

Clinicopathological Features and Predictors of Lupus Nephritis Patients

A Study in a Tertiary Care Hospital in Bangladesh

Presented By,
Dr. Farhana Faruque
FCPS(Medicine)
Assistant Registrar

Department of Nephrology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh

Background

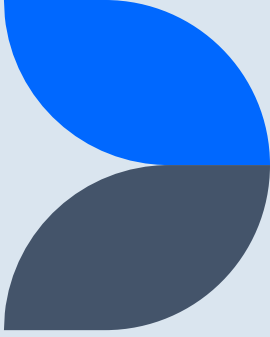
- Lupus nephritis (LN) represents a severe manifestation of systemic lupus erythematosus, and its clinicopathological findings significantly impact the overall disease prognosis.
- Unfortunately, there is a scarcity of data on lupus nephritis (LN) in Bangladeshi patients in the existing literature
- Current study reveals SLE carries a significant risk of ESRD (11% at 5 years, 22% at 15 years), and 10-30% of lupus nephritis cases progress to kidney failure. Mortality rates in SLE are 2-5 times higher than the general population, with the highest risk associated with renal involvement. Those with renal damage face a 14-fold increased risk, and ESRD patients face over a 60-fold increased risk of premature death.

Objectives

The objective of this study was to assess

- ❖ The clinicopathological features;
- ❖ Predictors of lupus nephritis patients in Bangladesh;

Methods



- ***Study Method :*** Cross-sectional study
- ***Location:*** Department of Nephrology, Sir Salimullah Medical College Mitford Hospital, Dhaka, Bangladesh.
- ***Duration:*** January 2023 to July 2023
- ***Sample Size:*** 30 patients (purposive sampling)
- ***Patients Criteria:*** Underwent a renal biopsy as part of clinical care, determined by treating nephrologists.
- ***Analysis:*** SPSS version 23.0 program (p-value<0.05 is significant)

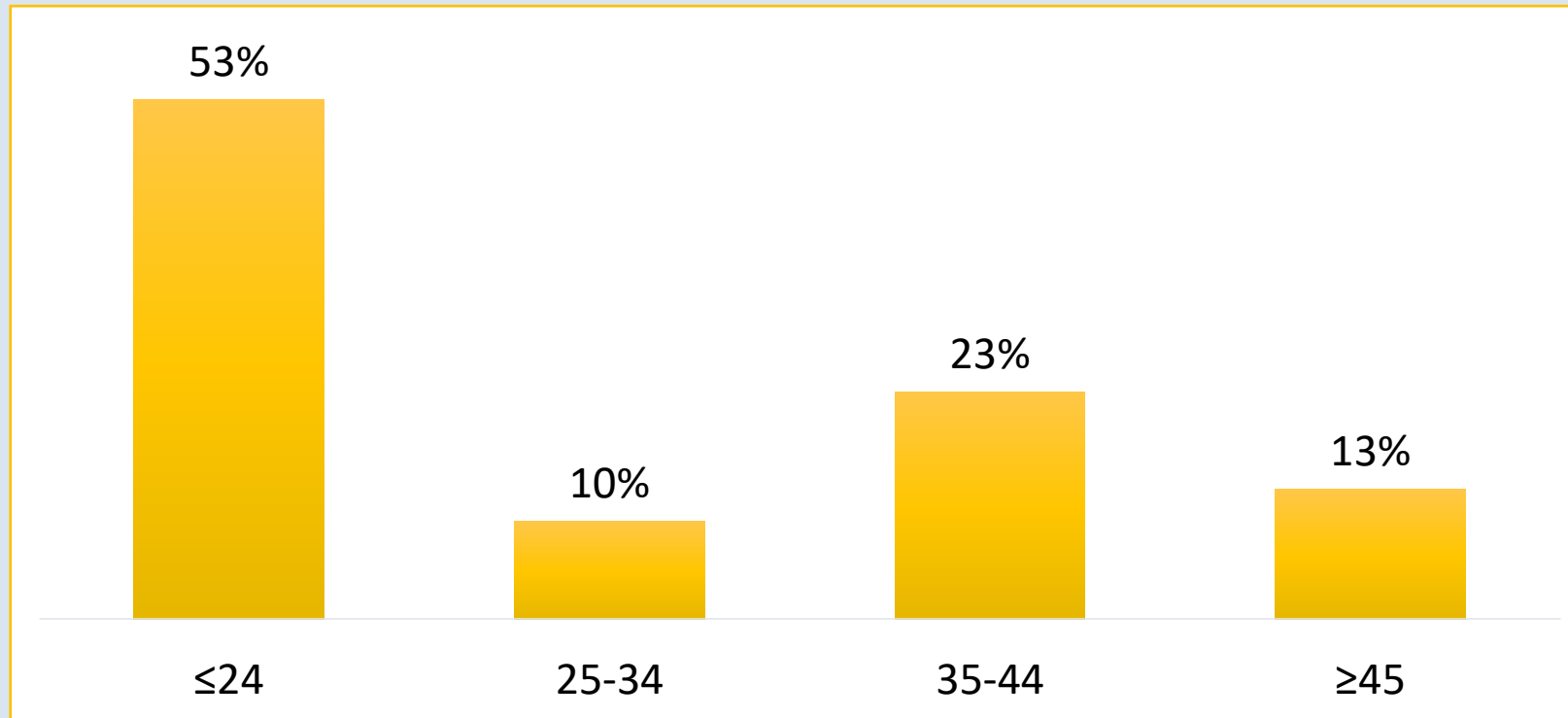
Results

Highlights

- ✓ The majority of participants (53%) belonged to the ≤ 24 years age group, with 77% being female.
- ✓ The classification of lupus nephritis according to the International Society of Nephrology/Renal Pathology Society (ISN/RPS), the majority (53%) fell into class IV.
- ✓ All of the participants (100%) exhibited a SLEDAI 2K score of ≥ 20 .

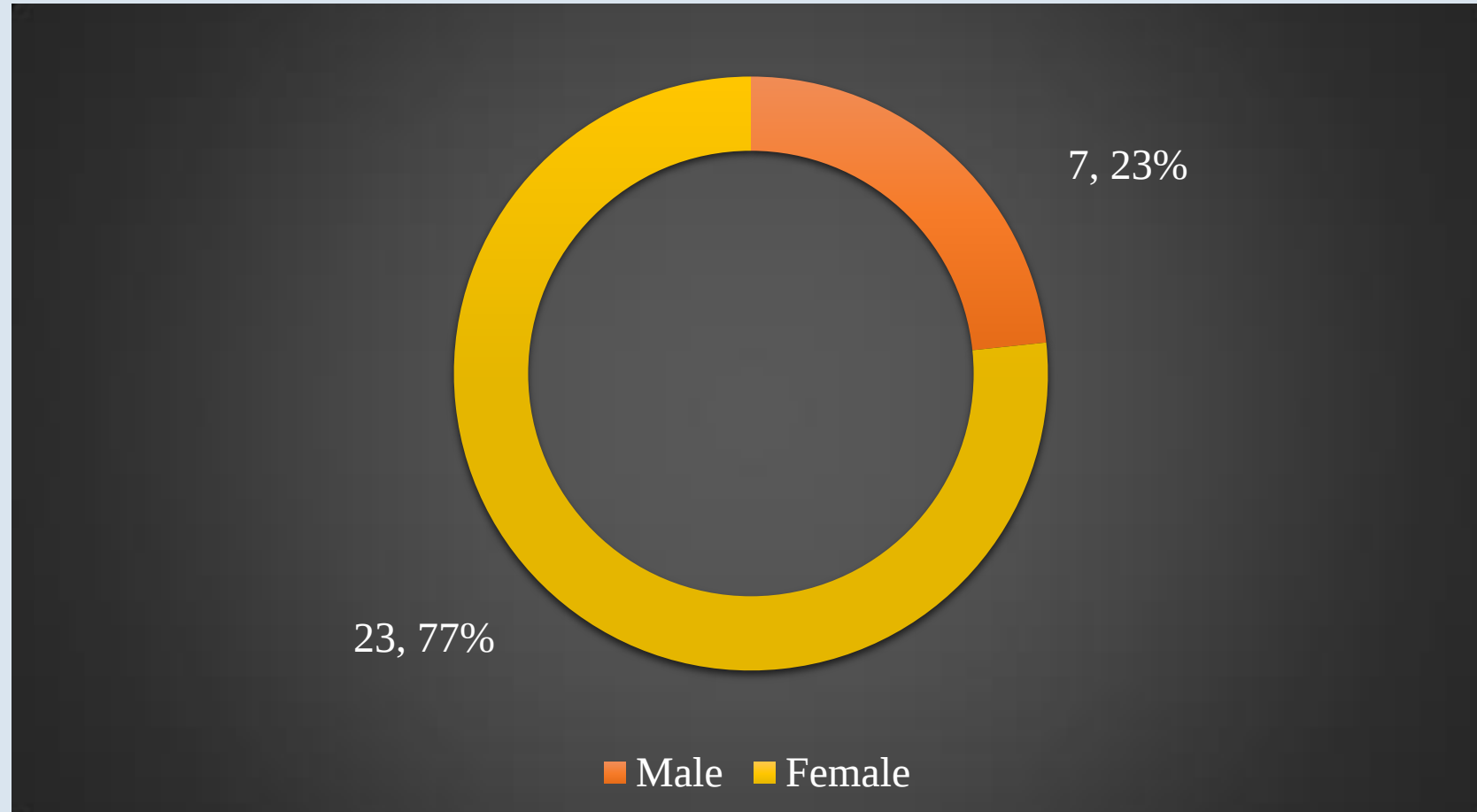
Results

Figure 1: Ages of participants (N=30)



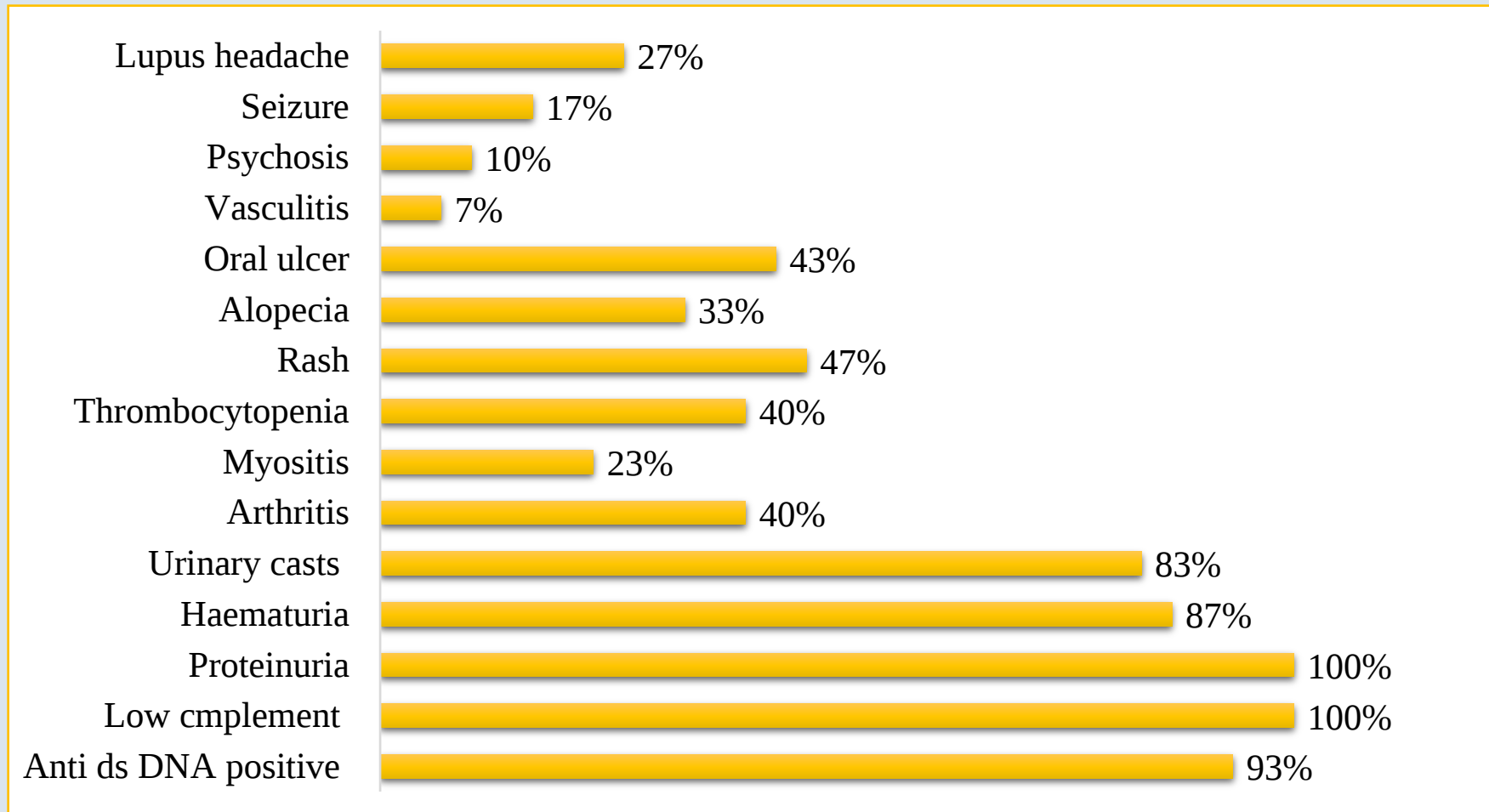
Results

Figure 2: Gender distribution



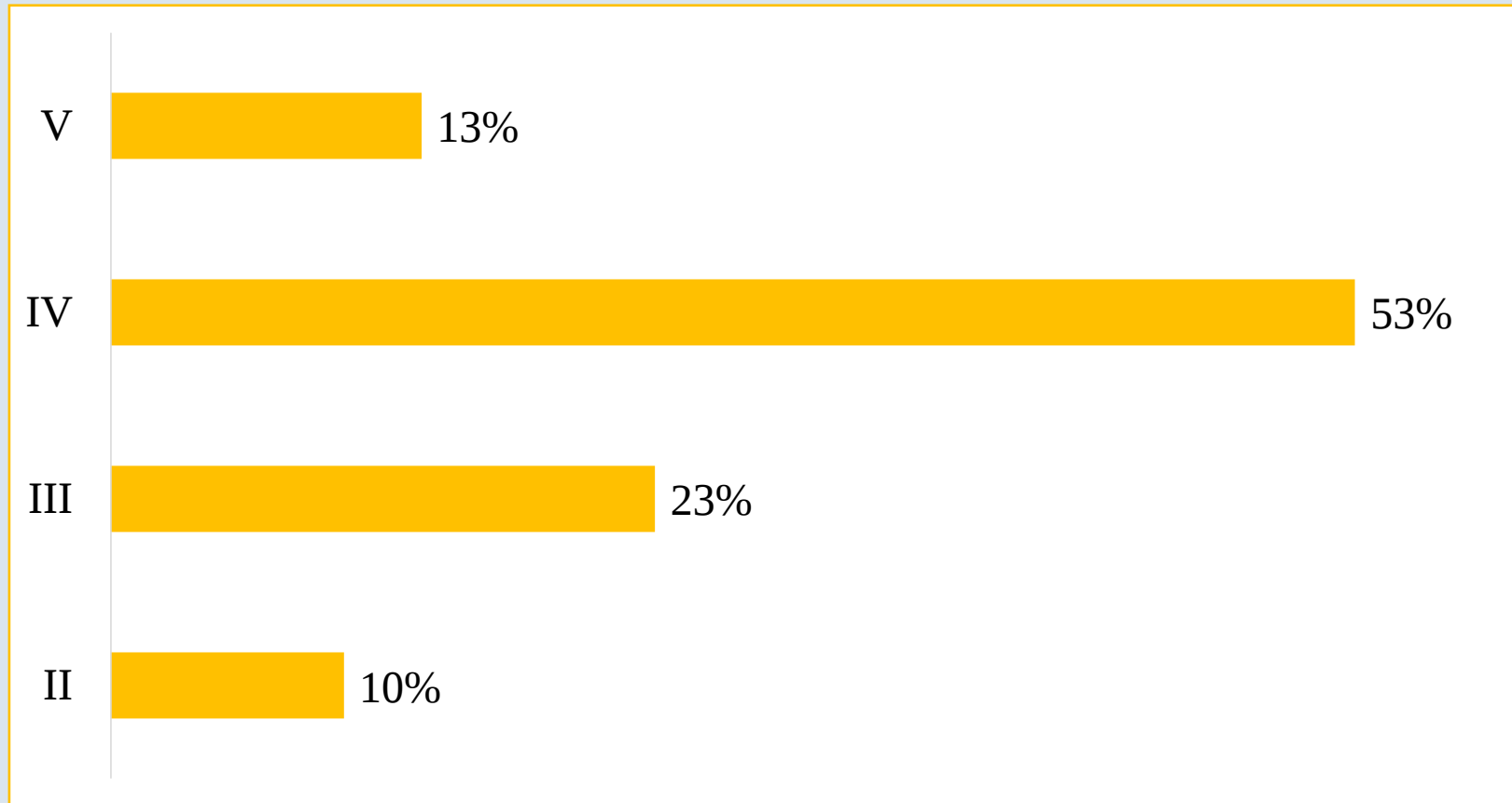
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Figure 3: Clinical features distribution



Results

Figure 4: ISN/RPS score distribution



Results

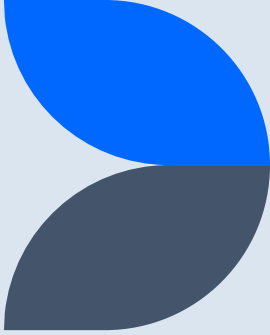


Table 1: SLEDAI 2K score distribution

SLEDAI 2K scores	n	%
No activity (0)	0	0%
Mild activity (1 to 5)	0	0%
Moderate activity (6 to 10)	0	0%
High activity (11 to 19)	0	0%
Very high activity (≥ 20)	30	100%

Results

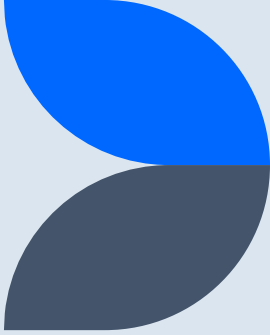
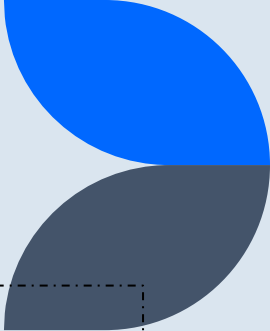


Table 2: Comparison between ISN/RPS and SLEDAI 2K scores

ISN/RPS score	SLEDAI 2K score	ISN/RPS scores	SLEDAI 2K score	P-value
(n)	Mean $\pm$ SD		Mean $\pm$ SD	
II (3)	29.33 $\pm$ 4.62	III (7)	49.29 $\pm$ 12.85	0.034
		IV (16)	55.81 $\pm$ 10.65	<0.001
		V (4)	24.25 $\pm$ 0.96	0.079
III (7)	49.29 $\pm$ 12.85	IV (16)	55.81 $\pm$ 10.65	0.218
		V (4)	24.25 $\pm$ 0.96	0.004
IV (16)	55.81 $\pm$ 10.65	V (4)	24.25 $\pm$ 0.96	< 0.001

Limitation

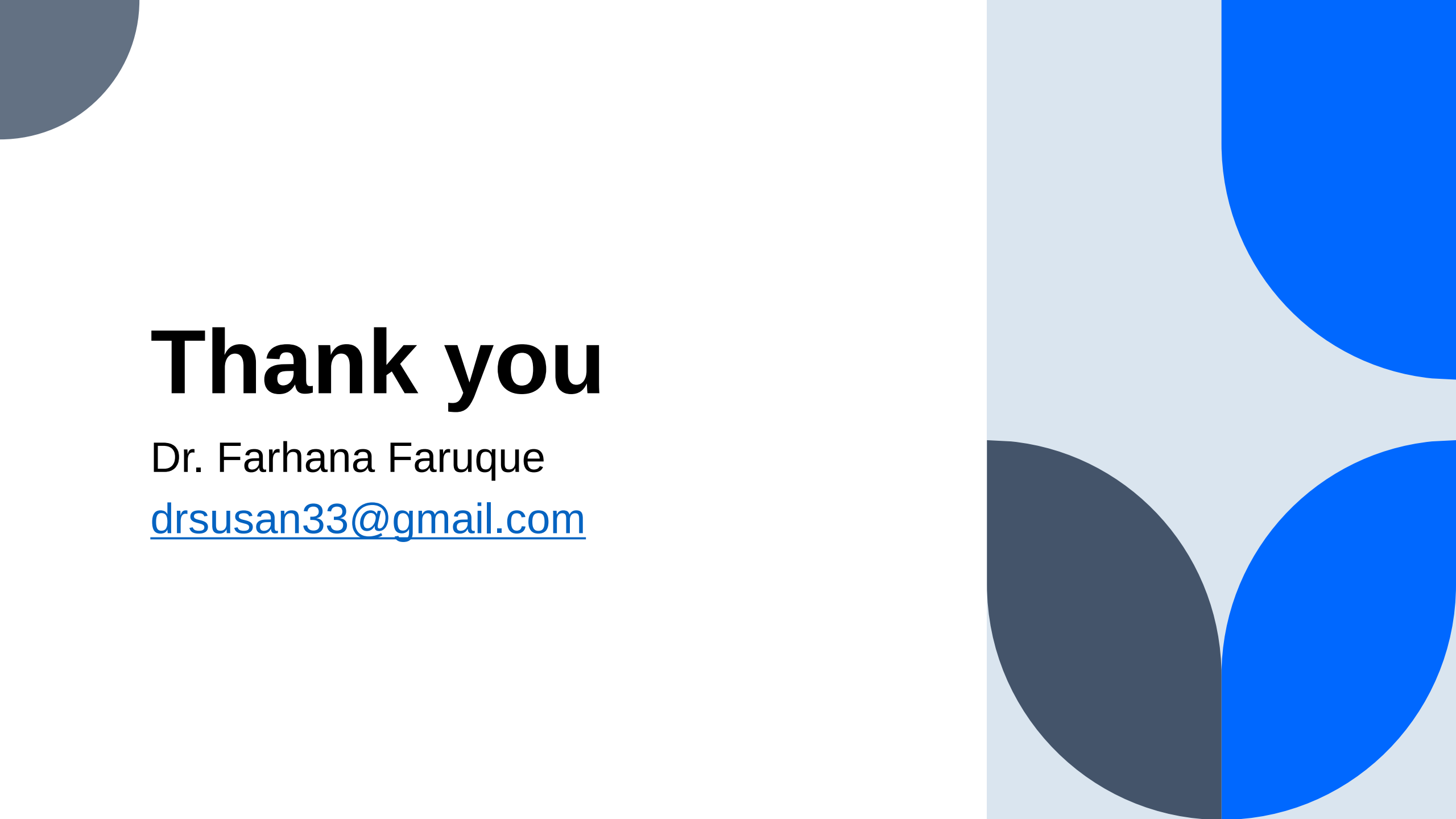


This study has some limitations

- ❖ Single-centered Nature
- ❖ The Relatively Small Sample Size
- ❖ Conducted Over A Brief Period
- ❖ Findings may not accurately represent the broader scenario across the entire country

Conclusion

- ❖ Among the Bangladeshi population, lupus nephritis is more prevalent in younger individuals and females.
- ❖ In the majority of lupus nephritis cases, ISN/RPS score IV is observed, and there is a higher frequency of having a SLEDAI 2K score of ≥ 20 .
- ❖ In addition to the ISN/RPS score, SLEDAI 2K scores can be regarded as another reliable diagnostic tool for evaluating lupus nephritis.



Thank you

Dr. Farhana Faruque

drsusan33@gmail.com