Does implementation of a video module improve patient knowledge about gestational weight gain?

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Background

- There are specific guidelines stating how much weight patients should gain during pregnancy based on their pre-pregnancy BMI.
- Approximately one third of women receive no counseling about these gestational weight gain (GWG) guidelines.
- Those who are counseled are often not satisfied with their discussion, and may instead receive advice about GWG from friends or family.

Objectives

To determine if implementation of a video module improves patient knowledge about gestational weight gain.
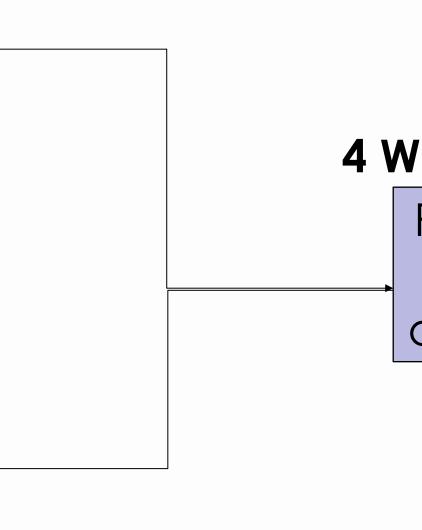
Study Design

- Prospective cohort study conducted from February-October 2019
- Patients were recruited from a large academic practice during the first trimester

Control Cohort

First Trimester Visit
1. Complete baseline GWG knowledge questionnaire
2. Routine provider counseling.

4 Weeks Later

Repeat GWG knowledge questionnaire.

Video Cohort

First Trimester Visit
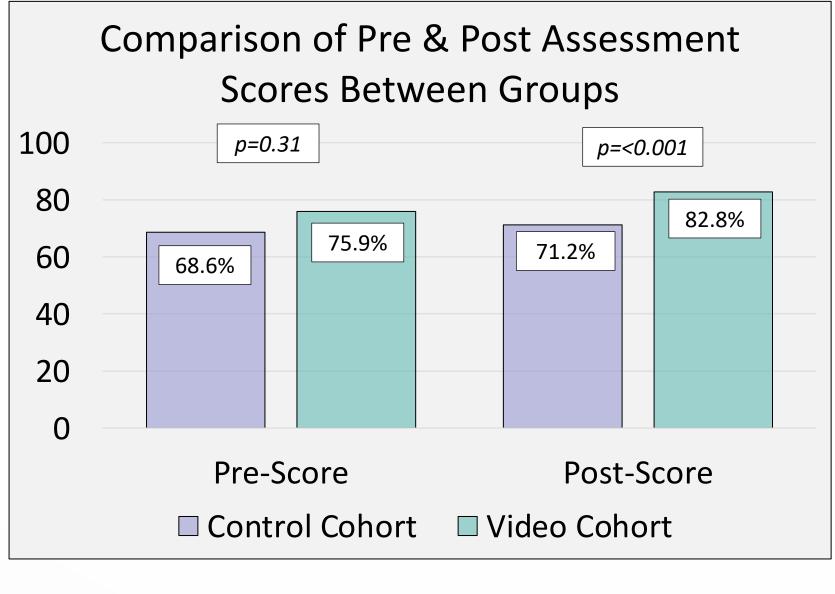1. Complete baseline GWG knowledge questionnaire
2. Watch GWG video.

- The GWG video module was 5 minutes long, created by the study team, with information from ACOG & March of Dimes

Results

Table 1. Demographics for participants in both the control and video cohorts.

	Control Cohort n=79	Video Cohort n=76	p-value
Race			
Caucasian	44 (55.7)	51 (67.1)	0.06
Black	4 (5.1)	10 (13.2)	
Asian	7 (8.9)	3 (3.9)	
Hispanic	20 (25.3)	11 (14.5)	
Other	4 (5.1)	1 (1.3)	
Education			
<High school	5 (6.3)	2 (2.6)	***0.016***
High school	32 (40.5)	15 (19.7)	
College	22 (27.8)	33 (43.4)	
Graduate school	20 (25.3)	26 (34.2)	
Marital Status			
Single	28 (36.4)	24 (31.6)	0.532
Married	49 (63.6)	52 (68.4)	
Pre-Pregnancy Weight (kg)	72.65±21.7	75.2±20.7	0.424
Pre-Pregnancy BMI (kg/m²)	27.6±7.6	27.8±7.5	0.787
Age (years)	30.4±5.2	31.9±4.5	0.065

	Control Cohort n=79	Video Cohort n=76	p-value
Income (U.S. Dollars)			
<30k	16 (20.8)	11 (14.9)	0.725
30-50k	15 (19.5)	12 (16.2)	
50-80k	13 (16.9)	16 (21.6)	
80-100k	7 (9.1)	10 (13.5)	
>100k	26 (33.8)	25 (33.8)	
Insurance			
None	1 (1.3)	0 (0)	0.206
Medicaid/Medicare	39 (49.4)	29 (38.2)	
Private	39 (49.4)	47 (61.8)	
Provider			
Residents	15 (19)	4 (5)	***0.034***
General Obstetricians	22 (28)	16 (22)	
Maternal-Fetal Medicine	14 (18)	18 (24)	
Certified Nurse Midwives	28 (35)	36 (49)	

Figure 1. Pre and post assessment scores in both the control & video cohorts.

Comparison of Pre & Post Assessment Scores Between Groups

p=0.31 — Pre-Score: Control Cohort 68.6%, Video Cohort 75.9%
p=<0.001 — Post-Score: Control Cohort 71.2%, Video Cohort 82.8%

■ Control Cohort ■ Video Cohort

Figure 2. Score improvement from the pre to the post assessment for both the control & video cohorts.

Score Difference on Pre & Post Assessments

P=0.129 — Control Cohort 1.7%, Video Cohort 6.2%

■ Control Cohort ■ Video Cohort

Conclusion

- Use of a video module did not show a significant improvement in GWG knowledge.
- Our video cohort overall had a higher level of education.
- This makes it difficult to interpret if the video module may have improved knowledge.
- The visual improvement seen in the score difference for the video group suggests that a video module may improve knowledge.
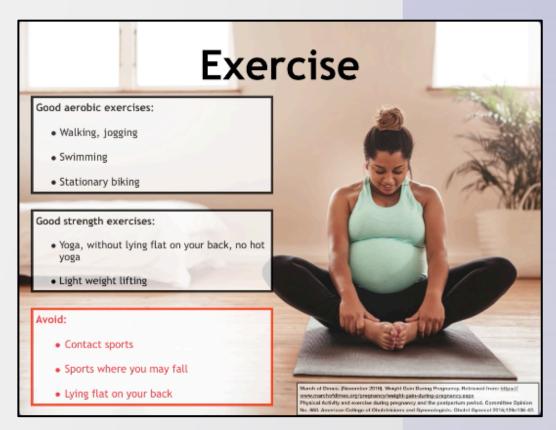- Cohorts of similar education level are needed to better assess this.

References

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