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To Assess the Perceived Benefits and Barriers to Exercise in Nursing Students

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ABSTRACT

BACKGROUND: Physical activity is crucial for maintaining optimal health and well-being, particularly in demanding academic environments like nursing education. However, despite the known benefits, there remains a gap in understanding how nursing students perceive exercise and integrate it into their lifestyles. The study was aimed to assess the perception of exercise in nursing students of Pune city. This study employs a qualitative approach, utilizing semi-structured interviews to delve into the attitudes, beliefs, and behaviours surrounding exercise among undergraduate nursing students.

METHODS: The study enrolled a total of 260 participants of undergraduate BSc nursing students in Pune region. A purposive sampling method was used to select participants from various stages of their nursing program to capture diverse perspectives. Exercise benefit-barrier scale was used which has two sub-scale with total 43 questions in it. Consent was taken and individuals were thoroughly explained the procedure.

RESULTS: A Cross-sectional study was carried out on 260 undergraduates nursing students in which there were 63% females and 37% males 37% with average age of 21.9 ± 1.4 years. The research included 61% students from 4th year, 21%students from 3rd year, 11% students from 2nd year and 7% students from 1st year. The benefit scale shows that 61% participants people strongly agree on the EBBS scale suggesting that majority of students understand the benefit of performing exercises. The barrier scale shows that 53% participants strongly agree on the EBBS scale suggesting that majority of students are facing barriers to perform exercises.

CONCLUSION: According to the study, students' perception towards exercise has found out to be positive but majority of students are unable to focus on exercise in daily living because of their hectic schedule which does not allow them to engage in exercise on their daily basis.

KEYWORDS: Nursing, Exercise, Benefit, Barrier.

INTRODUCTION:

Nursing has an increasingly important role in providing health promotion advice to general population as we are aware of their job demands which includes prolonged standing hours, lifting, manual handling, working long shifts or night shifts, having sporadic breaks, theoretical classes, practical's clinical experience in hospitals or healthcare settings. Nursing students are our next generation of NHS (national health services) employees and so action should be taken to increase the likelihood that these

individuals adopt a healthy lifestyle behavior before they enter the public health workforce. In doing so, we aim to generate improvements in the health of the future.

Nursing students should engage in exercise to maintain their physical activity promote overall health and reduce stress, it also helps in enhancing cognitive function, this also sets and positive example for patients and reinforces the importance of a healthy lifestyle in nursing practice.Regular exercise should be integrated into their routine alongside their academic studies and clinical experiences, prioritizing self-care to ensure they can provide the best care for their patients.

Regular exercise is associated with a reduced risk of chronic diseases such as heart disease, diabetes, and certain cancers. Nursing students who establish healthy exercise habits early in their careers are more likely to maintain them throughout their lives, leading to better long-term health outcomes.

EBBS (exercise benefits/barriers scale) is used as a research instrument to investigate the perceived benefits and barriers of exercise in a range where we understand how positively the individual perceives exercise. It typically consists of a series of questions designed to measure attitudes, beliefs, and perceived obstacles related to exercise participation. This scale has a total four response forced choice Likert type format with responses ranging from 4 strongly agree to 1 disagree barrierscale item are reverse scored items on the barrier scale. Scores on the total instrument can rangefrom 43-172.We have used the scale individually where the Benefit scale scoring ranges from 29-116 students may find some benefits which includes Participants may recognize benefits such as increased strength, stamina, and cardiovascular health. whereas the barrier scale score ranges from 14-56 with barrier such as Participants may cite lack of time as a major barrier to engaging in regular exercise.

Understanding the specific benefits and barriers identified by individuals through the EBBS can inform the development of targeted interventions and strategies to promote exercise adoption and adherence.

MATERIALS AND METHODS

Inclusion criteria: The inclusion criteria for this study includes both female and male students belonging to age between 18-24. We included students who are studying only Bachelor of science of nursing. The study includes nurses of both genders. The participants should be willing to participate in the study.

Exclusion criteria: Students who have medical condition that prevents them from engaging in physical activity, Students who have undergone any recent surgery, students who had a recent surgery, students who are unwilling to participate in the study.

Study design:

Type of study: Cross-sectional study

Duration of study: 6 months

Study setting: Pune

Sampling design:

Sample size: 260

Sampling method: Purposive sampling

Material used: Exercise benefit-barrier questionnaire.

Procedure: A total of 260 participants were included in the study based on the inclusion and exclusion criteria. The statistical significance was set at ≤ 0.05 and the confidence interval was at 95%, This evaluation study was conducted using nursing colleges as the primary sampling unit in Pune city. Consent was taken from every individual. Individuals were approached for participation, procedure was explained

to each one of them. Demographic data was noted. a structured questionnaire was given to them which included 43 questions which has 29 questions for benefit and 14 questions for barrier. Analysis was done using Microsoft Software. Data were summarized using the descriptive statistics of mean, standard deviation, and p-value for the knowledge of exercise among the undergraduate nursing students.

RESULTS: A total of 260 participants were included in the study from age between 18 to 24 years who are studying BSc nursing from 1st to 4th year.

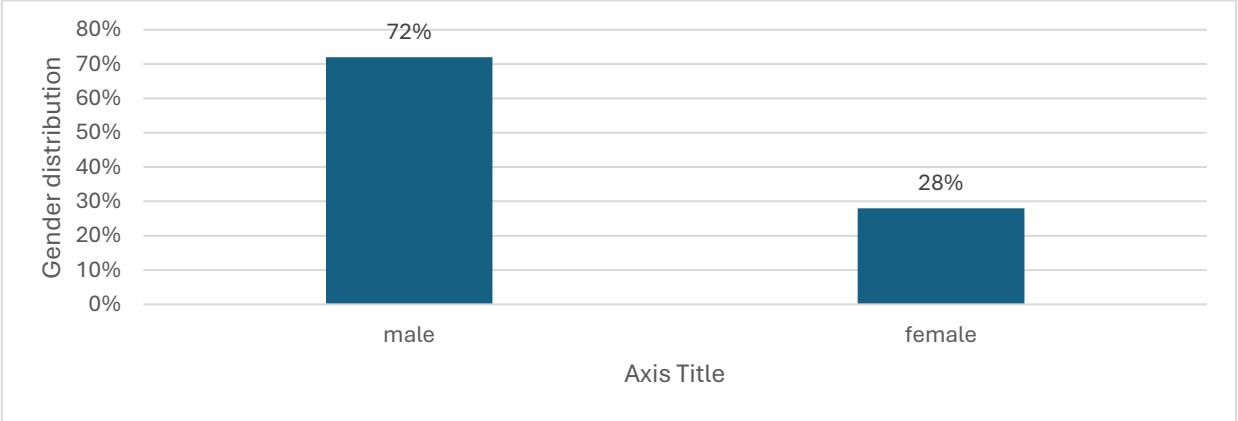
GENDER DISTRIBUTION

Interpretation: This graph shows that maximum number of participants were female i.e, 63% and 37% of participants were male.

Table 1.1 Gender distribution

GENDER	FREQUENCY	PERCENTAGE
MALE	97	37%
FEMALE	163	63%

Fig 1.1Graph of gender distribution



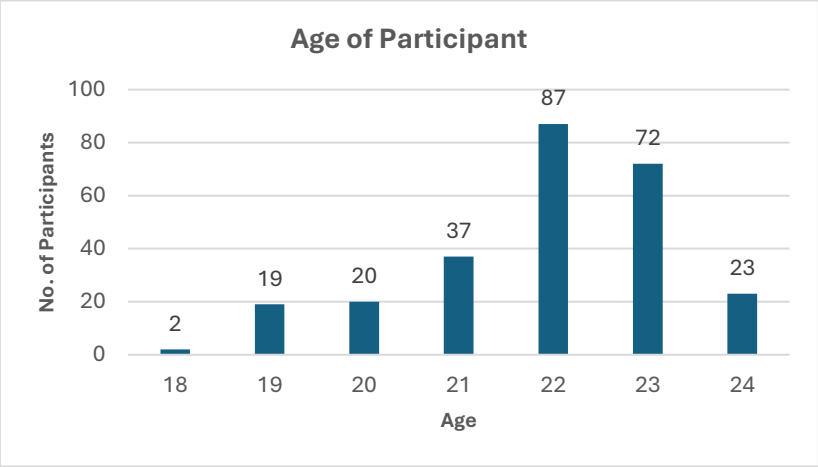
AGE DISTRIBUTION

Interpretation: This chart shows that the maximum number of participants were of age 22 yrs and the minimum number of participants were 18 yrs old.

Table 1.2 Age distribution

AGE	FREQUENCY	PERCENTAGE
18	2	1%
19	19	7%
20	20	8%
21	37	14%
22	87	33%
23	72	28%
24	23	9%

Fig 1.2 Graph of age distribution



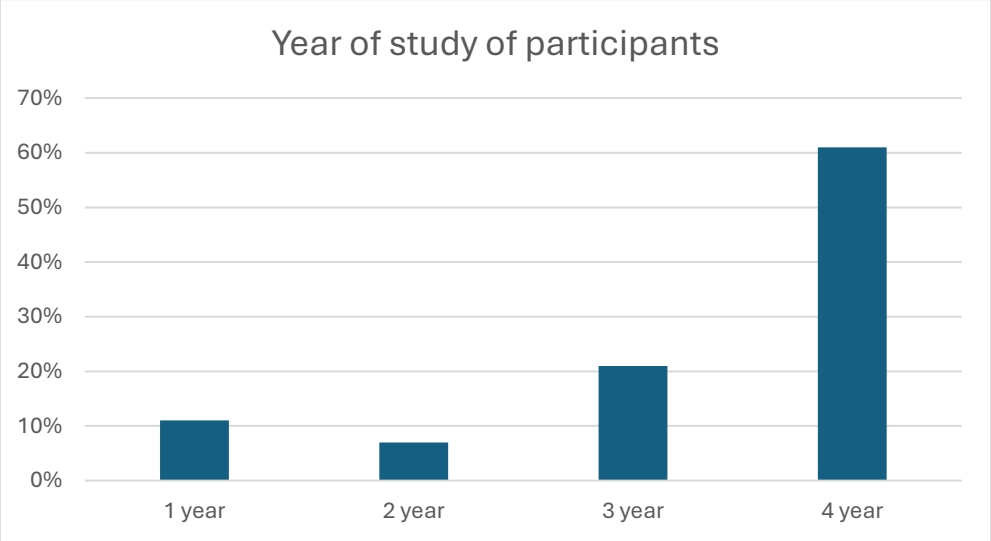
YEAR OF STUDY OF PARTICIPANTS

Interpretation: This graph shows that highest number of participants were studying in 4th year i.e., 61%, 21% participants were studying in 3rd year, 11% participants were studying in 1st year and 7% participants were studying in 2nd year.

Table 1.3 Year of Participants

Year of study	No. Of students	Percentage
1	29	11%
2	18	7%
3	55	21%
4	158	61%

1.3 Graph of Year of Participants



PERCEIVED BARRIERS OF EXERCISE

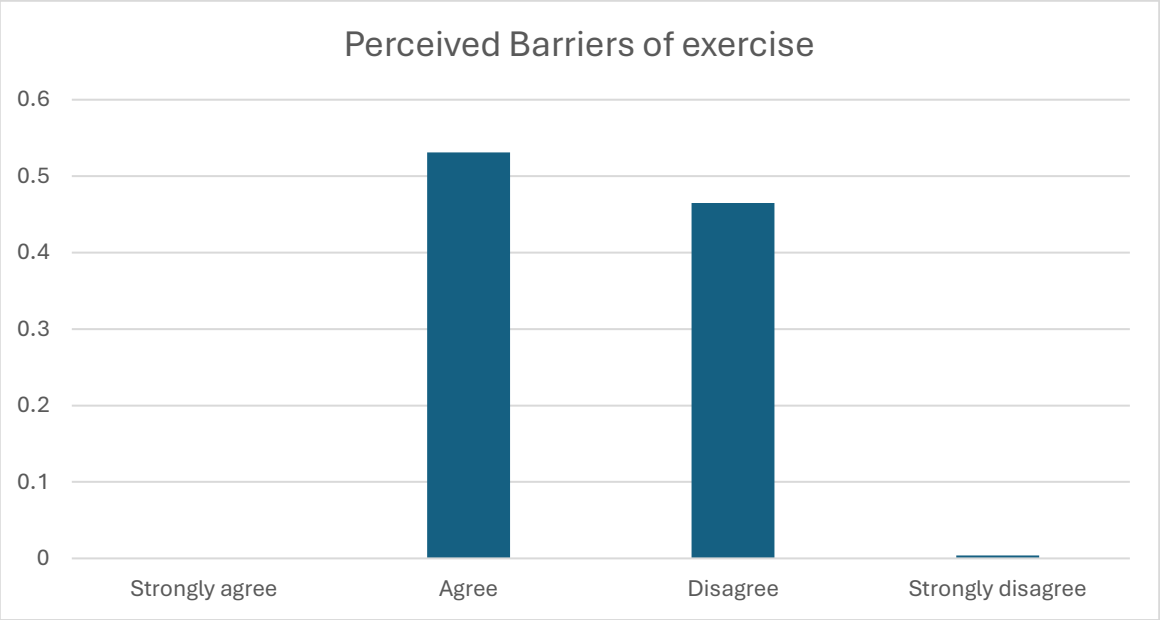
Interpretation: - This graph shows that maximum number of participants i.e,53% students agree on the

barrier scale and1% students strongly disagree on the scale, which indicates that they face multiple barriers for performing exercises as a routine.

Table 1.4 Perceived barriers of exercise

Exercise Barriers	Frequency	Percentage
Strongly Agree	0	0
Agree	138	53.1%
Disagree	121	46.5%
Strongly disagree	1	0.4%

1.4 Graph of Perceived barriers of exercise



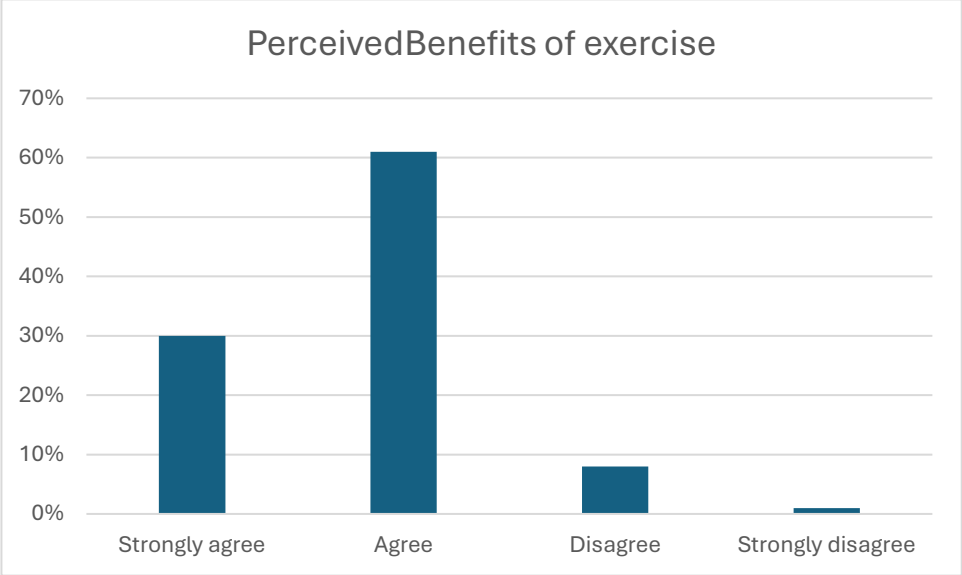
PERCEIVED BENEFITS OF EXERCISE

Interpretation: This graph shows that 61% participants i.e., 159 people strongly agree on the EBBS scale stating that the have knowledge of benefits of exercises. Whereas 2 participants poorly perceive the effect of exercise.

Table 1.5 Perceived benefits of exercise

Benefits of Exercise	Frequency	Percentage
Agree	159	61%
Strongly Agree	80	30%
Disagree	19	8%
Strongly Disagree	2	1%

1.5 Graph of Perceived benefits of exercise



DISCUSSION

The purpose of this study was to assess the benefits and barriers to exercise among the undergraduate BSc nursing students in Pune city. Physical activity levels are less than exemplary in healthcare professionals and students, although similar in the general population. This concerns given their education and training around the health benefits of physical activity and their roles as advocates of health and well being. With the current focus on improving healthy behaviors in hospital workers as role models to the general public, this study is aimed to increase our understanding of the factors associated with physical activity in nursing students, our healthcare providers of the future. This knowledge will support the provision of interventions to promote active lifestyles and encourage the establishment of healthy lifestyle behaviour in nurses before they join the public health workforce. The research was carried out using the EBBS scale which are considered to be the most generous part of the research to find out the perception towards exercise. This research has found out that the undergraduate students are vigorous whereas according to their activities of daily living which includes many activities such as clinical postings for 8 hours which includes standing for long period, extracurricular activities such as vaccination camp, going for PHC in different places, blood donation camp, sports which make them physically more active.

The benefit scale gives data of the perception of students towards exercise which shows a good amount of result i.e., 61% which is approximately 159 students have a good perception and that they are aware of the exercise benefits in their life. As shown in the research by Janaína Fonseca Victor , The perception of benefits is constituted of positive mental representations that involve factors which reinforce, facilitate, nurture and enable the adoption of a behavior. The benefits can be intrinsic (improving health, feelings of well-being) or extrinsic (social interaction, financial reward). A positive perception towards physical activity may encourage people to develop it.

Although nursing and medicine students are educated about the benefits of physical activity for health, this knowledge does not always translate into their personal lifestyle choices. For example, many nursing and medicine students do not meet physical activity guidelines Blake & Harrison 2013; medicine: Dąbrowska-Galas 2013, Frank. It is unclear what factors predict physical activity levels in nursing and

medicine students, although predictors may differ to students of other disciplines and the general population because of their high level of health knowledge. This understanding is crucial to inform the design of appropriate and tailored interventions to support those nursing and medicine students who are less active, to make healthy lifestyle choices. It is unclear what factors predict physical activity levels in nursing and medicine students, although predictors may differ to students of other disciplines and the general population because of their high level of health knowledge. This understanding is crucial to inform the design of appropriate and tailored interventions to support those nursing and medicine students who are less active, to make healthy lifestyle choices.

CONCLUSION

This study concluded that the undergraduate students have a higher degree of physical activity. According to the study, some students are unable to focus on exercise in daily living because of their hectic schedule which does not allow them to engage in exercise on their daily basis. The students are aware of the benefits that are necessary to face the obstacles of behaviour modifications in clinical practice as the route towards being important role players by taking up the leading role in fighting against communicable disease through physical activity related health promotion.

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