

CRUSH SYNDROME COMPETENCE AMONG 4TH, 5TH AND 6TH GRADE STUDENTS OF BEZMIALEM VAKIF UNIVERSITY SCHOOL OF MEDICINE

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BACKGROUND

- Earthquake = Disaster due to changes in fault lines (1)
 - Risky Areas= Densely populated regions includes Türkiye (2)
- Education for earthquake-related conditions is VITAL for medical staff who have potential to work at risky areas for earthquake (5)
- Crush Syndrome is THE SECOND most common reason of mortality after trauma at earthquakes (3,4)
- Crush Syndrome may be described as a condition which could have components like electrolyte imbalances, acute kidney injury related to release of myocytes' components to circulation after prolonged injury (5).
 - Because of fatal components diagnose the condition quickly and accurately and start the right resuscitation treatment have the highest priority (5)

STUDY OBJECTIVE

- To determine the Crush Syndrome knowledge levels and differences among the 4th, 5th and 6th grade medical students of Bezmialem Vakif University School of Medicine via survey study

METHODS

- **Study Design**
 - Survey Study
 - 25 questions total = 5 demographic + 20 knowledge (Definition, Causes, Fluid, Hemodialysis, Treatment, Potassium, Prevention) (2,5,8,9)
- **Section**
 - 2023-2024 academical year
- **Population**
 - Total Population = 342 students
 - Calculated = 184 students min. (7)
 - Reached = 71 students
- **Data Collection**
 - Google Forms + Microsoft Excel
- **Statistical Analysis**
 - SPSS ver. 26
 - Compare means of age and survey results point = Student's T-Test
 - Demographical Data (Sex, Preeducation, Confidence Status) = Fisher's Exact Test
 - Compare each question points between two groups (4th + 5th grade, 6th grade) = Mann Whitney U Test

RESULTS

DEMOGRAPHICS	4TH AND 5TH GRADES (n, %)	6TH GRADES (n, %)	P
AGE (MEAN ± SD)	22.84±3.72	23.25±0.79	0.278
SEX	M: 22 (%34,92) F: 41 (%65,07)	M: 1(%12,5) F: 7(%87,5)	0.261
PARTICIPATION ANY SEMINAR FOR CRUSH SYNDROME	47 (%74,6)	8 (%100)	0.185
CONFIDENCE LEVEL FOR CRUSH SYNDROME	22 (%34,9)	2 (%25)	0.708

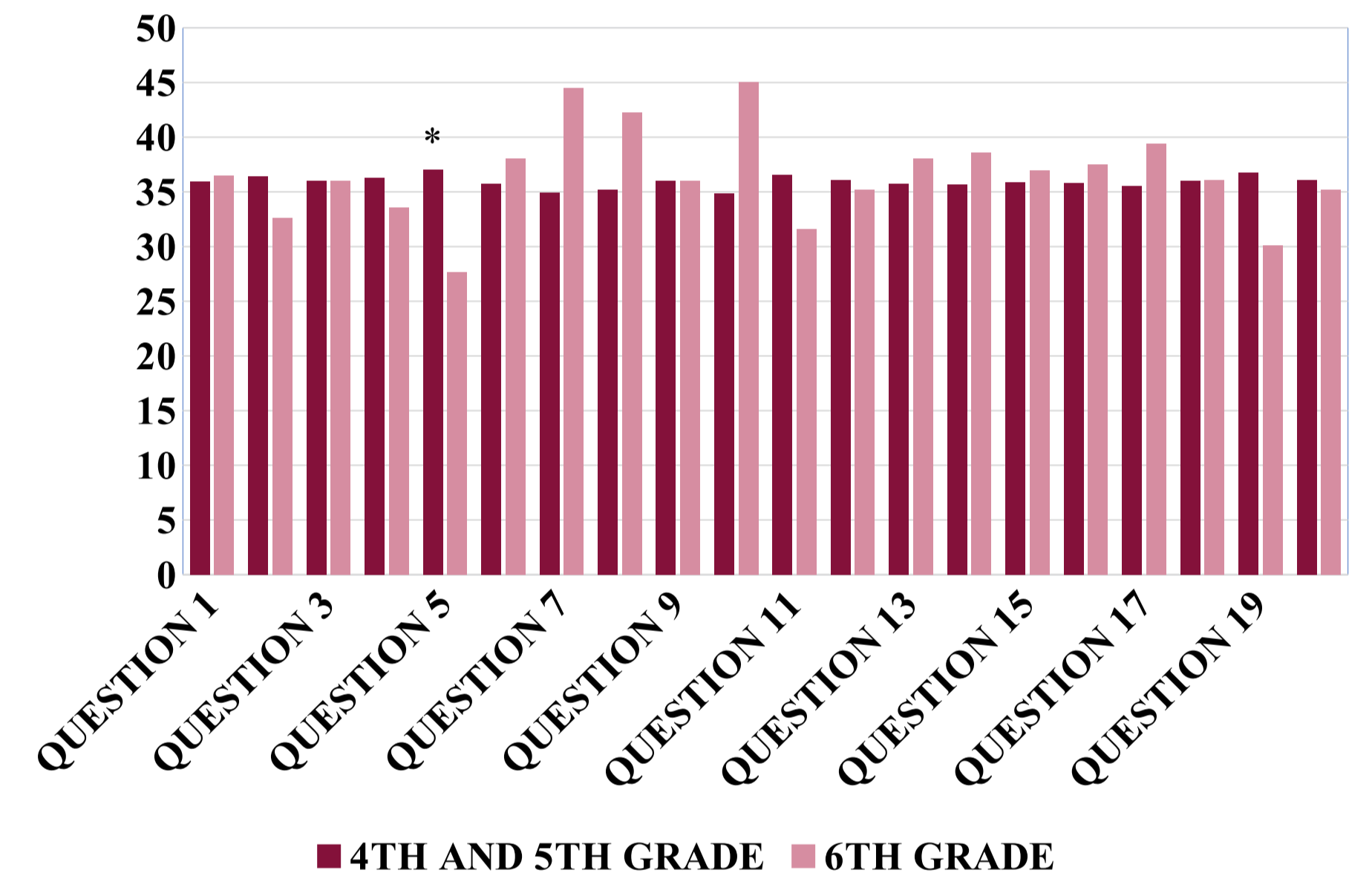
Table 1. Comparison of demographical data between two student groups

RESULTS

Table 2. Comparison of total results of survey between two groups

	TOTAL PARTICIPANT	ANSWER MEANS (MEAN ± SD)	P
4TH AND 5TH GRADES	63	15.65 ± 5.23	0.340
6TH GRADES	8	16 ± 3.71	

Figure 1. Mann-Whitney U Test for result comparison for each question



■ 4TH AND 5TH GRADE ■ 6TH GRADE

CONCLUSION

According to our preliminary results, we haven't seen any significant difference in result means except the question about causes of Crush Syndrome among medical student doctors and interns (6th grade=27.69, 4th and 5th grade=37.06, p=0.045). This findings warrant further investigation.

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