Sex and the surgery: students’ attitudes and potential behaviour as they pass through a modern medical curriculum

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Objective: To examine students’ attitudes and potential behaviour to a possible intimate relationship with a patient as they pass through a modern medical curriculum.

Design: A cohort study of students entering Glasgow University’s new learner centred, integrated medical curriculum in October 1996.

Methods: Students’ pre year 1 and post year 1, post year 3, and post year 5 responses to the “attractive patient” vignette of the Ethics in Health Care Survey instrument were examined quantitatively and qualitatively. Analysis of students’ multi-choice answers enabled measurement of the movement towards professional consensus opinion. Analysis of written justifications helped determine whether their reasoning was consistent with professional consensus and enabled measurement of change in knowledge content and recognition of the values inherent in the vignette. Themes on students’ reasoning behind their decision to enter a relationship or not were also identified.

Results: No significant movement towards consensus was found at any point in the curriculum. There was little improvement in students’ performance in terms of knowledge content and their abilities to recognise the values inherent in the vignette. In deciding to enter a relationship with the patient the most frequently used reasoning was that it could be justified if the patient changed their doctor.

Conclusions: Teaching on the subject of sexual or improper relationships between doctors and patients, including relationships with former patients requires to be made explicit. Case based teaching would fit in with the ethos of the problem based, integrated medical curriculum.

Sexual or improper emotional relationships between a doctor and a current patient are prohibited by all codes of ethics set up by medical professional bodies. Sexual relationships between doctors and their patients can have devastating consequences for the patients and can harm doctors’ abilities to make objective medical judgements. In the UK, the General Medical Council (GMC) advises doctors: “You must not allow your personal relationships to undermine the trust which patients place in you. In particular, you must not use your professional position to establish or pursue a sexual or improper emotional relationship with a patient or someone close to them”.

However, sexual relationships between doctors and patients occur. Searight and Campbell estimated 11% of family physicians in the USA have had sexual contact with at least one patient. Thomson and White’s survey of Australian general practitioners found 32% personally knew of a colleague who had engaged in sexual contact with a patient. Lamont and Woodward’s survey of Canadian gynaecologists found 10% admitted knowing of a colleague who had been sexually involved with a patient. In the same survey 3% of male and 1% of female gynaecologists reported sexual involvement with a patient. Ovens and Permaul-Woods’s survey of Canadian emergency physicians found 8.7% were aware of a colleague who had been sexually involved with a patient, or former patient, with 6.2% admitting to having sexual involvement with a former patient. In the USA, Bayer et al’s nationwide survey of 1600 doctors, from various specialties, found 4.5% of respondents admitted to dating a patient, with 3.4% admitting having sexual contact with a patient.

The numbers of doctors disciplined for sexual offences with patients is considerably smaller. Donaldson’s survey of 49 senior doctors over a five year period found serious concerns raised about 6% of these doctors. Of these concerns 14% related to sexual matters. Morrison and Wickersham’s study of Californian doctors (10% of all doctors in the USA) found 0.24% of doctors receive some form of disciplinary action by the state medical board per year, and 10% of such offences are for inappropriate contact with patients. Dehendorf and Wolfe’s analysis of sex related orders during the period 1981–96, drawing figures from a national database of disciplinary orders taken by state medical boards and federal agencies in the USA, found disciplinary action against physicians for sex related offences to be increasing over time.

In the year with the highest rate of offences, 0.02% of all US physicians were disciplined for sex related offences. Psychiatrists, gynaecologists, and general practitioners are significantly more likely to offend than those in other specialties. Particularly vulnerable are socially isolated, middle aged men experiencing a mid-life crisis, who are eminent in their field. The risk of sexual misconduct increases with age by a risk ratio of 1.44 with every decade. Marital discord, loss of important relationships, and a professional crisis in the offenders’ lives often are trigger factors.

Traditional medical education has inadequately tackled this issue. Gartrell et al found 56% of doctors reported having had no education on doctor–patient sexual contact during their medical degree, and only 3% had undertaken training on this issue after graduation. The University of Glasgow introduced a new learner centred, integrated medical curriculum in 1996 which has medical ethics and law as one of the vertical themes running throughout the five year course. This provided an opportunity to study longitudinally the effect of ethics teaching on students’ potential behaviour.
on facing ethical dilemmas. The present study aimed to examine students’ attitudes and potential behaviour to a possible improper relationship with a patient as they progressed through the curriculum.

**METHOD**
A cohort design was adopted.

**Subjects**
A cohort of 162 students from the first intake of Glasgow’s new curriculum took part in the study.

**Instrument**
The adapted Ethics in Health Care Survey Instrument (EHCI) was used. The EHCI consists of 12 case vignettes, which include an ethical dimension. In addition to asking subjects to choose one of the pre-set answers to each case vignette, the EHCI also asks them to justify their chosen response. For the purpose of this study only the responses to vignette 9 (box 1) were considered.

In October 1996, the EHCI was distributed to the 238 students entering the new curriculum. There was no compulsion for students to undertake the questionnaire; their participation was entirely voluntary. The students were assured of this and of the confidentiality and anonymity of their responses. A consent form was attached to the instrument. A total of 162 patients returned a completed EHCI pre year 1 forming the cohort under observation.

Ethics teaching is mainly delivered in the first three years of the curriculum as part of the Vocational Studies course. The main teaching format in Vocational Studies is small group teaching led by a generalist clinical tutor. The content of Vocational Studies ethics sessions has been previously described. The EHCI was distributed to the cohort at the end of year 1, the year in which the largest proportion of ethics sessions take place, and at the end of year 3 following completion of Vocational Studies.

After year 3, 101 students left the curriculum to undertake an intercalated BSc, of whom 67 were from the study cohort. The remaining students entered the predominantly clinical years of the curriculum where the emphasis in ethics teaching is on preparation for professional life, including working with others and critical case analysis. The EHCI was distributed to cohort students who were in the process of completing year 5, the final year of the medical curriculum. Students’ pre-set responses to the consensus questions in each questionnaire were tabulated in an Excel spreadsheet. The written responses to each vignette were transcribed and added to the database.

**Analysis**
The students’ multi-choice responses to vignette 9 were compared at the four time points to determine if their views were consistent with the consensus judgement of informed professionals pre-curriculum and if they changed as they progressed through the curriculum.

The students’ written justifications of their pre-set answer were classified independently by the researchers (JG and JM). They were initially classified as being either a “professional consensus” or an “other” response, a form of data reduction after Huberman and Miles. A professional consensus response was considered to be one based on the consensus reasoning of experts in the field of medical ethics, legal requirements on practitioners, or on policies issued by relevant professional institutions. The “other” response category was subclassified (box 2). These categories were derived from the reflections of the Glasgow researchers (JG,

**Box 1: Ethics in Health Care Survey Instrument**

**Question 9: the attractive patient**

You have just taken over a single handed practice on a remote, small Scottish island. You have always wanted a rural practice, and hope someday to marry and raise children on the island. Lee Cuthbert is an attractive, intelligent, level headed patient whose family has lived on the island for generations. Lee is also a member of the bird watching club you have joined. You have been treating Lee for some time for a difficult and unpleasant skin condition, which appears to be clearing up. Although surgery visits will continue to be necessary for monitoring, the patient is substantially improved.

At the end of a visit, Lee smiles warmly and invites you for dinner, clearly evidencing an interest in being more than your patient. Your options are:

- ___ Accept the invitation.
- ___ Do not accept the invitation.

Please state the reasons for your choice:

**Box 2: Classification of responses**

- **Consensus responses**
  - Category 1 Based on the consensus reasoning of experts in the field of medical ethics, legal requirements on practitioners, or on policies issued by relevant professional institutions

- **Subcategories of non-consensus responses**
  - Category 2 Based on the subject’s personal values/morality
  - Category 3 Influenced by other non-medical/legal value systems
  - Category 4 Although based on moral argument, it is not consistent with the profession’s normative values
  - Category 5 Indeterminate

**Box 3: Hierarchy of subjects’ action justifications**

- **Level 3**
  The subject, in proposing a course of action, not only demonstrates the ability to identify, classify, and analyse the issue(s) involved, but also demonstrates the ability to consider alternatives when deciding his or her course of action

- **Level 2**
  The subject, in proposing a course of action, demonstrates his or her ability to identify, classify, and analyse one or more of the ethical issue(s) contained

- **Level 1**
  The subject, in proposing a course of action, demonstrates that he or she is able to recognise and/or identify one or more of the ethical issue(s) contained
LS, JM) and one of the original developers of the instrument (Ken Kipnis, University of Hawaii), and grounded in responses given by students in both Hawaii and Glasgow.22 23

Students’ written categories were also compared with their choice of pre-set answer to help determine whether their thinking was consistent with professional consensus. Responses judged to be consensus responses were further classified on the hierarchies of subjects’ action justifications and values recognition (boxes 3 and 4). The hierarchical levels were grounded in previous responses given by Glasgow students and influenced by the consensus aim of medical ethics education. During the classification process it became clear that the action justification hierarchy required to be extended due to the poor quality of a small number of responses. The change is shown in box 5. Comparison of the positions of students’ justifications on the hierarchies before and after instruction was used as measures of change following instruction.

The reliability of the categorisation/classification process was estimated using the kappa coefficient, which compares the level of agreement between the two raters with that which would have been expected by chance alone (table 1). The results indicated acceptable interrater reliability. Following independent rating, areas of disagreement between the raters on the categorisations and hierarchical classifications of the written responses were identified and the responses were further examined and discussed until agreement was reached.

Students’ written responses were further coded independently by JG and JM to identify themes for students’ reasoning behind their decision to enter in a relationship with the patient or not. Crosschecking of the researchers’ themes showed a high level of agreement.

RESULTS
The EHCI post year 1 was returned by 111 cohort students and the EHCI post year 3 by 85. The final year class contained 107 students, of whom 102 were from the original intake and 79 from the original cohort. The EHCI post year 5 was returned by 62 cohort students. All 62 respondents had provided an answer to the multi-choice question in vignette 9. There were precurriculum and postcurriculum written responses to vignette 9 from 54 students, 30 students provided written responses on four occasions and a further 10 on three occasions (figs 1 and 2). Students remaining from the original cohort were similar to the whole class in

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<tr>
<th>Box 4: Values recognition hierarchy</th>
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<tr>
<td>1. Level 4</td>
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<tr>
<td>The subject recognises the value system(s) inherent in his or her course of action, the value system(s) of the individuals involved in the decision making process and those of wider society</td>
</tr>
<tr>
<td>2. Level 3</td>
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<tr>
<td>The subject recognises both the value(s) inherent in his or her course of action and those of the individual(s) involved in the decision making process</td>
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<tr>
<td>3. Level 2</td>
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<tr>
<td>The subject recognises the value(s) inherent in either his or her course of action or those of the individual(s) involved in the decision making process</td>
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<tr>
<td>4. Level 1</td>
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<tr>
<td>There is no recognition of the value(s) inherent in the subject’s proposed course of action or those of the individual(s) involved in the decision making process</td>
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<th>Box 5: Hierarchy of subjects’ action justifications</th>
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<tr>
<td>1. Level 4</td>
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<tr>
<td>The subject, in proposing a course of action, not only demonstrates the ability to identify, classify, and analyse the issue(s) involved, but also demonstrates the ability to consider alternatives when deciding his or her course of action</td>
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<tr>
<td>2. Level 3</td>
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<tr>
<td>The subject, in proposing a course of action, demonstrates his or her ability to identify, classify, and analyse one or more of the ethical issue(s) contained</td>
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<tr>
<td>3. Level 2</td>
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<tr>
<td>The subject, in proposing a course of action, demonstrates that he or she is able to recognise and/or identify one or more of the ethical issue(s) contained</td>
</tr>
<tr>
<td>4. Level 1</td>
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<tr>
<td>The subject, in proposing a course of action, does not identify the ethical issue(s) contained in the vignette</td>
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Table 1 Kappa coefficients for the agreement between the two researchers on the categorisations and hierarchical classifications of students’ written justifications on all occasions of the survey

<table>
<thead>
<tr>
<th></th>
<th>Categorisation as consensus or non-consensus</th>
<th>Five category classification</th>
<th>Action justification hierarchy</th>
<th>Values recognition hierarchy</th>
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<tbody>
<tr>
<td>Kappa</td>
<td>0.96</td>
<td>0.8</td>
<td>0.85</td>
<td>0.65</td>
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Figure 1 The number of students completing the Ethics in Health Care Survey Instrument (EHCI) at each survey point.
terms of age (mean age of cohort students: 24 years; mean age of class 23 years 8 months), sex (male:female 1:2.5 and 1:2, respectively), overseas origin (10% and 9%, respectively) and holding a previous degree(s) (8% and 8%, respectively). They were also similar to the original cohort in terms of sex (1:2.5, 1:2 original cohort), overseas origin (10% and 9%, respectively) and holding a previous degree (8% and 5%, respectively).

Statistical analysis of student’s choice of pre-set answer to vignette 9 showed no significant movement towards consensus at any point in the curriculum.20 By the end of the curriculum while 60% (n = 32) chose the consensus multi-choice response, analysis of the written justification categorisations showed only 58% (n = 19) of these students provided a consensus written justification for their choice (table 2).

The reasoning behind responses categorised as non-consensus was most often based on moral argument not consistent with the professions’ normative values. This was also the case where the reasoning behind the choice of consensus pre-set answer was not consistent with professional consensus thinking (table 3).

There was little improvement in students’ performance in terms of the position of their written justifications on the hierarchies as they progressed through the curriculum (table 4). This was the case both in terms of knowledge content and their abilities to recognise the values inherent in the vignette.

Students’ reasoning behind their decision to embark on a relationship or not, and the frequency of their occurrence at each survey point, is shown in table 5. Often more than one theme was identified from a response. Where the reasoning behind the decision not to embark on a relationship was aligned with professional consensus thinking, the themes identified most frequently were that the course of action was deemed unethical and that the doctor–patient relationship would be compromised:

- It is unethical for a doctor to have a relationship with a patient other than a professional one as it leaves room for exploitation.
- This could be interpreted in the future, if the relationship did not work out, as an abuse of the doctor–patient relationship.
- Where the reasoning behind the consensus pre-set answer was not aligned with professional consensus thinking, the most frequent reasoning used was that a relationship could be justified if the patient changed their doctor:

<table>
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<th>Table 2</th>
<th>Comparison of the number of consensus written justifications provided by students with the number of consensus multi-choice responses chosen for each time point</th>
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<tr>
<td>Consensus justifications provided (%)</td>
<td>Consensus multi-choice response chosen (%)</td>
</tr>
<tr>
<td>Pre year 1 (n = 54)</td>
<td>13 (24)</td>
</tr>
<tr>
<td>Post year 1 (n = 40)</td>
<td>13 (33)</td>
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<tr>
<td>Post year 3 (n = 30)</td>
<td>10 (33)</td>
</tr>
<tr>
<td>Post year 5 (n = 54)</td>
<td>19 (35)</td>
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Doctor–patient relationship [is one] that implies trust, confidentiality. This would not remain intact if things progressed. However, accept if he changes doctors.

Where students decided to enter into a relationship with the patient, as well as the strategy of encouraging the patient to find another doctor, the context of being the only doctor on a remote island was often used to justify the relationship:

A doctor theoretically should not have a relationship with a patient and should refer the patient to some other doctor. However, since the doctor is the only feasible one in the region, then I would accept the invitation—if the island is that small then everyone on the island is probably related anyway.

On a small Scottish island where you’re the only doctor, everyone’s going to be your patient. As the condition is clearing up too, I see no reason why not? If you ever hope to marry and raise kids you will probably end up with one of the islanders anyway.

Another common theme used to justify the relationship was the importance for doctors separating their private from professional lives:

He is not merely a patient as he attends the same club and has the same interests. As long as [your] professional and private lives are kept separate this would be OK.

**DISCUSSION**

Cohort studies are particularly appropriate in research on human growth and development. They provide greater opportunity to observe trends and to distinguish “real” change from chance occurrences.21 This study, like most cohort studies, suffered from sample mortality; a major factor for this was students undertaking intercalated degrees. However, the cohort students consisted of 60% of the students completing the new Glasgow medical curriculum. They were representative of the year as a whole and of the original cohort.

Cohort studies can also suffer from “control effects”. This was a potential source of bias because the same instrument was used on four separate occasions. However, the time interval of one year between the first and second stages; two years between the second and third stages of the study; and a further two years between the third and fourth stages made this less likely. In addition, the students did not receive
covering the vulnerability of both patients and doctors.

For the individual vignettes covering professional issues, which include vignette 9, no improvement was found at any time point in the curriculum.\textsuperscript{18–20} For the individual vignettes covering professional issues, which include vignette 9, no improvement was found at any time point in the curriculum.\textsuperscript{18–20} Cohort studies can suffer from the interaction of biological, environmental, and interventional influences. In medical curricula, the longer students are exposed to the hidden curriculum and the process of “moral enculturation”, the greater the risk of students’ ethical development being detrimentally affected.\textsuperscript{22} While it may partly explain the lack of improvement in the Glasgow students’ performance in the vignettes covering professional issues, the relative lack of direct teaching on the issues covered in the vignettes possibly played a greater part.\textsuperscript{18–20} Gartrell et al.’s 1992 survey demonstrated a lack of direct teaching on the issue of sexual or improper emotional relationships with patients, which was felt to contribute to the development of improper relationships.\textsuperscript{17} The latest UK consensus statement on the core medical ethics curriculum merely recommends teaching on the “Implications for students and their relationship with patients”.\textsuperscript{2} While the issue was not the subject of an individual teaching session it was covered in plenary sessions on “Oaths, codes and regulations” and “Dealing with medical mistakes” in year 3. The principle of autonomy, and its prerequisites, patient competence and informed consent, are extensively covered in year 1 where there is also a session on “Vulnerability”, covering the vulnerability of both patients and doctors. Students were also provided with the GMC document \textit{Duties of a Doctor}\textsuperscript{12} on admission to the curriculum and encouraged to refer to them throughout. Teaching on the issue may require to be more explicit if it is to impact on students’ learning. Simply teaching principles, related concepts, and/or decision making templates is not always sufficient as learning often requires to be contextualised for students.\textsuperscript{20} The teaching need not be didactic, a case similar to that in vignette 9 could be used as the focus for students’ exploration of the underlying issues.

Students’ performance in vignette 9 was poorer than it appeared from their multi-choice responses. While 48–60% of students chose the consensus response for vignette 9 at the various time points through the curriculum, only 52–65% of these students justified their choice reasoning based on consensus opinion. There was also no movement of responses up the action justification or values recognition hierarchies as students progressed through the curriculum. Measuring students’ proposed behaviour on encountering ethical dilemmas has been the approachfavoured in recent years.\textsuperscript{24} A common feature of the instruments developed has been the provision for subjects of a choice of options in deciding which action to take. While this is of value it leaves them open to the criticism that they say little about the subject’s own thinking about the issues involved, or indeed whether or not they would recognise the issues.\textsuperscript{25} These findings illustrate the importance of testing students’ underpinning reasoning in instruments which attempt to measure students’ decision making abilities using a multi-choice format.

There are obvious problems with consensus as a method of decision, it can be parochial and not sensitive to particular features of a specific case.\textsuperscript{25} In the context of vignette 9 while it was understandable that some students held the attitude that there would be few opportunities for the doctor to meet a suitable mate on a remote island, and recognised that doctors in such communities often face dilemmas regarding keeping their personal lives separate from their professional lives, there is a clear consensus that sexual or improper emotional relationships between a doctor and a current patient are wholly prohibited. The use of consensus opinion was therefore justified.

Where students chose the consensus pre-set answer, but provided justifications which were considered non-consensus, the commonest reasoning used was that it would be acceptable to pursue the relationship if/when the patient changed doctor/became an ex-patient. The issue of sexual relationships between doctors and former patients remains an area of debate among the medical profession. The American Psychiatric Association has stated that “sexual activity with a former patient is unethical ... with no qualifications”\textsuperscript{27} The Council of Ethical and Judicial Affairs of the American Medical Association has stated “sexual or romantic relationships with former patients are unethical if the physician uses or exploits trust, knowledge, emotions, or influence derived from the previous professional relationship”.\textsuperscript{28} The New Zealand Medical Council adopted a “zero

\begin{table}[h!]
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\begin{tabular}{|c|c|c|c|c|c|}
\hline
\textbf{Multi-choice answer} & \textbf{Category} & \textbf{Pre year 1 (\%)} & \textbf{Post year 1 (\%)} & \textbf{Post year 3 (\%)} & \textbf{Post year 5 (\%)} \\
\hline
Non-consensus & 2 (Personal values/morality) & 13 (45) & 10 (50) & 6 (50) & 8 (36) \\
 & 3 (Influence of other non-medical/legal value systems) & 0 & 0 & 0 & 0 \\
 & 4 (Inconsistent with consensus though based on moral argument) & 15 (52) & 9 (45) & 6 (50) & 14 (64) \\
Consensus & 2 (Personal values/morality) & 1 (3) & 1 (3) & 0 & 0 \\
 & 3 (Influence of other non-medical/legal value systems) & 0 & 0 & 0 & 0 \\
 & 4 (Inconsistent with consensus though based on moral argument) & 9 (75) & 4 (57) & 4 (57) & 8 (62) \\
 & 5 (Indeterminate) & 0 & 0 & 0 & 1 (7) \\
\hline
\end{tabular}
\caption{The researchers’ categorisation of written justifications judged not to be consistent with consensus reasoning with students’ corresponding multi-choice answer at each survey point}
\end{table}
The lack of competence due to the presence of transference is the commonest and strongest basis for this claim, although Guntheil and Gabbard prefer a model of “undue influence” rather than claiming such patients are necessarily incompetent. Transference developing in the doctor–patient relationship is likely to persist as there is no empirical evidence to suggest that it disappears or even reduces with cessation of the doctor–patient relationship.

However, not every doctor–patient relationship involves transference. Zelas argues “no rule of thumb regarding a suitable time period of restraint nor regarding the specific nature of the doctor–patient relationship can be offered … a reasonable guide-line is that if the sexual attraction and desire for relationship commenced in the context of the doctor–patient relationship then it is unlikely to be well-founded at any time in the future.” However, she adds, “there seems to be widespread agreement that when a patient has been in long term psychotherapy or counselling with the doctor then an ordinary social relationship can never be established.”

The power imbalance of the initial doctor–patient relationship which is likely to continue into the relationship between a doctor and his or her former patient, can also affect the patient’s ability to consent. Feldman-Summers states, “even if consent can be given, exploitation can nevertheless be argued if the fiduciary has acquired information about the client’s vulnerabilities that otherwise would remain concealed.”

Other arguments which question the former patient’s ability to freely consent revolve around the patient’s autonomous choice. Autonomous choice requires the patient to be competent and be provided with all relevant information to decide
on a course of action, while not acting under any form of coercion. Simon argues that the provision of such information rarely, if ever, occurs.46 Coercion can arise from imposed restraints on any or all three types of autonomy: autonomy of thought, autonomy of will, and autonomy of action.47 Hall argues the persistence of transference can exert a coercive effect on one’s autonomy of thought and/or will.1

In vignette 9, where the context of the doctor–patient relationship is in the general practice setting, Brody argues that a distinguishing characteristic of general practice ethics is the longitudinal relationship which develops between doctor and patient.42 This „relational ethic“ is grounded in the goal of enhancing patient autonomy by, and through this relationship. From both these arguments it can be seen that attention to relationship is particularly important when considering general practice ethics. Hall argues that general practice has a particular duty to foster the autonomy of the patient and that a general practitioner’s actions should be evaluated in the light of this duty. Sexual misconduct with a former patient does not foster patient autonomy and there-