Views of contraceptive service delivery to young people in the UK: a systematic review and thematic synthesis

Susan Baxter, Lindsay Blank, Louise Guillaume, Hazel Squires, Nick Payne

Section of Public Health, School of Health and Related Research, University of Sheffield, Sheffield, UK

Correspondence to
Dr Susan Baxter, Section of Public Health, School of Health and Related Research, University of Sheffield, Regent Court, 30 Regent Street, Sheffield S14DA, UK;
s.k.baxter@sheffield.ac.uk

Received 18 March 2010
Accepted 15 July 2010

Abstract

Background and methodology Despite widespread availability of contraceptives and increasing service provision in the UK, rates of teenage pregnancy remain a concern. It has been suggested that young people face particular obstacles in accessing services, leading to a need for specialist provision. This systematic review examined the literature reporting views of service providers and young people. Data were synthesised in order to develop key themes to inform the development of contraceptive services for this population.

Results A total of 59 papers reporting studies carried out within the UK were included. Forty-five of these provided qualitative or mixed method data and 14 reported survey findings. Seven key themes were identified: perceptions of services; accessibility; embarrassment; anonymity and confidentiality; the clinic environment; the consultation; and service organisation.

Conclusions This review suggests that the most significant concern for young people is the preservation of anonymity and confidentiality. There seems to be a need for young people to be given greater assurances about this, with process and environmental changes suggested. The fear of staff being critical or unfriendly also presents a considerable obstacle to some young people. Issues of service accessibility – such as convenience of location and opening hours – are also highlighted, with lifestyle factors and restrictions on where under-18s can go suggested as important aspects. The review suggests that varying preferences among young people with regard to which service to access requires choice to be preserved and, where possible, extended. This requires services to work effectively together to consider provision across a locality.

Key message points

- Further work is required to assure young people regarding the confidentiality of services.
- Services should consider issues of accessibility, environment and processes to encourage uptake among young people.
- Variation in preferences among young people requires choice to be available regarding which service to access.

Introduction

Young people in the UK are experiencing sexual intercourse at an increasingly younger age.[1] However, it has been reported that not all young people use contraceptives at first intercourse or consistently.[2] This limited usage is despite widespread availability of contraceptives across the country, with free and confidential services provided by general practitioners (GPs), family planning clinics (FPCs), local drop-in facilities, school nurses in some areas and specialist services such as Brook Advisory Centres.

While it has been reported that around 80% of women receive contraceptive services from their GP,[3] studies have indicated that teenagers find consulting with their GP difficult.[4] In response to this, the range of sexual health services specifically for young people has increased, driven by government policy aiming at reducing concerning rates of teenage pregnancy and sexually transmitted infections.[5 6] It has been argued that contraceptive services need to be specifically targeted, as young people face particular obstacles in accessing health care.[7] It is suggested that these new specialist services should be planned around patient need, and involve users in service design.[8] New youth-orientated services are increasingly evident such as the 'One-Stop Shop',[9] young people's 'Help Centre'[10] and sexual health clinics based in secondary schools.[11] There has also been an extension of the services provided by community pharmacists, with the advent of emergency oral hormonal contraception (EHC) being available 'over the counter'.

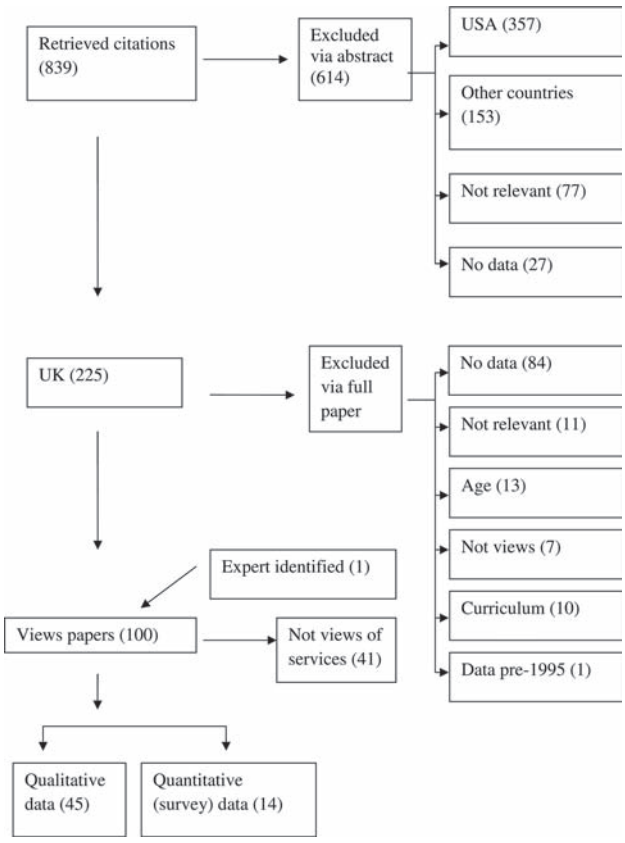

Figure 1 Flowchart illustrating the process of inclusion and exclusion of papers in the study. The numbers in parentheses indicate the number of papers identified in each category.

A recent examination of services for young people[12] linked different types of delivery to varying success rates for reducing teenage pregnancy across the UK. The report highlighted concerns regarding a considerable disparity in provision available in different areas of the country. Papers providing evaluations of new initiatives have suggested that specifically designated youth services can increase clinic attendance rates.[10] However, some studies have reported that this seems to be mainly among young women,[13 14] with limited success in attracting young people from high-risk groups.[15] It has been highlighted that there are challenges associated with user involvement in service planning and delivery; such as the need to ensure representation from a wide variety of backgrounds, and support for their participation.[16] French *et al.*[9] have suggested that more evidence is required on the impact and appropriateness of different service delivery models for young people.

Methods

This study examined research reporting the views of young people and service providers in the UK. The full remit of the work undertaken was an examination of the knowledge and perceptions of contraception among young people, together with provider and user views of services and service delivery. This paper reports the data regarding views on contraceptive services.

The review team drew on National Institute for Health and Clinical Excellence (NICE) search methods[17] to use an approach based on several smaller, more targeted searches to identify evidence, rather than a large, single search. In this method retrieved citations are used to identify useful terms to inform further searches (see Appendix 1 for a sample search strategy). Studies were excluded when they were conducted with people aged 25 years or older. Papers that contained data for both under-25s and over-25s were included if 50% of participants were aged 25 years or younger. There was no cut-off limit for the youngest age of inclusion. The review considered contraceptive services provided in clinical and non-clinical locations, however it excluded views of the school curriculum. The search was restricted by date (1995–2008) and by limiting the search to humans (to avoid animal studies relating to contraception).

Relevant literature was identified via free-text searching of electronic databases (see Appendix 2) and citation searching of included articles (using Web of Science Cited Reference search and Google Scholar). Also, by sifting the reference lists of included articles; sifting the reference lists of relevant systematic reviews; searching of websites for grey literature; and consulting an expert group.

The results were downloaded into Reference Manager for sifting at title and abstract level. Following this sifting, studies for potential inclusion were obtained for full paper examination and data extraction. The process is illustrated in the flowchart in Figure 1. Inclusions and exclusions were checked by a second reviewer, and where consensus could not be reached, by a third reviewer. Data relating to the research question, theoretical approach, data collection, data analysis, population, key findings and study limitations were extracted.

Quality assessment

The qualitative papers were assessed using NICE criteria[17](Box 1).

Box 1 Quality indicators for qualitative studies

1. Is a qualitative approach appropriate?
2. Is the study clear in what is seeks to do?
3. How defensible is the research design?
4. How well was the data collection carried out?
5. Is the role of the researcher clearly described?
6. Is the context clearly described?
7. Were the methods reliable?
8. Is the data analysis sufficiently rigorous?
9. Are the data rich?
10. Is the analysis reliable?
11. Are the findings credible?
12. Are the findings relevant?
13. Are the conclusions adequate?
14. How clear and coherent is the reporting of ethics?

All or most of the criteria fulfilled = high quality
Many of the criteria fulfilled = good quality
Few of the criteria fulfilled = poor quality

While there is currently no NICE framework to assess survey papers, quality indicators for survey papers noted were: sample size; return rates; whether the questionnaire was piloted; the appropriateness of study conclusions; and relevance.

Data analysis

The review question concerned views of services rather than a more standard systematic review, which considers the effectiveness of an intervention and may combine outcomes numerically.[18] In order to analyse the data we drew on the principles of qualitative meta-synthesis,[19] and methods of thematic synthesis.[20] In this approach data from each paper are extracted to establish core themes. These themes are then further analysed and synthesised using a process of comparison and contrast to further develop key concepts. Unlike effectiveness reviews this method does not compare data by measured outcome, and unlike meta-analysis it does not weight findings according to sample size or study design. The method integrates data across all the papers to develop a deeper understanding of views or perceptions.

Results

The searches identified 59 papers that met the inclusion criteria from a database of 839 citations. Forty-five papers reported data from qualitative or mixed method studies and 14 reported data from surveys (Table 1). Using NICE criteria, eight papers were rated as high quality, 26 were rated as good quality and 11 papers were rated as poor quality. Analysis and synthesis of these data suggested a number of themes relating to the delivery of contraceptive services to young people (Box 2).

Perceptions of particular services

Perceptions of FPCs and sexual health clinics and pharmacies were reported in five papers.[10 21–24] Study participants' ages were in the range 14–25 years. The data suggested the importance of the name of a service, with a perception among some young people that 'clinic' implies a place where only girls go[21 23] and that 'family planning' means a service for older couples[23] or where older married women go.[24]

Views of pharmacy services were reported in three papers, with generally positive perceptions expressed. Pharmacy services were described as being helpful,[25] as being easy to visit[26] and being less regulated than GP services or FPCs.[27]

Box 2 Themes in the data

1. Perceptions of particular services
2. Accessibility of services
3. Embarrassment
4. Anonymity and confidentiality
5. The clinic environment
6. The consultation
7. Service organisation

Five papers suggested evidence of some concerns regarding services provided by GPs. A perception that the service lacks confidentiality was reported,[28] particularly among young people of African and Indian ethnicity, although not among non-Indian Asians.[29] Concerns regarding GP services were also voiced in rural communities.[23] Another negative perception of GP services mentioned in one paper[30] is the obstacle of getting past the surgery receptionist in order to make an appointment. In contrast to these negative perceptions, however, a study in a school-aged population[31] indicated that concerns regarding GP surgeries are not universal. The findings from this paper were that views varied, with some young people having concerns about GP services in regard to information reaching their parents, whereas others report preferring a GP service to a school-based service.

Staff perceptions of particular services are reported in four papers.[9 32–34] Mackie *et al*.[32] described staff concerns that using premises that are not health service sites had drawbacks in terms of transporting drugs and a lack of client records on site. Participants in the Pitts *et al*. study[33] echoed young people's concerns that the receptionist in a GP surgery could act as a barrier. Some of the GP participants in one study[34] had negative views regarding the appropriateness of a pharmacy environment for EHC provision. One paper[9] described positive perceptions of satellite and outreach services. In this paper staff highlighted that these services could be important stepping stones for young people into more mainstream services.

Accessibility of services

Eleven papers provided data regarding the importance of services being easy to access. Convenient opening hours, being in a preferred location, and fitting in with a young person's lifestyle are particular elements of accessibility reported.

Opening hours

Bissell and Anderson[25] described women participants as finding pharmacy provision easy to access due to extended opening hours and weekend provision. These elements were echoed in another study,[26] which similarly described greater accessibility in terms of convenient location, flexible opening hours and rapid consultation. Griffiths *et al*.[29] described convenience as a key theme, with timings of sexual health clinics reportedly making them difficult to access. The importance of convenient opening hours was also highlighted in a survey[7] suggesting that young people would prefer services to be open after school (71%, of respondents aged 11–18 years) or on Saturdays (49% of respondents). Older pupils were more likely to find after-school clinics ($p=0.001$) or lunchtime clinics ($p=0.038$) useful than younger ones.

These service user views regarding the importance of accessibility were reflected in papers that reported staff views. Three papers[24 33 35] described staff as identifying

Table 1 Characteristics of the primary papers referred to in this review

Reference	Quality	Data collection method	Sample size	Gender	Age	Ethnicity	Geographical location
Allen (2004)[11]	Poor	Focus groups and interviews	*n*=28 School nurses grades E,F,G,H	NS	NS	NS	Two localities: one urban, one mixed urban/rural
Baraitser *et al.* (2003)[16]	Good	Interviews + staff survey open question data	*n*=46 Young people *n*=22 Staff	M = 4 F = 42	12 <16 years; 19 16–19 years; 15 20–25 years	8 White British, 8 Black Caribbean, 6 Black British, 6 Black African	NS
Barrett & Harper (2000)[72]	Good	Interviews	*n*=24 18 community pharmacists, 6 GPs	M = 21 F = 3	Mid-20s to late-50s	16 Asian origin, 8 White	Three Health Authorities in South Thames region
Bell & Millward (1999)[30]	Good	Interviews	*n*=8 Women who had asked for EC at a GP practice	NS	18–34 years	NS	South West England. Practice located in a city centre and close to a university
Bissell & Anderson (2003)[25]	High	Interviews + focus groups	*n*=35 Pharmacists	M = 14 F = 18	18 years to late-50s	White British, South Asian, Chinese, Black British, British Asian	NS
Bissell *et al.* (2006)[36]	Good	Interviews	*n*=44 Community pharmacists supplying EHC	M = 32 F = 12	Early 20s to late-50s	Ethnic mix of South Asian, White British and Chinese	Manchester, Salford, Trafford, Lambeth, Southwark, Lewisham
Bloxham (1997)[43]	Poor	Case study design Interviews	*n*=25 Staff from community health service, health promotion, youth and community service, and 4 secondary schools	NS	NS	NS	Medium sized town in the North of England
Burack (2000)[59]		Survey	*n*=1045 School students	NS	13–15 years	NS	NS
Chambers *et al.* (2002)[68]		Workshop + survey	*n*=66 Professionals *n*=55 Young people	36% M	12–20 years	NS	Mostly from deprived wards
Coleman & Testa (2008)[58]	Good	Interviews	*n*=50 Young people	NS	16–23 years	Black and minority ethnic	London
Craig & Stanley (2006)[38]	Poor	Multiple (3) case studies. Group discussions + individual interviews	*n*=63 Group discussions. School students and those outside mainstream provision *n*=116 Individual interviews with 'transient' young people, young parents and professionals	NS	12–18 years	NS	'Rural hinterland' areas of seaside towns in the Midlands, North of England and South of England. Described as having relatively high teenage conception rates
Croghan (2006)[57]	Poor	Mixed method. Interviews + survey	*n*=8 Young people	M = 5 F = 3	16–21 years	1 White Irish, 1 mixed race, 1 Afro-Caribbean, 3 Pakistani	NS
Donovan *et al.* (1997)[53]		Survey – part of an evaluation of a novel sex education programme	*n*=4481 Students from 30 schools	51.6% M	15–16 years	NS	NS
Donnelly (2000)[24]	Good	Focus groups	*n*=35 Attendees of youth units. Users and non-users of existing sexual health services	M = 12 F = 23	15–25 years	NS	Northern Ireland. Area of above average rate of teenage pregnancy
Fairhurst *et al.* (2004[44])	Good	Interviews	*n*=44 GP or primary care nurses *n*=22 Women who had received EC supplies	NS	NS	NS	Lothian Scotland

continued

Table 1 continued

Reference	Quality	Data collection method	Sample size	Gender	Age	Ethnicity	Geographical location
Fallon (2003)[35]	Good	Interviews	*n*=5 Nurses in 3 A&E departments	NS	NS	NS	North West England
Folkes *et al.* (2001)[26]	Good	Interviews	*n*=27 Young women, use of EHC varied from never to 9 times	NS	18–29 years	NS	Urban area, South West England
Free *et al.* (2005)[49]	High	Interviews	*n*=30 Young pregnant women or mothers	NS	16–25 years	21 White British, 4 Afro-Caribbean, 2 Black British, 3 White other	London
Free *et al.* (2002)[48]	Good	Interviews	*n*=30 Women recruited from GPs, hostels, youth groups, FPCs, schools	NS	16–25 years	NS	London
French *et al.* (2006)[9]	Poor	Interviews + telephone interviews	*n*=11 Key informants involved in developing the National Strategy for Sexual Health and HIV	NS	NS	NS	NS
French (2002)[67]	High	Interviews and focus groups + clinic observation	*n*=32 Interviews *n*=28 Focus groups with clinic clients, school pupils *n*=18 Observations nurses, doctors, health visitor	M = 28 F = 32	16–21 years	NS	Camden and Islington, London
French *et al.* (2005)[28]	High	Interview + focus groups	Interviews *n*=75 Young people *n*=33 Focus groups with professionals or community representatives *n*=33 young people *n*=11 parents	M = 30 F = 48	13–21 years	Bangladeshi, Indian, Jamaican	London, Manchester, Birmingham
French *et al.* (2007)[14]		Survey	*n*=8879 Young people	50% M	13–21 years	NS	NS
Garside *et al.* (2002)[60]	Poor	Survey + focus groups	18 focus groups of teenagers, 4–9 participants in each group	NS	NS	NS	Devon
Garside *et al.* (2000)[63]		Survey	*n*=235 GPs	NS	NS	NS	NS
Griffiths *et al.* (2008)[29]	Good	Interviews and focus groups	*n*=19 Interviews with minority ethnic individuals *n*=103 Focus group participants	NS	16–21 years	NS	9 sites across England with high residential occupancy and higher than average deprivation scores
Hagley *et al.* (2002)[40]		Survey	*n*=587 Students from 19 schools	F = 214 M = 373	Average age 16 years	NS	NS
Hayter (2005)[45]	Good	Mixed method. Survey + interviews	*n*=20 Clients of sexual health nursing outreach clinics	NS	13–18 years	NS	Doncaster
Higginbottom *et al.* (2006)[41]	High	Interviews, focus groups and telephone interviews	*n*=19 Focus group participants young mothers *n*=50 Interview participants young mothers *n*=6 Interviews with young fathers *n*=10 Interviews with grandmothers *n*=16 Service providers interviewed by telephone	NS	Up to 19 years and in 20s	African-Caribbean origin, multiple ethnicity, Bangladeshi, Pakistani, Yemeni, Somali, Turkish	Bradford, Sheffield, London

continued

Table 1 continued

Reference	Quality	Data collection method	Sample size	Gender	Age	Ethnicity	Geographical location
Hoggart (2006)[64]		Interviews + focus groups	*n* not specified (between 37–47) Focus groups *n*=13 Interviews with 12 young mothers + 1 young person who had a termination *n*=25 Interviews with professionals from different agencies	NS	14–21 years	Mixed ethnicity	NS
Ingram & Salmon (2007)[13]	High	Mixed method. Interviews + attendance data + survey	*n*=18 Clinic attendees	F = 15 M = 3	14–18 years	NS	Areas of social deprivation with high rates of teenage conceptions + suburb of 1 large town + 1 small rural town
Jolley (2001)[70]	Poor	Survey (some free text questions) + interview	*n*=10 Nurses working in a gynaecology unit	NS	NS	NS	Nottingham
Jones *et al.* (1997)[56]	Good	Focus groups	*n*=61 School pupils	NS	14–15 years	NS	Cardiff
Lester & Allan (2006)[22]	Good	Focus groups	*n*=32 Students at 3 schools	M = 16 F = 16	14–15 years	NS	Area of high chlamydia prevalence
Mackereth & Forder (1996)[46]	Poor	Focus groups	*n*=40 Young people	NS	11–16 years	NS	Gateshead
Mackie *et al.* (2002)[32]	Poor	Interviews. 10 in person, 3 telephone interviews	*n*=13 staff 5 representatives of the local health board, 4 from the local FP service, 4 representing pharmaceutical retailers	NS	NS	NS	NS
Mason (2005)[66]	Good	Interviews	*n*=8 5 nurses, 3 counsellors	F	NS	NS	North West England, one major city centre and one in small town service. Described as mixed population with areas of high deprivation and pockets of wealth
McCann *et al.* (2008)[65]	Poor	Survey, interviews, focus groups	*n*=22 Key informants. 4 focus groups, 1 practice nurse, 3 school nurses	NS	NS	NS	Rural area of Northern Ireland with high percentage of young people under 20 years and rising rate of STI
Morrison *et al.* (1997)[10]	Poor	Interviews	*n*=368 Clinic clients and other young people	More F than M	Mean age 17 years	NS	Glasgow. 55% Carstairs Deprivation Category 1–4 and 45% Category 5–7
Nwokolo *et al.* (2009)[7]		Peer designed survey	*n*=744 Students at 6 secondary schools and one PRU	294 M 450 F	11–18 years	NS	NS
Parkes *et al.* (2004)[37]		Survey	*n*=5747 Students at 47 schools	NS	15–16 years	NS	NS
Pearson & Pearson (2003)[23]	Good	Focus groups	*n*=75 Both users and non-users of services	100% M	13–21 years	NS	England. Urban, semiurban and rural locations
Pearson (1995)[39]		Survey	*n*=167	NS	Mean age 17 years	NS	NS
Pitts *et al.* (1996)[33]	Good	Interviews	*n*=19 5 GPs, 5 practice nurses/FP nurses; 4 school nurses; 5 community medical officers	NS	30–55 years	NS	NS

continued

Table 1 continued

Reference	Quality	Data collection method	Sample size	Gender	Age	Ethnicity	Geographical location
Powell (2008)[55]	Good	Survey and focus groups	*n*=57 3 secondary schools and 6 out of school youth settings	M = 37 F = 20	12–19 years	NS	Cardiff, southern area of the city described as encompassing the 16 most deprived districts of the city
Reeves *et al.* (2006)[69]		Survey	*n*=360 3 schools	M = 173	15–16 years	97% White	NS
Ross *et al.* (2007)[42]		Survey	542 community interviewees, 202 clinic patients	49% F	16–25 years	60% White	NS
Salmon & Ingram (2008)[31]	Good	Mixed method. Survey + interviews with service providers/managers and focus groups with young people	*n*=222 10 schools *n*=44 Individuals from 3 schools attended focus groups or interviews, both users and non-users of the service *n*=7 Interviews with 2 staff managers, 2 nurses, 3 youth workers	F = 27 M = 17	Years 7, 8, 10, 11	NS	Bristol, reported as being deprived areas with high incidence of teenage pregnancy
Samangaya *et al.* (2007)[54]		Survey	Young men	100% M	16–28 years	42% Pakistani, 18% Bangladeshi, 13% Indian, 11% Black Caribbean, 9% Black African, 7% mixed race	NS
Schubotz *et al.* (2003)[50]	Good	Interviews	*n*=15	NS	14–25 years	NS	Northern Ireland
Sixsmith *et al.* (2006)[21]	Good	Mixed method. Interviews + survey	*n*=6 Young people from youth clubs, parks, residential streets, school districts, nightclubs/ pub, shopping areas	M = 4 F = 2	14–19 years	NS	Greater Manchester
Stanley (2005)[62]	Good	Interviews	*n*=467 Young people excluded from school, transient resident young people, young people from minority ethnic groups and with special needs *n*=46 Interviews with young parents *n*=40 Interviews with local professionals	NS	12–17 years	NS	3 seaside towns and associated rural hinterlands in the Midlands, North and South of England
Stone & Ingham (2003)[52]		Survey	*n*=747	88.8% F	Median age 17 years, mean age 19 years	95.4% White	NS
Thomas *et al.* (2006)[61]		Survey	*n*=295 Students from 4 schools	48% M	13–14 years	NS	NS
van Teijlingen *et al.* (2007)[47]	Good	Focus groups	*n*=32	50% M	12–13 years & 16/17 years	NS	Aberdeen and Edinburgh
Wellings *et al.* (2007)[2]		Survey	*n*=169 GPs *n*=148 Nurse practitioners *n*=4 NS	74% F	74% under 50 years	NS	31% working in a socially disadvantaged area
Ziebland & Maxwell (1998)[27]	Good	Survey + interviews	*n*=53 Women attending for EC	NS	Mean age 21 years	NS	Oxford and London

continued

Table 1 continued

Reference	Quality	Data collection method	Sample size	Gender	Age	Ethnicity	Geographical location
Ziebland *et al.* (1998)[34]	Good	Telephone interviews	n=76 GPs, M = 55, F = 21	NS	NS	NS	3 health authorities
Ziebland *et al.* (2005)[51]	High	Interviews	*n*=22 Women who had received a supply of EHC	NS	NS	NS	NS

A&E, accident & emergency; EC, emergency contraception; EHC, emergency hormonal contraception; F, female; FP, family planning: FPC, family planning clinic; GP, general practitioner; M, male; NS, not stated; PRU, pupil referral unit; STI, sexually transmitted infections.

easy access as important elements of a service. Three papers[25 34 36] reported that staff as well as young people recognise that accessibility of pharmacy services is a benefit.

Location of service

Seven studies provided data on views of service location. Ingram and Salmon[13] concluded that services should be in close proximity to the young person's home location. Further work by the same authors[31] reported that school-aged participants emphasised the convenient location and ease of access of a school-based service. A survey study[37] indicated that the proximity of a clinic was linked to greater use. In contrast to these papers, however, one study[16] highlighted that the perception that young people prefer services near to their home may not always be the case. In this study of FPCs, new clients often used services near to a friend's house or to their school rather than their home, and tended to continue to use that clinic. French *et al.*[28] similarly reported that closeness to home is not always preferred. They described varied views regarding location, with some young people preferring clinics outside their home locality to avoid being seen by people they know. Craig and Stanley[38] highlighted that while venues should be accessible; they need to be convenient so that a young person can travel there without being reliant on a parent for transport.

Two studies described the need for services to be located in venues that fitted in with a young person's lifestyle. In one study[28] some young people mentioned the benefits of services being located in town centres or locally to increase accessibility. Participants suggested outreach into venues that young people accessed such as hairdressers, nightclubs, snooker halls, fast food outlets, youth services, events, sports shops, music shops and churches. Another paper[21] also described the importance of accessibility in terms of lifestyle and lack of age restrictions. In this study, young people described the lack of condom machines in female toilets, and inaccessibility of machines to young people unable to enter pubs or nightclubs. The authors suggested that machines should be located where 14–16-year-olds and 17–19-year-olds spend their free time.

Four papers highlighted that young people have varying preferences regarding service location.[38–41] In a survey of pregnant young women's use of services, it is reported that 60% had opted to visit a GP clinic and 30% a FPC regarding contraception.[39] One paper highlighted differences between young men and women with regard to service preferences.[40] Studies in a rural area[38] and among minority ethnic young people[41] described the perception among some participants of having a lack of choice regarding which services they could access.

Appointment systems

Studies reported varying views with regard to whether an appointment system or a drop-in service provides greater accessibility for young people. Ingram and Salmon[13] suggested a drop-in service is more convenient. A survey of 11–18-year-olds[7] reported that 62% would prefer a walk-in service. However, while these respondents valued the drop-in aspect, the study highlighted that 24% would not be prepared to wait longer than 15 minutes to be seen. Another survey[42] suggested that 93% of young people (aged 16–24 years) would prefer to make appointments by telephone rather than in person.

Papers[25 36] described staff perceptions that not needing to make an appointment at pharmacies for EHC was a key benefit for young people. Also, that a drop-in system in sexual health clinics is perceived as preferable by staff.[43] Baraitser *et al.*[16] reported that waiting times can be long in a clinic that does not have an appointment system, although staff perceived that the clinic was accessible despite this fact. Pitts *et al.*[3] found that GPs perceive that having an appointment system is an advantage in terms of being available.

Embarrassment

A recurrent theme within the data concerned the perception of embarrassment surrounding contraception and contraceptive services. Sixteen studies[16 21 22 28 31 44–54] described young people's perceptions of embarrassment. One[44] reported the reduction of embarrassment when women (GP patients) were given supplies of EHC, rather than having to seek a supply from a doctor when needed. Another[45] highlighted staff concerns that supplying contraception should not make young clients feel embarrassed. A study by Sixsmith *et al.*[21] described the embarrassment felt by young people when obtaining

condoms. Baraitser *et al.*[16] reported the embarrassment felt by 16–24-year-olds when giving personal details at a clinic reception desk. Salmon and Ingram[31] found that half the participants in their study reported embarrassment at using a school-based service. Other studies of school-aged young people[22 46-47] similarly emphasised the embarrassment felt when discussing contraceptive services. This embarrassment was described in papers reporting perceptions of young people up to 25 years of age[28 48–50] including clients of a FPC.[51]

Stone and Ingham[52] reported that 20–24% of women had felt embarrassed or scared to use a contraceptive service. Other survey studies indicated that 63% of females and 46% of males (age 15–16 years) would feel embarrassed by consulting their GP about contraception,[53] and 66% of black and minority ethnic males would be prevented from attending a sexual health service because they experienced embarrassment.[54]

Anonymity and confidentiality

Nine papers reported the importance of a young person's identity remaining unknown when accessing services.[21–25 28 29 38 55] The fear of being seen, being uncomfortable in case they were recognised by someone, and fear of their anonymity being compromised was described. In order to address these concerns there was the suggestion from study participants that they would prefer the use of numbers rather than names in a clinic situation,[24 28] services where it is not possible to identify the reason for the visit,[28] and waiting rooms separated by gender.[28]

The Powell[55] study reported that telephone help lines, magazines, chat rooms or television were valued sources of information and advice due to their anonymity. Papers that described staff perceptions also echoed the importance of anonymity to young people.[27 32 33 36]

Confidentiality was often linked to anonymity by young people. Eleven studies identified the importance of perceived confidentiality.[13 23 24 28 29 31 38 39 45 52 56–60] Young people described professionals having their name and address, or a personal file on them to be a concern, with some worried that staff would breach confidentiality either deliberately or by omission. One study[52] reported that under-16-year-old women were the most likely to report concerns over confidentiality as a reason for delaying service use. Another study[45] reported concerns at discussing sexual health matters at a youth club due to the noisy environment and proximity of other people. Another[57] described the concerns of young Pakistani women regarding confidentiality from health professionals of the same background, and a second[29] also reported particular concerns regarding confidentiality of a GP surgery among particular ethnic groups (African and Indian). Confidentiality concerns were most often reported in relation to GP surgeries[23 28 29 56 59 61] although not exclusively so.[31]

Issues regarding confidentiality were raised in particular with regard to young people living in rural areas, where it was a small community and staff at clinics, surgeries or pharmacies may know the young person or their friends, or be friends with the parents of a young person.[38 62] There were also fears in these localities that clinic reception staff with access to records would breach confidentiality.

A staff perspective on confidentiality is provided by Garside *et al.*[63] who reported that 76% of GPs preferred parents to be informed when a young person consulted them about contraception. Other papers reporting data from staff highlighted that facilities not linked to schools may be perceived as having greater confidentiality[43] and that schools varied with regard to their policies on confidentiality.[64] One study described staff reports of women deliberately travelling to an unfamiliar neighbourhood to seek EHC in order to allay fears of lack of confidentiality at their local pharmacy[25] together with staff concerns regarding a lack of privacy in the waiting area.[32] In contrast, McCann *et al.* reported positive perceptions among school nurses and GP practice nurses that procedures regarding confidentiality were well managed and consistent.[65]

Anxiety underpins much of the data concerning young people's views regarding confidentiality and anonymity. Two papers specifically highlighted the anxiety felt by young people when accessing a service for the first time, and one paper reported anxiety in regard to EHC supplies. Baraitser *et al.*[16] described the sense of relief and accomplishment felt by a young person following an appointment, and Lester and Allan[22] highlighted the lack of confidence felt by young people attending a clinic. Fairhurst *et al.*[44] described the easing of anxiety felt by young women who were provided with EHC in advance.

The clinic environment

Views regarding the clinic environment were outlined in six papers.[11 13 16 23 31 43] Baraitser e*t al.*[16] reported that clients made more comments on the waiting room than any other topic in their evaluation of a family planning service. Young people disliked a clinical appearance, preferring instead a more homely and cosy space resembling a communal living space in a private home. Also, participants requested improved entertainment in the waiting area, with waiting being stressful and silent reportedly leading some people to leave before they were seen. Other papers described a welcoming and friendly,[13] comfortable and relaxed,[23 31] informal[43] and congenial environment[11] as being important to young people.

The consultation

Respectful and non-judgemental staff

Twelve papers made reference to the value placed by young people on staff being respectful and non-judgemental.[13 16 23 24 26 28 38 41 48 56 66 67] Baraitser *et al.*[16] reported that young people were more likely to

comment on the attitudes of staff than to make an assessment of their knowledge or technical competence. In the Folkes *et al.* study[26] some participants had experience of negative encounters with professionals when they were seeking EHC, when they felt that they were being judged. The fear of being judged was described by young people in eight studies, with Mason[66] concluding that staff needed to be more understanding of why girls wanted to have sex, and the suggestion from the Pearson and Pearson[23] study that young people perceived that staff closer in age to themselves may have less disapproving beliefs. The Free *et al.*[48] paper similarly described the perception of young people accessing EHC that they were being "told off", and that more youthful staff would be less disapproving.

Chambers *et al.*[68] sought the views of young people (aged 12–20 years) and health professionals, and found that both groups suggested that staff should be educated to be more sensitive in relating to young people. In other papers, young people reported that they were aware of the potential disapproval of adults towards them becoming sexually active, with concerns regarding what staff and other adults would think of them when accessing services.[21 22 28] Concerns to preserve their image and social standing, and not lose their reputation or be stigmatised were also highlighted.[23 38 49] Participants reported in one study[13] that they would like to be treated as an adult and not made to feel ashamed.

Staff perceptions regarding their own and other staff attitudes towards young people were reported in four papers. One[35] described staff views in an accident and emergency department that some medical staff could demonstrate a lack of sympathy for young people requesting EHC. In this study the author described some ambivalence in staff attitudes between being sympathetic and being judgemental towards adolescents. Pitts *et al.*[33] also reported ambivalent emotions and language as regards teenage sexuality, suggesting some unease among sexual health service staff participants regarding the onset of sexual activity in young people. The authors concluded that there was a potential tension between the underlying attitude to young people's sexual behaviour and the need to help. Variation in attitudes among family planning service staff were described in one paper,[16] and another[43] described a perception among staff that accepting a young person's sexual status was key for professionals working in the area.

Building a relationship

Reeves *et al.*[69] found that having staff who were "easy to talk to" rated among the most important aspects of a service for young people. Lester and Allan[22] described young people as preferring someone who "got straight to the point". Pearson and Pearson[23] also suggested that brevity was important, with male study participants valuing minimal contact time with no personal questioning or counselling. Other positive aspects described are a professional, friendly, matter of fact approach and someone who shows understanding whom a young person could build a relationship with.[49 50 55] French *et al.*[28] explored views of ethnic minority young people, and described diversity regarding whether the ethnicity, age or gender of a staff member was considered important.

Staff views regarding key aspects of the consultation echo the importance of establishing a relationship with the young person.[33 35 43] Bloxham[43] described staff perceptions that familiarity with a young person was influential, and reported the view that youth and community workers establish a different kind of relationship with young people from other professionals such as teachers.

Service organisation

Five papers reported staff concerns regarding limited resources for contraceptive services.[9 36 63 64] Staff in the French *et al.* study[9] voiced concerns that commissioning priorities around sexual health including both contraception and GUM were patchy. Hoggart[64] reported that staff in particular perceived the restrictions of geographically limited initiatives.

Papers[28 31 41 64 70] described concerns regarding the success of working between different agencies delivering services. Issues raised were: the need for improved connection between agencies; the importance of having an integrated strategy;[64] the need for leadership;[70] and the need for collaborative networks with clear signposting and consistent messages between services.[28] There was also evidence of concerns regarding role limitations or confusion among some staff.[41 70] Salmon and Ingram[31] reported that while joint working between agencies had been a particularly successful aspect of the school service innovation they evaluated, that there was still a need for links between the service and other community agencies to be improved.

Staff training

Lack of training for staff was perceived as a barrier to high-quality service provision by participants in two studies.[64 70] A lack of knowledge or confusion regarding all available methods was described by pharmacists[71 72] and other health professionals,[73] although early studies of provision may now have less relevance. A lack of training was reported among teachers[43] and among staff trained in GUM, whose role had been extended to provide wider contraceptive services.[9]

Discussion

This study examined the literature reporting views of young people and staff regarding contraceptive service delivery. It highlights seven key areas to consider in design and implementation of services for young people.

This review emphasises the importance of accessibility of services in terms of a convenient location and opening hours. The papers reported a slightly greater percentage of young people surveyed opting for a

'drop-in'-type service, although concerns regarding long waits were evident, and this choice was far from universal. In terms of location, the need to further consider lifestyle factors and restrictions on where under-18s can go seemed significant in decisions regarding where to place contraceptive vending machines.

An examination of perceptions of services indicates generally positive views regarding pharmacy provision among young people, in contrast to some staff concerns regarding the appropriateness of this location. The name of a service may be a key consideration, with the suggestion that 'family planning' and 'clinic' can be perceived as lacking relevance for some young people.

This review suggests that the most significant concern for young people is the preservation of anonymity and confidentiality when accessing services. There seems a need for young people to be given greater reassurances about this. Aspects of services that could be considered further are the use of numbers rather than names in public areas, and ensuring the reason for a visit remains confidential when making an appointment and on arrival. The appearance of the clinic was reported as an influential factor, with the waiting room playing an important role in whether a young person is prepared to remain until they can be seen. The use of gender-specific waiting areas and video entertainment was suggested as potentially enhancing the environment.

Another aspect of service delivery where young people seem to require further reassurances relates to the attitude of staff and content of the consultation. It was reported that young people valued staff members who have a respectful and non-judgemental attitude towards them, with the fear of staff being critical or unfriendly seen as presenting a considerable obstacle to some young people. This highlights the importance of skilled staff, a factor also emphasised in a recent review of reviews[73] identifying facilitators of effective sex and relationship interventions.

Young people's embarrassment at accessing contraceptive provision seems the most significant barrier for services to overcome. Embarrassment also underpins the fears regarding breaches of confidentiality and concerns regarding preserving anonymity. Young people are experiencing sexual intercourse earlier[1] and younger age groups are reportedly where intervention is most effectively targeted,[74] yet this is the group that is most concerned about confidentiality.[52] There seems a need for the design and delivery of services to have a key focus on reducing embarrassment, by paying attention to and publicising systems for maintaining confidentiality and anonymity, and also by taking steps to make young people more aware of the non-judgemental stance of staff.

This review highlights the diversity in preferences among young people regarding which service/s they wish to access and where and how they should operate. This suggests that while new initiatives may be welcomed, the preservation or extension of choice remains paramount. The divergent views regarding general practice consultations have been described, with some young people expressing significant concerns regarding confidentiality, whereas for others their GP has been the service of choice. Some young people wish to access a service near to their home, but preservation of anonymity leads others to choose services away from their home area. Similarly, appointment-free options may be preferred by some, but not others.

While the review was able to identify a large body of UK evidence, few of the included papers used more than a single source of qualitative data. Although there is considerable debate regarding quality assessment of qualitative studies, the use of and comparison of data from multiple methods (triangulation) is often considered to add strength/depth to the findings and would enhance the evidence base. Papers reporting mixed method data often missed the opportunity to compare and contrast findings, tending to focus on the quantitative data and adding only a small number of examples of quotations. The survey studies tended to use untested instruments, with few details reported regarding their development. The use of a standard survey tool across services would be valuable to enable direct comparisons to be made.

The examination of published evidence inevitably captures past practice, and this review included studies published over the last 15 years. Future reviews will be able to assess the impact of guidelines such as the 'You're Welcome' criteria[75] and changes to professional practice. This review was limited by considering solely UK evidence. A review comparing practice between countries may offer additional insights.

Conclusions

The findings of this review support and provide additional evidence to underpin the 'You're Welcome' quality criteria issued by the Department of Health.[74] This best practice guidance similarly highlights accessibility, confidentiality, the environment and trained staff working together as features of an effective service. The findings reinforce the need for services to examine their approach to confidentiality, and consider any measures that can be taken to increase anonymity.

While this review sought to examine perceptions of contraceptive services rather than assess the effectiveness of delivery, the views of users are significant in identifying where practice may be enhanced. The work suggests that a key consideration within each local area should be the availability of choice in where and how to obtain contraception. This requires services to work effectively together to consider provision across a locality. Also, in efforts to evaluate services, the variability among young people regarding the type and location of service that they prefer to access should be borne in mind. While new service initiatives for young people are to be welcomed, it seems that there is no 'one size fits all' option.

Funding This review was funded by the National Institute for Health and Clinical Excellence (NICE) for the purposes of informing public health guidance. The interpretation, analysis and views expressed are those of the authors and not necessarily those of NICE.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

References

1 **Kane R**, Macdowall W, Wellings K. Providing information for young people in sexual health clinics: getting it right. *J Fam Plann Reprod Health Care* 2003;**29**:141–145.
2 **Wellings K**, Nanchahal K, Macdowall W, *et al*. Sexual behaviour in Britain: early heterosexual experience. *Lancet* 2001;**358**:1843–1850.
3 **Department of Health.** *NHS Contraceptive Services, England 1999–2000. Statistical Bulletin 2000/27*. London, UK: Government Statistical Service, 2000.
4 **Kari J**, Donovan C, Li J, *et al*. Adolescents' attitudes to general practice in north London. *Br J Gen Pract* 1997;**47**:109–110.
5 **UK Government Social Exclusion Unit.** *Teenage Pregnancy*. London, UK: HMSO, 1999.
6 **Department of Health (DH).** *Choosing Health*. London, UK: DH, 2004.
7 **Nwokolo N**, McOwan A, Hennebry G, *et al*. Young people's views on provision of sexual health services. *Sex Transm Infect* 2002;**78**:342–345.
8 **Department of Health (DH).** *The National Strategy for Sexual Health and HIV*. London, UK: DH, 2001.
9 **French RS**, Coope CM, Graham A, *et al.*; One-Stop Shop Evaluation Team. One stop shop versus collaborative integration: what is the best way of delivering sexual health services? *Sex Transm Infect* 2006;**82**:202–206.
10 **Morrison A**, Mackie CM, Elliott L, *et al*. The Sexual Health Help Centre: a service for young people. *J Public Health Med* 1997;**19**:457–463.
11 **Allen B**. Drop-in clinics in secondary schools; the perceptions and experiences of school nurses. *Educ Health* 2004; **22**:39–43.
12 **Department for Education and Skills (DfES).** *Teenage Pregnancy Next Steps: Guidance for Local Authorities and Primary Care Trusts on Effective Delivery of Local Strategies*. London, UK: DfES, 2006.
13 **Ingram J**, Salmon D. 'No worries!' Young people's experiences of nurse-led drop-in sexual health services in South West England. *J Res Nurse* 2007;**12**:305–316.
14 **French RS**, Mercer CH, Kane R, *et al*. What impact has England's Teenage Pregnancy Strategy had on young people's knowledge of and access to contraceptive services? *J Adolesc Health* 2007;**41**:594–601.
15 **Fletcher A**, Harden A, Brunton G, *et al*. Interventions addressing the social determinants of teenage pregnancy. *Health Educ* 2008;**108**:29–39.
16 **Baraitser P**, Blake G, Brown KC, *et al*. Barriers to the involvement of clients in family planning service development: lessons learnt from experience. *J Fam Plann Reprod Health Care* 2003;**29**:199–203.
17 **National Institute for Health and Clinical Excellence (NICE).** *The Guidelines Manual*. London, UK: NICE, 2009.
18 **Bruce J**, Mollison J. Reviewing the literature: adopting a systematic approach. *J Fam Plann Reprod Health Care* 2004;**30**:13–16.
19 **Stern PN**, Harris CC. Women's health and the self-care paradox: a model to guide self-care readiness. *Health Care Women Int* 1985;**6**:151–163.
20 **Thomas J**, Harden A, Oakley A, *et al*. Integrating qualitative research with trials in systematic reviews. *BMJ* 2004;**328**:1010–1012.
21 **Sixsmith J**, Griffiths J, Hughes J, *et al*. Accessibility of condoms to young people in Manchester, UK. *J Fam Plann Reprod Health Care* 2006;**32**:219–225.
22 **Lester C**, Allan A. Teenage sexual health needs: asking the consumer. *Health Educ* 2006;**106**:315–328.
23 **Pearson S**. Promoting sexual health services to young men: findings from focus group discussions. *J Fam Plann Reprod Health Care* 2003;**29**:194–198.
24 **Donnelly C**. Sexual health services: a study of young people's perceptions in Northern Ireland. *Health Educ J* 2000;**5**:288–296.
25 **Bissell P**, Anderson C. Supplying emergency contraception via community pharmacies in the UK: reflections on the experiences of users and providers. *Soc Sci Med* 2003;**57**:2367–2378.
26 **Folkes L**, Graham A, Weiss M. A qualitative study of the views of women aged 18–29 on over-the-counter availability of hormonal emergency contraception. *J Fam Plann Reprod Health Care* 2001;**27**:189–192.
27 **Ziebland S**, Maxwell K. Not a 'proper' solution? The gap between professional guidelines and users' views about the safety of using emergency contraception. *J Health Serv Res Policy* 1998;**3**:12–19.
28 **French R**, Joyce L, Fenton K, *et al*. *Exploring the Attitudes and Behaviours of Bangladeshi, Indian and Jamaican Young People in Relation to Reproductive and Sexual Health*. London, UK: Centre for Sexually Transmitted Infections/British Market Research Bureau, 2005.
29 **Griffiths C**, Gerressu M, French RS; One-Stop Shop Evaluation Team. Are one-stop shops acceptable? Community perspectives on one-stop shop models of sexual health service provision in the UK. *Sex Transm Infect* 2008;**84**:395–399.
30 **Bell T**, Millward J. Women's experiences of obtaining emergency contraception: a phenomenological study. *J Clin Nurs* 1999;**8**:601–609.
31 **Salmon D**, Ingram J. *An Evaluation of Brook Sexual Health Outreach in School. Final Report*. Bristol, UK: Centre for Public Health Research, University of the West of England, 2008.
32 **Mackie CM**, Elliot L, Thomson DA, *et al*. Public and private collaboration in establishing a young person's sexual health clinic in a commercial setting. *J Fam Plann Reprod Health Care* 2002;**28**:201–203.
33 **Pitts M**, Burtney E, Dobraszczyc U. There is no shame in it any more: how providers of sexual health advice view young people's sexuality. *Health Educ Res* 1996;**11**:1–9.
34 **Ziebland S**, Graham A, McPherson A. Concerns and cautions about prescribing and deregulating emergency contraception: a qualitative study of GPs using telephone interviews. *Fam Pract* 1998;**15**:449–456.
35 **Fallon D**. Adolescents accessing emergency contraception in the A&E department - a feminist analysis of the nursing experience. *Accid Emerg Nurs* 2003;**11**:75–81.
36 **Bissell P**, Savage I, Anderson C. A qualitative study of pharmacists' perspectives on the supply of emergency hormonal contraception via patient group direction in the UK. *Contraception* 2006;**73**:265–270.

37 **Parkes A**, Wight D, Henderson M. Teenagers' use of sexual health services: perceived need, knowledge and ability to access. *J Fam Plann Reprod Health Care* 2004;**30**:217–224.
38 **Craig G**, Stanley N. Visibility, immobility and stigma: young people's use of sexual health services in rural areas. *Child Soc* 2006;**20**:171–182.
39 **Pearson V**. Family planning services in Devon, UK: awareness, experience and attitudes of pregnant teenagers. *Br J Fam Plann* 1995;**21**:45–49.
40 **Hagley M**, Pearson H, Carne C. Sexual Health Advice Centre. *Int J Adolesc Med Health* 2002;**14**:125–130.
41 **Higginbottom GM**, Mathers N, Marsh P, *et al*. Young people of minority ethnic origin in England and early parenthood: views from young parents and service providers. *Soc Sci Med* 2006;**63**:858–870.
42 **Ross JD**, Copas A, Stephenson J, *et al*. Optimizing information technology to improve sexual health-care delivery: public and patient preferences. *Int J STD AIDS* 2007;**18**:440–445.
43 **Bloxham S**. The contribution of interagency collaboration to the promotion of young people's sexual health. *Health Educ Res* 1997;**12**:91–101.
44 **Fairhurst K**, Ziebland S, Wyke S, *et al*. Emergency contraception: why can't you give it away? Qualitative findings from an evaluation of advance provision of emergency contraception. *Contraception* 2004;**70**:25–29.
45 **Hayter M**. The social construction of 'reproductive vulnerability' in family planning clinics. *J Adv Nurs* 2005;**51**:46–54.
46 **Mackereth C**, Forder J. Young people 1: assessing the sexual health needs of young people. *Health Visit* 1996;**6**:144–146.
47 **van Teijlingen E**, Reid J, Shucksmith J, *et al*. Embarrassment as a key emotion in young people talking about sexual health. *Sociol Res Online* 2007;**12**:2.
48 **Free C**, Lee RM, Ogden J. Young women's accounts of factors influencing their use and non-use of emergency contraception: in-depth interview study. *BMJ* 2002;**325**:1393.
49 **Free C**, Ogden J, Lee R. Young women's contraception use as a contextual and dynamic behaviour: a qualitative study. *Psychol Health* 2005;**20**:673–690.
50 **Schubotz D**, Simpson A, Rolston B. *Telling It Like It Is: Young People's Experiences of Relationships and Sex in Northern Ireland*. London, UK: Family Planning Association, 2003.
51 **Ziebland S**, Wyke S, Seaman P, *et al*. What happened when Scottish women were given advance supplies of emergency contraception? A survey and qualitative study of women's views and experiences. *Soc Sci Med* 2005;**60**:1767–1779.
52 **Stone N**, Ingham R. When and why do young people in the United Kingdom first use sexual health services? *Perspect Sex Reprod Health* 2003;**35**:114–120.
53 **Donovan C**, Mellanby AR, Jacobson LD, *et al*. Teenagers' views on the general practice consultation and provision of contraception. The Adolescent Working Group. *Br J Gen Pract* 1997;**47**:715–718.
54 **Samangaya M**. Access to sexual health services for young BME men. *Nurs Times* 2007;**103**:32–33.
55 **Powell E**. Young people's use of friends and family for sex and relationships information and advice. *Sex Educ* 2008;**3**:289–302.
56 **Jones S**, Hopkins S, Lester C. Teenage sexual health through the eyes of the teenager. A study using focus groups. *Ambulatory Child Health* 1997;**3**:3–11.
57 **Croghan E**. Sexual health: is it different for young ethnic minority people? *Br J School Nurs* 2006;**1**:52–57.
58 **Coleman L**, Testa A. Sexual health beliefs, attitudes and perceptions among black and minority ethnic youths. *Educ Health* 2008;**26**:32–36.
59 **Burack R**. Young teenagers' attitudes towards general practitioners and their provision of sexual health care. *Br J Gen Pract* 2000;**50**:550–554.
60 **Garside R**, Ayres R, Owen M, *et al*. Anonymity and confidentiality: rural teenagers' concerns when accessing sexual health services. *J Fam Plann Reprod Health Care* 2002;**28**:23–26.
61 **Thomas N**, Murray E, Rogstad KE. Confidentiality is essential if young people are to access sexual health services. *Int J STD AIDS* 2006;**17**:525–529.
62 **Stanley N**. Thrills and spills: young people's sexual behaviour and attitudes in seaside and rural areas. *Health Risk Soc* 2005;**7**:337–348.
63 **Garside R**, Ayres R, Owen MR, *et al*. General practitioners' attitudes to sexual activity in under-sixteens. *J R Soc Med* 2000;**93**:563–564.
64 **Hoggart L**. *Young Women, Sex and Choices: A Study of Young Motherhood in Haringey*. London, UK: Haringey PCT/ Middlesex University, 2006.
65 **McCann L**, Donnelly L, Quinn P, *et al*. Sexual health services for young people in a rural area of Northern Ireland: a study of the key issues for those who provide them. *Health Educ J* 2008;**67**:276–284.
66 **Mason L**. 'They haven't a clue!' A qualitative study of staff perceptions of 11–14-year-old female clinic attenders. *Prim Health Care Res Dev* 2005;**6**:199–207.
67 **French RS**. The experience of young people with contraceptive consultations and health care workers. *Int J Adolesc Med Health* 2002;**14**:131–138.
68 **Chambers R**, Boath E, Chambers S. Young people's and professionals' views about ways to reduce teenage pregnancy rates: to agree or not agree. *J Fam Plann Reprod Health Care* 2002;**28**:85–90.
69 **Reeves C**, Whitaker R, Parsonage R, *et al*. Sexual health services and education: young people's experiences and preferences. *Health Educ J* 2006;**65**:368–379.
70 **Jolley S**. Promoting teenage sexual health: an investigation into the knowledge, activities and perceptions of gynaecology nurses. *J Adv Nurs* 2001;**36**:246–255.
71 **Seston EM**, Holden K, Cantrill J. Emergency hormonal contraception: the community pharmacy perspective. *J Fam Plann Reprod Health Care* 2001;**27**:203–208.
72 **Barrett G**, Harper R. Health professional's attitudes to the deregulation of emergency contraception (or the problem of female sexuality). *Sociol Health Illness* 2000;**22**:197–121.
73 **Wellings K**, Zhihong Z, Krental A, *et al*. Attitudes towards long-acting reversible methods of contraception in general practice in the UK. *Contraception* 2007;**76**:208–214.
74 **Poobalan A**, Pitchforth E, Imamura M, *et al*. Characteristics of effective interventions in improving young people's sexual health: a review of reviews. *Sex Educ* 2009;**9**:319–336.
75 **Department of Health (DH)**. *You're Welcome Quality Criteria*. London, UK: DH, 2007.

Appendix 1 Sample search strategy from MEDLINE

1	*adolescent/
2	teen*.ti,ab.
3	adolescen*.ti,ab.
4	underage.ti,ab.
5	youth*.ti,ab.
6	(Young adj2 (person or people or adult*)).ti,ab.
7	(School adj2 (child* or student* or age)).ti,ab.
8	minor*.ti,ab.
9	student*.ti,ab.
10	(under adj2 (eighteen or '18')).ti,ab.
11	(under adj2 (twenty five or '25')).ti,ab.
12	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11
13	*contraception/
14	*family planning services/
15	*birth control/
16	*contraceptive behavior/
17	(family adj2 planning).ti,ab.
18	(birth adj2 control).ti,ab.
19	sexual health service*.ti,ab.
20	sexual health clinic*.ti,ab.
21	(Contracepti* and (pharmacy or pharmacist* or community or service* or access* or provision or support* or clinic* or availab* or emergency or delivery or outreach or advice or information or intention*)).ti,ab.
22	13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21
23	exp Pregnancy, Unwanted/
24	exp Pregnancy, Unplanned/
25	(Pregnan* adj2 (unwanted or unplanned or unintent* or accident*)).ti,ab.
26	conception*.ti,ab.
27	(Prevent* adj2 pregnancy).ti,ab.
28	23 or 24 or 25 or 26 or 27
29	22 or 28
30	12 and 29
31	limit 30 to (humans and yr='1995-2008')

Appendix 2 Databases searched during the preparation of the review

MEDLINE via OVID SP
Embase via OVID SP
CINAHL via OVID SP
British Nursing Index via OVID SP
PsycINFO via OVID SP
ASSIA via CSA
Cochrane–CDSR via Wiley
Cochrane–DARE via Wiley
Cochrane–Central via Wiley
Cochrane–HTA via Wiley
Social Care Online
Science and Social Science Citation Indices via Web of Knowledge
EconLit via OVID SP
Cochrane–NHS EED via Wiley