

USE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN SCIENTIFIC PUBLISHING BY HOSPITAL PHARMACISTS



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INTRODUCTION

- Generative artificial intelligence (GenAI) has rapidly evolved since its launch in 2022. Its use in the healthcare field is continuously expanding.
- The Pharmactuel editorial board explored pharmacists' exposure to GAI in scientific publications.

OBJECTIVES

- To provide an overview of the knowledge and use of GenAI by pharmacists in Quebec hospitals.

METHOD

- Study design:**
- Retrospective descriptive study
- Sample:**
- 2,074 pharmacists from hospitals in Qu bec
- Study period:**
- Survey sent on December 2, 2024
 - Survey closed on December 17, 2024
- Criteria:**
- 11 questions
- Analysis plan:**
- Data compiled in January 2025
 - Descriptive analyses performed

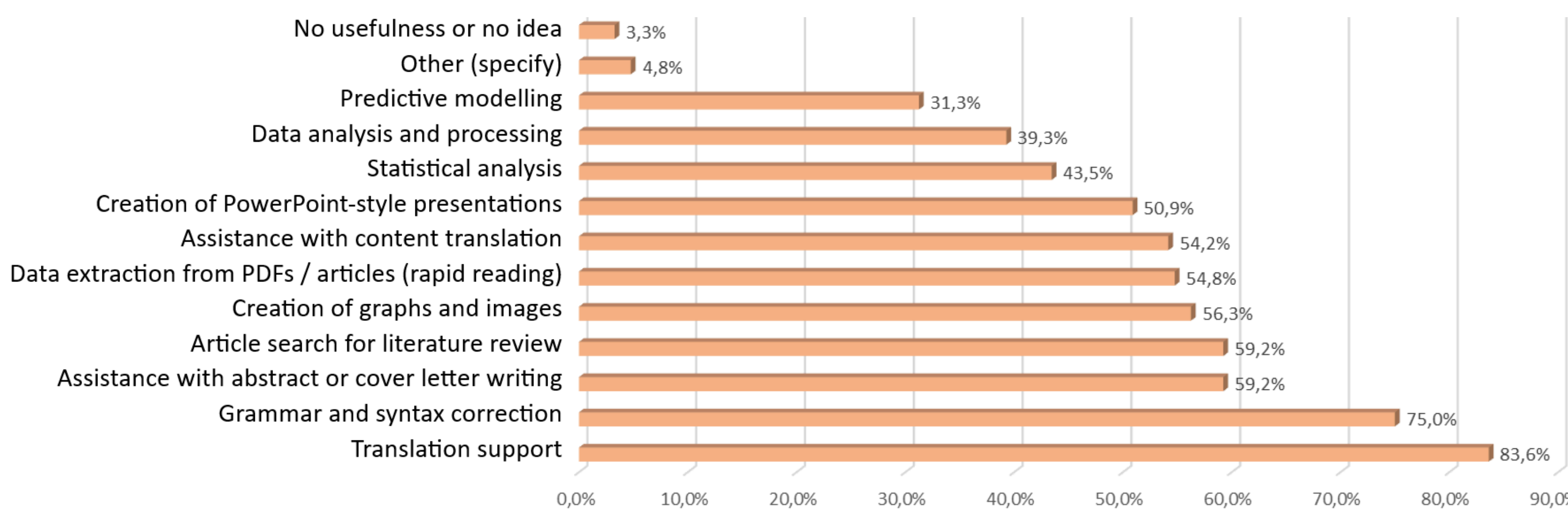
RESULTS

Participation rate: 336/2074 (16%)

10 out of 11 questions allowed for descriptive statistical analysis

- Use of GenAI since its introduction: 50.9% (171/336)
- Which GenAI tool(s) have you used? ChatGPT: 93.5%, Copilot: 26.5%, Gemini: 11.8%, Claude: 4.7%, DeepL: 2.4%, Others: 7.1% (e.g. Meta, Perplexity, Grok, Canva, Dougal, NotebookLLM)
- Type of access used: See Figure 1
- Have you ever read articles about GAI use in healthcare?
 - Yes: 27.7% (93/336)
- How many articles did you read?
 - Median: 3 (min: 1, max: 50)
- Is there someone in your pharmacy department designated to monitor GenAI conversational agents' potential?
 - Yes: 7.7% (26/336)
- In your opinion, in which areas could GenAI be useful? See Figure 2

Figure 2: Tasks where GAI could be useful



- Have you personally used GenAI for any of the items listed above in the past two years?
 - Yes: 33.3% (112/336)

DISCUSSION

- Half of the respondents have already used a GenAI conversational agent.
- ChatGPT is the most commonly used tool (a free version is available, easy to access, and widely known).
- The majority recognize the many opportunities GAI offers in scientific publishing.
- Translation support and editing assistance are the most frequently cited uses.
- GenAI also raises concerns, mainly:
 - Data confidentiality breaches
 - Generation of inaccurate information
- Most respondents expressed interest in training on the use of GAI in scientific publishing.
- Based on these results, Pharmactuel is considering offering training in 2025.

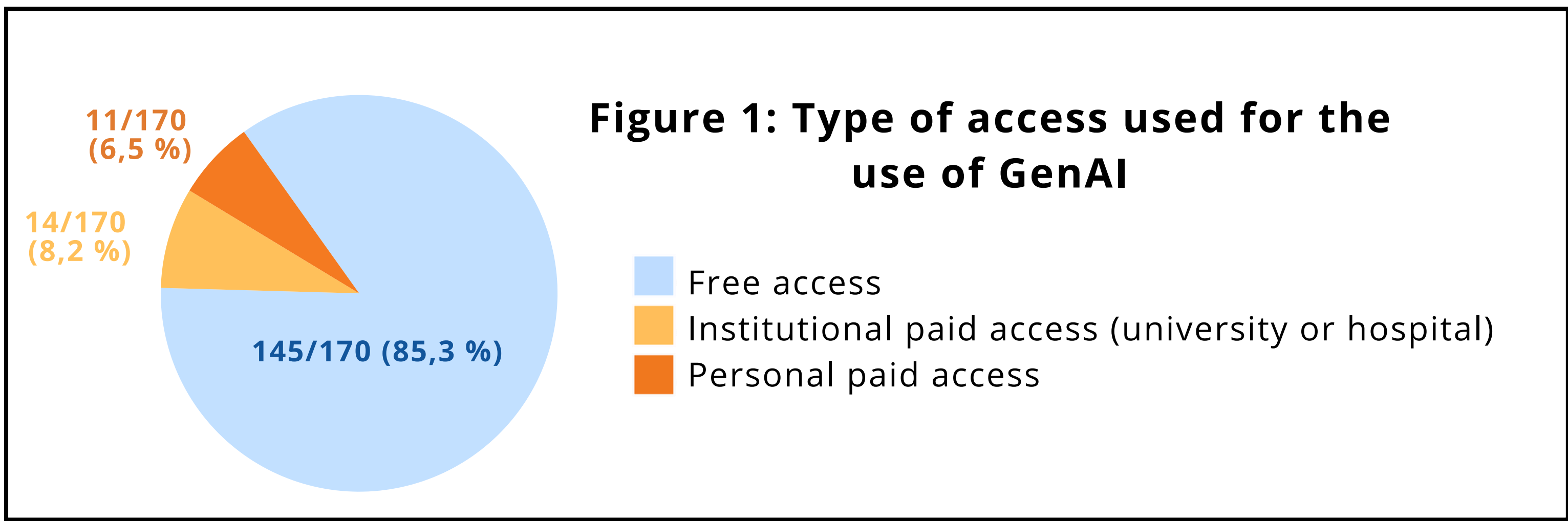


Figure 1: Type of access used for the use of GenAI

9. Rank the challenges in decreasing order of importance (Fig 3)

The weighted score was obtained by assigning a weight to each rank, being inversely proportional to it. Thus rank 1 has a weight of 6, rank 2 has a weight of 5 etc. For each criterion, the weighted score was calculated by multiplying the number of responses in each rank by the weight of the rank

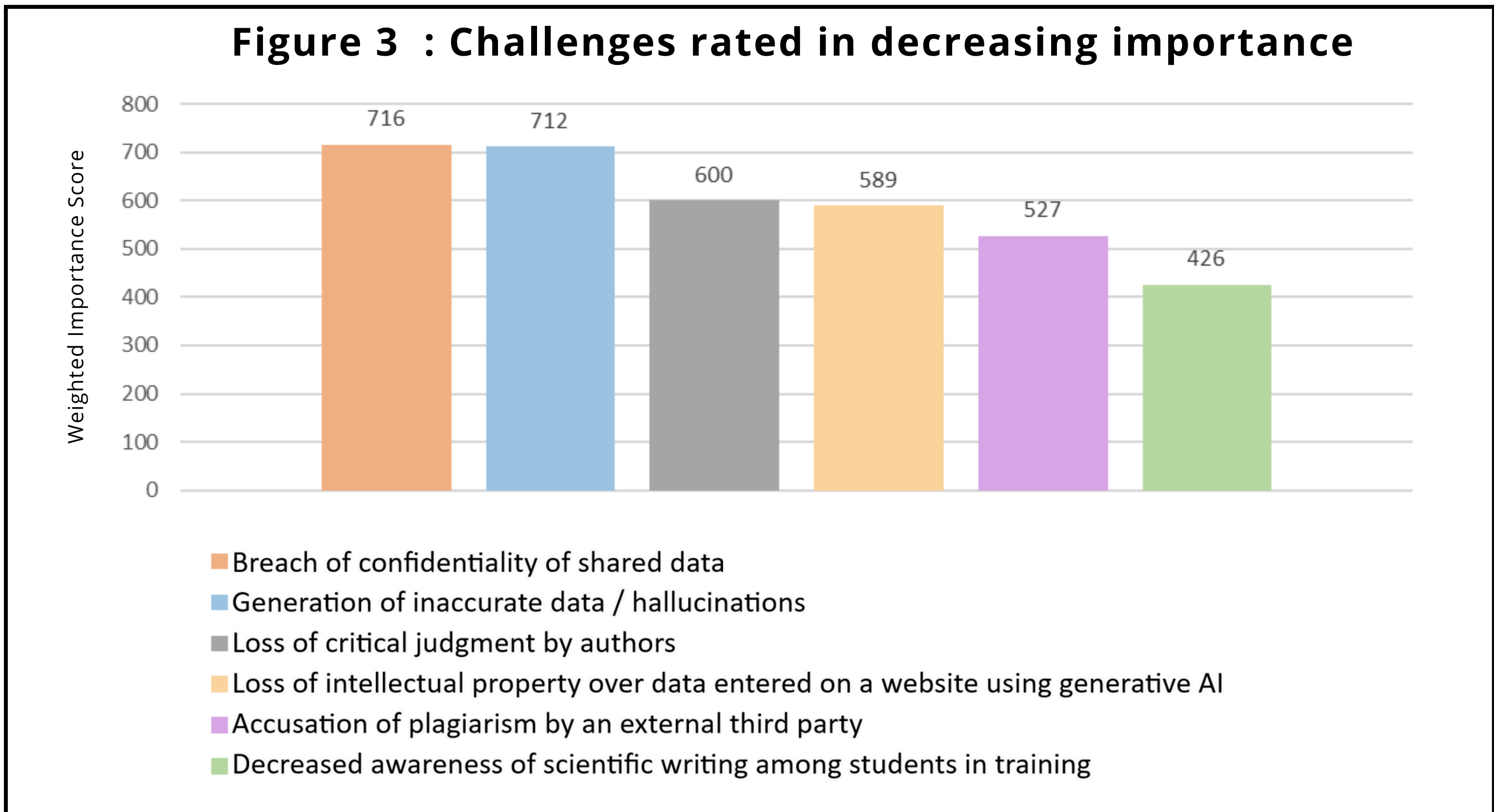


Figure 3 : Challenges rated in decreasing importance

- Would you be interested in training on the use of GenAI in scientific publishing?
 - Yes: 83.3% (280/336)

CONCLUSION

GenAI is now part of the scientific landscape, and half of the pharmacists surveyed are already using it. All pharmacists should stay informed about its evolution, understand its potential benefits in their practice, and remain aware of its risks and challenges.

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