

# Vaginal Blood Loss: A patient- and medical trainee-centered mixed-methods research program

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## INTRODUCTION

- More than half of women of reproductive-age experience heavy vaginal blood loss (VBL), whether menstrual, lochial, or otherwise.
- Only 5% seek medical attention for evaluation making this severely underrecognized and underdiagnosed.<sup>1-3</sup>
- Complications include fatigue, poor concentration, and iron deficiency anemia which adversely impact quality of life.<sup>4</sup>
- It is unclear the extent to which medical trainees recognize signs and symptoms of heavy vaginal blood loss.
- This study assessed medical trainees' perspectives and feelings on VBL and explore patient experiences.

## OBJECTIVES

- Uncover the understanding, attitudes, and perceptions of medical trainees in quantifying and characterizing vaginal bleeding
- Understand the experiences of patients with vaginal bleeding

Using this data we will develop a targeted multimodal knowledge-translation-exchange intervention including modification of relevant medical education curricula.

## METHODS

1. Online survey to assess trainees' comfort and ability to identify heavy vaginal bleeding from the following specialties: Family Medicine, Internal Medicine/Hematology, Emergency Medicine, and Obstetrics/Gynaecology at St. Michael's Hospital (SMH) in Toronto.
2. Qualitative inquiry identifying 15 patients from SMH Hematology Clinics to elucidate narratives on excessive vaginal bleeding-related experiences.

Ethics approval has been obtained through Unity Health Toronto Research Ethics Board (REB 21-126).

## CONCLUSIONS

- Trainees at SMH across all training disciplines and levels largely felt comfortable with their skills in assessing those with VBL irrespective of the patient's background.
- This was a surprising finding given the investigators' anecdotal experience to the contrary.
- It is possible that selection bias has contributed to this finding as individuals more interested and more comfortable with vaginal bleeding may have been more inclined to complete the survey.
- Next steps involve assessing trainee skills in practice and exploring patient lived experiences with VBL through qualitative interviews.

## REFERENCES

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4. Warner PE, Critchley HO, Lumsden MA, et al. Menorrhagia I: measured blood loss, clinical features, and outcome in women with heavy periods: a survey with follow-up data. Am J Obstet Gynecol. 2004 (190): 1216-23.

## RESULTS

Age	Count	Percentage
18-24	5	6.85%
25-34	64	87.67%
35-44	4	5.48%
Prefer not to specify	1	1.37%
Racial or ethnic group		
African Ancestry or Black	1	1.37%
Caucasian or White	32	43.84%
Middle Eastern	7	9.59%
South Asian	8	10.96%
South East or East Asian	19	26.03%
Prefer not to specify	6	8.22%
Religion		
Christian/ Protestant/ Methodist/ Lutheran/ Baptist	10	13.70%
Catholic	4	5.48%
Jewish	6	8.22%
Muslim	8	10.96%
Hindu	3	4.11%
Atheist or agnostic	32	43.84%
Nothing in particular	10	13.70%
Training program		
Family Medicine	9	12.33%
Emergency Medicine	20	27.40%
General Internal Medicine	7	9.59%
Hematology	10	13.70%
Obstetrics & Gynecology	7	9.59%
Medical student	20	27.40%
Current level of training		
Medical Student Year 3	9	12.33%
Medical Student Year 4	11	15.07%
Resident Year 1	6	8.22%
Resident Year 2	22	30.14%
Resident Year 3	6	8.22%
Resident Year 4+	19	26.03%

- Here we present the findings from the online trainee survey,  $n = 73$ .
- Gender self-identity: 56.2% female, 42.4% male, 1 participant preferred not to specify.
- Most trainees feel comfortable asking about vaginal blood loss regardless of cultural and religious background, ethnicity, sexual orientation, and gender.
- Trainees believe excessive VBL impacts quality of life, that it is stigmatized, a common problem, and that it is not subjective but hard for patients to quantify.
- 94% of trainees reported asking about heavy VBL in the last 6 months.
- Trainees recognize the need to screen and not rely on patients being forthcoming about excessive VBL.
- In terms of measures used to assess vaginal blood loss, 100% used changing pads every 1-2 hours, 97% used soaking through a pad, 93% used passing clots, 80% used longer than average cycles.

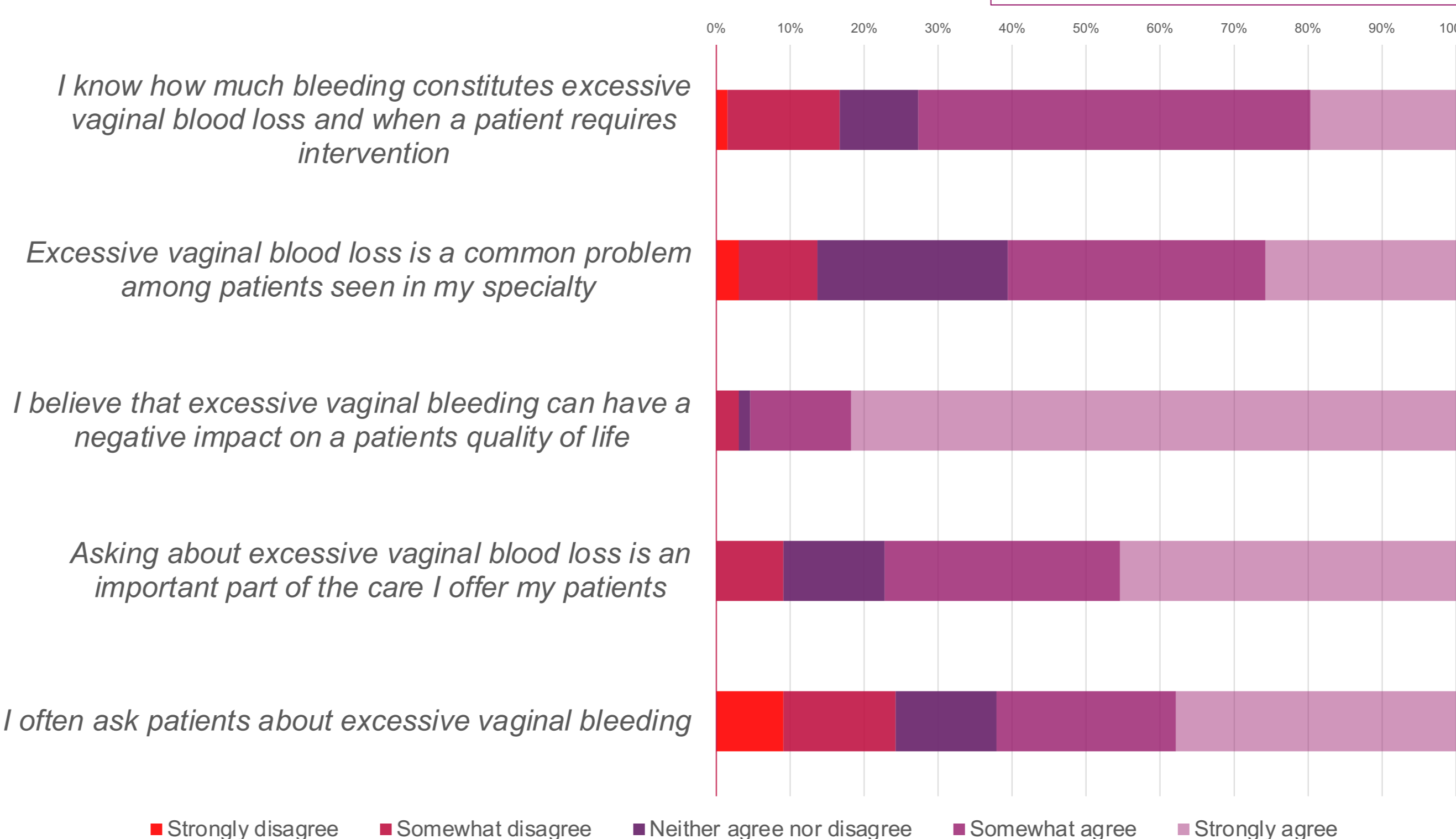


Figure 1. Responses to survey questions assessing beliefs about physician factors ( $n = 64$ ).

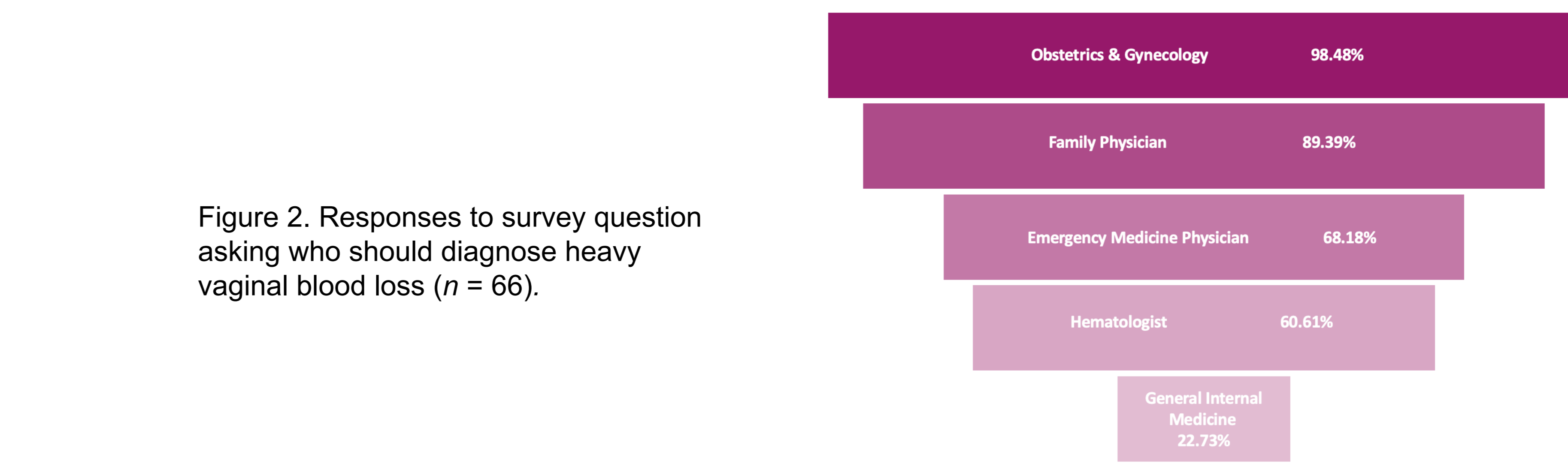


Figure 2. Responses to survey question asking who should diagnose heavy vaginal blood loss ( $n = 66$ ).

In terms of tools available to quantify vaginal bleeding, I am aware of (select all that apply):

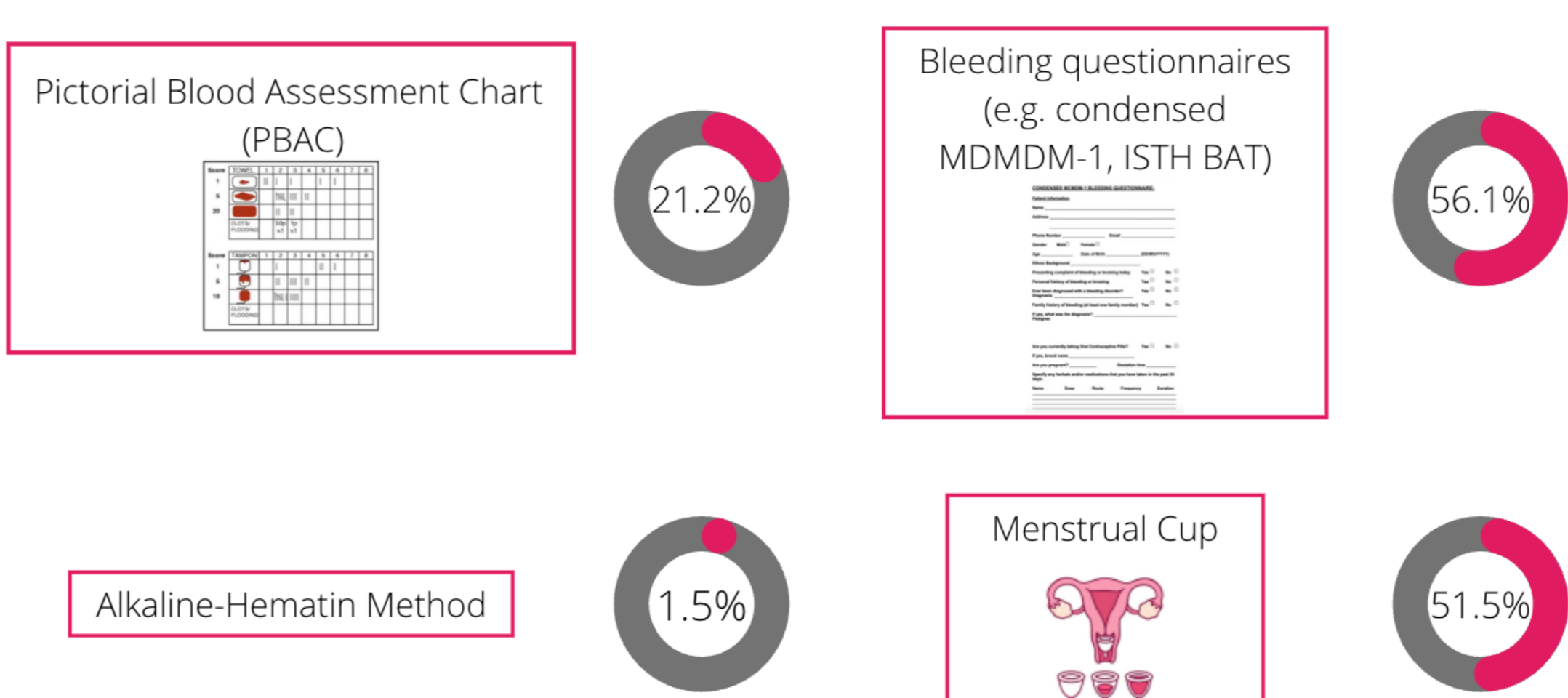


Figure 3. Responses to survey questions assessing awareness of available tools to quantify vaginal blood loss ( $n = 66$ ).