Socio-economic differences in patient participation behaviours in doctor–patient interactions—A systematic mapping review of the literature

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Abstract

Background: The degree to which patients participate in their care can have a positive impact on health outcomes. This review aimed to map the current literature on patient participation behaviours in interactions with physicians and the extent to which differences in these behaviours can be explained by socio-economic status (SES).

Search strategy: Four electronic databases were searched from 1980 onwards using key words related to socio-economic status and patient participation behaviours.

Study selection: Titles, abstracts and full texts were screened by two reviewers, with the second reviewer screening 20% of all entries.

Data extraction: Data on year of publication, country, patient population, setting, patient participation behaviour studied, and SES measure used were extracted.

Main results: Forty-nine studies were included in the review. Most studies were conducted in the United States, and the most commonly studied patient participation behaviour was involvement in decision making. Most studies measured SES using education as an indicator, with very few studies using occupation as a measure. Many studies did not report on participants’ medical condition or in what setting the study was undertaken. More studies are needed on less commonly studied patient participation behaviours. It would be helpful for further studies to also include a wider range of SES indicators.

Discussion and conclusions: Current literature was found to be mainly US-centric. Many studies did not specify participants’ medical condition or in what setting the study was undertaken. More studies are needed on less commonly studied patient participation behaviours. It would be helpful for further studies to also include a wider range of SES indicators.

Keywords
communication, Doctor–patient relationship, inequalities, patient participation, socio-economic status
INTRODUCTION

Patient-centred care has been associated with beneficial outcomes such as a greater adherence to treatment, satisfaction and improved quality of life.\(^1\)\(^2\) The Institute of Medicine defines patient-centred care as providing care that is respectful of and responsive to individual patient preferences, needs and values, ensuring that patient values guide all clinical decisions.\(^3\)\(^4\) Thus, the extent to which patients participate in discussions during their hospital or clinic visits is seen as an important barometer of patient-centred care. Although there is no universally applied definition on what type of behaviours constitutes patient participation in clinical visits,\(^5\) most studies focusing on patient participation behaviours involve a range of behaviours such as question asking, raising concerns, and expressing opinions, preferences and emotions.\(^6\)

Often ‘patient participation behaviours’ are described as a general group of behaviours that characterize doctor–patient communication, rather than describing in detail the different ways patient participation can be measured or other component parts of doctor–patient communication behaviour which are classified in a different way. For example, an important previous systematic review by Verlinde et al\(^7\) focused more globally on doctor–patient communication behaviours, with the electronic search terms based on ‘doctor–patient communication’ and ‘physician–patient relations’. The review reported evidence showing that a social gradient in doctor–patient communication exists and classified this according to the following classification: verbal behaviour including instrumental and affective behaviour, non-verbal behaviour and patient-centred behaviour. Although the review found that patients with low socio-economic status (SES) tended to participate less actively in their care, the study and its search strategy were insufficiently sensitive to allow identification as to whether certain patient participation behaviours were more researched or more important than others, since the focus of the study was doctor–patient communication in general.

The Verlinde et al\(^7\) review also limited identification of literature exploring the social gradient in doctor–patient communication and social gradient, to studies reporting the ‘social class related concepts of’ educational level, income or occupation. Confusingly, three of the studies included in this review measured SES using ‘social class’, although the authors did not specify exactly how this was defined. However, there are several other indicators of SES which may also be associated with patient participation behaviours such as the patients’ health insurance status or receipt of benefits, and also area-level measures of deprivation related to the patients’ home address (Indices of Multiple Deprivation), which may not have been captured previously, and may still be relevant.\(^8\)\(^9\) Bearing in mind the potential importance of this area and its likely relationship to beneficial health outcomes, we undertook a systematic mapping review to identify what research had been done which specifically examined how patient participation behaviours in doctor–patient interactions are related to differences in a wide range of possible measures of socio-economic status.

We chose to conduct a systematic mapping review, as such reviews are useful for detecting patterns in a large body of literature in order to identify areas for future research. As such, details of the included studies are summarized without quality assessment or presenting statistical analyses.\(^10\)\(^11\)

PURPOSE

Our research question was as follows: How and why does tendency to and desire for patient participation behaviours in healthcare consultations with physicians vary according to SES and what measures of SES have been explored? For the purpose of this review, we defined patient participation behaviours as consisting of question asking, raising concerns, involvement in decision making, rapport building, and expression of opinions, preferences and emotions.

DATA SOURCES

An electronic search was undertaken of the following databases: Medline, CINAHL, PsychINFO and Web of Science. Literature was searched from 1980 to 2018; since prior to 1980, there was much less electronic indexing. A pilot search was conducted to identify potentially eligible papers, assess the amount of relevant literature in the field and identify suitable search terms. At this stage, we found that including screening appointments and emergency admissions made the scope of the review far too broad and unmanageable; therefore, we decided to introduce limits in the electronic search terms regarding ongoing doctor–patient relationships. The electronic search contained free text and subject headings including patient-centred care, question asking, raising concerns, involvement in decision making, building rapport, expression of preferences, emotions or opinions, educational status, income, occupational status, employment, social class and socio-economic factors. This was modified as necessary for each database and can be found in Appendix S1.

Inclusion criteria for the review were as follows:

- Studies involving patient perspectives on actual and desired question asking, raising concerns, involvement in decision making, rapport building, or expression of opinions, preferences and emotions.
- SES gradient measured in the form of education, income, occupation or ‘other measures’ which included patients’ health insurance status, income indicators of state benefits and area-based measures relating to the patients’ home address.
- Published in 1980 onwards.
- Studies involving adult patients.
- Only studies which focused on doctor–patient interactions.
- Written in English language only.
Studies were excluded if:

- They included only health-care professional perspectives on patient participation.
- Patients under 18 or parents of patients only were recruited.
- Adult patient perspectives of childhood experiences were collected.
- The study was conducted in a country on the OECDs Development Assistance Committee list of Official Development Assistance recipients.\(^2\) This was in order to limit literature to higher income countries where the health-care systems were likely to be similar.
- The appointment involved emergency attendances or screening.
- The interactions were with health-care professionals who were not medical doctors.
- They were opinion articles.
- They were systematic reviews.

4 | STUDY SELECTION

One reviewer (SA) screened all titles and abstracts identified through electronic searches, and 20% of the entries were double screened by a second reviewer (DH). All full-text articles were then screened by one reviewer (SA), and 20% of the full texts were double screened by a second reviewer (DH). If the two reviewers disagreed on any papers, this was resolved by discussion with two other independent reviewers (RH and SR).

5 | DATA EXTRACTION

Data extraction was independently conducted by both reviewers and the following information was obtained: year published, country the study was conducted in, study method and design,
| Author                | Country       | Study population                                      | Methods                        | Number of participants | Socio-economic status (SES) measure | Patient participation behaviours measured | Direction of association                                                                 |
|-----------------------|---------------|-------------------------------------------------------|--------------------------------|------------------------|------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------|
| 1. Aasen et al (2012) | Norway        | End-stage renal disease patients                      | Qualitative interviews         | 11                     | Education                          | Involvement in decision making, question asking, and expression of opinions               | No statistical analyses performed                                                       |
| 2. Ackermans et al (2018) | The Netherlands | Patients with osteoarthritis of the hip or knee       | Questionnaire                  | 142                    | Education and employment            | Involvement in decision making, and expression of opinions, preferences and emotions     | No associations                                                                          |
| 3. Adams et al (2001)  | Australia     | Asthma patients                                       | Questionnaire                  | 128                    | Income, education, employment, receipt of benefits, and housing situation | Involvement in decision making           | Positive association with education only                                                    |
| 4. AlHaqwi et al (2015) | Saudi Arabia  | Adult family practice patients                         | Questionnaire                  | 236                    | Education                          | Involvement in decision making            | Positive association                                                                     |
| 5. Aro et al (2012)    | Estonia       | Adult ICU patients                                    | Questionnaire                  | 166                    | Education                          | Involvement in decision making            | Negative association                                                                    |
| 6. Arora et al (2000)  | USA           | Hypertension, diabetes, congestive heart failure, myocardial infarction and clinical depression patients | Questionnaire                  | 2197                   | Education, income and employment    | Involvement in decision making            | Positive association with education only                                                    |
| 7. Attanasio et al (2015) | USA         | Women aged 18-45 who gave birth in US hospitals       | Questionnaire                  | 2400                   | Education and insurance            | Question asking                          | Positive association for education, Negative association for insurance type              |
| 8. Beauchamp et al (2015) | Australia    | Patients attending chronic disease services           | Questionnaire                  | 813                    | Insurance and education            | Involvement in decision making            | No associations                                                                          |
| 9. Bell et al (2001)   | USA           | Patients reporting a new or worsening problem, or worries about serious illness | Questionnaire                  | 909                    | Education, employment, income and insurance | Raising concerns                        | No association for education and income only, other SES variables not analysed         |
| 10. Bozec et al (2016) | France        | Head and neck squamous cell carcinoma patients         | Questionnaire                  | 200                    | Education and occupation           | Expression of preferences                 | No associations                                                                          |
| 11. Chung et al (2012) | USA           | Patients admitted to a general internal medicine service | Questionnaire                  | 8308                   | Education                          | Involvement in decision making and expression of preferences                           | Positive association for involvement in decision making only                           |
| 12. Cohen et al (2013) | USA           | Patients admitted to hospital for hematopoietic stem cell transplantation | Longitudinal qualitative interviews | 60                     | Education and occupation           | Involvement in decision making            | No statistical analyses performed                                                       |
| 13. Dang et al (2017) | USA           | New patients attending a HIV clinic                   | Longitudinal qualitative interviews | 21                     | Occupation                         | Question asking and involvement in decision making                                   | No statistical analyses performed                                                       |

(Continues)
| Author | Country | Study population | Methods | Number of participants | Socio-economic status (SES) measure | Patient participation behaviours measured | Direction of association |
|--------|---------|------------------|---------|------------------------|-------------------------------------|------------------------------------------|--------------------------|
| 14. De las Cuevas et al (2014) | Spain | Outpatient psychiatric patients | Questionnaire | 846 | Education | Involvement in decision making | No associations |
| 15. Deen et al (2011) | USA | Community health centre patients | Intervention-pilot study | 252 | Education | Involvement in decision making | No associations |
| 16. Durand et al (2016) | UK | Chronic kidney disease patients | Questionnaire | 492 | Education | Involvement in decision making | No associations |
| 17. Ellington et al (2006) | USA | General population (some had cancer) | Focus groups | 55 | Education and employment | Involvement in decision making and expression of preferences | No statistical analyses performed |
| 18. Friis et al (2016) | Denmark | Patients with diabetes, cardiovascular disease, COPD, musculoskeletal disorders, cancer, or mental disorders | Questionnaire | 29,473 | Education | Question asking, raising concerns, and expression of opinions, preferences and emotions | Positive associations |
| 19. Garfield et al (2007) | UK | Patients with type 2 diabetes or rheumatoid arthritis | Questionnaire | 516 | Social class (composite measure) | Involvement in decision making | Positive associations |
| 20. Gleason et al (2016) | USA | Older adults with hypertension, arthritis, cholesterol, diabetes, cancer, heart disease or depression | Questionnaire | 277 | Education, financial strain, and finances at the end of the month | Involvement in decision making | No significant associations |
| 21. Henselmans et al (2015) | The Netherlands | Patients diagnosed with a somatic chronic disease | Questionnaire | 1314 | Education | Involvement in decision making, question asking, and expression of opinions, preferences and emotions | No significant associations |
| 22. Jacobs-Lawson et al (2009) | USA | Lung cancer patients | Questionnaire | 100 | Income and education | Involvement in decision making and expression of preferences | No significant associations for education only, income not entered into analysis |
| 23. Janz et al (2004) | USA | Breast cancer patients | Questionnaire | 101 | Education, employment and income | Involvement in decision making, question asking, raising concerns, and expression of opinions, preferences and emotions | Positive association between education and involvement in decision making only No significant associations for income and employment, and other participation behaviours not entered into analysis |
| 24. Jonsdottrir et al (2016) | Iceland | Patients who reported and consulted for chronic pain | Questionnaire | 754 | Education and income | Involvement in decision making | No significant associations |

(Continues)
| Author               | Country | Study population                                      | Methods              | Number of participants | Socio-economic status (SES) measure | Patient participation behaviours measured                                                                 | Direction of association                                                                 |
|----------------------|---------|-------------------------------------------------------|----------------------|------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 25. Lu et al (2011)  | USA     | Underserved women newly diagnosed with breast cancer | Intervention-pilot study | 231                    | Education                          | Involvement in decision making, question asking, and raising concerns                                      | Positive association for question asking only, no significant associations for other variables |
| 26. Lubetkin et al (2010) | USA   | Patients attending urban health centres               | Questionnaire        | 454                    | Education                          | Involvement in decision making                                                                               | Positive association                                                                      |
| 27. Magnazi et al (2015) | Israel | General population                                     | Questionnaire        | 508                    | Education and income                | Involvement in decision making, rapport building, and expression of preferences                            | Negative associations for rapport building and expression of preferences only, involvement in decision making not entered into analysis |
| 28. Maly et al (2008) | USA     | Breast cancer patients                                 | Questionnaire        | 257                    | Education and income                | Question asking, raising concerns, involvement in decision making, and expression of opinions, preferences and emotions | Positive associations                                                                    |
| 29. Manderbacka (2005) | Finland | Coronary heart disease patients                        | Qualitative interviews | 30                     | Occupation and employment           | Involvement in decision making                                                                               | No statistical analyses performed                                                          |
| 30. Mercer et al (2016) | UK (Scotland) | Patients attending a GP practice                   | Questionnaire        | 659                    | Scottish Indices of Multiple Deprivation | Involvement in decision making                                                                               | Positive association                                                                      |
| 31. Moise et al (2017) | USA     | Patients with uncontrolled hypertension               | Questionnaire        | 195                    | Education and insurance             | Involvement in decision making                                                                               | Positive association for education only                                                   |
| 32. Moret et al (2017) | France | Gynaecology, orthopaedic, internal medicine, and emergency medicine hospital inpatients | Questionnaire        | 255                     | Deprivation (EPICES score and perceived social status), education, and employment | Involvement in decision making                                                                               | Positive association for deprivation only, other variables not entered into analysis       |
| 33. Morishige et al (2017) | Japan | Inflammatory bowel disease patients                  | Questionnaire        | 1035                   | Income, education and employment    | Involvement in decision making                                                                               | No associations                                                                         |
| 34. Morrison et al (2003) | Australia | General population                                   | Questionnaire        | 1297                   | Education and income                | Involvement in decision making, and expression of preferences                                                 | Negative associations                                                                     |
| 35. Murray et al (2007) | USA     | General population                                    | Questionnaire        | 3177                   | Education, income and insurance     | Involvement in decision making                                                                               | Positive associations for education and income only                                       |
| 36. Nijman et al (2014) | The Netherlands | General population                       | Questionnaire        | 1432                   | Education and income                | Involvement in decision making                                                                               | Positive associations                                                                     |
| 37. Olson et al (2010) | USA     | Hospital inpatients                                   | Questionnaire        | 89                     | Education and insurance             | Involvement in decision making                                                                               | No associations                                                                         |

(Continues)
| Author | Country | Study population | Methods | Number of participants | Socio-economic status (SES) measure | Patient participation behaviours measured | Direction of association |
|--------|---------|------------------|---------|------------------------|-------------------------------------|------------------------------------------|-------------------------|
| 38. Overgaard et al (2012) | Denmark | Low risk women receiving midwifery unit or obstetric unit care | Questionnaire | 375 | Education and employment | Involvement in decision making | No associations |
| 39. Phipps et al (2008) | USA | African American cancer patients who received chemotherapy | Questionnaire | 26 | Income and education | Involvement in decision making | No associations |
| 40. Rademakers et al (2012) | The Netherlands | Patients with rheumatoid arthritis, spinal disc herniation, or malignant or benign breast abnormalities | Questionnaire | 1019 | Education | Involvement in decision making and question asking | Positive associations |
| 41. Skolasky et al (2011) | USA | Community dwelling multi-morbid adults | Questionnaire | 855 | Education and income | Involvement in decision making | Positive association for education only |
| 42. Smith et al (2016) | USA | General population | Questionnaire | 3400 | Income and education | Involvement in decision making | Positive associations |
| 43. Spies et al (2006) | Germany | Patients attending a chronic pain clinic | Questionnaire | 341 | Income, employment and education | Involvement in decision making and question asking | Positive associations for education only |
| 44. Stepleman et al (2010) | USA | Multiple sclerosis patients | Questionnaire | 199 | Education and employment | Involvement in decision making | Positive associations |
| 45. Tariman et al (2014) | USA | Symptomatic myeloma patients | Questionnaire | 20 | Employment, education, and income | Involvement in decision making | No associations |
| 46. Tsimtsiou et al (2014) | Greece | Hospitalized patients | Questionnaire | 454 | Education and income | Involvement in decision making and question asking | Positive associations for education only Income not entered into analysis |
| 47. van den Brink-Muinen et al (2011) | The Netherlands | Patients diagnosed with a somatic chronic disease | Questionnaire | 2423 | Education | Involvement in decision making | No association |
| 48. Yek et al (2017) | Singapore | Patients attending a pre-operative evaluation clinic for elective surgical procedures | Questionnaire | 364 | Education, employment, insurance and income | Involvement in decision making and question asking | Positive associations for education, employment, and insurance only Income not entered into analysis |
| 49. Yeo (2016) | USA | General population | Questionnaire | 2297 | Education, employment, income and insurance | Involvement in decision making and question asking | Negative associations for education and income only Positive associations for insurance Employement not entered into analysis |
population recruited, study setting, sample size, how SES is measured, what patient participation behaviours are reported and key results.

6 | RESULTS

The title and abstracts of 4718 articles were imported into Endnote, and 368 duplicates were removed. This left 4350 entries, of which 3989 articles were excluded leaving 361 entries. After screening all 361 full-text articles, the two reviewers disagreed on 11 papers. Following discussion, seven papers were excluded. After screening, 49 studies were included in the review. The PRISMA diagram can be found in Figure 1.

Details of the characteristics of the 49 included studies can be found in Table 1. Overall, 39 (79.6%) of the included studies were published in the last 10 years, with only 10 being published before 2008. Most of the studies were conducted in the United States (46.9%), with the Netherlands being the second most common (10.2%). There were only three studies conducted in Australia, and only three conducted in the UK. ‘Other’ countries included Spain, Estonia, Germany, Norway and Finland (Figure 2).

The majority of studies used questionnaires to collect data (75.5%), with only five studies using qualitative techniques such as interviews or focus groups, and only two studies were interventions. Both interventions were pilot studies with no control group. The most commonly studied condition was cancer (20.4%), with four studies recruiting arthritis patients, and four studies with diabetes patients. Most studies did not specify what condition (if any) their participants had (36.7%). ‘Other’ conditions included asthma, chronic pain, HIV, multiple sclerosis and inflammatory bowel disease (Figure 3). None of the three UK studies recruited cancer patients.

The most common setting for studies involved secondary or tertiary care (44.9%), with primary care being the setting in only 11 studies. Unfortunately, 16 studies did not specify which setting their research referred to when collecting data from participants. The most commonly studied patient participation behaviour was involvement in decision making (46 studies), whereas five studies examined raising concerns.14-18 and only one study looked at rapport building.19 Question asking and expression of opinions, preferences or emotions was more commonly studied, featuring in 13 and 12 studies, respectively. The rapport building study recruited participants from the general population and so there was a lack of studies which focused on rapport building which involved participants in a health setting. Three of the raising concerns studies were with breast cancer patients (Table 2).

The most commonly used measure to explore relationships between patient participation behaviours and SES was educational level (45 studies). Only four studies used occupation as an indicator of SES,20-23 and only two studies used a composite measure of deprivation.24,25 One study measured housing situation and receipt of benefits,26 one used a composite measure of social class,27 and one looked at financial strain and finances at the end of the month.28 It is also important to note that many studies examined more than one type of patient participation behaviour or used more than one measure of SES. Most studies (33) used more than one measure of SES, whereas only 18 studies examined more than one type of patient participation behaviour (Table 2).

Table 1 shows the direction of associations reported in the included studies. Of the 49 included studies, 5 did not perform statistical analyses as they had employed qualitative methodologies. Positive associations between SES and patient participation behaviours (PPBs) were reported by 24 studies, while 5 studies reported negative associations. Twenty-seven studies reported no association between at least some of their variables. Eleven studies reported associations of differing directions for different measures of SES or different PPBs within their study. Since the studies were so mixed in terms of design, participants’ condition, outcomes and setting, it was not appropriate to undertake any meta-analyses.

Of the 23 studies conducted in the United States, 13 reported a positive association between SES and PPB. 2 reported a negative association, and 14 reported no association between at least some of their variables. Three studies did not perform statistical analyses, and 9 studies reported associations of differing directions for different measures of SES and PPB.

Of the 10 studies conducted with cancer patients, 4 reported a positive association between SES and PPB, 7 reported no association between at least some of their variables, and 2 reported associations of differing directions for different measures of SES and PPB. One study did not perform statistical analyses.

7 | DISCUSSION

Although the goal of systematic review searches is to identify all relevant studies on a topic, it is necessary to balance comprehensively covering a topic (or sensitivity of a search) with how manageable it is within resources available.21 On the other hand, a wider search may reduce precision (identifying non-relevant articles), which while more comprehensive, may be more difficult to summarize because types of studies may vary quite widely. Systematic mapping reviews help by a method to overview a larger area so that gaps to inform future research can be identified.10,11

Our study shows that while an earlier systematic review exploring literature on the social gradient in doctor–patient communication had a relatively broad search strategy, this included only 20 papers,8 whereas our study focusing purely on patient participation behaviours and SES differences identified 49 studies. Although this may indicate an expanding area of research, this may also be because our study used a wider set of SES indicators than had been used previously. Our research is particularly informative because it focused in detail on the patient-side of the clinical interactions, whereas other reviews have had a main focus on behaviours in the consultation.8,29

We found that the most commonly used measure of SES in studies of this type was educational level, while measures of participants’
occupation have been much less frequently used. Income and employment status were not as commonly measured as educational level, although they were still used in some studies. Occupation is a key indicator of SES and likely to have an important influence on the doctor–patient relationship,\textsuperscript{30} and so it is surprising to find so few previous studies using this measure.

We found that the most frequently studied patient participation behaviour was involvement in decision making, whereas raising concerns and building rapport were comparatively relatively neglected. In contrast, Verlinde et al\textsuperscript{8} found fewer studies on joint decision making and a larger number of studies involving other types of patient participation behaviours. Perhaps patient-orientated communication studies have had more focus on decision-making aspects of communication, whereas doctor-orientated communication studies focus on other aspects of the relationship—or our more specific electronic search terms which included ‘decision making’, meant that we could better reflect the amount of research which has been undertaken in this field.
Although previous studies have found that rapport building in the doctor–patient relationship can have a number of positive outcomes, including treatment satisfaction, understanding health information, coping and adherence to treatment, only one study was identified which looked at how this behaviour was related to SES difference, and so further research in this area is particularly needed.

Most studies used more than one measure of SES which in some cases allowed a comparison of the effects of each different measure, although in some of these, not all the SES variables were entered into the analysis but were simply used to describe the sample. The objective of our study was to map the literature in this area rather than to produce a synthesis across several types of studies; however, we extracted data from included studies on whether a statistically significant association between SES and PPB had been reported. This indicated that although PPB was found to be related to SES in about half of the studies, in about half, they were not. Summarizing results are made more difficult by the heterogeneity which exists between studies in this area, and the range of different measures of SES and indicators of PPB which had been used. For example, although several studies showed an association with education and patient participation behaviours, as many as 17 studies found no statistically significant association between the two variables; and so the relationship is likely to be complex. On the other hand, few studies seem to have found a significant association between patient participation behaviours and employment or income. Larger and more sophisticated studies are needed, using a range of SES indicators and a more in-depth description of patient participation behaviours, and the setting involved.

While the most common condition studied was cancer and the most common setting was secondary or tertiary care, 36.7% of studies did not specify what condition (if any) their participants were diagnosed with or what health-care setting their questions regarding patient participation referred to. This is potentially important information which is missing from these studies, as setting and condition which the patient is consulting for can influence a patient’s preferred and experienced level of participation in a consultation.

Most studies included in the review were conducted in the United States, making the current research in this area very US-centric. This may limit the generalizability of the results of these studies, as other countries have differently structured health-care systems which might influence patient participation behaviours. There is a need for more studies on patient participation behaviours outside of the United States.

8 | CONCLUSION

In conclusion, our findings suggest that most patient participation research relies on education as an indicator of SES and mainly explores involvement in decision making as the patient participation behaviour of interest. Most previous studies have been undertaken in the United States, but many lack important information on the setting or the patients’ condition. More studies on specific patient participation behaviours such as rapport building and raising concerns are needed, and other studies undertaken outside the United States. Use of a wider range of SES measures such as occupation, housing situation, receipt of benefits and household finances would be useful additional data.

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CONFLICTS OF INTEREST

None.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analysed in this study.

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**SUPPORTING INFORMATION**

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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