
Patients' experiences of consultations involving medical students in general practice

ORIGINAL ARTICLE

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Background and aim

The aim of the study was to investigate patients' attitudes to and experiences of consultations in general practice where medical students acted as observers or conducted independent consultations. Participants were also asked about the advantages and disadvantages of student involvement.

Material and method

We conducted a cross-sectional study in which patients completed an online questionnaire in general practitioners' (GPs') waiting rooms, having been invited to participate by medical students in a clinical placement. The results are presented descriptively.

Results

A total of 2263 out of 5576 (41 %) invited patients participated. Of these, 1287/2263 (57 %) experienced consultations involving students. Of these, 890/1277 (70 %) reported that they valued the experience and 1009/1248 (81 %) agreed that it was a positive experience. Of the 847 patients who clearly recalled a consultation involving a student, 763/837 (91 %) reported feeling safe and 806/846 (95 %) felt they received adequate care.

Interpretation

Although the vast majority of patients in the study felt well cared for in consultations involving medical students in clinical placement in general practice, special attention should be paid to vulnerable patient groups.

Main findings

In a study of 2263 patients in general practitioners' waiting rooms, 70 % of the 1277 participants with experience of consultations involving medical students in general practice reported having a positive experience. Twenty-six per cent found it difficult to decline when asked to take part in a consultation involving a student. Among the 846 patients who clearly recalled a consultation involving a student, 95 % felt they had received adequate care. Ninety-one per cent of the 837 patients with experience of consultations involving a student reported feeling safe during the consultation.

Patient contact in clinical placements is essential for developing a professional identity as a doctor [\(1\)](#). Only in genuine patient encounters will students experience the cognitive, emotional and practical complexity they are required to navigate as doctors [\(2\)](#). In independent consultations, students gain experience in identifying patients' problems and resources, establishing therapeutic relationships, applying their medical knowledge, making clinical decisions and managing uncertainty [\(3\)](#). However, what are patients' experiences of consultations in general practice when a student participates alongside or in place of their general practitioner (GP)? Universities depend on patients' willingness to contribute to the education of medical students, especially as student numbers grow [\(4\)](#) and practice-based learning becomes increasingly central in undergraduate education [\(5, 6\)](#).

Patients are generally positive about consultations involving students but are more hesitant in cases involving mental health problems and intimate examinations [\(7–11\)](#). Patients from minority backgrounds are more likely to decline a student's presence in a consultation [\(7, 12\)](#). Reported benefits of student consultations for patients include engagement, more time and more thorough examinations [\(7, 13\)](#).

White Papers to the Norwegian Parliament from 2016–17 and 2020–21 set out more stringent requirements for supervisory competence and practical training in healthcare education [\(14, 15\)](#). Medical students in Norway now undertake six or ten weeks of clinical placement in general practice during the final two years of study, depending on the institution, and it has been recommended that primary care placements be increased to ten weeks for all students [\(16\)](#). Students are expected to train in conducting independent consultations, but previous research has shown considerable variation in the number of independent consultations students are able to complete [\(17\)](#).

We explored patients' attitudes to and experiences of consultations in general practice where medical students acted as observers or conducted independent consultations. Improved understanding of patients' attitudes and experiences may help supervisors to better accommodate patients' needs in clinical placements.

Material and method

Sample and data collection

Medical students at the University of Bergen complete a six-week clinical placement in general practice in their sixth year, whereas at the University of Oslo, this takes place at the end of the fifth year.

The study population included all adult patients (≥ 18 years) visiting their GP during the periods when medical students were undertaking clinical placements in spring and autumn 2023. All 367 students at the two institutions were encouraged to invite patients in the waiting room to participate in the study. Patients received a written invitation (Appendix 1 (in Norwegian)) and a QR code linking to an anonymised questionnaire, with responses stored directly in SurveyXact (18). Students reported the number of patients they invited using an online form (nettskjema.no).

Variables

Participants were asked about demographic information (Table 1), their attitudes to consultations involving medical students in general practice, and their personal experiences with this. Those without personal experience were asked what they thought it would be like to meet a student during a GP consultation. Participants with experience were asked about their perceptions and experiences of student consultations. No validated questionnaires on this topic were identified. The questions were therefore devised and tested by the authors and their colleagues at the University of Bergen and the University of Oslo.

In the questions on attitudes and experiences, three different five-point Likert scales were used: Like very much – Dislike very much, Strongly agree – Strongly disagree, and Very safe – Very unsafe. The questionnaire is shown in Appendix 2 (in Norwegian).

Ethics

In the invitation to participate, patients were informed about the study and that participation was voluntary. They were also informed that completing the questionnaire implied consent to their data being used for research purposes. Responses were anonymous, and the project was therefore considered not to require approval (Sikt - Norwegian Agency for Shared Services in Education and Research, ref.no. 220278/REK Vest, application number 549204). Several of the authors are involved in organising clinical placements for medical students at the University of Bergen and the University of Oslo.

Analysis

The presentation of the findings is descriptive. Given the relatively low response rate, selected comparisons are also only presented descriptively. The number of responses varies for each question, and we have therefore reported the number of responses for each result. Some of the response options for attitudes and experiences received few responses, so we chose to combine the answers into three categories: positive, neutral and negative. In these cases, 'Don't know', 'I've never met a student at my GP's

practice', and for gender: 'Other'/Prefer not to answer' were excluded. Response percentages were calculated based on the number of participants who answered each question. Appendix 3 (in Norwegian) gives an overview of non-responses per question. Analyses were conducted using the SPSS software package (19).

Results

A total of 241/367 (66 %) medical students were involved in collecting data. Each student invited a median of 23 patients (interquartile range 21–26) to take part. Of the 5576 patients invited in total, 2450 responded, and 2263/5576 (41 %) of these were included in the analyses (Figure 1). A total of 1395/2263 (62 %) participants were women. Participant characteristics are shown in Table 1.

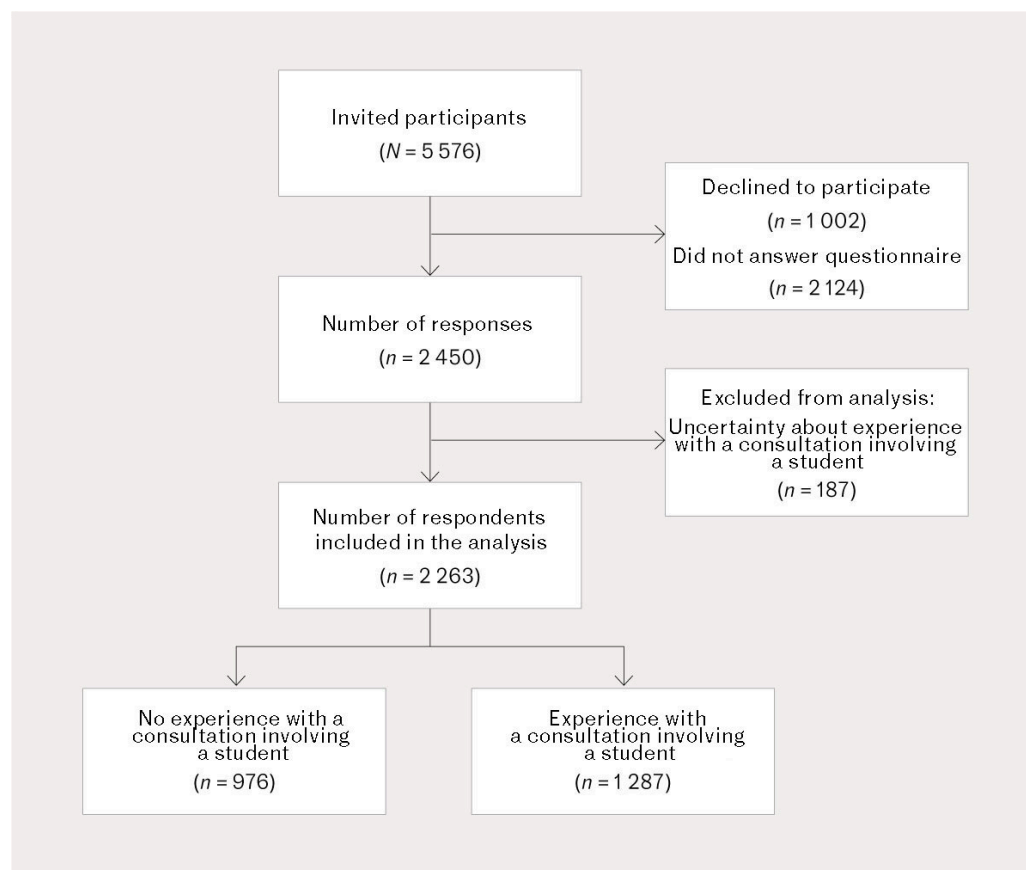


Figure 1 Flow chart of study participants, showing the distribution into two analysis groups based on participants' experiences with consultations involving medical students

All participants

A total of 540/2103 (26 %) patients found it difficult to decline a consultation solely with a student. A total of 549/2136 (26 %) patients found it difficult to decline the student as an observer in a consultation with their GP. See Figure 2, which also shows patients' attitudes to contributing to the education of future doctors.

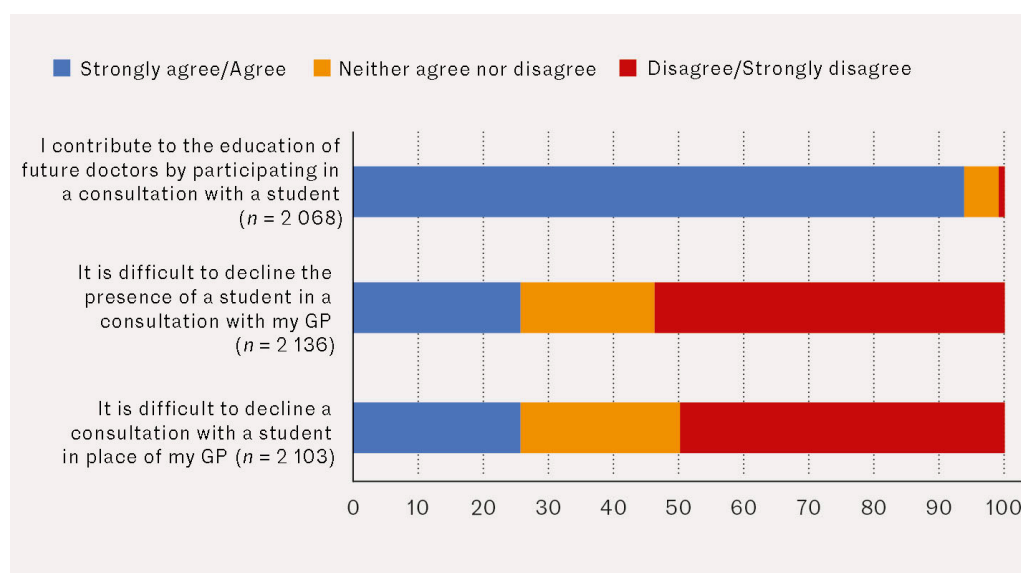


Figure 2 Patients' attitudes to GP consultations involving students. The number of responses (*n*) is indicated for each group; non-responses, 'Don't know' and 'I've never met a student at my GP's practice' were excluded from the analysis.

Figure 3 shows the variation in the proportion of patients who find student consultations burdensome, stratified by gender and by whether they have experienced student consultations.

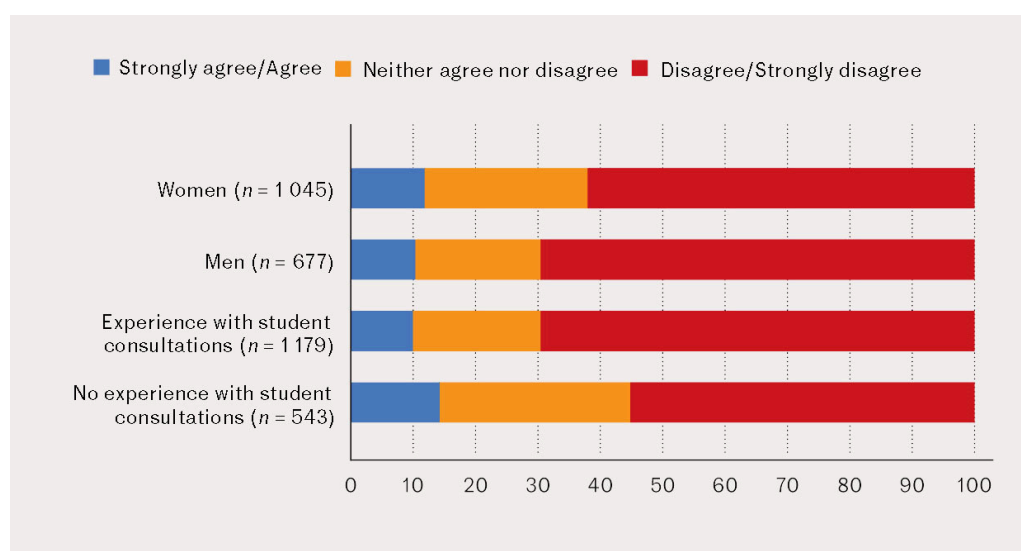


Figure 3 Attitudes of patients in GP waiting rooms regarding the burden of student consultations, based on differences in gender and experience with student consultations. The number of responses (*n*) is given for each group; non-responses, 'Don't know' and 'I've never met a student at my GP's practice', and for gender: 'Other/Prefer not to answer' were excluded from the analysis.

No experience of students in GP consultations

A total of 976/2263 (43 %) respondents had not experienced medical students at their GP's practice and were asked for their thoughts on potentially meeting a student during a consultation. Of these, 526/960 (55 %) thought they would like it, while 58/960 (6 %) thought they would dislike it.

Experience of students in GP consultations

In response to the question of what they thought about meeting a student during a consultation at their GP's practice, 890/1277 (70 %) stated that they liked it and 50/1277 (4 %) that they disliked it. Among patients over 65 years of age, 188/239 (79 %) liked meeting a student, compared with 702/1024 (69 %) among those aged 65 or younger (Figure 4). We also found that 672/923 (73 %) of those with physical health problems reported that they liked meeting a student, compared to 112/186 (60 %) with a mental health problem.

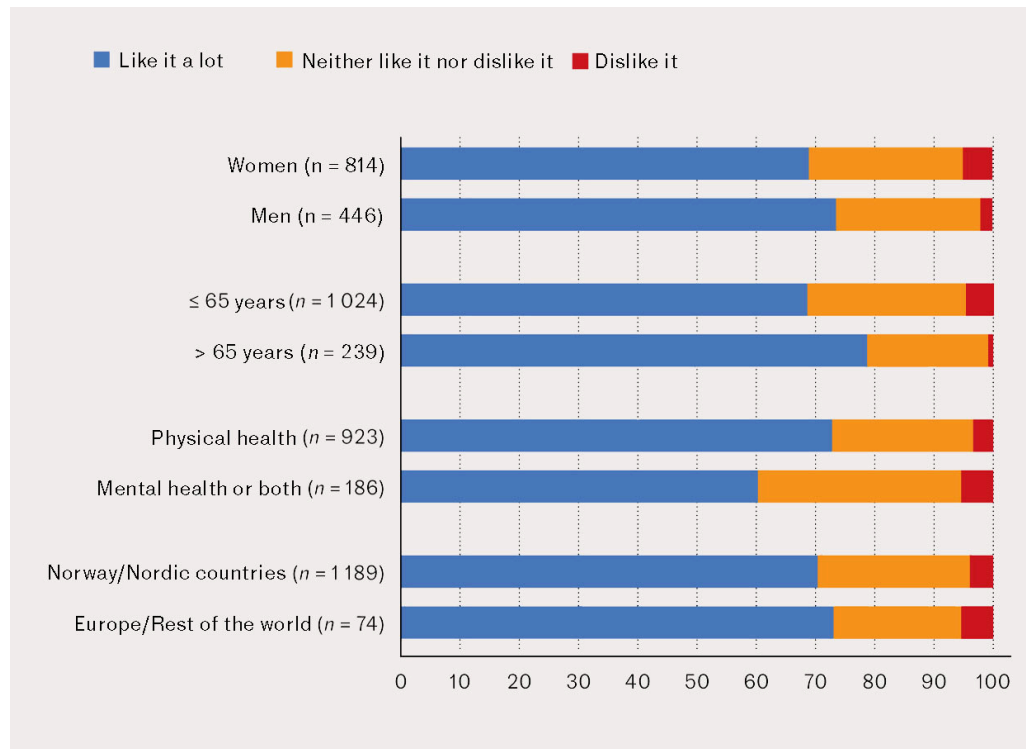


Figure 4 Patients' satisfaction with students in clinical placement at their GP's practice, based on differences in gender, age, reason for consultation and country of origin. The number of responses (*n*) is given for each group; non-responses, 'Don't know' and for gender: 'Other/Prefer not to answer' are excluded from the analysis.

Among those who had experienced meeting a student, 1009/1248 (81 %) responded that it was a positive experience (Strongly agree or Agree) (Figure 5). Furthermore, 1049/1204 (87 %) of patients with experience answered 'Yes' when asked whether it would be acceptable to meet the same student again, 31/1204 (3 %) answered 'No', and 124/1204 (10 %) 'Don't know'. Of those who answered 'Yes' to this question, 212/1049 (18 %) stated that it is difficult to decline a student consultation.

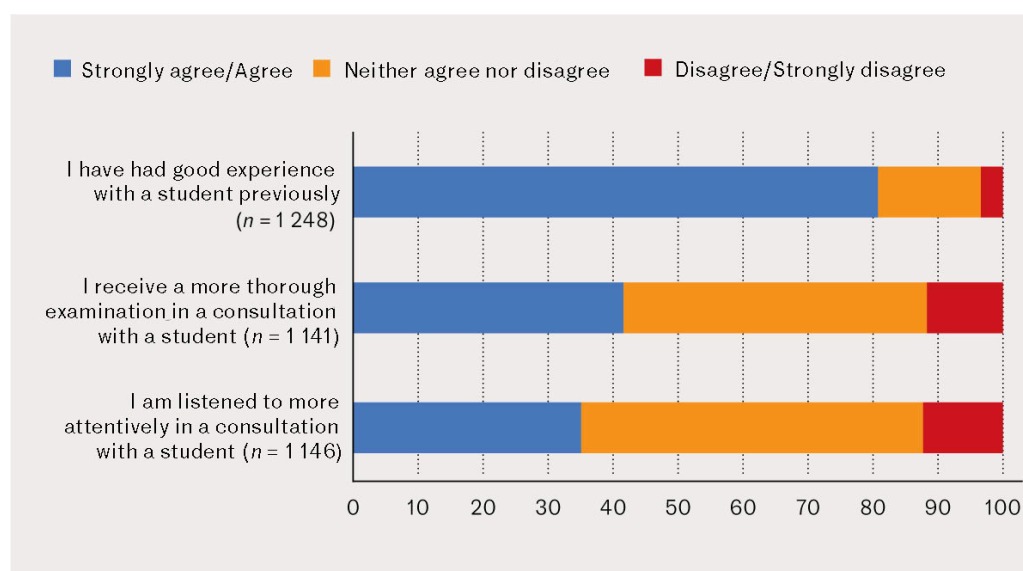


Figure 5 Experiences of patients in GPs' waiting rooms of medical students in clinical placement. The number of responses (*n*) is given for each group; non-responses, 'Don't know' and 'I've never met a student at my GP's practice' were excluded from the analysis.

Recall a student consultation

A total of 847/1227 (69 %) respondents recalled a consultation with a student in the role of doctor well enough to provide detailed answers. A total of 630/846 (74 %) reported that they received more help than expected or a great deal of help, 176/846 (21 %) reported that they received adequate help, while 40/846 (5 %) felt they received little or no help. A total 547/839 (65 %) stated that they did not require a new appointment with their GP following the student consultation because everything was resolved, whereas 27/839 (3 %) required such an appointment because they did not receive the help they needed.

Among those who recalled a student consultation, 763/837 (91 %) reported feeling very safe or quite safe during the consultation overall, with similar proportions reported across the individual components of the consultation (Figure 6). In some subgroups, a lower proportion reported feeling very safe or quite safe: those attending for mental health problems, 88/108 (82 %); patients from countries outside the Nordic region, 36/49 (74 %); and those who found it difficult to decline student consultations, 145/191 (76 %).

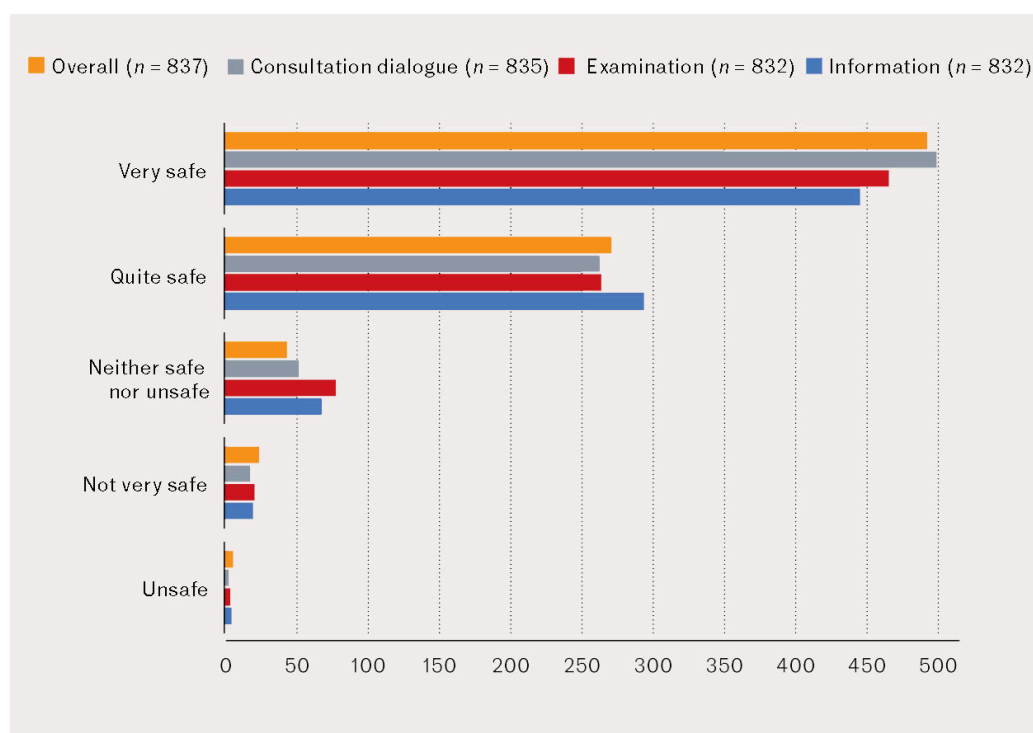


Figure 6 Perceived level of safety among patients in GPs' waiting rooms who experienced a student consultation. The figure shows perceived safety overall, during the consultation dialogue, during the examination, and with regard to the information received. The number of responses (*n*) is given for each group, with non-responses excluded from the analysis.

In response to the question about whether there were topics they did not raise with the student and the reason for this, 101/827 (12 %) answered 'Yes', citing the following reasons (most frequent responses first): 'Too personal', 'Too complicated', 'Too intimate', 'Too emotional' and 'Other reasons'. A total of 35/825 (4 %) participants reported raising an issue with the student that they would not have raised with their GP.

Discussion

We analysed responses from 2263 patients in GP's waiting rooms regarding their attitudes to and experiences of consultations in general practice with medical students in clinical placement. The majority were positive to consultations involving students, particularly those who had previous experience of this at their GP's practice. These respondents generally reported a positive experience, that they felt safe during the consultation, received the help they needed and would be comfortable meeting the student again.

The proportion of women (62 %) is comparable to figures for GP consultations (20). The proportion of consultations involving patients aged over 80 years (2.6 %) was lower than in the general population (8.7 %) (20). One possible explanation is that the questionnaire could only be completed online, and the oldest age groups tend to have lower levels of digital literacy (21).

In line with previous studies, our respondents largely considered that they contributed to medical students' education by participating in student consultations (6, 11, 12). The observation that those with prior experience of students were the most positive is also

consistent with earlier research (5). This may be a reflection of good experiences, but it is also possible that those who are most positive are more likely to agree to student consultations.

In a study from 2008 of patients who had agreed to have a student present in consultations, one in five nevertheless stated that they would have preferred to see the doctor alone (11). We also observed this ambivalence in our study: 18 % of those who reported that it would be acceptable to meet the student again also indicated that they found it difficult to decline when asked to have a consultation with a student instead of their GP.

Among the few publications describing patients' experiences of consultations conducted solely by a student are two Norwegian studies, in which patients provided very positive feedback about the students (9, 10). Similarly, in a Swedish study from 2008, a large majority reported that they appreciated such consultations (6). Enabling students to gain experience in dealing with emotional and intimate issues while simultaneously safeguarding patients requires awareness on the part of students as well as clinical supervisors (6, 8).

To our knowledge, our study is the first to describe patients' perceived sense of safety in student consultations, and the findings are predominantly positive. However, patients presenting with mental health problems, patients from countries outside the Nordic region and those who find it difficult to decline student consultations appear to experience a lower degree of safety than others. This is consistent with previous literature on groups who may be more reluctant to agree to student consultations (7, 12), and highlights factors that clinical supervisors and students should recognise and take into account.

The results of the study can be used by students when preparing for clinical placements and in their contact with clinical supervisors. They can also be used by universities in their efforts to further develop clinical placements and in dialogue with the authorities. Clinical placements should aim to safeguard patients and students within the learning environment, and a stronger focus on formal competence for clinical supervisors may help to establish a robust framework for supervisors to support both groups.

Strengths and limitations

The strength of this questionnaire study is the large number of respondents and the fact that the study population consisted of patients presenting to their GP for medical care (22). It is also a strength that the participants had no dependent relationship with the student who invited them to take part. Furthermore, the study is one of few to examine patients' experiences of student consultations in addition to consultations with a student present. This is particularly important as the number of students and duration of clinical placements in primary care is set to increase in the future, and students will also be expected to conduct independent consultations.

The study also has some limitations. The self-selection of students and patients may have introduced selection bias. Since patients were recruited in GPs' waiting rooms, most of their prior experience with students likely involved earlier students. The types of patients and medical issues selected for these student consultations may have influenced patients' experiences of the students. It may also vary whether patients are reporting on independent student consultations or consultations in which the student

was observing the GP. Nevertheless, some questions were only posed to patients who recalled the student in the doctor role, and the responses should therefore be interpreted accordingly.

One in four participants reported finding it difficult to decline student consultations, which may have resulted in a selection bias of patients with prior experience of student consultations. Furthermore, there may have been inconsistencies in students' inclusion and recording of data, potentially resulting in underreporting of the number of patients invited and an artificially high response rate. The relatively low response rate also raises questions about the representativeness of our participants. Over 90 % of respondents were from Norway, and experiences of patients from other backgrounds may therefore be underreported.

Conclusion

Clinical placement is an important part of medical students' education, and the patients in our study generally perceived student consultations as positive and safe. Nevertheless, supervisors and students should consider the needs of vulnerable patient groups to ensure that it remains safe to increase the number of students and duration of clinical placements in GP practices.

The article has been peer-reviewed.

REFERENCES

1. Dornan T, Tan N, Boshuizen H et al. How and what do medical students learn in clerkships? Experience based learning (ExBL). *Adv Health Sci Educ Theory Pract* 2014; 19: 721–49. [PubMed][CrossRef]
2. van der Zwet J, Zwietering PJ, Teunissen PW et al. Workplace learning from a socio-cultural perspective: creating developmental space during the general practice clerkship. *Adv Health Sci Educ Theory Pract* 2011; 16: 359–73. [PubMed][CrossRef]
3. Steven K, Wenger E, Boshuizen H et al. How clerkship students learn from real patients in practice settings. *Acad Med* 2014; 89: 469–76. [PubMed][CrossRef]
4. Regjeringen. Studieplasser i medisin i Norge. Behov, modeller og muligheter. Regjeringen.no; 2019.
https://www.regjeringen.no/contentassets/9b5b81d102384507b85150f2e0f1b089/11745900_rapport_utredning_fra_grimstadutvalget.pdf Accessed 14.2.2024.
5. Cooke F, Galasko G, Ramrakha V et al. Medical students in general practice: how do patients feel? *Br J Gen Pract* 1996; 46: 361–2. [PubMed]
6. Haffling AC, Håkansson A. Patients consulting with students in general practice: survey of patients' satisfaction and their role in teaching. *Med Teach* 2008; 30: 622–9. [PubMed][CrossRef]
7. Mol SS, Peelen JH, Kuyvenhoven MM. Patients' views on student participation in general practice consultations: a comprehensive review. *Med Teach* 2011; 33: e397–

400. [PubMed][CrossRef]

8. Partanen R, Ranmuthugala G, Kondalsamy-Chennakesavan S et al. Is three a crowd? Impact of the presence of a medical student in the general practice consultation. *Med Educ* 2016; 50: 225–35. [PubMed][CrossRef]
9. Braend AM, Gran SF, Frich JC et al. Medical students' clinical performance in general practice - Triangulating assessments from patients, teachers and students. *Med Teach* 2010; 32: 333–9. [PubMed][CrossRef]
10. Braend AM, Gran SF, Lindbaek M. Pasienter–nyttig ressurs ved evaluering av medisinstudenters kliniske praksis? *Tidsskr Nor Lægeforen* 2006; 126: 2122–5. [PubMed]
11. Price R, Spencer J, Walker J. Does the presence of medical students affect quality in general practice consultations? *Med Educ* 2008; 42: 374–81. [PubMed][CrossRef]
12. Vaughn JL, Rickborn LR, Davis JA. Patients' Attitudes Toward Medical Student Participation Across Specialties: A Systematic Review. *Teach Learn Med* 2015; 27: 245–53. [PubMed][CrossRef]
13. Pichlhöfer O, Tönies H, Spiegel W et al. Patient and preceptor attitudes towards teaching medical students in General Practice. *BMC Med Educ* 2013; 13: 83. [PubMed][CrossRef]
14. Kunnskapsdepartementet. Kultur for kvalitet i høyere utdanning (Meld. St. 16 (2016-2017)). <https://www.regjeringen.no/no/dokumenter/meld.-st.-16-20162017/id2536007/> Accessed 5.1.2026.
15. Kunnskapsdepartementet. Utdanning for omstilling. Økt arbeidslivsrelevans i høyere utdanning. (Meld. St. 16 (2020–2021)). <https://www.regjeringen.no/no/dokumenter/meld.-st.-16-20202021/id2838171/> Accessed 5.1.2026.
16. Ekspertutvalget for gjennomgang av allmennlegetjenesten. Gjennomgang av allmennlegetjenesten. Helse- og omsorgsdepartementet. <https://www.regjeringen.no/contentassets/092e9ca0af5e49f39b55c6aded2cf18d/no/pdfs/ekspertutvalgets-rapport-om-allmennlegetjenen.pdf> Accessed 14.2.2024.
17. Gran SF, Braend AM, Lindbaek M. Praksisperiode i allmennmedisin under medisinstudiet. *Tidsskr Nor Legeforen* 2008; 128: 2443–5. [PubMed]
18. SurveyXact. <http://www.surveyxact.no> Accessed 26.3.2025.
19. IBM SPSS Statistics. <https://www.ibm.com/products/spss-statistics> Accessed 26.3.2025.
20. SSB. 10141: Konsultasjoner hos fastlegen, etter diagnose, statistikkvariabel, år og alder. <https://www.ssb.no/statbank/table/10141> Accessed 5.1.2026.
21. Kristiansen E, Atherton H, Austad B et al. Older patients' experiences of access to and use of e-consultations with the general practitioner in Norway: an interview study. *Scand J Prim Health Care* 2023; 41: 33–42. [PubMed][CrossRef]

22. Green LA, Fryer GE, Yawn BP et al. The ecology of medical care revisited. *N Engl J Med* 2001; 344: 2021–5. [PubMed][CrossRef]

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