

Background

- Adequate bowel preparation is crucial for obtaining a high-quality colonoscopy.
- Inadequate preparation leads to impaired visualization, which can lower adenoma detection rate, increase the risk of complications and potentially necessitate repeating the procedure¹.
- Patients with higher health literacy and a higher level of education have been associated with better bowel preparation quality^{2,3,4,5}.

Aim

To describe the population receiving outpatient screening colonoscopies at Thomas Jefferson University Hospital (TJUH) and associated ambulatory surgical centers in terms of bowel preparation used and highest level of education completed to assess the impact of education on the quality of bowel preparation.

Methods

- A prospective, survey-based study was performed where patients undergoing outpatient screening colonoscopies between March 2023 and October 2023 at TJUH and affiliate sites were invited on the day of their colonoscopy to answer a questionnaire.
- Questions included highest level of education and what type of bowel preparation they used. Demographic information and the patient's Boston Bowel Preparation Score (BBPS) were recorded.
- ANOVA was used to analyze differences in the mean BBPS among various subgroups.

Results

Table 1: Patient Demographics

Age	# of patients	% of total
<45	18	5.17
45-59	193	55.46
60-74	122	35.06
≥75	15	4.31
Sex	# of patients	% of total
M	151	43.39
F	197	56.61
Race	# of patients	% of total
White	192	55.17
Black	118	33.90
Hispanic	3	0.86
Asian	18	5.17
Other/Unknown	17	4.89
Education level	# of patients	% of total
Below high school	8	2.30
High school	61	17.53
College	160	45.98
Graduate school	119	34.20

Table 2: Average BBPS Amongst Different Preparations

Type of Prep	# of patients	% of total	Average BBPS
GoLytely	12	3.45	7.75
MoviPrep	3	0.86	7.33
HalfLytely	2	0.57	7.5
Miralax and Bisacodyl with Gatorade – 3 bottles	300	86.2	8.07
Miralax and Bisacodyl with Gatorade – 6 bottles	19	5.46	8.16
SUPREP	5	1.44	8.4
Plenvu	5	1.44	8.33
Other	2	0.57	8.5

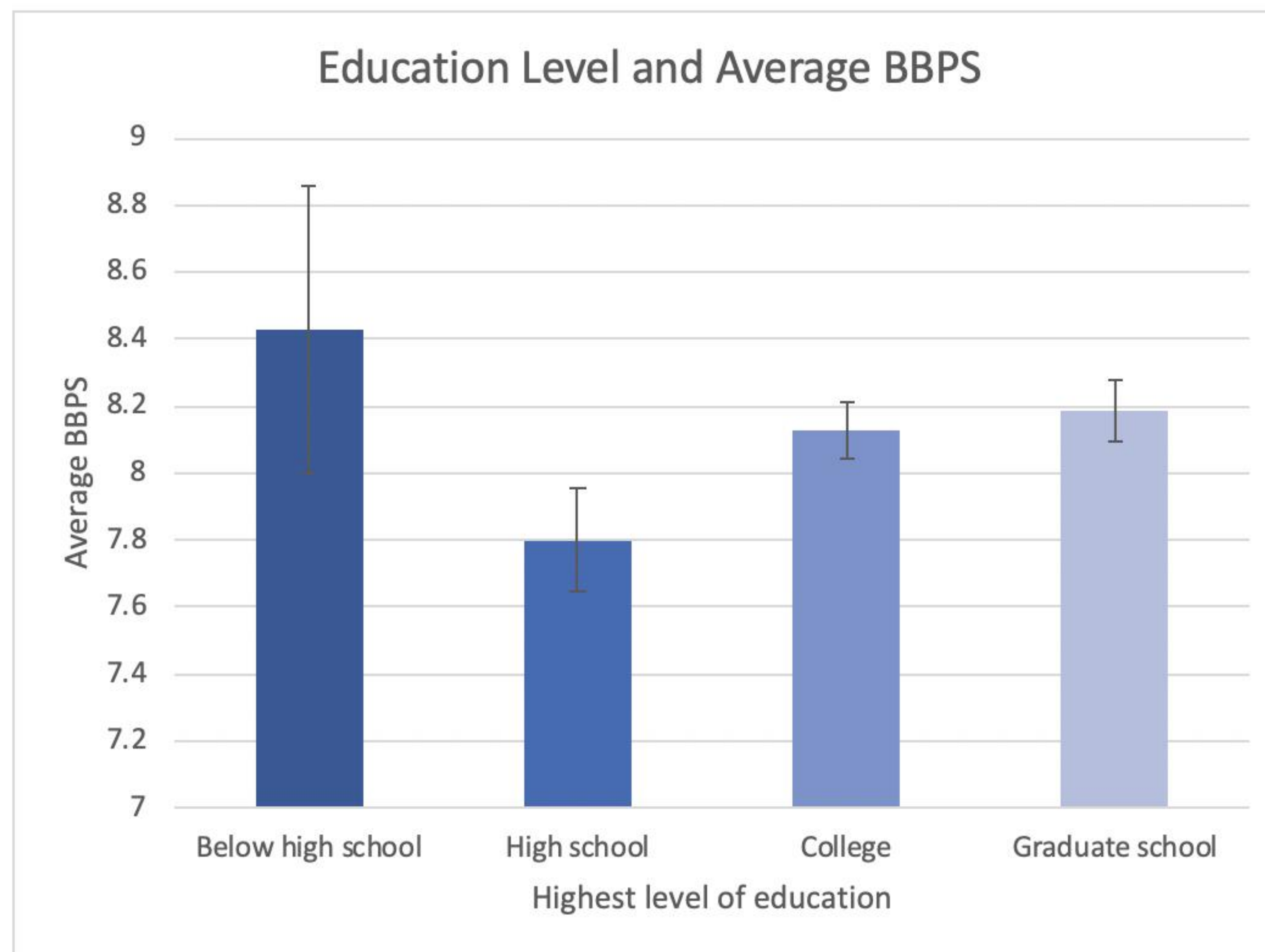


Figure 1: Average BPPS among different education level in patients using Miralax and Bisacodyl with Gatorade regimen

Results

- The majority of patients were white (55%), age 45-74 (90.5%), and had a college education level or higher (89%) (Table 1).
- There was no significant difference in the average BBPS amongst the different bowel preparation groups (p-value 0.764) (Table 2).
- There was no significant difference in the average BBPS amongst the different education level groups (p-value of 0.122) (Figure 1).

Conclusions and Future Directions

- No significant differences in average BBPS among patients from different education levels undergoing outpatient screening colonoscopies.
- Limitations of our study include a highly educated patient population which may not be representative of the US population at need of colorectal cancer screening.
- Future areas of study include examining effects of other socioeconomic factors including income level on bowel preparation score, and if adjusting reading level of written bowel preparation score impacts overall patient population bowel preparation scores.

Health Equity Considerations

- Education level alone may not be the best predictor of quality of bowel preparation. Other potential health disparities among different socioeconomic groups (i.e. income, reading level) may also contribute to poor bowel preparation and can be evaluated in future studies.

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