



ANALYSIS OF GRADE III VASOVAGAL REACTIONS

Dr.Thettayil Joseph John, Dr.Pratul Sinha, Dr.Vilasini Patil, Dr.Romesh Jain

INTRODUCTION

- Any untoward feeling experienced by the blood donor before, during or after blood donation is called an adverse donor reaction (ADR).
- The retention of blood donors is important, if not less than the recruitment of new blood donors, and is affected by ADR's.
- Grade III VVRs are a medical emergency and can be prevented by better screening and monitoring of blood donors.

METHODS

- Study design: Retrospective analysis of ADR
- Centre: AIIMS Bhopal
- Source of data: adverse donor reaction registers, hemovigilance forms and donor screening cards from 1st June 2020 to 30th September 2024.
- The data comprises the frequency of mild, moderate and severe grades of VVR among blood donors.
- This data was analyzed and correlated to the various factors that could lead to these complications.

DISCUSSION

- Frequency of VVR among blood donors in AIIMS Bhopal varied from 1.16% to 2.71% over a span of five years.
- There was a decreasing trend and then a sudden spurt in grade III VVR in 2024 (1.69%).
- Major factors that contributed to grade III VVR included first time donation (60%), inadequate sleep (40%) and empty stomach (30%).

RESULTS

Out of 34,582 donors, VVRs were observed in 727 donors, giving an overall incidence of 2.1%. Out of 727, 10 (1.38%) were grade III in nature. Figure 1 shows the frequency of VVRs and grade III reactions separately over a span of five years. Figure 2 shows the various factors affecting grade III VVR.

CONCLUSION

- Inadequate sleep, empty stomach, anxiety, first time donation and history of previous ADR are the major contributing factors.
- This reflects that with adequate care most of the reactions could have been prevented.
- Situations like increased waiting period, lack of trained personnel, lack of cheerful and lively environment and decreased post donation waiting period can also contribute to a higher incidence of causative factors leading to grade III VVR.

OBJECTIVES

- To study the frequency of various grades of VVR occurring among blood donors in a blood center of a tertiary care health center in central India.
- To assess the factors contributing towards grade III VVR.

Figure 1.

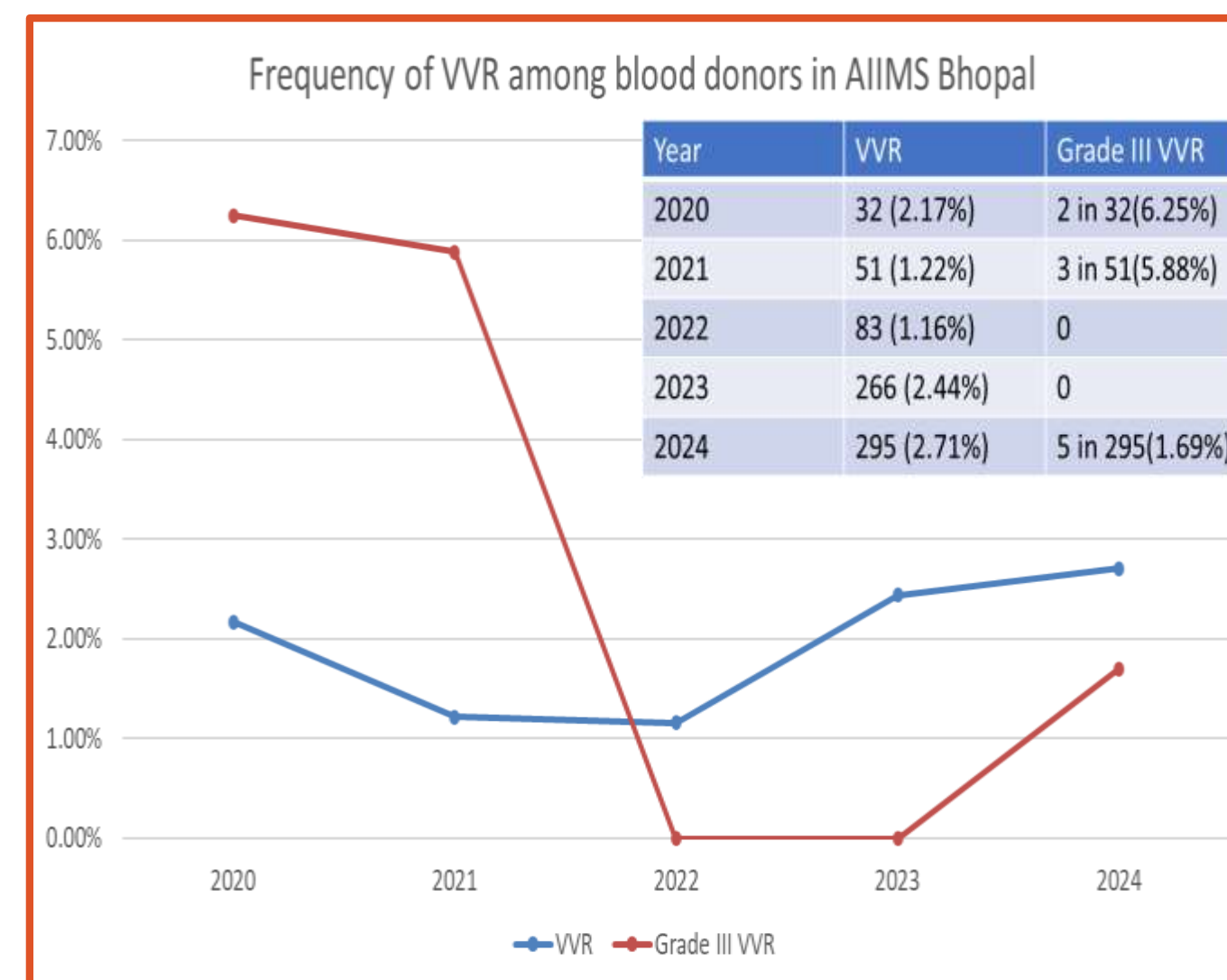
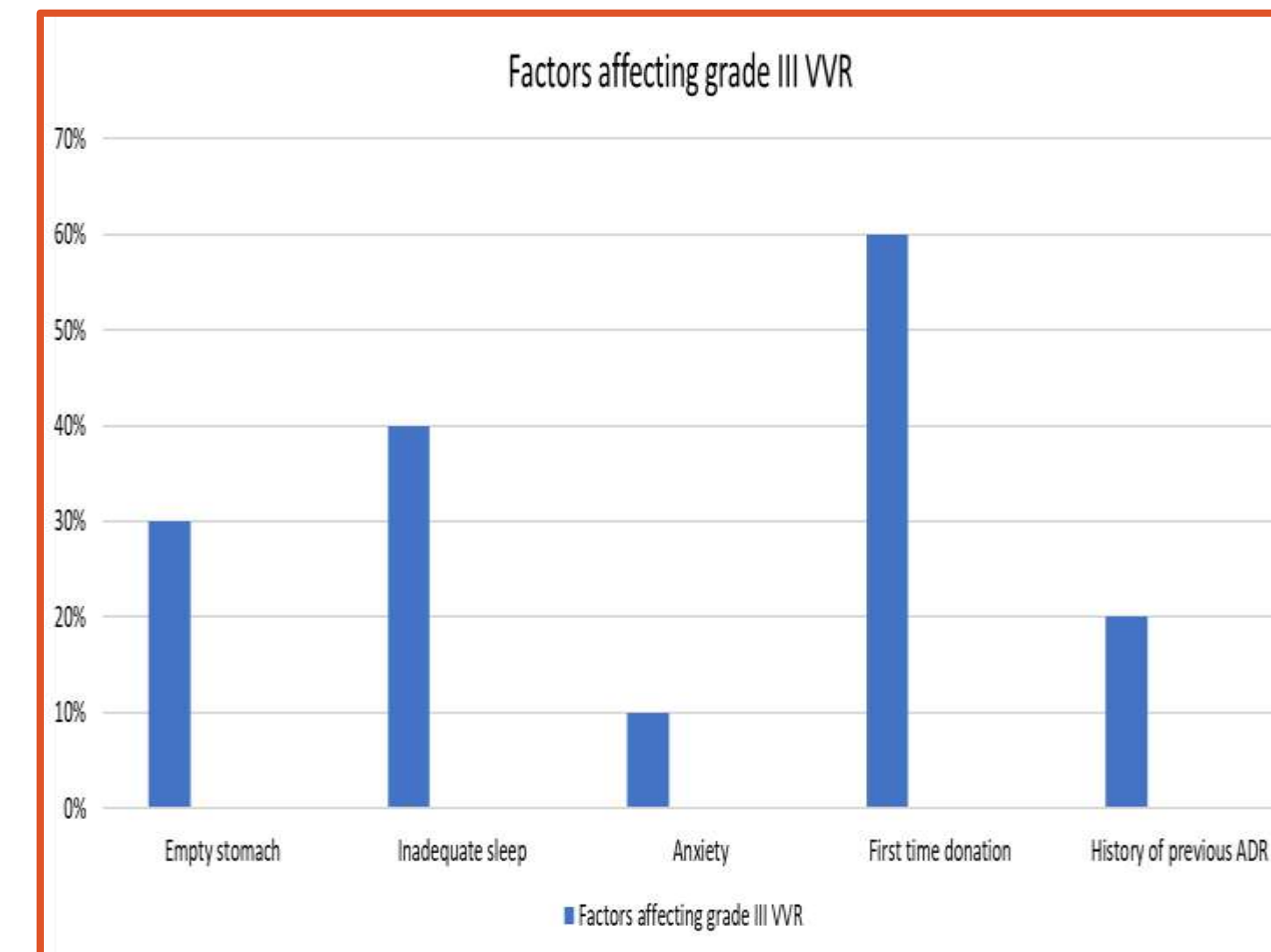


Figure 2.



REFERENCES

- Jain, Romesh; Gupta, Anubhav1; Bava, Davood2; Patil, Vilasini; Sinha, Pratul; Garg, Sachin3; Mishra, Snehashish; Jain, Shubhangi4. Time-deferred consequences: A deep dive into delayed adverse reactions among whole blood donors. Asian Journal of Transfusion Science (J):10.4103/ajts.ajts_81_24, August 28, 2024. | DOI: 10.4103/ajts.ajts_81_24
- Agnihotri, Naveen1,2; Marwaha, Neelam1,; Sharma, Ratti R.1. Analysis of adverse events and predisposing factors in voluntary and replacement whole blood donors: A study from north India. Asian Journal of Transfusion Science 6(2):p 155-160, Jul-Dec 2012. | DOI: 10.4103/0973-6247.98922