WHAT IS THE ROLE OF FAMILY HISTORY IN THE MANAGEMENT OF VTE?

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ABSTRACT/ BACKGROUND

VTE is a worldwide public health and medical care problem due to high morbidity, mortality, and rate of missed diagnosis, and considered as the most likely preventable fatality. The awareness of VTE in the general population is very low. Caprini Risk Score (CRS), widely used all over the World to determine the level of risk for thrombosis, includes many risk factors that occur in hospitalized patients with VTE.

OBJECTIVES

To increase awareness of VTE in the community regarding thrombosis-related risks, we assessed individual participants' baseline thrombosis risk scores before injury, illness or hospitalization occurred, employing a non-experimental design, involving cross-sectional survey methodology, and convenience sample.

METHODS

Participants (N=928) were recruited from the USA, UK, and India. Risk factors (1 to 5) indicated the power of each factor to cause a blood clot. The risk of VTE occurrence in patients was divided into low (0 ~ 1 points), risk (2 ~ 4 points), high (5 points), and very high (9 + points). The participants tested on their own electronic devices; the team was blinded to the identity of the participants. The participants logged in to the website, www.caprinriskscore.org. The study was approved by the IRB of DePaul University and was administered by high school students.

RESULTS

Characteristics of the population (Table 1)

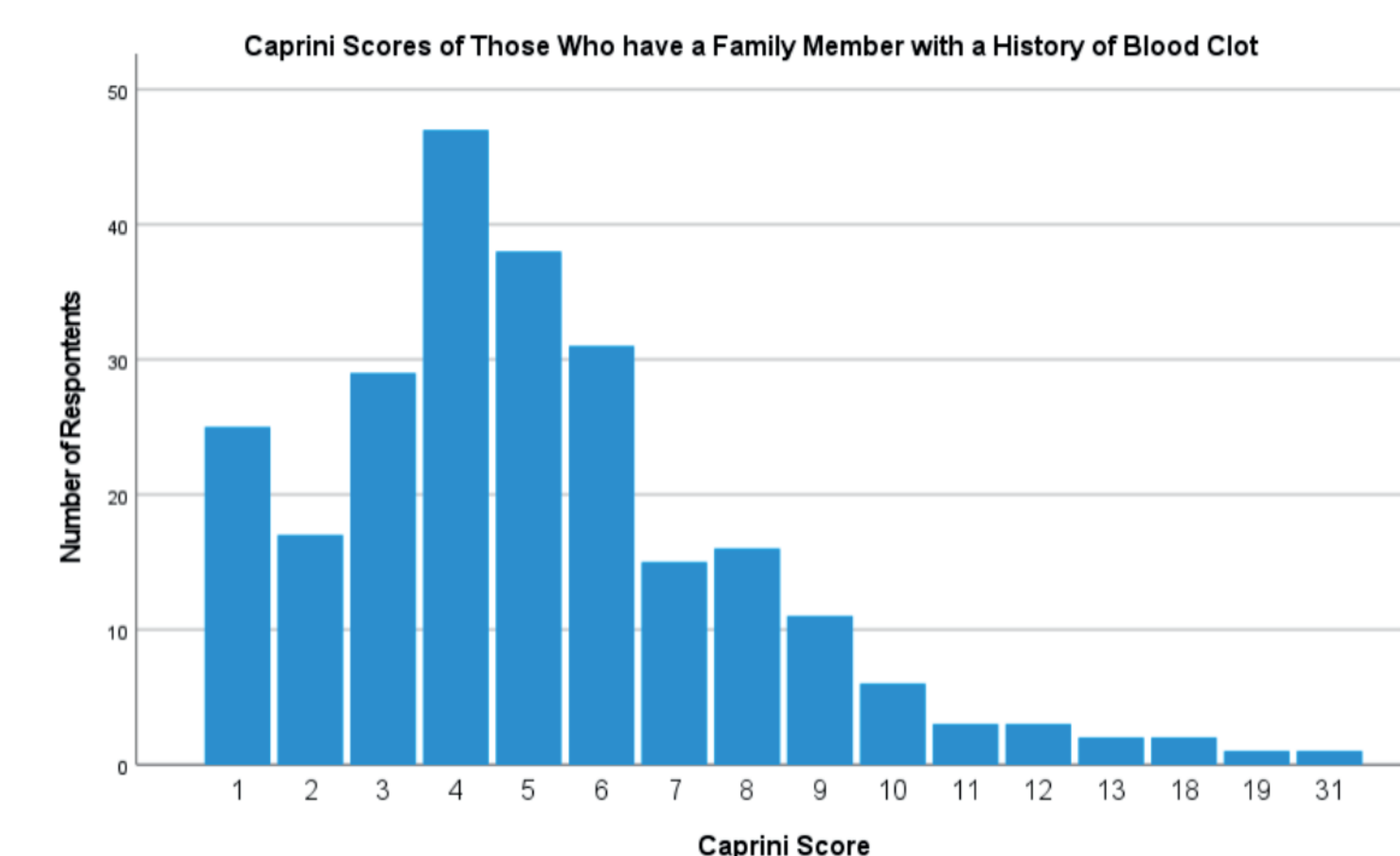|	
Males	471 (50.8%)
Females	457 (49.2%)
Age > 40 years	130 (52.6%)
Females on OC's	324 (34.9%)
African Americans	159 (17.2%)
Caucasians	185 (20%)
Latinos / Hispanics	118 (12.7%)
Smokers	283 (30.5%)
Diabetics	245 (26.1%)
Average CRS	4.93 ± 3.17
CRS 0-4	49.6%, N = 460
CRS 5-8	42.5%, N = 394
CRS > 9	8.0%, N = 74

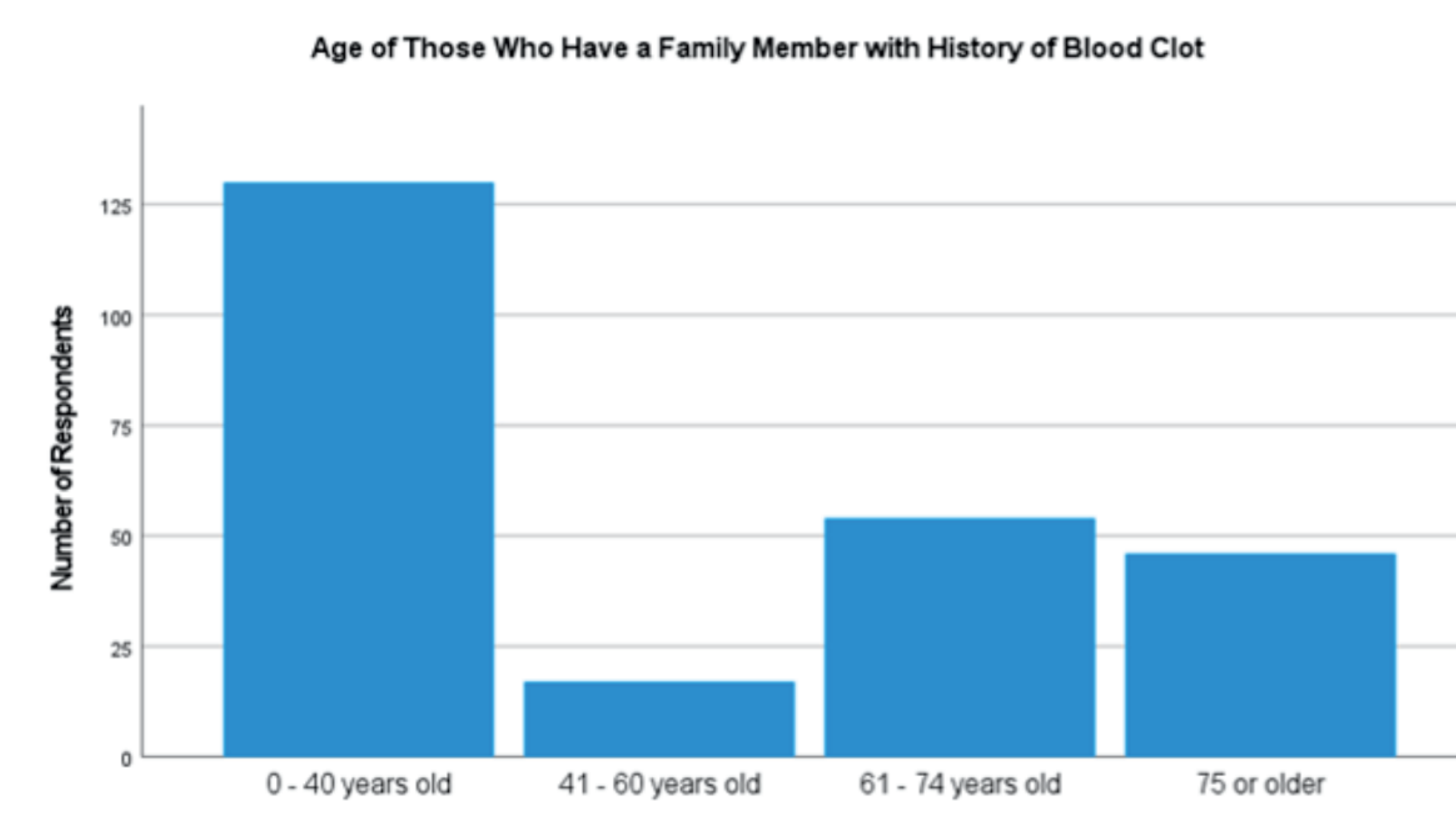Figure 1. CRS: Family members with a history of blood clot

Figure 2. Age of those who have a family member with a history of blood clot.
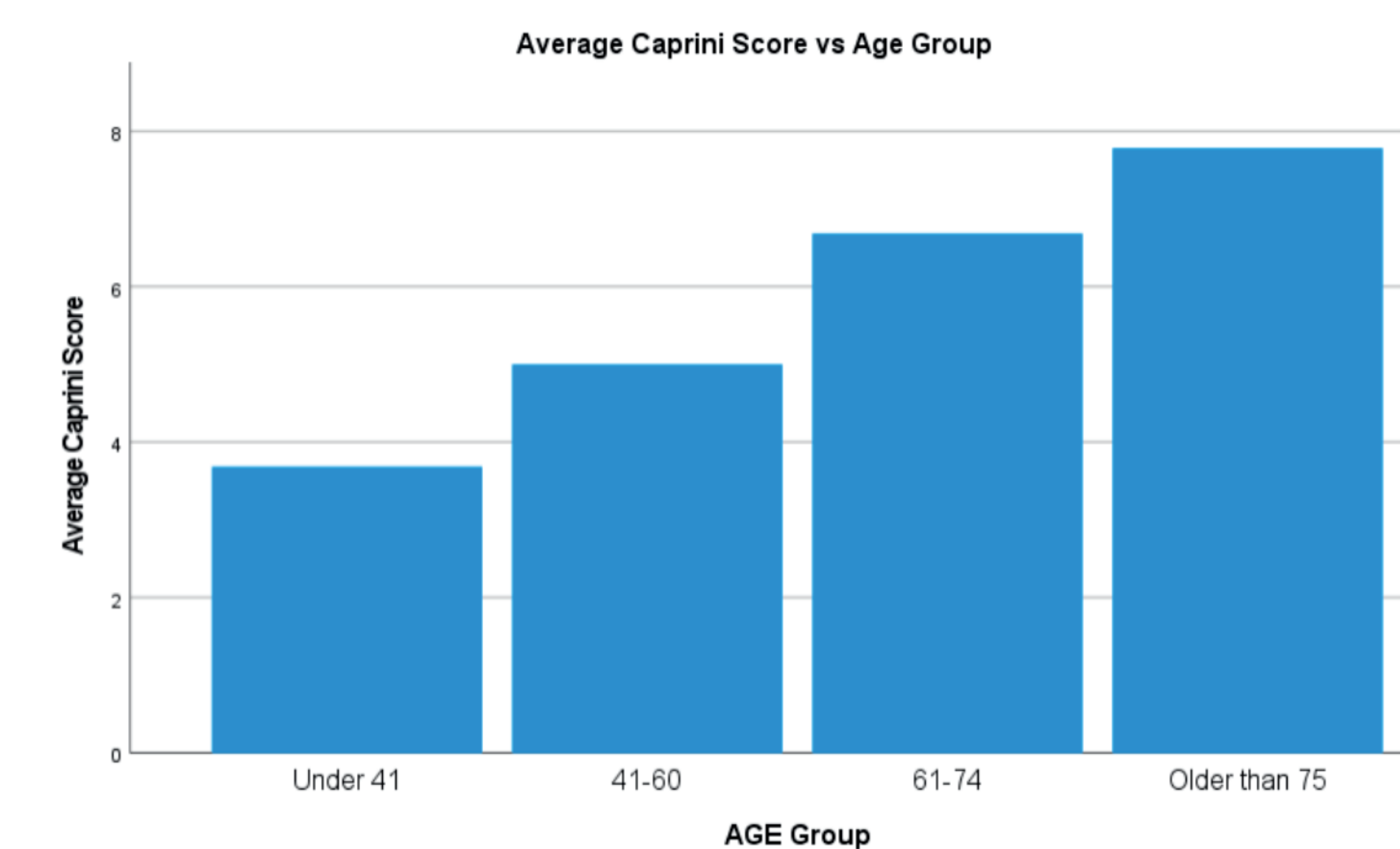
RESULTS CONT.

Figure 3. Caprini Score vs Age Group

CONCLUSIONS

- Family history, smoking, diabetes, contraceptives, and IBD are important factors increasing the risk of VTE in people before illness or injury, which should improve public awareness of VTE as a first step to reducing the incidence of fatal PE events.
- Our study established a very important role of high school students in the collection of the data by contacting their friends, relatives, and family friends.
- A total of 26.6% of participants reported a family history of blood clots.
- Despite the measures Worldwide of banning smoking, our study had 30% smokers.
- As expected the Asian community had a very high incidence of diabetes.

CONCLUSIONS, CONTD.

Knowing CRS and risk factors ahead of time is one of the best ways to lower the incidence of VTE.
It is necessary to develop and apply strategies and interventions to increase public awareness of the dangers and prevalence of VTE.

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