0	28.6	4.8	62.0
Total	266	20.2	5.0	72.0	31.8	4.8	74.0

Note: * in month

The description of age and weight of ASD patients in Da Nang Hospital by year are shown in Table 2. The age of patients with ASD tends to decrease over the years. In particular, ASD patients' lowest age also decreased accordingly. Between 2012 and 2015, the

lowest age of ASD patients ranged from 5-7 months. For weight, ASD patients' average weight also decreased over time. ASD patients' smallest weight was 4.8 kg in 2015.

Table 3. Demographic characteristics of ASD patients in surgical and transcatheter closure groups

Characteristics	Surgical group	Transcatheter closure group	p-value
Sex			
Women	27 (62.8)	159 (71.3)	0.26
Men	16 (37.2)	64 (28.7)	
Age group (year)			
0-9	14 (32.6)	91 (40.8)	0.52
10-19	11 (25.6)	37 (16.6)	
20-39	10 (23.3)	52 (23.3)	
40+	8 (18.6)	43 (19.3)	
Province of residence			
Da Nang	15 (34.9)	70 (31.4)	0.14
Quang Nam	21 (48.8)	110 (49.3)	
Quang Ngai	3 (6.9)	36 (16.1)	
Other	4 (9.3)	7 (3.1)	
Total	43 (100)	223 (100)	

Table 3 shows the demographic characteristics of ASD patients in the surgical and transcatheter closure groups. Of 266 ASD patients, 43 cases (16.2%) were operated on, while 223 cases (83.8%) were applied the transcatheter closure. The proportional distribution in the two groups by gender, age group and provinces of residence was relatively similar (all $p > 0.05$). In both groups, the proportion of women was higher than the proportion of men. The proportion of age group 0-9 years was the highest in both groups (32.6% in the surgical group and 40.8% in the transcatheter closure group). Most ASD patients in the two groups were in Da Nang city, Quang Nam and Quang Ngai province.

Table 4. Dimension (diameter) of the ASD defects in surgical and transcatheter closure group

Diameter of defect	Surgical group	Transcatheter closure group	p-value*
Length (mm)			
Mean (SD)	26.3 (8.6)	20.4 (7.6)	<0.01
Min	10	5	
Max	41	38	
Width (mm)			
Mean (SD)	24.8 (8.3)	18.5 (7.5)	<0.01
Min	10	5	
Max	41	38	

*: t-test

As shown in Table 4, the average length of the defect in the surgical group (26.3 mm) was significantly longer than that in the transcatheter closure group (20.4 mm). The maximum and minimum lengths of defects in the surgical group are also larger than that in the transcatheter group. The average width of defects in the surgical group (24.8 mm) was significantly longer than that in the transcatheter closure group (18.5 mm). Similarly, the maximum and minimum width of defects in the surgical group are also larger than that in the transcatheter group.

Table 5. Surgical and transcatheter closure group by type of ASD

Type of ASD	n	Surgical group		Transcatheter closure group	
		N (%)		N (%)	
Primum ASD	2	2 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)
Secundum ASD	256	35 (13.6)	223 (87.1)	223 (87.1)	0 (0.0)
Sinus venous ASD	6	6 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)
Total	266	43 (16.2)	223 (83.8)	223 (83.8)	0 (0.0)

Table 5 shows the surgical and transcatheter closure group by types of ASD. The entire ASD patients in transcatheter closure group is secundum ASD. Secundum ASD has also made up the majority of the surgical group (35/43 cases). In secundum ASD alone, patients who had an operation were 35 people (13.6%), and those with transcatheter were 223 people (87.1%). All patients that had primum ASD and sinus venous ASD belonged to the surgical group.

Table 6. Characteristics of different types of ASD patients in Da Nang Hospital among the surgical group, 2010-2015

	Primum ASD	Secundum ASD	Sinus venous ASD	Total ASD
	Mean (SD)			
Age (age)	29 (11.3)	22.4 (17.3)	5.3 (3.9)	20.3 (16.9)
Height (m)	1.6 (0.1)	1.3 (0.3)	1.0 (0.2)	1.3 (0.3)
Weight (kg)	44.3 (10.9)	33.4 (15.6)	17.6 (9.9)	31.7 (15.8)
Diameter of ASD				
Length (mm)	28.5 (16.3)	27.9 (8.1)	18.0 (5.5)	26.6 (8.7)
Width (mm)	28.5 (16.3)	26.2 (7.8)	18.0 (5.5)	25.1 (8.2)

The characteristics of different types of ASD patients among the surgical group were shown in Table 6. The average age in the sinus venous ASD patient group was the smallest (5.3 years). The average height and weight of sinus venous ASD patients were also the smallest. Similarly, the diameter of the defects of sinus venous ASD patients was also the smallest. The primum ASD patients group had the highest of age, the highest of height, heaviest of weight and the largest of the diameter of the largest defect.

Table 7. Characteristics of different types of ASD patients in Da Nang Hospital among the transcatheter closure group, 2010-2015

	ASD I	ASD II	Sinus venous ASD	Total
	Mean (SD)			
Age (age)	NA	20.1 (18.3)	NA	20.1 (18.3)
Height (m)	NA	1.3 (0.4)	NA	1.3 (0.4)
Weight (kg)	NA	31.8 (17.9)	NA	31.8 (17.9)
Diameter of ASD	NA		NA	
Length (mm)	NA	20.6 (7.6)	NA	20.6 (7.6)
Width (mm)	NA	18.7 (7.5)	NA	18.7 (7.5)

Table 7 shows the characteristics of different types of ASD patients in Da Nang Hospital among the transcatheter closure group. In the transcatheter closure group, all patients had secundum ASD. The average age of these patients was 20.1 years, the average height was 1.3 m, and the average weight was 31.8 kg. The average diameter of the defects was 20.6 mm in length and 18.7 mm in width.

Table 8. Type of device using for the transcatheter closure group

Device	N	%
Figulla Flex II ASD	52	24.1
ASO Cocoon	88	40.7
ASO Amplatzer	76	35.2
Total	216	100.0

Table 8 shows the type of device using for the ASD transcatheter closure group. Among the tools used, ASO Cocoon was most used (40.7%), followed by ASO Amplatzer (35.2%) and Figulla Flex II ASD (24.1%).

Table 9. Diameter of defect among the transcatheter closure group by type of devices

	Devices for transcatheter closure			Total
	Figulla Flex II ASD	ASO Cocoon	ASO Amplatzer	
Mean (SD)				
Diameter of defect				
Length	17.4 (7.5)	20.3 (7.3)	22.4 (7.3)	20.4 (7.6)
Width	15.4 (6.9)	17.9 (7.1)	21.2 (7.5)	18.5 (7.5)

The diameter of defect among the ASD transcatheter closure group by type of devices are shown in Table 9. The ASO Amplatzer has been used with defects with the largest average diameter (22.4 mm in length and 21.2 mm in width). Figulla Flex II ASD was used with defects with the smallest mean diameter (17.4 mm in length and 15.4 mm in width).

Table 10. Complications of ASD surgical group and transcatheter closure group

Complication	Surgical group (n=43) N (%)	Transcatheter closure group (n=223) N (%)	Total
Pneumonia	3 (7.0)	0	3
Septicemia (clinical symptom)	4 (9.3)	0	4
Heart failure	3 (7.0)	0	3
Incision infection	1 (2.3)	0	1
Cerebrovascular accident	1 (2.3)	0	1
Respiratory insufficiency	1 (2.3)	0	1
Convulsion	1 (2.3)	0	1
Dropping of device	0	2 (0.9)	2
Transcatheter closure failure	0	5 (2.2)	5
Total	14 (32.6)	7 (3.1)	21

Table 10 shows the complications of the ASD surgical group and transcatheter closure group. There have been 7 ASD cases of complications occurring in the transcatheter closure group, while 14 cases had been reported in the surgical group. Complications with the highest numbers among the surgical group were septicemia (4 cases), pneumonia (3 cases) and heart failure (3 cases). Regarding complication due to the transcatheter closure technique, there were 5 ASD cases with device failure during the implantation period and 2 cases with dropping device in the same day after procedure. However, those cases were sent to surgery, and they recovered completely.

Table 11. Hospital days of surgical and transcatheter closure groups for ASD patients in Da Nang Hospital

Time (day)	Surgical group	Transcatheter closure group	p-value*
	Mean (SD)		
Before intervention	15.0 (8.4)	12.3 (8.5)	0.06
Reanimation unit	1.2 (0.5)	-	
After intervention	8.0 (3.0)	6.4 (2.4)	<0.001
Total of hospital days	24.1 (9.3)	18.6 (8.8)	<0.001

Table 11 presents the hospital days of the surgical and transcatheter closure groups for ASD patients. Time of inpatient of the surgical group (24.1 days) was significantly longer than that of the transcatheter closure group (18.6 days). ASD patients in the transcatheter closure group did not need to stay in reanimation unit, while patients in the surgical group needed to stay on average of 1.2 days in reanimation unit.

Table 12. Unit price of different category for ASD patients in Da Nang Hospital

Price category	Unit price (USD)
Bed-day	8.4 USD /day
Transcatheter closure procedure	2150.5 USD /case
Operation	3010.8 USD /case

Bed-day in reanimation room	17.7 USD /day
Bed-day in post-operation room	12.6 USD /day

Note: 1 USD=23,250 (in 2019)

Table 12 presents the unit price for different categories for ASD patients. The unit price for a case of operation was 3010.8 USD, while for a case of transcatheter was 2150.5 USD. The price of a bed-day was 8.4 USD/day. If a ASD patient needs an operation, he or she has to use another type of bed with the price of 17.7 USD/day in a reanimation room, and 12.6 USD/day in a post-operation room. The average cost of one ASD transcatheter closure is lower than the cost of one case of ASD surgical closure, averaging 2306.8 USD compared to 3257.0 USD ($p < 0.001$).

Discussion:

This study was conducted at Da Nang Hospital to evaluate the effectiveness of two treatment methods of ASD closure by surgery and transcatheter.

Number of ASD patients:

The total number of ASD patients in the study was 266, the lowest distribution in 2012 (38 patients) and reached the highest level in 2014 (65 patients), and then decreased again. However, this rate is not the true rate of ASD in the population, because it depends on the free heart surgery programs of Da Nang Hospital. Therefore, this percentage does not reflect the true prevalence of ASD patient in the community. The number of surgical patients is only 43 (16.2%) while the number of transcatheter patients in the study accounts for 83.8%. According to Tien-Hsing Chen et al., the number of ASD surgical patients was reduced every year, in contrast to the increasing number of patients accepting transcatheter closing (8).

Age of ASD patients:

The average age of ASD patients in the study was 20.3 years, the youngest was 5 months, the oldest was 72 years. The group of patients under 9 years-old accounted for the highest proportion (39.5%), the group under 40 years-old accounted for the majority of 81% and the group of 40 years and older accounted for the lowest rate of 19%. According to Nguyen Lan Hieu's research (2008 in Ha Noi), the ASD average age is 27, the smallest age is 11 months, the highest age is 64 years (2). Compared with the study of Pham Manh Hung (2012) also in Ha Noi, the average age of ASD patients in his study is 34.15 years, the lowest age is 16 years, the highest age is 70 years (3). Yinn Khurn Ooi et al. the youngest age of ASD patients was closed, even 5.6 years compared to surgical group, 4.5 years (9). The study showed that the age of ASD patients undergoing surgery or whether in Da Nang Hospital tends to decrease over the years, from 23.5 years in 2010 to 17.4 years in 2015. This shows that congenital heart disease patients are detected and treated more and more earlier.

The proportion of patients in the 0-9 age group was the highest in both groups (32.6% in the surgical group and 40.8% in the closed group). Thus, up to 73.4% of ASD patients were treated before 10 years of age. This early treatment has many benefits for the recovery of heart muscle for patients. The majority of patients with ASD have no clinical symptoms, so this also reflects the possibility of early detection of the health system in Da Nang. The youngest patient treated is 5 months, reflecting the ability of the surgeon as well as the interventionist in Da Nang have been improved, was able to perform the procedure for very

small patients. Most patients with ASD (89%) come from Da Nang, Quang Nam and Quang Ngai, only 11% come from other provinces.

About gender of ASD patients:

Research in Da Nang Hospital shows that ASD are more common in women (69.9%) than men (30.1%). Many researchers have tried to understand this issue, but so far no research has shown the exact cause and no hypothesis has been made convincing. The proportion of women in the study is also the majority when compared in each transcatheter and surgical group, the rate of women is always higher than that of men. This percentage is consistent with the study of Pham Manh Hung (male 26.5%, female 73.5%) and other studies in the world (3). According to Nguyen Lan Hieu in 2008, the study of 249 ASD patients with secundum ASD, the female population is also the majority (female 71.5%, male 28.5%) (2). According to author Tien-Hsing Chen et al. in 1422 ASD patients, there were 1069 women, accounting for 75.2% (8).

About weight of ASD patients:

The average weight of ASD patients at Da Nang Hospital was 31.8 kg, the patient was at least 4.8 kg and the heaviest was 72 kg. This weight gradually decreases over time, averaging 33.6 kg in 2010 to 28.6 kg in 2015. The doctors of Da Nang Hospital can operate or transcatheter close even for the ASD child with the smallest weight of is 4.8 kg. According to Nguyen Lan Hieu in 2008, the patient had the lowest weight of the intervention closure was 8kg, and the highest was 62 kg (2).

Atrial septal defect size:

The average length of atrial septum in the surgical group (26.3 mm) is significantly longer than that of the transcatheter group (20.4 mm). The maximum and minimum length of ASD in the surgical group is also larger than the intervention group. This shows that the larger the hole, the more likely the patient will have surgery. However, the intervention doctors at Da Nang Hospital were able to close even the patient had a large hole of up to 38 mm. The maximum hole size is 41 mm in the surgical group and 38 mm in the transcatheter group. In the study in Ha Noi, the average size of ASD was 25.79 mm, the smallest size was 10mm and the largest was 40mm (3).

Specify surgery or intervention:

Indication for surgery or transcatheter closure depends on the patient's ASD types. Transcatheter closure is only applied to secundum ASD patients with all of margins around defect are superior to 5 mm. Therefore, surgery is applied for patients with combination ASD, primum ASD and venous sinus ASD. The surgical procedure also applies to secundum ASD that are too large (more than 38 mm) or the rims of the defect are inferior to 5 mm. In our study, the majority of ASD patients were treated by transcatheter with 223 patients (83.8%), only 43 patients (16.2%) had surgery. In the 43 cases of surgical group, there were 2 cases of primum ASD, 6 cases of sinus venous ASD and the remaining 35 cases were secundum ASD with no indication of transcatheter closure because of the too large defects.

Types of ASD devices:

In the Da Nang study, although ASO Cocoon was most used (40.7%), followed by Amplatzer ASO (35.2%) and Figulla Flex II ASD (24.1%). All types of devices are safe and do not see complications. The Amplatzer ASO type is used for ASD with the largest average diameter with a length of 22.4 mm and a width of 21.2 mm. Figulla Flex II ASD is used for ASD with the smallest average diameter with a length of 17.4 mm and a width of 15.4 mm. However, the use of any closing device type is not entirely dependent on the characteristics of the patient's ASD or the choice of the doctor, but also depends on the supply of the hospital's available medical equipment. According to Pham Manh Hung's research on patients with large-size hole with medium size device of 39.65 ± 1.67 mm, in which the smallest device is 38 mm, the largest is 44 mm (3).

Results of transcatheter closure group:

The success rate of transcatheter closure in Da Nang Hospital is 221 cases of success on 228 interventions, equivalent to 96.9%. According to Nguyen Thuong Nghia at Cho Ray Hospital, the success rate is 97% (4). Truong Tu Trach in Ho Chi Minh City, ASD transcatheter closure after 3 months resulted in a total of 98.65% success (5). Author Pham Manh Hung in Ha Noi, the successful rate of ASD closure is 97.1% (3).

In Da Nang study, there were 5 patients that the ASD transcatheter closure procedure were failure, accounted for 2.2%. The reason for failure are the too large defects and the rims of the ASD are weak. The interventional doctors tried to close it, but they couldn't fixed the devices. So the doctors decided to pull out the equipment and these 5 ASD patients were transferred to surgery in the following week, and all of them were successfully closed by surgery.

Complications of dropping device:

In our study, there were 2 patients who dropped the device after closing. These patients had chest pain and had difficulty breathing after going to the postoperative room on the same day of intervention. They was diagnosed by echocardiography as dropping of closing device from the position. One device fell into the right ventricle and another in the pulmonary artery. These two patients were also transferred to surgery immediately to remove the devices and successfully close the ASD without leaving any sequelae. The author Pham Manh Hung reported a failure case due to a large heart, a ASD diameter of 35mm, absolutely no inferior vena cava rim. The device was dropped in the right ventricular and it was trapped in a tricuspid valve. The patient was operated in urgent to take out the device and to close surgically the ASD at the same time. (3). This result is consistent with research in Da Nang Hospital. John Moore et al. (2003) had 21 failure cases in a total of 3824 intervention cases, accounting for 0.55%, of which 15 cases were obtained the devices by intervention equipment, and 6 cases were transferred to open surgery (6).

Complications of infection:

Our study did not experience any infection in the transcatheter group. The surgical group had 7 infection cases including 3 cases of pneumonia and 4 cases of sepsis, all of these patients recovery well with antibiotic treatment. According to John Moore et al., the closure of ASD by x-ray intervention is often carried out strictly sterile, and often patients receive a dose of prophylactic antibiotics, so the risk of infection is very small and rare. (6).

Complications of pericardial effusion:

No patients had pericardial effusion in the study at Da Nang Hospital. There is one case of pericardial bleeding in Truong Quang Binh's study (1). In study of Nguyen Thuong Nghia et al., one case of pericardial effusion due to left pulmonary vein tearing during procedure and successful resuscitation by blood transfusion, after that the patient was successfully transferred to open-heart surgery (4).

Complications of arrhythmia:

The study in Da Nang did not record any arrhythmia case, but it is likely that due to inadequate study data, patients who were re-examined were not able to complete ECG. There are 3 cases of arrhythmias recorded in the study of Truong Quang Binh (1). In MAUDE data, 5% of patients with ASD had a post-procedure arrhythmia.

Complications of thrombosis:

The results do not record any cases of thrombosis due to the device in the heart chamber. This result is similar to the results of other authors' studies (5). MAUDE study showed that 2.5% had thrombosis (18/705 patients) with thrombosis, including 1 fatal case (6).

Death in the study:

There were no deaths in both transcatheter and surgical groups in the Da Nang Hospital study, most of the patients in the intervention group did not have any complications after the intervention. This result is suitable for authors in Vietnam and in the world. According to Truong Quang Binh, the procedure was successful in 140/145 patients (96%). There were 5 cases of failure when closing accounting for 4% and no patients died (1). The study of Zhong-Dong Du et al., the mortality rates of the transcatheter and surgical groups were 0% (10).

About hospital stay:

The average days of hospitalization for ASD patients in Da Nang surgery group (24.1 days) was significantly longer than that of the transcatheter group (18.6 days). The duration of inpatient includes preoperative time and postoperative or post interventional time. In any period, hospital day of patients with surgery were always higher than transcatheter patients. In addition, all ASD patients in the transcatheter group did not need to stay in Intensive care unit(ICU) after procedure, while the patients in surgical group have to stay in ICU after surgery for an average of 1.2 days. The study in Ha Noi showed a shorter hospital days of 8.65 ± 8.14 days for transcatheter group (3). In our study, the average of hospital days is quite long compared to the other researchs in Vietnam and in the world. However, in fact, the majority of hospitalized days in Da Nang Hospital is mainly prepared before the procedure. According to Yinn Khurn Ooi et al., ASD transcatheter patients have a shorter hospital stay, only 1.5 days compared to surgery is 4.0 days, with less cost compared to surgery (9).

About the cost of treatments:

For many reasons, this study was unable to give an exact number of average costs for one ASD case by surgical and transcatheter closure. However, it can be seen that the cost for a surgical patient is higher than transcatheter treatment. The cost includes all services during the hospital stay, namely the following:

The length of hospital stay before surgery is longer (15 days) than the transcatheter group (12.3 days).

The period of resuscitation after surgery was 1.2 days in the surgical group while the transcatheter group did not have to pay this cost. Moreover, the cost of medicines, tools, ventilation machine at the post-operative resuscitation department is very high.

The postoperative period of surgical group was also higher (8 days) compared to the catheter group (6.4 days).

In summary, all costs for beds, medicines, resuscitation, postoperative ... are higher than those in the open surgery group. The final cost to be taken into account and also the most important cost in all current costs is the "cost of the operation" and "the cost of the device closure":

The operation cost includes all tools for one operation and for circulation extra cardiac (CEC).

The transcatheter cost includes device price and the cost of the interventional procedure.

In Da Nang Hospital study, the average cost of one ASD transcatheter closure is lower than the cost of one case of ASD surgical closure, averaging 2306.8 USD compared to 3257.0 USD ($p < 0.001$). The study by Yinn Khurn Ooi et al. found that the cost of ASD transcatheter closure was lower when compared with ASD surgery, the average cost of transcatheter was 19,128 USD compared to the cost for surgery was 25,359 USD (9). In the future, the price of closed devices is getting cheaper, the cost for transcatheter closure will be significantly lower than that of surgery.

About aesthetics:

The method of interventional treatment without leaving a surgical scar, ensuring aesthetic issues facilitates patients to integrate into the community, not feeling ill. Psychologically, patients as well as families are more likely to accept intervention through skin than open surgery (3).

Follow up after treatment:

After surgery or transcatheter closing, patients at Da Nang Hospital will be re-examined after 1 week, 1 month, 3 months, 6 months, 12 months, and every year. However, the patient's re-examined record could not be found, this study have to follow patients through phone calls. The following time from surgery or closing though to the earliest is after 3 years, no later than 8 years. As a result, only about 50% of patients responded (because many phone numbers were changed, so we cannot contact to these patients) and most patients in both groups were in good health, only 1 case in the surgical group with complications and then returned to hospital and complications have been resolved.

Tien-Hsing Chen et al. monitored the results 4 years after discharge, there were no statistically significant differences between the two SC and TC groups (8). Long-term follow-up, TC patients had better results in all-cause mortality and ischemic stroke and systemic thromboembolism than those who accepted surgery. Moreover, patients treated with transcatheter closure had a lower rate of arrhythmias than the surgical group (8).

About reintervention after treatment:

Our study followed for 3-8 years without any reintervention in both SC and TC groups. Mark A. Kotowycz et al. Evaluated the comparative and long-term effectiveness of safety of CT despite the surgery of ASD, among 718 times of ASD performed between 1988 and 2005, 383 had surgery and 335 CT. The long-term relapse rate is higher in patients with parasite closed parenterally (7.9% versus 0.3% after 5 years, $p = 0.0038$), but most of these re-interventions occur during the year. Firstly. The surgical group had 1 surgical intervention that occurred on the first postoperative day and 1 case occurred nearly 13 years later. The group closed despite 6 cases after 30 days, 12 cases after 1 year and 38 cases after 5 years of follow-up (7).

About death after treatment:

Our study after 3-8 years of information via phone calls to about 50% of patients in the study did not record patients who died in both groups. According to Mark A. Kotowycz et al., the long-term mortality rate of patients with transcatheter closure was not significantly different from that of surgical patients (5.3% versus 6.3% after 5 years, $p < 0.01$) (7).

Indications for transcatheter closure:

Secundum ASD with defect's diameter not more than 38 mm on echocardiography, shunt from left atrium to right atrium with Q_p / Q_s is 1.5: 1 or the presence of right ventricular overload or patients with minimal shunt but present clinical symptom. Another important criterion is that a minimum distance of 5 mm from the edge of the defect to the coronary sinus, atrioventricular valve and the right upper pulmonary vein (6).

Contraindications for transcatheter closure:

Cases of ASD complex need surgery to repair multiple defects at the same time, primum ASD, venous sinus ASD, coronary sinus ASD. In addition, ASD patients with pulmonary hypertension superior to 7 Wood units, ASD had reverse shunt from right atrium to left atrium, ASD in patients with recent myocardial infarction, unstable angina, decompensated congestive heart failure, sepsis, thrombosis in the heart are also candidates for open-heart surgery (6).

Limitation of research:

This is one of the first studies done on ASD patients who underwent surgery or intervention to close parachute in Da Nang hospital. However, the study has some limitations, namely the nature of the study is a cross-sectional study and a hospital-based study of patients, so some CHD patients may choose where treatment other than Da Nang hospital. Secondly, the collection of data based on medical records stored in paper also has many difficulties and shortcomings that are likely to cause inadequate or lack of data in the study.

Conclusions:

Our research was done at the hospital level to evaluate the results of the ASD surgical closure versus the interventional transcatheter closure technique. We found that the proportion of TC patients, despite their majority, has increased significantly since the introduction of this new technique and it has become the main method for ASD current treating in Da Nang Hospital. Compared with surgery, ASD intervention close have high success rates, no deaths

and fewer complications.

The success rate of TC and SC treatment were not statistically different, however, the complication rate was lower and the hospital stay was shorter when TC was treated compared with SC. Choosing the right patient is an important factor for success. ASD transcatheter closure by devices is a safe and effective alternative method to current surgical treatment in Da Nang Hospital.

Overall, our research data shows that the use of transcatheter closure for ASD patients is effective and safe, with fewer complications, resulting in aesthetic benefits and lower costs compared to surgery.

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कांकरिया के कथा साहित्य में वैश्वीकरण

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वैश्वीकरण का शाब्दिक अर्थ स्थानीय या क्षेत्रीय वस्तुओं या घटनाओं के विश्व स्तर पर रूपांतरण की प्रक्रिया है। इसे एक ऐसी प्रक्रिया का वर्णन करने के लिए भी प्रयुक्त किया जा सकता है जिसके द्वारा पूरे विश्व के लोग मिलकर एक समाज बनाते हैं तथा एक साथ कार्य करते हैं। यह प्रक्रिया आर्थिक, तकनीकी, सामाजिक और राजनैतिक ताकतों का एक संयोजन है। वैश्वीकरण का उपयोग अक्सर आर्थिक वैश्वीकरण के संदर्भ में किया जाता है, अर्थात् व्यापार, विदेशी प्रत्यक्ष निवेश, पूंजी प्रवाह, प्रवास और प्रौद्योगिकी के प्रसार के माध्यम से राष्ट्रीय अर्थव्यवस्था का अंतर्राष्ट्रीय अर्थव्यवस्थाओं में एकीकरण।

इसे वैश्वीकरण कहें, भूमंडलीकरण या बाजारवाद, यह हमारे भीतर और बाहर जीवन के दोनों पक्षों को प्रभावित करता है। साहित्य भी इससे अछूता नहीं है। मधु कांकरिया के कथा-साहित्य में वैश्वीकरण के घात-प्रतिघात बड़ी प्रमुखता से उभर कर आए हैं। अर्थशास्त्र से स्नातकोत्तर होने के कारण इस विषय पर उनकी गहरी पैठ है। उनकी कहानियों और उपन्यासों के पात्र एवं घटनाओं पर वैश्वीकरण का स्पष्ट प्रभाव दिखाई पड़ता है।

मधु कांकरिया के उपन्यास 'सेज पर संस्कृत' में इस वैश्वीकरण के दुष्परिणामों की और संकेत किया गया है। वैश्वीकरण को देखा जाए तो यह पूंजीवादी देशों के अमीरों की क्रांति है। इसका सरोकार हमारे बाजार से है। हमारा वह बाजार जो गरीबों ने अपने पुश्तैनी धंधों और श्रम से तैयार किया है। गोरखपुर गांव में हाट लगता है लेकिन अब घरेलु साबुन की बट्टी कोई नहीं खरीदता। सभी ब्राइट साबुन निरमा, सर्फ खरीदते हैं। अब मैदान में बड़े-बड़े राक्षस उतर आए हैं। पहले गांव का साबुन गांव में खप जाता था। अब बड़ी-बड़ी कंपनियाँ एजंट बन साबुन बेच रही हैं। इसी उपन्यास के राजपाल काका कुम्हार हैं। वे देवी की मूर्तियाँ, दिये, माटी के बर्तन बनाते हैं। मंदी की मार के कारण वे कलकत्ता जाने का निश्चय करते हैं। वहाँ जगदीश बाबू की गद्दी है। उनको दरबानी कर लेंगे या मेहनत मजदूरी कर लेंगे। मधु जी ने बाजारवाद से उत्पन्न समस्या जैसे कुटीर उद्योग नष्ट प्रायः होने का संकेत कर, बढ़ती बेरोजगारी और बेरोजगारी पर प्रकाश डाला है। माटी के दीये अब कोई नहीं खरीदता। माटी अब माटी हो गई है। उसके स्थान पर प्लास्टिक की बोतलें, थर्मोकॉल के ग्लास बिकते हैं।

'भर दोपहरी के अंधेरे' कहानी का बुद्धन पहले मोहलाइन पेड़ की लतर की खाल उधेड़ उसका ऊपर का छिलका उतार उसकी बीच की मज्जा को बट कर रस्सी बन लेता था। उसे हाट में बेच देता था। अब हाट में रस्सी नहीं बिकती। अब वहाँ प्लास्टिक की सस्ती रसियाँ आ गई हैं। मुर्शिदाबाद का सिल्क दुनिया में मशहूर था। इतना बारीक की पूरी माचिस की डिबिया में अट जाए। लेकिन अब इतना महंगा हो गया है कि कौन खरीदे। अब बारीकी कारीगरी और कद्रदानी का जमना लद गया है। मशीनों से बनी हुई सस्ती सिल्क मिलने लगी। मशीनों ने हाथ काट डाले। पहले पूरा मोहल्ला इत्र गुलाब के जल बनाने वालों से महकता था। ऐसी महक कि पेरिस का परफ्यूम भी क्या महके। लेकिन अब पूरा मोहल्ला वीरान पड़ा है। गुलाब एक्सपोर्ट हो गए हैं, केवल कांटे रह गए हैं।

भारत में ग्लोबलाइजेशन का जो भूजाल आया है, उसकी एक सबसे बड़ी विशेषता 'प्रतिभा पलायन' है। नौजवान शहर की ओर पलायन कर रहे हैं और शहरों के नौजवान विदेशों की राह पकड़ रहे हैं। मधुजी की 'रहना नहीं देश विराना है' कहानी का नायक दीप गोल्ड मेडलिस्ट है। वह अपनी सेवाओं को भारत में नहीं बल्कि कैलिफोर्निया में

देना चाहता है। ग्रीन कार्ड मिलते ही वह अपनी माँ को भी वहाँ ले जाना चाहता है। प्रतिभाओं का पलायन भारत के भविष्य के लिए एक गहरा संकट है। भले ही विकसित पूँजीवादी देशों में वह कोई कल्याणकारी शकल रखता हो, पर विकासशील देशों में वह शोषक की शकल में ही आया है। वह कल्याणकारी नहीं, विनाशकारी है।

ग्लोबलाजेशन (वैश्वीकरण) में जहाँ पूरा संसार एक गांव का रूप धारण कर चुका है, वहीं इसके परिणामस्वरूप मानवीय रिश्ते भी संकुचित होते जा रहे हैं। आज संयुक्त परिवार बड़ी तीव्रता से एकल परिवार में परिवर्तित हो रहे हैं। रिश्तों में संवेदनहीनता बढ़ती जा रही है। अर्थ प्राप्ति ही जीवन का मुख्य ध्येय बन गया है। मधु जी ने आपसी संबंधों में खत्म होते गर्माहट को 'लेडी बॉस' कहानी के माध्यम से व्यक्त किया है। अपनी कंपनी को ग्लोबल बनाने के चक्कर में मैडम की स्वयं की परिधि नफा-नुकसान तक रह गयी थी। अपनी कंपनी को वे बेटा मानती थीं परंतु वहाँ काम करने वाले कर्मचारियों को ऐसे देखती जैसे मध्ययुग में कभी नीग्रो या हब्शी की ओर देखा जाता।

जितना ही उनके कैरियर की तरक्की का ग्राफ आगे की ओर बढ़ता, उतना ही जीवन की बेहतरीन चीजें एक-एक करके छूटती जाती। पंद्रह साल कंपनी के लिए खपाने के बाद जीवन के पैतालीसवें वर्ष में भी 'अकेलेपन' के अलावा कोई उपलब्धि उनके हाथ नहीं थी। पति महोदय भी किसी रशियन युवती के साथ विवाह करके ग्लोबल बन चुके थे। वह सुखी होना चाहती थीं पर सुखी होने की होड़ में वह भूल जाती हैं कि, सुख क्या है, किसमें है? दिन-रात काम तो करती थीं परंतु इनके कर्म दूसरों को छूते तक नहीं थे। यश के शिखर तक पहुँचते- पहुँचते पैर सीधे जमीन पर आ गिरे। अब तो किसी भिखारिन को अपनी गृहस्थी के साथ देखती तो ठिठककर वहीं खड़ी हो जाती और उनको अपने आप से ज्यादा सुखी पाती।

इसी प्रकार 'लोड शेडिंग' कहानी में मधु जी ने कलकत्ता शहर की भीड़ भड़ाक, शहर बाजार की उठापठक, शेयर ब्रोकर्स का फाटका, पोलेवालों (खरीदारों) की समस्याएँ जैसे बाजारवादी माहौल का चित्रण किया है। इस फटाफट कमाती दुनिया के लोगों के पास सब कुछ होते हुए भी आत्मा को संतुष्ट करने वाले प्रेम तत्त्व का अभाव है। कथानायक योगेश ऐसे ही व्यक्तियों का प्रतिनिधित्व करता है जिनकी जिंदगी का मूल मंत्र 'मुनाफा कमाना' है। कहने के लिए तो योगेश के पास पत्नी, पुत्र, माँ, बहन सभी थे। परंतु उसने ही कभी कोशिश नहीं की उन रिश्तों में रंग भरने की। बाजारवाद के नशे ने उनकी तरफ फुरसत से देखने का अवसर ही नहीं दिया। योगेश की तरह न जाने कितने ही ऐसे युवक हैं जो बाजारवाद के चलत अपनी जिंदगी के खूबसूरत लम्हों को हाय-हाय करने वालों की सूअरबाड़ी में बिता देते हैं।

आज की दिशाहीन युवा पीढ़ी

इस वैश्वीकरण के नकारात्मक परिणामका जीता-जागता उदाहरण है। नशाखोरी के गर्त में डूबते युवाओं का चित्रण मधु जी ने अपने उपन्यास 'पत्ताखोर' में बखूबी किया है। पश्चिमी देशों की लाइफ स्टाइल, खान-पान, पहनावा, खुलापन आदि आज के युवाओं को बड़ी तीव्रता से अपनी ओर आकर्षित कर रहे हैं। अपनी महान भारतीय संस्कृति को रूढ़िवादी, जर्जर बनाकर स्वयं को पश्चिमी विचारों का पोषक बताने में यह पीढ़ी गर्व का अनुभव करती है। नशा करना उनके लिए एक फैशन बन गया है। इस बुरी लत को उन्होंने अपना स्टेटस सिंबॉल बना लिया है। वास्तव में भूमंडलीकरण के इस युग में चकाचौंध और सुनहेर कल का सपना देखने वाली आज की युवा पीढ़ी जीवन की अनेक तनाव, समस्याओं, कुंठा आदि से संघर्ष न कर पाने के कारण नशाखोरी के गर्त में गिरने के लिए अभिशप्त है जिसका अंत अत्यंत त्रासदीपूर्ण होता है। इस वैश्वीकरण की दुनिया में क्षमा, धीरज और बर्दाश्त जैसे मूल्य तिरोहित हो गए हैं।

यह लगातार हमारी संस्कृति को विकृत करता जा रहा है। हमारी सदियों पुराने मानवीय सरोकारों और संस्कारों को तोड़ता जा रहा है।

मधु जी ने वैश्वीकरण के लगभग सभी पक्षों को चाहे वह राजनीतिक हो, आर्थिक हो या सामाजिक, अपने साहित्य के माध्यम से उद्घाटित करने का प्रयास किया है। इनकी कहानियों एवं उपन्यासों के अध्ययन के पश्चात् वैश्वीकरण के दुरागामी परिणामों को समझने में सहायता मिलती है।

संदर्भ ग्रंथ:

- १) बीतते हुए, मधु कांकरिया
- २) और अंत में इशू, मधु कांकरिया
- ३) सेज पर संस्कृत, मधु कांकरिया
- ४) पत्ताखोर, मधु कांकरिया
- ५) मधु कांकरिया का रचना संसार, डॉ. उषा कीर्ति राणावत
- ६) कथाकार मधु कांकरिया, डॉ. सुति कांबळे
- ७) वैश्वीकरण और संबंध, शैला एल. क्रोचर
- ८) भूमंडलीकरण : साहित्य और संस्कृति, श्री कमलेश्वर
- ९) भूमंडलीकरण और हिंदी उनन्यास, पुष्पपाल सिंह

मधु कांकरिया के उपन्यासों में सामाजिकता

डॉ. अनिल सिंह: अध्यक्ष, हिन्दी विभाग, सोनुभाऊ बसवंत महाविद्यालय, शहापुर - ४२१६०१

किसी भी देश का साहित्य उसके समाज का प्रतिबिंब होता है। प्रत्येक साहित्यकार अपने समकालीन समाज की अनुभूति को अपनी विलक्षण प्रतिभा द्वारा अपनी रचनाओं के माध्यम से अभिव्यक्त करता है। इसे स्पष्ट करते हुए डॉ. अर्चना मिश्रा ने लिखा है, “साहित्य युग एवं काल सापेक्ष होता है। समसामायिक परिवेश की हर धड़कन को रेखांकित करते जाना ही उसकी सार्थकता है। सामाजिक वातावरण, परंपराएँ, रूढ़ियों, परिवर्तन, सांस्कृतिक भाव-बोध जो भी लेखक को प्रत्यक्ष या अप्रत्यक्ष रूप से प्रभावित करता है, अपनी कृति में उस सत्य को अपनी संवेदनशील शक्ति और व्यक्तित्व के अनुरूप ढालकर उसे एक नवीन आयाम देता है... युग बोध का चित्रण रचनाकार कभी प्रत्यक्ष रूप से समस्याओं का अंकन और उसके समाधान को प्रस्तुत कर सकता है; तो कभी परोक्ष रूप से न्यूनताओं के चित्रण द्वारा प्रतीक, संकेत आदि के आश्रय से, कभी प्रश्न उपस्थित कर, कभी भावदशाओं के चित्रण आदि के द्वारा करता है।”

१) मधु कांकरिया नयी सदी की एक सशक्त लेखिका है। इनके सभी उपन्यास सामाजिक परिवेश से अनुप्राणित हैं। इनके उपन्यासों में सामाजिक चेतना पूर्ण रूप से अभिव्यक्त हुई है। आम जनजीवन से जुड़े जीवन मधु कांकरिया ने अपनी बौद्धिक सर्जनात्मक प्रतिभा से सामाजिक परिवेश को दृष्टि में रखकर उसके सकारात्मक तथा नकारात्मक दोनों पहलुओं को पाठको के समक्ष रखा है। आधुनिक समाज के व्यक्ति की चिंता, समस्याएँ, उसकी इच्छाएँ और महत्वाकांक्षाएँ, उसका अकेलापन और अजनबीपन, प्रेम और यौनसंबंध, आम आदमी की कुंठा, घुटन, स्वार्थी वृत्ति आदि सभी पक्ष उनके उपन्यासों में व्यक्त हुए हैं।

मधु कांकरिया ने अपने समाज से जुड़े हुए सामाजिक परिवेश के साथ-साथ कई ऐसी सामाजिक समस्याओं का चित्रण किया है जो व्यक्ति के सर्वांगीण विकास में अवरोध का कार्य करती हैं। व्यक्ति और समाज का संबंध अन्योन्याश्रित है। महादेवी वर्मा जैसी प्रख्यात लेखिका ने ‘समाज’ को परिभाषित करते हुए लिखा है, “समाज ऐसे व्यक्तियों का समूह है, जिन्होंने व्यक्तिगत स्वार्थों की सार्वजनिक रक्षा के लिए, अपने विषम आचरणों में साम्य उत्पन्न करने वाले कुछ सामान्य नियमों में शासित होने का फैसला कर लिया है।”

२) मधु कांकरिया ने ‘खुले गगन के लाल सितारे’, ‘सेज पर संस्कृत’, ‘सलाम आखिरी’ तथा ‘सूखते चिनार’ आदि उपन्यासों में मारवाड़ी समाज में आए परिवर्तनों के फलस्वरूप उत्पन्न संघर्ष एवं चुनौतियों का सजीव वर्णन किया है। इस समाज के व्यापारी वर्ग के अतिरिक्त टूटते-बिखरते संयुक्त परिवार, संबंधों में तनाव, आधुनिकता की ओर उन्मुख युवा पीढ़ी आदि का वर्णन बखूबी किया है। शिक्षा प्रसार तथा अपने अधिकारों के प्रति सजगता के परिणामस्वरूप मारवाड़ी स्त्री पारंपारिक जीवन शैली से मुक्ति चाहती है। घर की चार दीवारी से बाहर निकलकर अपने जीवन को एक नई दिशा देना चाहती है।

मधु कांकरिया ने ‘सलाम आखिरी’ उपन्यास में वेश्याओं के जीवन का चित्रण करते हुए मारवाड़ी समाज की झांकी भी प्रस्तुत की है। कलकत्ता में मारवाड़ी का तेजी से बढ़ने का कारण व्यक्तिगत समृद्धि के साथ-साथ समूह में काम करने की संस्कृति भी थी। वित्त सत्य ही इनके जीवन का सत्य है। मारवाड़ी वर्ग जीवन की रंगीनियों से दूर रहकर संयमित रहते हुए अपने जीवन का अंश-अंश अपने धंधे में झोंक देते हैं। उसके बाद ही ये किसी व्यापार में

मजबूती से पैर जमाकर खड़े रहते हैं। उपन्यास के पात्र मन्नालाल भी ऐसे ही व्यक्ति थे जो तीस वर्ष पूर्व पंद्रह वर्ष की अवस्था में राजस्थान के किशनगंज से नौकरी की तलाश में कलकत्ता आए थे। अपने मेहनत और लगन के बलबूते पर 'मन्नालाल एवं सुरो' फर्म खड़ी कर ली थी। 'सूखते चिनार' उपन्यास में मेजर संदीप के पिता भी व्यापारी थे। वे अपने बड़े बेटे संदीप के फौज में भर्ती होने के सख्त खिलाफ थे। वे चाहते थे कि उनका बेटा उनके धंधे को सीखकर बहुत बड़ा व्यापारी बने। अपने संघर्ष भरे जीवन का वर्णन करते हुए वे संदीप से कहते हैं, "अरे मुझसे पूछो कैसे पैसा-पैसा जोड़ जुटायी हे ये सुविधाएँ। कभी दस पैसे बचाने के लिए सियालदह से कॉलेज स्ट्रीट तक पैदल जाता था। तुम्हारी दादी मन्दिर जाती थी तो रास्ते में पड़ा गोबर उठा लाती थी कि उपले बन जायेंगे। अरे! फौज में वही जाता है जिसके लिए दूसरे सारे रास्ते बंद हो चुके होते हैं। तुम्हें क्या कमी जो तुम मरने को, गोली खाने को फौज में जाओगे।"

३) इसी प्रकार 'सेज पर संस्कृत' उपन्यास की संघमित्रा अपने पुश्तैनी धंधे को पिता की मृत्यु के उपरांत भी जारी रखना चाहती थी। इसके लिए वह काफी मेहनत भी करती है। मेहनत से साबुन बनाकर हाट में बेचती है। धीरे-धीरे उसे यह धंधा बंद करना पड़ा क्योंकि लोग घर में बने साबुन के स्थान पर बाजार में बने सस्ते साबुन को प्राथमिकता देते थे। भूमंडलीकरण और बाजारवाद ने पुश्तैनी धंधे को बुरी तरह प्रभावित किया है।

भूमंडलीकरण के परिणामस्वरूप समाज में हो रहे परिवर्तनों का लेखिका ने समग्रता से चित्रण किया है। औद्योगिकीकरण और शहरीकरण ने आधुनिक परिवार के मूल स्वरूप को ही बदल डाला है। बाजारवाद ने परिवार की धारणा को भी प्रभावित किया है। पति-पत्नी एक से अधिक संतान नहीं चाहते। तीन सदस्यों वाले लघु परिवार में भी तनाव एवं संघर्ष की स्थिति बनी हुई है। 'पत्ताखोर' उपन्यास में समाज की इस गंभीर समस्या को 'पत्ताखोर' उपन्यास में प्रस्तुत किया गया है।

'पत्ताखोर' उपन्यास का प्रमुख पात्र आदित्य की माँ नौकरी करने को ही नारी स्वतंत्रता समझती है। इसे घर में समय न देने के कारण पति - पत्नी में हमेशा बहस होता है। घर में हमेशा तनाव की स्थिति बनी रहती है। अपना पक्ष रखते हुए आदित्य की माँ कहती है, "उस समय जमाना अलग था। इतनी महंगाई नहीं थी। महिलाएँ इतनी व्यस्त नहीं थी। आज कहाँ सम्भव है कि मैं हमेशा उसके साथ खेलती रहूँ..... परछाई की तरह उससे चिपकी रहूँ..... मेरे पास तो मेरे लिये भी समय नहीं है। फिर मेरा अपना व्यक्तित्व है, जो सिर्फ हाउस-वाइफ बने रहने से इनकार करता है। मेरी स्वतंत्रता का भी तो कुछ अर्थ है।"

४) लेखिका का मानना है कि घर से उपेक्षित रहने वाले बच्चे आगे चलकर अपराधी बनते हैं। 'पत्ताखोर' उपन्यास के प्रमुख पात्र आदित्य के ड्रग एडिक्ट बनने के कारणों में से माँ की तरफ से उपेक्षित होना प्रमुख कारण है।

नई औद्योगिक सभ्यता की चेतना ने संस्कारित भारतीय समाज में द्वंद्व की स्थिति उत्पन्न कर दी है। प्राचीन समय में समाज का हर व्यक्ति अपने भीतर एक सामाजिक बोध लेकर जीता था। दूसरों के सुख-दुख में सहभागी होता था। उसका व्यक्तित्व सामाजिक हितों के प्रति समर्पित था। लेकिन आधुनिकता के साथ सामाजिक बोध की यह प्रवृत्ति क्रमशः घटती गई। हर व्यक्ति ने अपने आस-पास एक वृत्त बना लिया है और उस वृत्त की परिधि को ही उसने संपूर्ण संसार मान रखा है। परिणाम स्वरूप आज का व्यक्ति मानसिक तनाव, संत्रास, निराशा एवं कुंठा का शिकार है। मधु कांकरिया ने समाज के विविध रंगी चित्र को प्रमुखता से अपने उपन्यासों में उकेरा है।

अतः समग्र रूप में कहा जा सकता है कि मधु कांकरिया की रचनाओं में व्यक्तिगत दृष्टिकोण एवं सामाजिक चेतना का उत्कृष्ट सामंजस्य मिलता है। समाज के समस्त पहलुओं को लेखिका ने अपनी सूक्ष्म दृष्टि तथा स्पष्ट अभिव्यक्ति द्वारा एक नया आयाम प्रदान किया है।

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