Group C.1.1

# Association between grade five scholarship examination marks and performance of medical undergraduates, Faculty of Medicine,University of Kelaniya.

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## Introduction

First Examination for Medical Degrees is a barrier exam which is held to assess the capacity of students in the subjects learnt during first and second years. It is important to evaluate the potential predictors of medical undergraduates which affect the performance in the first main examination.

## Objective

To describe the impact of grade five scholarship examination marks, socio-demographic factors and General Certified Educational examinations results on performance of First Examination for Medical Degrees of medical undergraduates.
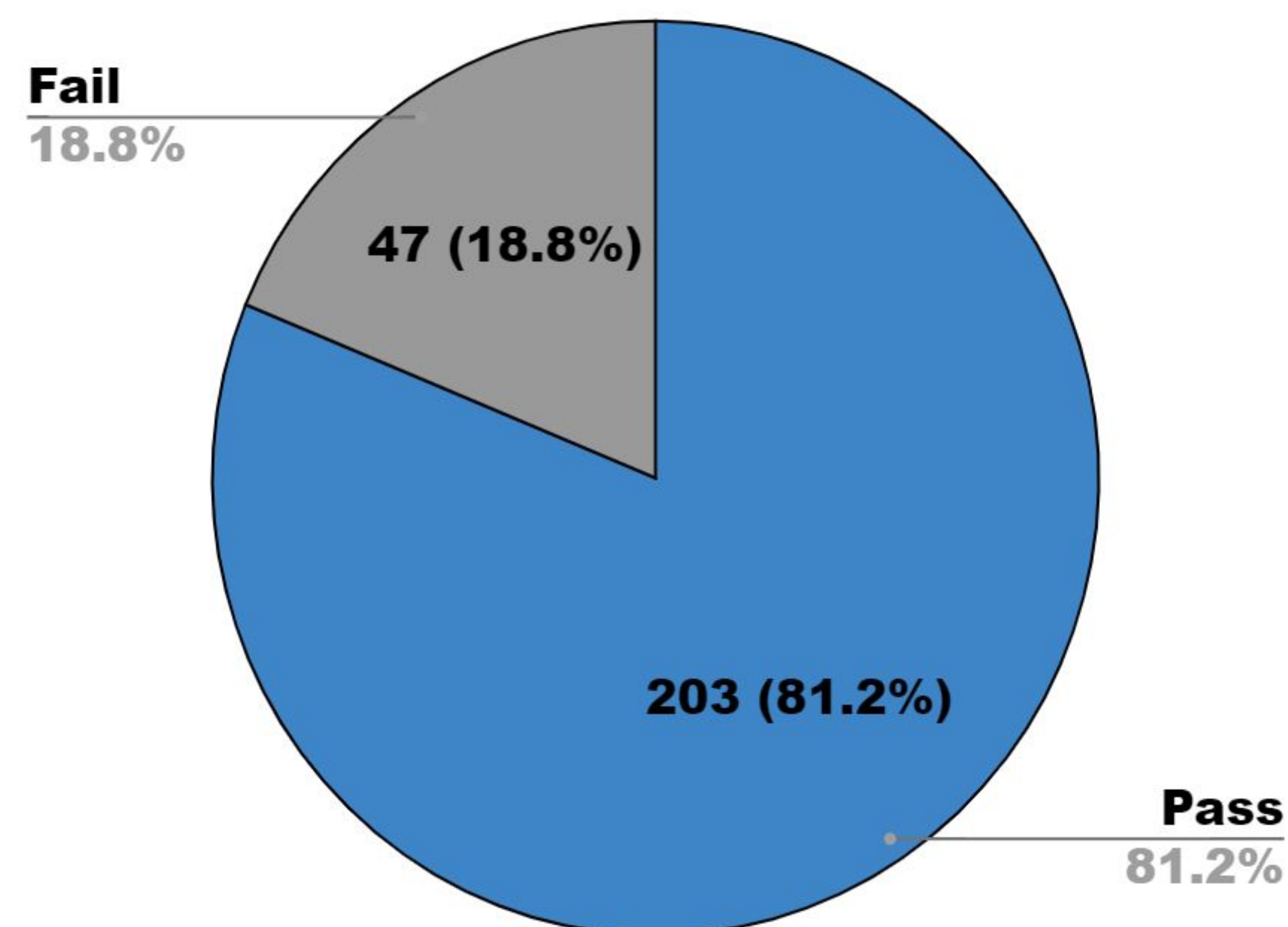
## Method

- Study design     -Descriptive cross sectional study
- Study setting     -Faculty of Medicine, University of Kelaniya
- Study period     -March 2019- March 2020
- Study population     -Medical students of the Faculty of Medicine, University of Kelaniya
- Inclusion criteria     -Batch 26, batch 27, batch 28
- Exclusion criteria     -Batch 29, batch 30 Foreign students from each batch
- Sample size     - 250
- Sampling method     -Cluster sampling
- Study tool     -Self-administered questionnaire
- Data analysis     -SPSS software

## Results

250 students participated in the study and majority of them were female (79.2%) (Table 1). 91.6% of the participants were sinhalese.
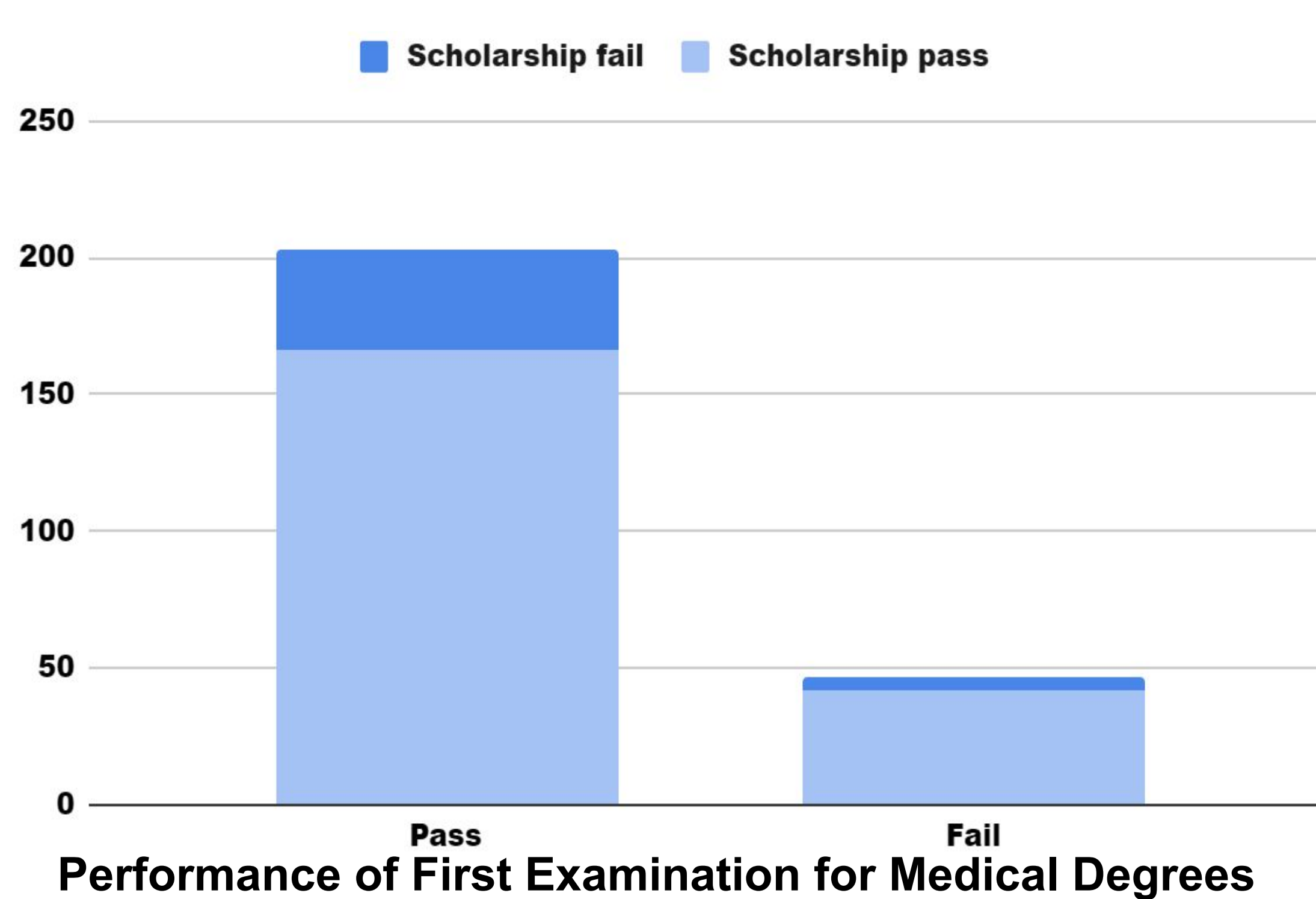
**Table 1:Distribution of gender in the study sample**

| 28th Batch (2015/2016) | | 27th Batch (2014/2015) | | 26th Batch (2013/2014) | |
|---|---|---|---|---|---|
| Male | Female | Male | Female | Male | Female |
| 29% | 71.% | 45% | 55% | 28% | 72% |



**Figure 1: Distribution of performance in First Examination for Medical Degrees**
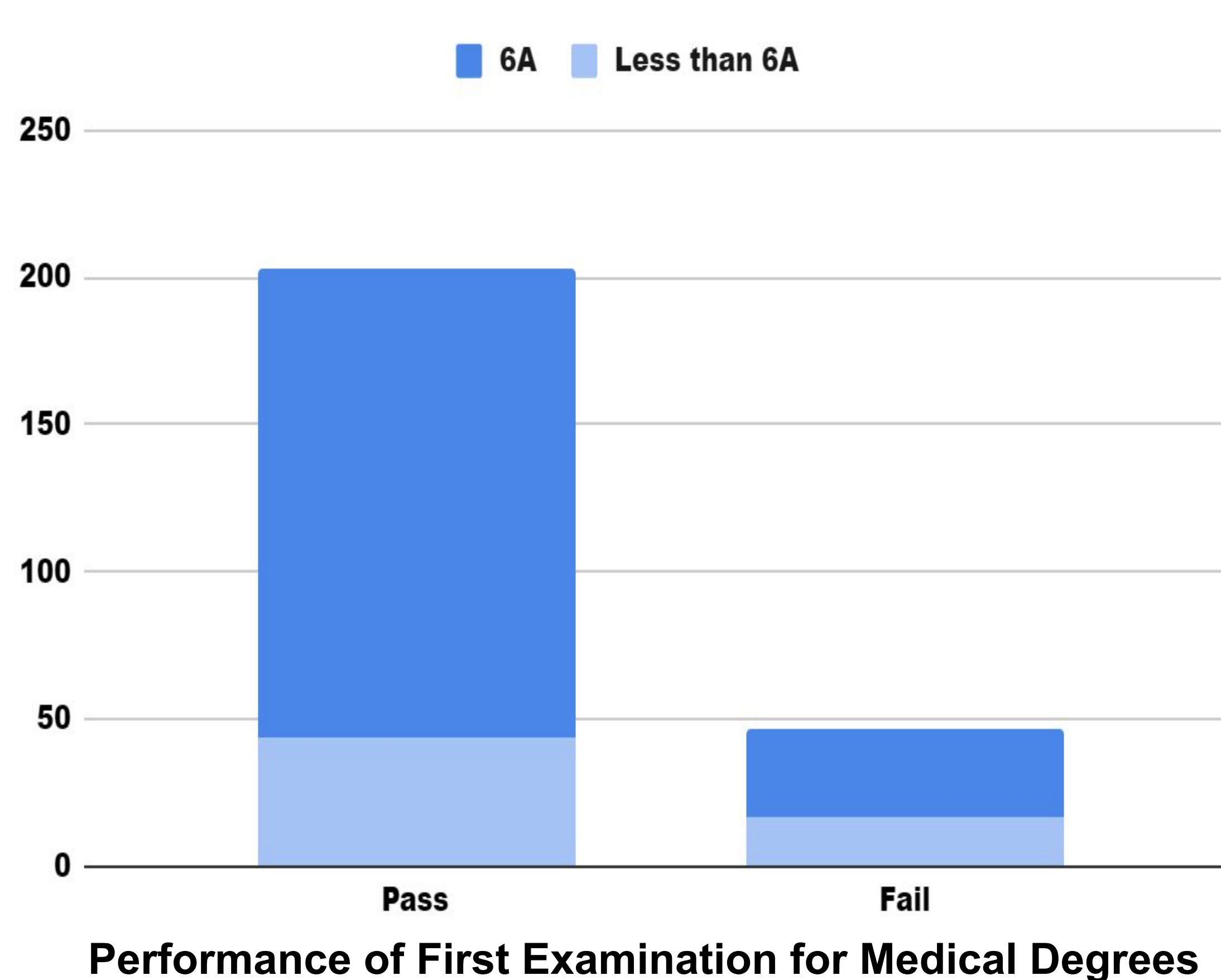
### Association of scholarship examination

According to chi-squared test ,there is no significant association between the performance of grade five scholarship examination and the performance of First Examination for Medical Degrees.(p = 0.210)



**Figure 2: Distribution of performance in scholarship exam and first examination of Medical Megrees**

### Association of 6A's in GCE O/Ls

According to chi-squared test ,there is a significant association between the performance of GCE Ordinary Level examination and the performance of First Examination for Medical Degrees. (p = 0.037)



**Figure3: Distribution of performance in GCE O/L exam and First Examination for Medical Degrees**

**Table 2: Association between the performance for each subject in GCE A/L and the performance of First Examination for Medical Degrees**

| | $x^2$ | df | p | Association |
|---|---|---|---|---|
| Biology A | 4.490 | 1 | 0.034 | $p<0.05$ Significant association |
| Chemistry A | 2.246a | 1 | 0.159 | $p>0.05$ No Significant association |
| Physics A | 0.702a | 1 | 0.402 | $p>0.05$ No Significant association |

**Table 3: Association between socio demographic factors and the performance of First Examination for Medical Degrees**

| | $x^2$ | df | p | Association |
|---|---|---|---|---|
| Gender | 2.711 a | 1 | 0.1 | $p>0.05$ No Significant association |
| Father's employment | 0.139 a | 1 | 0.71 | $p>0.05$ No Significant association |
| Mother's employment | 0.092 a | 1 | 0.761 | $p>0.05$ No Significant association |
| Siblings | 2.723 a | 1 | 0.113 | $p>0.05$ No Significant association |

## Conclusion & Recommendation

- The percentage of students who got through the First Examination for Medical Degrees in first attempt is 81.2%
- There is no statistically significant association between performance in First Examination for Medical Degrees and the marks obtained in grade 5 scholarship examination. (p > 0.05)
- Majority of the students who have got 6A's for the GCE O/L examination (75.6%) have got through First examination for Medical Degrees in first attempt (81.4%). There is a statistically significant association. (p < 0.05)
- There is a statistically significant association of the performance in First Examination for Medical degrees who have obtained A in biology(p <0.05)
- There is no significant association between First Examination for Medical Degrees results and socio demographic factors like gender, parent's employment and number of siblings.

## References

- de Silva, N. R., Pathmeswaran, A., de Silva, N., Edirisinghe, J. S., Kumarasiri, P. V., Parameswaran, S. V., … de Silva, H. J. (2006). Admission to medical schools in Sri Lanka: predictive validity of selection criteria. The Ceylon Medical Journal, 51(1), 17–21. https://doi.org/10.4038/cmj.v51i1.1371

## Acknowledgement