

BACKGROUND

- Despite tremendous success in preventing disease across the globe, vaccine hesitancy is prevalent.
- Others have demonstrated that healthcare providers do not have adequate knowledge of vaccines to adequately educate patients.
- The ABP guidelines for pediatric infectious disease fellows include objectives about vaccinology.
- As experts in vaccine preventable illness, pediatric infectious disease (Peds ID) physicians must understand vaccinology and be a resource for patients and colleagues.
- Little is known about Peds ID physician education on and understanding of vaccinology.

METHODS

- Pediatric infectious disease fellows and fellowship directors were surveyed to assess opportunities for vaccinology training available at U.S. institutions.
- A 16-question web-based survey was distributed to Pediatric Infectious Disease Society members.
- Respondents were asked how their institutions provides training on:
 - Specific vaccine antigens
 - Non-antigen components of vaccines
 - Manufacturing of vaccines
 - Licensing and regulation of vaccines
- Continuous sliding scale was used to assess personal knowledge of and need for training on above mentioned topics.
- Participants were also asked to select preference for educational modalities in the future and how many hours should be dedicated to training.

RESULTS

Fellowship Directors (n=31)

Years Since Fellowship	1–5	6–10	11–15	16–20	>20
n(%)	3(10)	8(26)	4(13)	6(19)	10(32)

Peds ID Fellows (n=33)

Year in Fellowship	1	2	3
n(%)	5(15)	14(42)	14(42)

Table 1. Number of Peds ID fellowship directors and Peds ID fellows who responded, categorized by year in fellowship (fellows) or years since fellowship (directors).

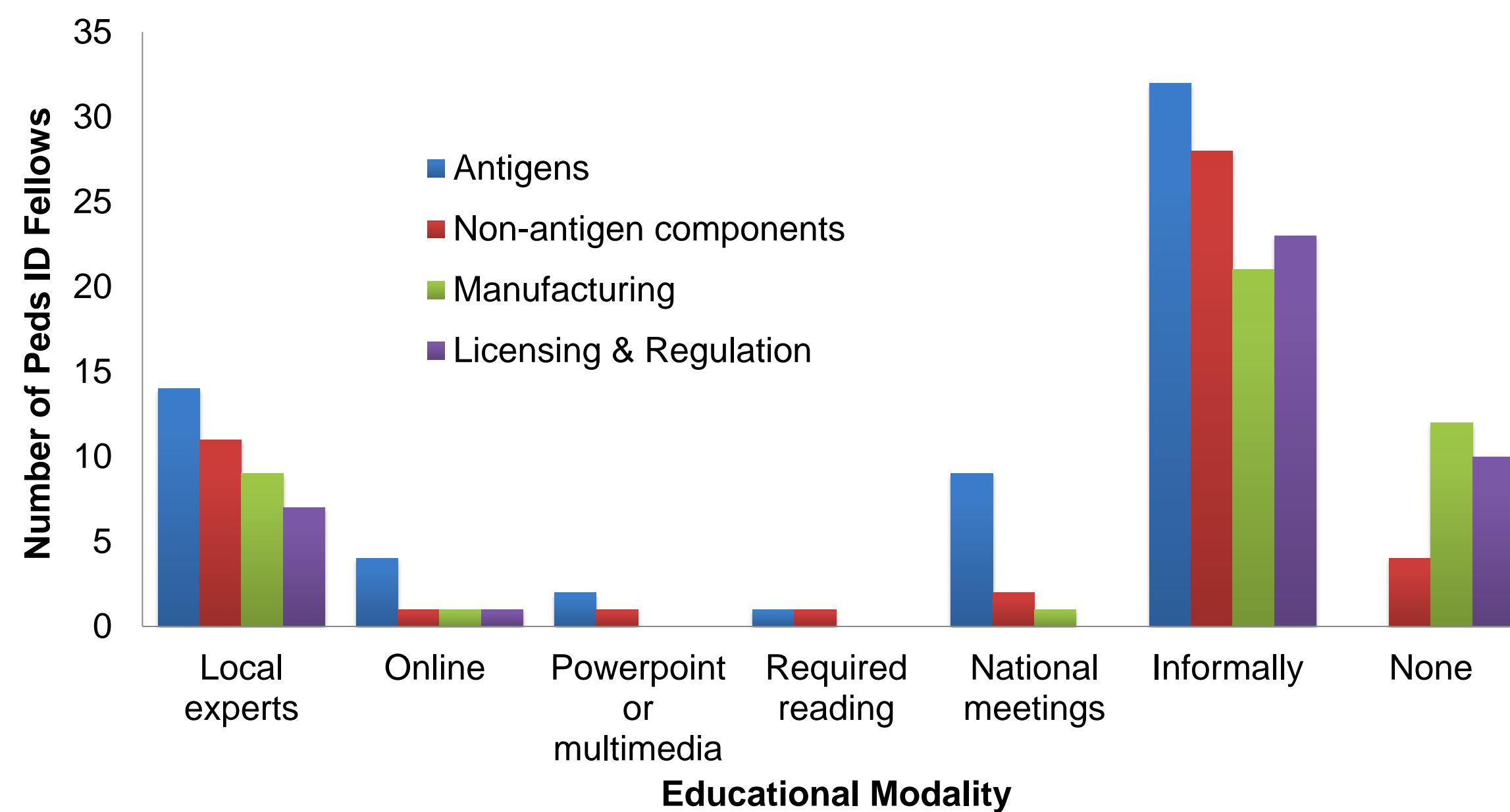


Figure 1. Number of pediatric infectious disease fellows who receive training in vaccine-related topics through a variety of educational modalities.

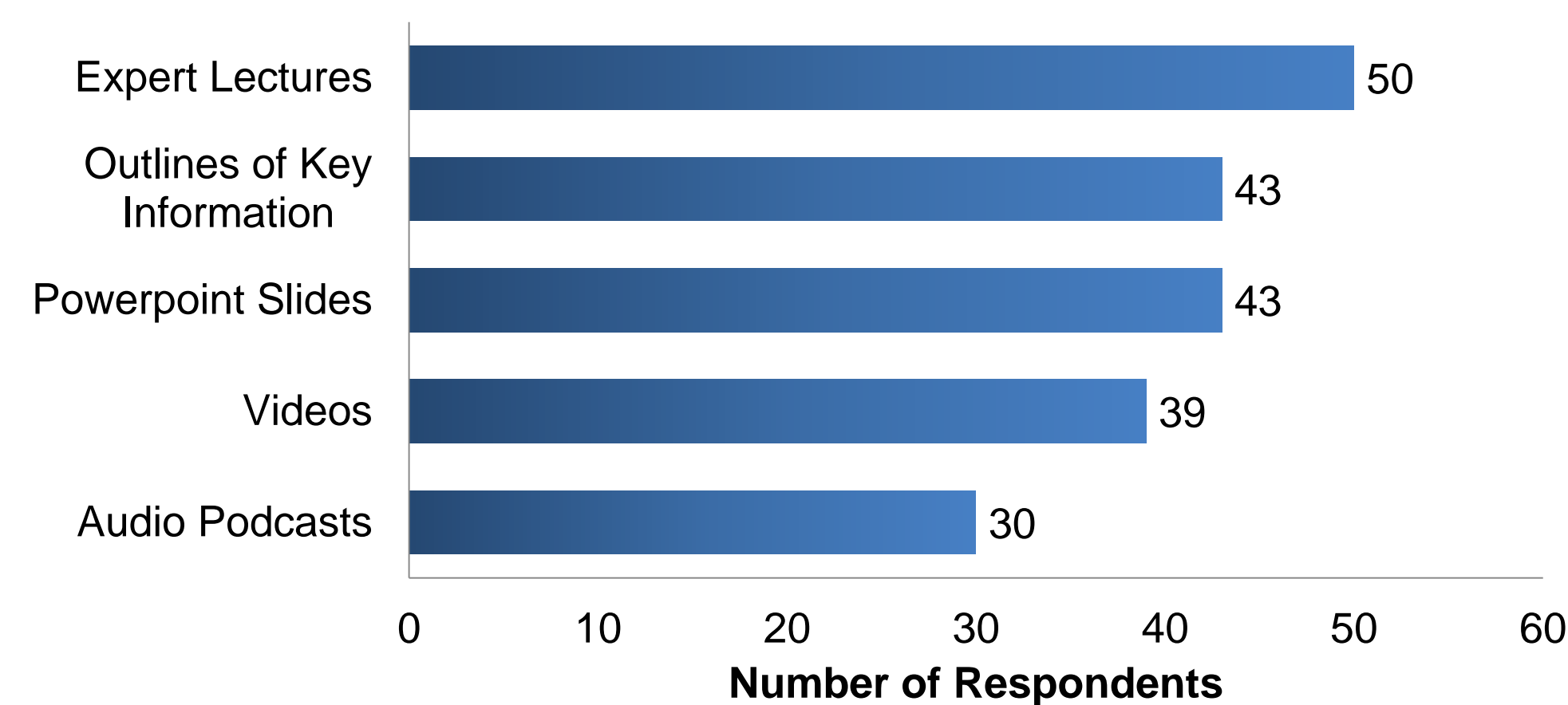


Figure 3. Educational modalities that respondents indicated they would prefer for further education on vaccinology.

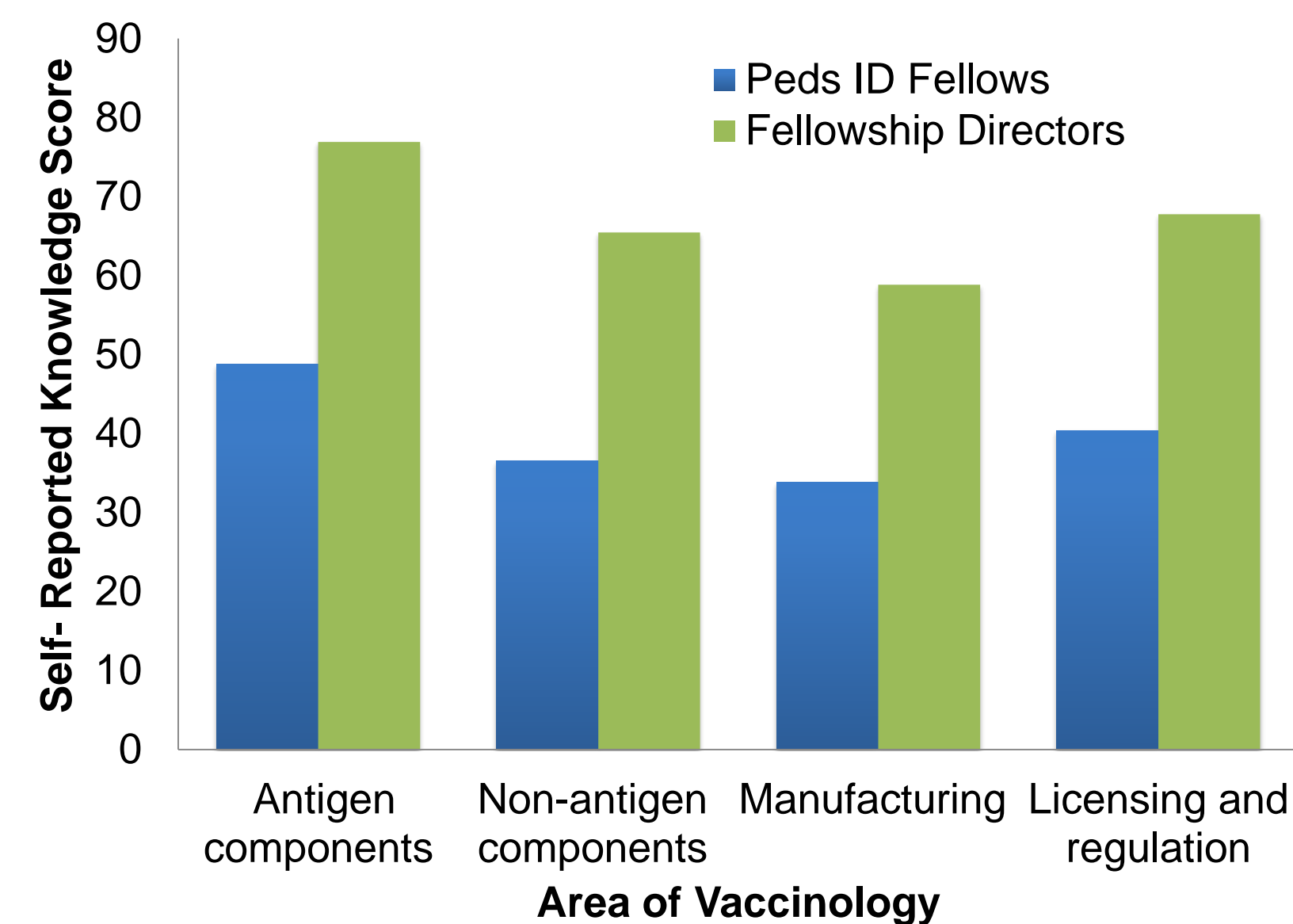


Figure 2. Self-reported knowledge (1-100) of specific components of vaccinology from Peds ID fellows and Peds ID fellowship directors. Each category was significantly different, $p < 0.001$.

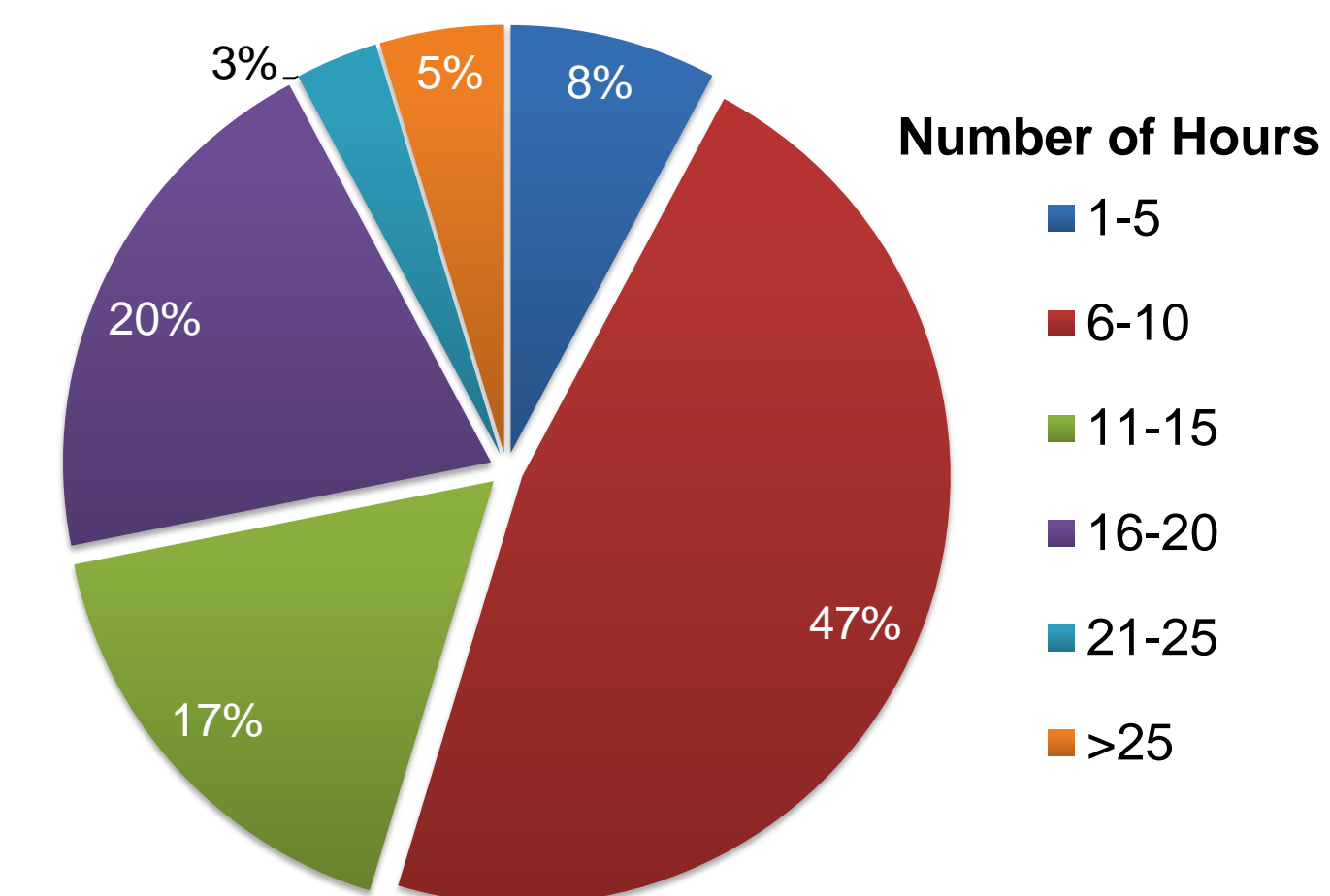


Figure 4. Number of hours respondents felt should be dedicated to vaccinology training during pediatric infectious disease fellowship.

DISCUSSION

- Peds ID fellows receive little formal education in vaccinology.
- Informal education as the primary modality for vaccine lacks consistency and is subject to educator bias and belief.
- Fellowship directors feel more comfortable with aspects of vaccinology than trainees.
- Fellows and fellowship directors feel that more vaccine-specific training is needed during fellowship and are willing to dedicate a significant amount of time to this training.
- Lectures or presentations by experts are not widely available, and most prefer education this way.
- The development of nationally available educational tools, curated by experts, may help fill this educational gap in an important time of vaccine hesitancy.

REFERENCES

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