# Early fatherhood: a mapping of the evidence base relating to pregnancy prevention and parenting support

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#### **Abstract**

Teenage pregnancy prevention programmes targeted at young women have received considerable attention from researchers and programme developers. However, to date, relatively limited information is available on preventing teenage fatherhood or improving outcomes for young fathers. A notable gap is concerned with understanding the forms of sexual health programmes that are most effective from the perspective of young men. We conducted a systematic mapping to identify studies involving young men aimed at preventing teenage pregnancy, improving outcomes for teenage fathers or exploring the perspectives of young men around pregnancy and fatherhood. We searched a wide range of electronic databases from January 1996 to August 2008. Three quantitative and 15 qualitative studies were identified, of which nine were UK based. Key themes related to the inappropriateness of current sexual health promotion to respond to the needs of young men. While young men often possessed very similar ideals to young women, existing programmes were problematic when they negatively stereotyped young men and ineffectively addressed models of masculinity or the difficulties young men may have forming meaningful relationships. Further investigations are required on programme development for young men, particularly on sexual health promotion interventions for 'looked-after' young men and those from unstable childhoods.

#### Introduction

High rates of teenage pregnancy and conceptions represent an area of social concern within some western countries, notably the UK and United States [1]. In 2005, there were 39 804 under 18 conceptions and 7473 under 16 conceptions in England, of which 46.8 and 57.5%, respectively, resulted in abortions [2]. Available figures for fathers suggest that a quarter of the fathers are aged under 20 [3]. The UK Department of Health in its white paper Choosing Health: making healthy choices easier [4] has committed to support the implementation of the Teenage Pregnancy Strategy, in particular through action in neighbourhoods with high teenage conception rates and putting in place initiatives to support teenage parents. To date, evaluations of this strategy have shown only a limited effect on teenage pregnancy rates although this has been greatest in the most socially deprived areas [5].

Evidence from systematic reviews [6, 7] has identified a number of interventions that may decrease unwanted teenage pregnancies. These include school-based sex education (particularly linked to contraceptive services), community-based education, contraceptive provision and early childhood and youth development programmes focusing on education, personal and vocational development and family outreach involving teenagers' parents. However, sexual health promotion targeted at

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young men remains relatively underdeveloped, particularly in relation to the prevention of teenage pregnancies and the promotion of positive parenting and sexual relationships [8].

This mapping of the literature is part of a project commissioned by the UK National Institute for Health and Clinical Excellence (NICE) to identify current evidence around the prevention of teenage pregnancy and to highlight areas for further research and development. It focuses on four main questions: (i) What research has been conducted that relates to the role of young men/fathers in the prevention of teenage pregnancy, (ii) What research has been conducted that relates to interventions to improve outcomes for young fathers?, (iii) What are the perspectives of young men on improving outcomes for teenage fathers and developing interventions to prevent teenage pregnancy? and (iv) What are the recommendations for future research and development of interventions?

#### Methods

As our aim was to scope the literature in this area, we conducted a mapping rather than a systematic review. Unlike systematic reviews, which provide an in-depth analysis and critically appraise research, a mapping can demonstrate the types of studies that exist, answer questions about what evidence is available and identify gaps in research [9]. Our original mapping included three topic areas (young men/young fathers, the role of peers and the role of nurses and General Practitioners (GPs)), but in this paper, the focus is on the role of young men/young fathers.

#### **Inclusion criteria**

The mapping included all types of primary studies, both quantitative and qualitative, that addressed the role of young men/young fathers in the prevention of unwanted teenage pregnancy or explored ways to support young fathers and improve their health, social, educational and employment outcomes. This included studies that evaluated interventions involving young men/young fathers or studies exploring their

attitudes and beliefs in relation to teenage pregnancy. We included studies considered to have some applicability to UK settings and excluded those focusing on interventions specifically for the prevention of HIV and/or sexually transmitted infections.

## Search strategy for identification of studies

We searched for English language, published and unpublished, literature using the following electronic databases: PubMed, CINAHL, Embase, psychINFO, Cochrane Library (Cochrane Database of Systematic Reviews, Cochrane Controlled Trials Register, Database of Abstracts of Reviews of Effectiveness, and Health Technology Assessment), National Technical Information Service, International Bibliography of the Social Sciences, British Nursing Index, Department of Health-Data, Kings Fund, National Health Service Economic Evaluation Database, System for Information on Grey Literature, National Research Register, Web of Science, Social Sciences Citation Index, Health Management Information Consortium, Education Resources Information Center, SCIRUS and The Allied and Alternative Medicine Database. The original searches ran from January 1996 to April 2006 and were subsequently updated on PubMed and CINAHL from March 2006 to August 2008. In addition, we screened reference lists and contacted authors for details of further studies.

#### Study screening and classification

The electronic database searches, which included all three topic areas in our original report, identified 4279 records and updated searches resulted in an additional 37 records. Titles and abstracts were screened to determine whether they met the inclusion criteria and 97 papers were retrieved for full-text screening.

Studies were classified according to the topic area, the study design and the main focus of the interventions or views reported. Qualitative studies were defined as those that employed methods such as focus groups, in-depth semi-structured or unstructured interviews or participant observation and used appropriate qualitative approaches to data

analysis. Those considered merely descriptive accounts of practice, without additional evaluation or research, were excluded. Quantitative studies were defined as those that reported evaluations of interventions or other analytical designs such as case—control studies, cohorts and surveys. Applicability to the UK was assessed using the criteria developed by NICE. These criteria score studies from 1 to 4 with those graded as 1 considered most widely applicable (e.g. applicable across populations and settings) and those graded as four the least (e.g. applicability outside study setting uncertain) [10].

#### **Data extraction**

Data on research questions, methods, participants, settings, country, intervention, outcomes, main findings, applicability and theoretical perspective were extracted. For qualitative studies, transparency and reliability were assessed according to the quality of the presentation and analysis and the use of an appropriate theoretical framework. Issues around study quality have been reported in the text although a formal quality assessment for quantitative studies was not conducted since the mapping was a broad scoping of the field that included all study designs.

#### Results

Twenty papers met our inclusion criteria of which 4 were quantitative [11–14] and 16 qualitative [15–30]. The four quantitative papers, reporting

three studies, described programmes involving young men which were concerned with both prevention of teenage pregnancy [11–13] and support to teenage parents [14]. The 16 qualitative papers, from 15 studies, were predominantly concerned with the experience/views of young men in relation to sexual health promotion or the experiences of young fathers.

Table I shows the number of papers and study designs used. More detailed information about individual studies, including a summary of the findings, can be found in Table II.

#### **Quantitative studies**

We found three relevant quantitative studies, two from the United States [11-13] and one from the UK [14]. All employed mixed methods. The UK study [14] used a matched case-control study, focus groups and interviews to evaluate the impact of a national initiative (Sure Start Plus) to provide intensive support for young parents under 18 with housing, health care, parenting skills, education and childcare. The other two studies [11-13] evaluated interventions targeting high-risk adolescent males in the United States. Of these, one reported different aspects of the same study in two papers, including an uncontrolled before-after study [11] and a survey [12], and the other [13] used both an uncontrolled before-after survey and a process evaluation. This study also included a qualitative component but the interview and focus group data were not systematically reported and are excluded from our analyses.

Table I	Number of	included	nanare	according t	o study design
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Quantitative study design	No. of quantitative papers	Qualitative study design	No. of qualitative papers
Uncontrolled before–after design	1	In-depth interview	11
Other descriptive/analytical e.g. surveys, case–control	2	Focus groups	4
Mixed design	1	Process evaluation (employing mixed methods including interviews and focus groups)	1
Total	4 (3 studies)		16 (15 studies)

Quantitative studies				
Study ID	Research question and methods	Study population, setting and country	Type of evaluation/ intervention	Results
Brindis et al. [13]	To describe the development, evaluation and implementation of the MIP. Methods Descriptive overview, qualitative and quantitative: interviews and focus groups, pre/post-survey.	14 992 young males	MIP designed to increase community and individual awareness of men's role in pregnancy prevention, reinforce values, increase knowledge, skills and motivation of at-risk adolescent males.  Core components:  Community awareness of male involvement, community mobilization, prevention education services, youth leadership, youth–adult partnerships, institutionalization of MIPs, referrals and links with clinical services.  Providers  MIP staff  Duration and intensity  Sessions varied from single educational to ongoing meetings held over several months.  Intensity varied from once a week for a total of 8–16 hours to 16–20 hours within 2–3 days.	Main findings based on primarily quantitative data and synthesis of some qualitative data. Survey findings: Pre- to post-significant decrease in sexual activity (50–88%) and increase in condom use (61–72%; $P < 0.0$ ). Marginal increase in contraceptive (68–69%) and condon use at last sex (60–61%). Condom use higher among those becoming sexually active during study than those already sexually active (82 versus 68%; $P < 0.01$ ). Pre to post: African Americans improved their own or the partner's use of contraception at last sex from 72 to 79% at condom use from 65 to 72% ( $P < 0.01$ ). For Whites, a no significant decrease in contraceptive use and a slight increase in condom use were reported. Knowledge of risk of pregnancy at first sex increased from 80 to 91% ( $P < 0.0001$ ); where to find birth control increased from 83 to 91% ( $P < 0.0001$ ). Attitude towards contraception being shared responsibility increased pre to post (81 versus 86%; $P < 0.0001$ ). MIP strategies: MIP worked within an environment that denied young people's need for information regarding sexuality and sexual health. Many community members wary of supporting male focused family, life education the incorporated both abstinence and contraceptive use

Quantitative studies				
Study ID	Research question and methods	Study population, setting and country	Type of evaluation/ intervention	Results
Smith <i>et al</i> . [12]	To examine risk behaviours and service needs of young men involved in a pregnancy prevention programme. To identify ways of incorporating this information in programme components.  Methods Survey Evaluation in Smith et al. [11]	Population 130 males aged 13–18 years; enrolment through trained social workers and 'communities in schools' programme staff; majority was Hispanic/African American and had no children. Setting Schools Country United States Applicability to UK 4	Case management-focused programme to prevent TP and STIs in schools. Included assessment of current risk behaviours and service needs.	27% reported at least three risk behaviours; 9.8% reported not risk behaviours; 54% reported engaging in sexual intercourse and only 28.5% reported consistent condom use.  Services most requested by participants were educational vocational, preventive health care and mentoring. Prevalence of overall risk factors not high.  Author suggests combination of risk factors with poor academic performance means intervention at this stage may be helpful. Data used to develop programme components such as parent involvement programme to enhance educational outcomes.
Smith <i>et al</i> . [11]	To examine impact of multifaceted school-based pregnancy prevention programme.  Methods Survey pre/post-enrolment. Theory-based, small follow-up sample, no comparison group and no statistical data.	Population 130 high-risk males aged 13–18 years; majority was Hispanic/African American, most had no children. 41 maintained continuous participation and re- enrolled. Setting Schools Country United States Applicability to UK 3	Intervention 5-year programme involving school and community activities. Aimed to develop personal and social competency, reinforce messages of pregnancy prevention, develop skills, promote risk reduction and increase family and community involvement. Enrolment through trained social workers and male programme staff. Providers Male case managers	Abstinence rates increased from 58.5 to 73.2%; never using condoms decreased from 14.6 to 0%; no pregnancies at follow-up.  Participants remained in school; participants who reenrolled showed slight improvements in school performance compared with those who did not; no difference in risk behaviours.  Comments from young males demonstrate their need for mentoring and support groups.

Quantitative studies				
Study ID	Research question and methods	Study population, setting and country	Type of evaluation/ intervention	Results
Wiggins et al. [14]	To evaluate UK government initiative Sure Start Plus (SS+) aimed to support pregnant young women and young parents <18 years of age.  Methods Included focus group discussions, interviews and questionnaires with project staff, young people and professionals. However, indepth analysis of the qualitative component with young fathers was not reported. Impact evaluation using matched case—control study in all 35 pilot areas for questionnaires and 12 case study areas for interviews	Population Pregnant teenagers and teenage parents. Results reported here are for teenage fathers. Over 85% were White, mean age 18.2 years; around 80% men in SS+ areas were young fathers, 24% fathers to be; 63% SS+ group had council housing.  Setting Community Country UK Applicability to UK 2	Impact study Intervention: SS+ controls were areas with no SS+. Impact questionnaires; 85 completed questionnaires were returned with 51 (58%) from SS+ areas and 34 (42%) from matched areas; 20 via worker distribution; 65 via teenage partners. Response rates low 1. Via local groups: 20/ 240, 8.3%. 2. Via women for the fathers: 66/176, 37.5%.	Findings from interviews/questionnaires relevant for fathers are included in this section  Results (mixed methods and impact study) Overall, no statistically significant differences between SS+ and control.  1. Health: more young fathers in SS+ areas compared with matched areas receiving information and advice about health, contraception, smoking cessation, domestiviolence and housing issues.  2. Learning: professionals felt young fathers in SS+ areas more likely to receive information about employment opportunities than in matched areas but no statistically significant difference in young fathers participation in either education or employment.  3. Families and communities: no significant difference between the groups in incidence of family breakdown of attendance of young fathers at parenting classes. Young fathers in intervention areas more likely to receive information about domestic violence.  Housing  More young fathers in intervention areas reported receiving help in housing issues than control areas but the was not statistically significant. Only 12% of professional from partner agencies felt SS+ had a positive effect on enabling young fathers to obtain accommodation.  Self-esteem, emotional well-being and confidence of Young fathers: professionals significantly more likely to regard provision of emotional support for young fathers be adequate in SS+ sites but few YF reported receiving help with emotional problems.  Peer advice from young fathers: having a child was challenging and life changing but was also a positive an special experience. However, the group was more involved than average—86% still together with the mother.

Table II. Con	ипиеа			
Quantitative studies				
Study ID	Research question and methods	Study population, setting and country	Type of evaluation/ intervention	Results
				Limitations Intervention and control poorly matched, lack of reliable baseline data, diversity of SS+, influence of other similar initiatives, lack of resources, prioritization of work with young mothers, lack of guidance.
Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Coleman [18]	To explore barriers and facilitators to consistent condom use among young people.  Methods Longitudinal design employing in-depth interviews. Initial interview and one follow-up at 8–10 months.  Theoretical/analytic framework Interpretative phenomenological analysis.	Population  22 men and women aged 16–19 (18 women 4 young men).  Setting Young peoples' clinics, youth advisory centres.  Country UK (Southampton)  Applicability to UK 2  Valuable study but only four young men.	Phenomenological	The matching of intentions, expectations and behaviours revealed six patterns of condom use/non-use, each with distinct cognitive and interactional characteristics.  1. Consistent users: positive intention and expectation, used condoms and initiated use.  2. Converted users: positive intention and expectation. Used condoms between study interviews but not always prior to interview (converted because of new partner or pregnancy scare)  3. Influenced users: positive intention, negative expectation. Used and not used condoms between interviews and had never initiated their use.  4. Over-optimists: positive intention, negative expectation no used condoms between interviews and had never initiated their use.  5. The resigned: positive intention, negative expectation. Did not use condoms between interviews and never initiated their use.  6. Consistent non-user: negative expectation and intentions did not use condoms between interviews and never initiated their use.  Overall  Useful for understanding young people's decision-making strategies. Consistent users were males and females.  Only non-consistent users were males.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Davies et al. [27]	To examine perceptions of young fathers towards issues relating to early childbearing.  Methods Four focus groups Theoretical/analytic Framework Two-stage interpretative Thematic analysis 1) Sorted into broad content categories by three individual coders. 2) Shared rating of coding by the three researchers.	Population  26 young African American fathers, whose partners became pregnant while participating in a randomized controlled trial to prevent HIV and other STIs (estimated age 17–23).  Country United States Applicability to UK 4 Unclear how findings would relate to UK African or Caribbean communities.	Based on findings that African American males are more likely to initiate sexual activity at earlier ages, have multiple partners, contract HIV and other STIs and consider marriage less important than males from other minority groups.	<ul> <li>a) Young men's desire for pregnancy: most did not intend to achieve a pregnancy and it was unintentional, but</li> </ul>
DiCenso et al. [29]	To learn adolescents' opinions about sexual health services and identify strategies to improve their delivery.  Methods  16 × 1-hour same sex focus groups with four to eight participants.  Theoretical/analytic framework  Basic content analysis.  Coded by multiple team members.	Population 83 students (49 females and 34 males) aged 13–19 years mean age of 15.4. All participants reported having had sex education in primary school and twothirds reported receiving some in secondary school. 44% of males and 37% of females had vaginal intercourse, 27% of males and 44% of females had not used contraception. Setting One rural and one urban high school. Country Ontario, Canada Applicability to UK 3	Aim to achieve a deeper understanding of why TP and STIs continue to rise despite the availability of sexual health services.	School felt to be a good place to receive sex education, but considered to focus too much on biological aspects. Public health nurse viewed as good educator (if experienced) but most had not had them.  Friends and siblings gave information not available through formal channels. This was viewed as the 'important stuff' on feelings decisions and experiences. Parents viewed as embarrassed and not a source of information.  Students suggestions for useful information in class: transmission and prevention of STIs, accurate information about Acquired Immunodeficiency Syndrome (AIDS), sexual activity options other than abstinence, intercourse pregnancy and birth control, emotional aspects of sexuality, communication with parents and gender issue In many cases, students hostile and intolerant to homosexuality.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Flood [30]	To examine young heterosexual men's participation in unsafe sex and why they do not use condoms.  Methods In-depth interview study. Difficult to recruit—employed leaflets in community settings.  Theoretical/analytic framework Not described fully.	Population 17 men aged 18–26. Setting Not applicable Country Australia Applicability to UK 3	Heterosexual AIDS research has focused on women rather than men. Study is concerned with following from feminist analysis to provide a critical analysis of the sexual culture of heterosexual men.	Preferences for sex educators: used everyday language, non- judgemental, not moralizing, relaxed and respectful. Sex education should be an ongoing process—that permitted gradual transmission of information. 'Scare tactics and abstinence until marriage' message viewed as outdated and unrealistic. Students had limited knowledge about the availability of services and how to access. Reasons for not using a condom:  1. Reliance of female partners: to prevent pregnancy—even though men strongly desired not to father a child.  2. Sexual choreographies: reduction of sensation, although not all respondents held to this view.  3. Hot moments: spontaneous sexual ambience makes it hard to incorporate condoms.  4. Trust: fundamental to their sexual encounters and quickly term relationships as monogamous.  5. HIV immunity: believe they are unlikely to contract HIV, as community they are in is heterosexual.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Forrest et al. [21]	To examine pupils perspective and experiences of peer-led versus teacher-led sex education as delivered via the RIPPLE intervention.  Methods RIPPLE study Process evaluation: 52 focus groups in schools (by gender; 41 in schools with peer-led sex education and 11 in schools with teacher-led sex education). Selected items from a questionnaire, survey comparing teacher-and peer-led delivery.  Theoretical/analytic framework Atlas.ti (data analysis package used) and a well-reported grounded theory approach.	Population Adolescents 13–14 and 14–15 years. Setting Secondary schools Country UK Applicability to the UK 2	To identify 'how the characteristics of the sex educator, the content of the programme and the teaching methods adopted interact in contributing to recipient satisfaction.	Students disliked sex educators expressing moralistic views Boys felt that teachers could be sexist portraying them as sexual predators.  Peer-led perceived as less likely to be moralistic and more likely to be empathetic, respectful and promote safe sexual behaviour. Empathy felt to be very important.  Embarrassment—if teachers are embarrassed, boys likely to 'act up' with provocative questions. This excluded girls Girls also found mixed groups more embarrassing.  Being taught by external visitors to the school would provide greater confidentiality. Confidence in peer educator increased through emphasis on confidentiality. Questionnaire data showed significant proportion of pupils felt peer-led sex education enjoyable, engaging and useful and more acceptable than teacher-led education.  Much teacher-led education is too narrowly focused on biology and inappropriate to young people's age and development.  SRE provision needs to be sustained over time and reiterated at increasing levels of complexity over time.

Qualitative studies				
Study ID		Study population, setting and country.	Theoretical perspective/ background employed.	Results
French [19]	To examine young people's attitudes and experiences of consultations with health care providers about contraception.  Methods  Described as part of a needs assessment; in-depth interviews and focus groups.  Theoretical/analytic framework  Stated grounded theory but no details or refs given.	Population Young people aged 16–21 (numbers in paper unclear). Setting Health settings, secondary schools and community settings such as youth club. Country UK Applicability to the UK 3	None	Knowledge about contraception and STIs was high among young people. But felt opportunity to discuss options limited and clinic time did not allow them to discuss the factors and personal issues that would construct usage and safe sex practices.  For young men, initial access for condoms was followed by further appointments once felt that staff and clinic were acceptable and familiar to them. Young people did appear to value professionals' independent opinion.
Gibbin [24]	To gain an understanding into I the emotional and practical needs of teenage parents.  Methods Involved young people researching young people, views study, structured interviews with 39 people in 29 different interviews by five local young people.  Theoretical/analytic framework The researcher analysed the data by focusing on particular services and themes that had become apparent through the interviews'.	Population 27 women who were, or had been, teenage mothers, 6 teenage fathers, 4 mothers of teenage mothers, 1 woman who had had a miscarriage and 1 friend.  Setting Interviews conducted in the community in a range of venues.  Country UK (Hartlepool)  Applicability to the UK 2		Author states that 'services' in this study is used as a catchall term that covers formal, informal and family provision of services that young parents use. Investigated way emotional and practical needs met by the services. Three broad categories of services reported upon:  1) Family 2) Medical services 3) Non-medical services In relation to fathers: Child's father—four main situations described.  1) Very involved 2) Those involved a bit 3) Those not involved at all 4) Men not the biological father of the child

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/background employed.	Results
Higginbottom et al. [17]	To explore teenage parenting experiences of young people Black and minority ethnic groups.  To identify decision-making processes, beliefs and attitudes towards teenage parenthood.  To establish the meaning and consequences of teenage parenthood.  To elicit the wider community and extended family perspectives on teenage parenthood.  Methods  Telephone survey with service providers and key stakeholders $(n = 41)$ , interviews with teenage pregnancy co-ordinators $(n = 43)$ , focus groups (participants $n = 19$ ) and interviews $(n = 15)$ with young people in their 20s who had experienced early parenthood, interviews with young mothers who were currently teenagers $(n = 45)$ and three mothers completed audio diaries), interviews with young fathers $(n = 6)$ , interviews with the mothers of teenage parents $(n = 10)$ .	Population Young people of Bangladeshi, African Caribbean, Pakistani and dual ethnic origin. Young mothers in the main study were aged from 15 to 18 years (n = 48). The sample of older mothers who had experienced TP ranged from 19 to 26 years (n = 34). The age of the young fathers ranged from 20 to 25 years (n = 6). The age of grandmothers ranged from 37 to 53 years (n = 10). Setting Range of community settings. Country UK (Sheffield, Bradford and the London boroughs of Lambeth, Lewisham and Southwark). Applicability to the UK 2	The research draws upon the ethnographic tradition.  The ethnographic dimension is enhanced further by the development of a 'case study' of teenage parenting in each study location, including prevalence, existing local initiatives and policies, profile of ethnicity in the locations and reference to existing indices of social and material deprivation.	Fathers interviewed ( <i>n</i> = 6) were uniformly positive about their role. The small number of fathers interviewed reflect that few of the mothers interviewed were in a relationshi with the father of their child.  The fathers felt the services provided were good but organized towards mothers, a view endorsed by the service providers. The needs of fathers were not well understood and service providers were well aware of this.  There was a general feeling among fathers that discussion about pregnancy, birth and early fathering were treated be both professionals and lay people as female matters and that services were biased against young parents.  Acknowledging the pregnancy  There was a shock phase for young men when they kne about the pregnancy and it could last for a substantial period. They expressed concern about sharing the news with their parents. In common with mother they saw the lives becoming more serious. In early stages support from family and friends was generally supportive.

stable employment and a good education for their children.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
	Theoretical/analytic framework  Data were analysed using the 'framework' approach. Ritchie and Spencer [31].			Health services Health services were seen overall as very helpful during pregnancy and post-natal period.  Education and employment Lack of finances did not seem a particular concern for any of the participants.  Relationships Relationships with partners emerged as a positive area. In terms of support from family and friends after the birth, the mothers of the participants' partners were seen to be the most supportive. This reflects the views of the young mothers in this study.  Religion The three young fathers of Muslim faith interviewed save religion as an important dimension of their identity and would like to see their offspring brought up according to Islamic law.  Impact of early fatherhood The impact of becoming a young parent seemed to be minimal. The main issues were increased responsibility, restrictions on social life and taking life more seriously. Aspirations were articulated in terms of finding good

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Mordaunt [23]	To develop and evaluate a model of working with young and vulnerable fathers and help them strengthen their relationship with their children by exploring their own attitudes as men and fathers and developing life skills and childcare skills.  Methods Two-year pilot project with the aim of enabling young fathers to become more involved in bringing up their children. Data collected from documentation, observation and interviews. The interviews were conducted with project stakeholders, case study professionals and young fathers from each site. Theoretical/analytic framework Authors state: 'Data analysed by means of Nvivo'.	project sites: - Birmingham (n = 26) - London (n = 16) - Newcastle (n = 62) - Norwich (n = 41) - Sheffield (n = 27) Difficult to attract fathers in large numbers, though this improved over time. Data about attendance and ages of attendees incomplete but suggested that around		Location  Location of the project important. Welcoming venues at the centre of the communities are best.  The wider organization  Good support from host organization important.  Father's workers  Skills, attitudes and knowledge of workers crucial for success. Breadth of skills including an ability to relate to young men and work with them one-to-one and in group needed.  Variations  Different approaches of five sites reflected underlying cor beliefs about the purpose of the project. Some sites understood the purpose of their work to be therapeutic an some placed greater emphasis on education and social aspects.  Sites that used mixed approach combining basic information, support and advice with the exploration of issues and attitudes connected to fatherhood were able to attract, and work with, greater numbers of young men and develop beyond one-to-one work into group work and pee support.  Group work  Evaluation of the group work in Norwich identified key barriers to group work, e.g. the need to have sufficient fathers in the pool that the group will be drawn from, recognizing that some will never take up the offer of grout work, acknowledging the disruptive consequences of 'open' groups where new members can join at any time and the difficulties in finding common ground when fathers' circumstances are very different.  Also there is a dearth of material to support direct work (especially group work) with young fathers.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Pearson [22]	1. Explore the needs for sexual health services. 2. Examine the appropriateness and accessibility of sexual health services for young men.  Methods Focus group study Theoretical/analytic framework Employed four-stage thematic process (Marshall and Rothman [32]) considered the interactional features of the focus group data.	Population Young men aged 13–21. 75 men were interviewed in nine focus groups. Setting Locations in England Country UK Applicability to UK 2	Few young men currently use sexual health services and little is known about their needs.  Men may feel excluded from traditional services as they are felt to be too female orientated.	Common ground  A common thread was the need for workers to adopt a steady planned approach, be dogged, stick to what they were doing and be there for the young men.  Impact on other professionals  One of the aims of the project was to make an impact or fellow professionals. All sites saw this as important but some were more successful in engaging with and influencing key local agencies. The short duration restricted what could be achieved in this area.  Outcomes for fathers, children and mothers  Many fathers identified ways in which the project had helped them in the following areas: involvement with their children, their relationship with the child's mother and extended family, living arrangements and personal development.  Young men most likely to use services to obtain condoms for crisis situations such as STIs.  Aspects of masculinity (e.g. need to present as highly knowledgeable about sex) may hinder young men from seeking advice and information about a sexual health service. In general, recognize that information services exist but feel would not use them themselves.  Free condoms: travel costs and administrative demands a the clinic meant that young men preferred not to attend the clinic.  Crisis situations: go because they feel they have no choice Stereotypical negative images of nurses and the family planning clinic prevailed in young men's minds when they thought about services.  Types of information valued—short to the point, visually engaging and humorous. Images should show mixed sex couples. Materials just targeting men were viewed as about 'gay' services by heterosexual young men.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Quinton et al. [25]	1. Document the experiences of young first-time fathers, especially those at risk of not accepting the parenting role.  2. Identify the factors linked to a father being involved with the mother and child a year after the birth.  3. Examine how fatherhood affects young men's identities and its impact on social exclusion and the transition to adulthood.  4. Discover how health services can supportively include prospective fathers.  Methods  Prospective parents were interviewed separately antenatally (5 months) and 9 months post-partum.  Used 'investigator-based' technique, involving a systematic coverage of research areas according to predefined concepts and tailored to respondents' concerns.  Duration: approximately 2–3 hours.  Theoretical/analytic framework  Not described	Population Couples aged 17–23; 92 women and 74 men in first interviews and 79 women and 52 men in second interviews, consecutively recruited from mothers attending first scan at 5 months at the Avon health district (part of a prospective epidemiological study of families followed up from pregnancy to the time of child's schooling). Setting Avon county, antenatal clinic. Country UK Applicability to UK 2	No data on young fathers' continuing relationship with the mother and baby; stable partnerships are known to be important in promoting transition out of social disaffection and problems in social functioning associated with poor childhood experiences.	Paternity was acknowledged and young men were intereste in the birth. 37% not involved in parenting at follow-up Experiences of young men Initial feelings about their partners pregnancy were mixe with over two-thirds reporting difficulties with constructing an identity as a father.  Risks in young men's background About 30% had experienced difficult family relationships; majority had hated schools; ~40% showed problems in wor patterns and 30% in social functioning prior to pregnancy.  Family relationships 36% lived at home and 51% saw parents weekly. Around a third of couples' parents were negative about pregnancy and less than half of prospective grandparents were clearly supportive. Persistently poor relationships between them were reported.  Risk and post-natal involvement Poor childhood family relationships or social functioning an quality of relationships with either partner's kin were not predictive of continued involvement. Couples' own judgements on their relationship were related to post-natal involvement.  Preparation and support for young parents Around half attended antenatal clinic appointments.  However, they experienced a distinct lack of support from services and professionals (including health visitors), especially in their transition to parenthood. They were ignored, marginalized or made uncomfortable despite their stated desire for inclusion.  Conclusions  Early fatherhood can positively effect a transition out of psychosocial risk and health risk behaviours.  The quality of the relationship between the young couple appears to be central in determining the continued involvement of young fathers with their child.  The findings are consistent with a more positive view of young fathers than the stereotypes sometimes allow.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Reeves [26]	<ol> <li>To what extent does becoming a young father lead to a renegotiation in roles and identity?</li> <li>What are the strategies, if any, used to do this?</li> <li>Does this renegotiation lead to areas of strain?</li> <li>What kinds of resources, if any, do the young fathers cite as using?</li> </ol>	Population Young men, aged 15–24, majority under 21, who were users of social services and who had just, or were about to, become fathers.  Setting Social services settings: leaving care, young offenders' teams, family	Views of young fathers under- represented in social work research; few social work studies on transition to fatherhood report different findings.	1. The young men described experiencing fragmentation and social exclusion in their lives, including the break-up of their birth families and becoming members of new reconstituted families, moving out of the family home (either voluntarily or by force) spending time in care and having poor school experiences.  2. Moving into fatherhood very early, experiencing a speedy transition to parenthood. Key themes  Recklessness: previous involvement in risk-taking activities, including fighting, poor school attendance,

16 narrative interviews; results reported on 10. Narrative data were transcribed and '10 stories' analysed thematically.

# Theoretical/analytic framework

Methods

Narrative approach focuses on crises or difficulties in individual lives, allows participants to frame stories in a way meaningful to them, they tell a story over time. Social services settings: leaving care, young offenders' teams, family centres. Recruited via team members and directly (not through mother of their child).

#### Country UK

Applicability to UK

2

Recklessness: previous involvement in risk-taking activities, including fighting, poor school attendance, offending, antisocial behaviour, drinking and drug taking. Being 'rescued': most framed the mother of their child as supportive 'saviour' rescuing them from crime, addiction and other negative risk-taking behaviours.

Repositioning: the route to 'responsibility': fathers 'in waiting' described themselves moving from behaviour associated with being 'irresponsible' and antisocial, prior to the pregnancy or birth of their child, to repositioning themselves responsibly afterwards.

Others who were already fathers considered themselves as more fully responsible, portraying themselves as being actively and protectively involved in their children's also presented as regretting past recklessness and antisocial behaviours.

#### Resources and types of support

relationships, notably with own father, as well as drawing on new sources of support such as their partner's family. Support from professional sources such as social services and sure start seen as valuable in terms of practical support and for advice and guidance. Dedicated provision for young fathers was particularly valued.

Forms of support included repairing existing family

**Conclusion:** the young men all depicted their past lives as being fragmented and located within a context of antisocial behaviour. The birth of their child and the relationship with the mother was related to as a catalyst for the construction of a more positive and optimistic narrative of their lives.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Silverman et al. [28]	1. To collect exploratory data concerning perceived behavioural and attitudinal norms regarding sexual behaviour and sexual HIV risk behaviour patterns among adolescent male perpetrators of dating violence that relate to sexual risk and pregnancy.  2. To generate hypotheses regarding the mechanisms underlying the intersection of these major threats to adolescent health and development.  Methods  Six focus groups (four to eight people each group), semi-structured, 60–90 min in length, audiotaped and by two female researchers. Focus group data were analyzed using a grounded theory approach.  Two members of the research team independently coded each transcript and identified key themes.	Population  34 adolescent males, English speaking, aged 13– 20 and participating in one of six school- and community-based intervention programmes for dating violence perpetration. Referred to these programmes by teachers, school counsellors and social service professionals, based on reported violence against dating partners or other female students. 64.7% were 15–17 years of age, all major racial and ethnic groups; 85.3% reported having had sexual intercourse with 68.9% of these reported having had sex with two or more partners in the past 3 months.  Setting School and community in major urban area. Country United States Applicability to UK 3	perpetrators of partner violence represents a sexual health risk, including increased risk for HIV, to their female partners.  Less is known about the sexual norms, risk perceptions and belief systems underlying these behaviours among young men.	Key themes:  1) Male norm of multiple partnering: multiple partnering identified as normative male behaviour; 77% of sexually active participants reported two or more sex partners within the past 3 months on the brief post-focus group survey. Described this behaviour as modelled by peers and older males.  2) Perceived gain of male social status from claims of sexual activity.  Casual sex and multiple partnering claimed to gain social status with other young men and demonstrated to others that they are 'a man'.  3) Perceptions of rape: it is uncommon and girls claiming to be raped are liars.  4) Beliefs that girls lie and manipulate boys in order to become pregnant: 20.9% of sexually active participants reported involvement in at least one pregnancy (post-focus group survey); participants described girls trapping them into relationships.  5) Male avoidance of responsibility and negative responses to pregnancy: feelings of hostility and distrust towards the young women who claimed the men's involvement in their pregnancy.  Conclusions  Peer-supported norms of male multiple partnering and adversarial sexual beliefs appear to support increased male sexual risk, lack of accountability for sexual risk and rationalization of rape and negative responses to pregnancy among adolescent male perpetrators of dating violence. In relation to pregnancy, adversarial beliefs that their partner is behaving manipulatively may lead to further abuse of young women.

Table II. Co.	ntinued			
Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
	1. Participants were asked to discuss their perceptions concerning perceived social norms among their peers regarding dating, physical and sexual coercion and violence in dating and sexual relationships, decision making, sexual risk perceptions and behaviours, concerns and involvement in pregnancies, within both non-violent and violent relationships.  2. Participants completed an anonymous survey assessing demographics, sexual health behaviours and outcomes and pregnancy involvement following the group discussion.			

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Tyrer <i>et al</i> . [16]	To find out more about experience of becoming young father, examine the extent to which their needs were recognized and explore types of support services they were aware of and able to access.  Methods In-depth semi-structured interviews with young parents, professionals and carers in four contrasting sites. Used a pretested discussion tool with 63 young people in and leaving care who were already, or were about to, become parents.  Theoretical/analytic framework If possible interviews tape recorded otherwise detailed field notes kept. Findings analysed using constant comparative method to elicit recurrent themes identified by interviewees. Once each of the themes had been identified in a preliminary form: a search for negative instances took place prior to the confirmation of that theme.	British, one as African and one as Black British of African Caribbean origin. 13 participants were already fathers and 3 were about to become fathers.  Setting Contrasting sites in England. Recruited from services frequented by	Qualitative	Becoming a father, social exclusion, issues of trust, bureaucracy and 'hassle' and barriers to support.  Becoming a father  Despite no or sporadic use of contraception, majority of young men's responses to a pregnancy was 'shock' and it some cases 'terror'.  Young men were either excluded from decisions about continuing a pregnancy or shared their partner's feelings against having an abortion or having the baby adopted. Most young men made some attempt to take on their responsibilities as fathers and expressed strong and positive feelings towards their children and about becoming fathers.  Social exclusion  Participants described forms of exclusion that began in childhood with detachment and isolation from their own families. Fatherhood was seen by some as an opportunity to create new attachments and recreate elements of a biological family. Young men in and leaving care wanted to be better fathers than theirs had been to them. Professionals suggested that young fathers faced social exclusion on a number of levels including financial insecurity, low educational achievement and poor work prospects. A lack of economic security and doubts and fears about being able to provide for their children was a recurring theme.  Young people drew a clear link between their negative o limited experiences of education and few career, work and life opportunities.  Most young fathers did not get much SRE at school, in par because they were often absent, either through illness, exclusion or truancy or because of frequent moves while in care.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
				Finding out about sex and relationships without any structured input from adults was common, with SRE from 'trial and error' friends, partners, television or pornography. As a consequence, many young men were misinformed.  Issues of trust  A major theme to emerge was how difficult it was for th young fathers to trust others (professionals suggested thi was a common result of spending many years in care, away from attachment figures and having had many carer and social workers).  Personal relationship problems (e.g. some young men fel they could not trust their partners) meant that, in practice young fathers' immediate relationships with their children were often difficult.  Fathers were disadvantaged in any judicial process.  Bureaucracy and hassle and barriers to support.  Participants felt that too many existing services were bureaucratic and inflexible, did not listen to them, put to much emphasis on paperwork and too little attention pair to the men as fathers, and how they could be supported to take on this role. In particular, housing services need to engage more with the issues surrounding young fatherhood and provide accommodation appropriate to the needs of their children. Other services were reported to have 'bought in' to the stereotype of young men as feckless and unconcerned with their children.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Chase and Knight [15]	Additional findings to Tyrer above	See above	The discussion in this paper focuses around the question 'Is early parenthood such a bad thing?' Although the authors cannot provide any straightforward answers, they conclude that 'We may find that early parenthood is not always such a bad thing after all'.  The paper presents findings from the study on both young men and women.	Influences on early pregnancy.  Factors that rendered young people vulnerable to TP included breakdown in family relationships, going into care, lack of trust and feeling rejected, lonely and stigmatized.  Although most pregnancies are unplanned, young people often wished to continue with the pregnancy because the wanted someone to love and to ensure their children wern not rejected in the way that they had been.  Peer pressure and introduction to sexual activity—often alongside drug and alcohol use—in residential care were also influencing factors.  Becoming a parent  While young men and women shared similar views about becoming parents, the relationship of young fathers with their children was more complex. Some were directly involved in bringing up their child or children, others reported being involved with some of their children but estranged from others and some had no part in their child life at all. Many spoke of the stabilizing effect that becoming a father had on their lives.  Factors influencing how well young people will cope. A continuum of support needs for young parents in and leaving care was identified.  The importance of a trusted confidant or just someone 'to be there' emerged as key. Positive experiences of service access and use were usually attributed to the presence of key individuals who had helped them. Instability created by changes in staffing or frequent moves was therefore a major barrier.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
				Different sources of support Support from partners  - Where the relationship was working well support from partners was invaluable and many professionals identifie the presence of a supportive partner as a key factor in enabling young people to cope.  Support from family Positive family relationships, their own or their partners, were central in providing young people with support. Some professionals felt that work was needed to improv family structures. Family mediation and efforts to promot the involvement of the extended family in supporting young parents was seen as helpful.  Education, employment and training Despite being disengaged from education, at a very youn age many young parents had aspirations to return to education training or employment.

Qualitative studies				
Study ID	Research question, methods and analytical theoretical/ analytic framework.	Study population, setting and country.	Theoretical perspective/ background employed.	Results
Wiggins et al. [20]	To explore the causes and consequences of TP and motherhood, identify factors predictive of positive and negative outcomes and examine any time effects associated with the experience of teenage motherhood.  Methods  Teenage Pregnancy Social Exclusion Study and Multimethod Study.  New analyses of two existing datasets: the SSPO Study and Family Health study.  Focus group discussions with 31 women (n = 459); also carried out some interviews with men who had fathered children as teenagers (n = 13).  Theoretical/analytic framework  Focus groups and interviews tape recorded and transcribed.  Thematic analysis undertaken with two researchers reading and coding each transcript.	Population  13 men who had become fathers as teenagers (subset of wider study and recruited ad hoc).  The women who participated in these studies were recruited in 1986–87 and 1999, respectively, and were predominantly socially disadvantaged.  Setting  Community: the SSPO Study was conducted in four areas (Derby, Reading, Stoke-on-Trent and Tunbridge Wells) with women who had previously given birth to a low birth weight baby; questionnaire. Of the 1196 women who took part in both these previous studies, 21% (246) had children as teenagers.  Country  UK  Applicability to UK  2	against the backdrop of social exclusion.	With respect to teenage fathers:  Themes that preceded teenage conception for this samp of fathers were similar to those of mothers: unhappy childhood, dislike of school and not using or failed contraception. Rejection and loss were prevalent from childhood to the present day.  Most teenage fathers were in a relationship with the mother of the baby during pregnancy and in the early years.  None was together in the longer term. Most had long periods of poor contact with their child, majority was ir contact with their child currently.

MIP, male involvement programme; SRE, sex and relationship education; SSPO, Social Support and Pregnancy Outcome; STI, sexually transmitted infection; TP, teenag pregnancy.

## Main findings

One study employed male case managers to deliver a 5-year multifaceted school-based pregnancy prevention programme to young men [11]. This involved activities in and out of school and reported a 14.7% increase in abstinence rates at second-year follow-up. Condom use also improved from baseline with 14.6% males reporting never using them to none of the participants reporting never using them. In addition, no new pregnancies were reported. However, the study quality was low with a small sample, no comparison group and limited statistical data. A survey of participants involved in the programme [12] showed that although 54% reported engaging in sexual activity, only 28.5% reported consistent condom use. Comments from the young men involved demonstrated their need for educational and vocational services as well as mentoring and support groups [11, 12].

The other US study [13] described the development and evaluation of the male involvement programme. This intervention involved young males in teenage pregnancy prevention and was delivered in a diverse range of settings, including juvenile justice, schools, street outreach and recreational centres. The study reported baseline survey data for ~15 000 males and post-intervention data on 3094 young men. The programme's core components included prevention, education, youth leadership, youth-adult partnerships and the reinforcement of community values that support young men's roles and responsibilities in the prevention of teenage pregnancy. Survey findings reported a 38% increase in the proportion of men who did not engage in sex from baseline to follow-up. Of those who had initiated sexual activity during this time, a significantly higher proportion reported using contraceptives and condoms compared with those who entered the programme already sexually active (P < 0.01). Overall, there was a significant improvement in knowledge relating to pregnancy risk and contraception and attitudes in relation to responsibility and communication regarding contraception, but only marginal increases in contraceptive and condom use. The programme

appeared to be more successful for African Americans than Whites which the authors suggest may be related to a shift in attitudes post-intervention to a belief that they would not necessarily gain respect if they had a baby.

Programme characteristics appreciated by the participants included challenging negative cultural stereotypes (about the young men as aggressive, low achievers), delivery in their own community, group participation, the promotion of self-worth and the sharing of knowledge and information with peers and parents. In particular, participants valued the way that the programme adopted an asset-based approach and sought to instil a sense of personal self-worth by addressing the young men's concerns about academic attainment, street safety and economic security. In addition, the authors concluded that programmes that incorporated a formal curriculum but adapted sessions to meet their own participants' needs appeared to be the most beneficial. Other key issues were the provision of a comprehensive culturally sensitive service that included health education, facilitating access, strengthening referrals and links with clinical services and maintaining staff-youth relationships. This was not, however, a controlled study and the intervention needs further, more rigorous, evaluation. In addition, the programme was only shown to be effective in changing contraceptive and condom use at last sexual contact in African American men. Other limitations were the variability in programme settings, participants, formats and scope and difficulties in collecting matched pre- and post-data in various settings.

The UK study [14] described an evaluation of Sure Start Plus. This initiative aimed to support young parents and improve their health, social and emotional well-being by improving access to appropriate health care and education. The quantitative component of the evaluation included a matched case—control study in 35 pilot areas and case study interviews in 12 areas. Overall, there were no statistically significant differences between the intervention and the control groups although a higher proportion of young fathers in intervention areas had access to health and advice about contraception, smoking cessation, domestic violence and

housing issues. Although interviews with professionals in partner agencies found little difference in perceptions of service provision, they did feel that fathers in Sure Start Plus areas had better emotional support and that areas with a specific strategy for reaching and working with young fathers were more successful in reaching teenage fathers than areas without such a strategy.

However, the study authors acknowledge that young fathers' needs were not generally addressed by the initiative and a lack of appropriate skilled staff made it difficult to work effectively. In addition, the evaluation of impact was limited by significant differences in the characteristics of fathers in the intervention and control groups, lack of reliable baseline data, diversity of intervention delivery in different areas and the confounding influence of other similar initiatives.

The two US-based studies provide some useful insights on how to develop programmes based on behavioural and contextual issues. The findings suggest that it is important to tailor strategies for different groups of participants. Partnerships with other youth-serving providers and community stakeholders appeared to help promote the message of male responsibility but more work is required regarding the length of programme, content and impact on outcomes for different profiles of participants (sexually active, ethnicity, age, etc.). Smith et al. [11] suggest that school-based interventions should include mentoring and support groups that can address young males' development and relationship issues and multifaceted programmes that involve social workers may be critical for young males who are not connected to a traditional health care system [12]. All three studies demonstrated that further research is needed to determine how to build links between different services including clinical care and prevention, education, housing and social services and to assess the type of supplementary supports necessary to successfully enrol young men in clinical settings.

#### **Qualitative studies**

In contrast to the paucity of quantitative papers, a number of qualitative studies were found. A total

of 16 papers (15 studies) are described, of which 12 were from the UK [15–26], 2 from the United States [27, 28], 1 from Canada [29] and 1 from Australia [30].

Nine papers were exclusively concerned with young males either as fathers or in relation to sexual health promotion, while seven included an exploration of the experiences and perspective of young men as part of larger studies also concerned with the perspective of young women. These studies tended to have fewer males than females with males often identified through snowballing techniques after the young women were recruited. Two papers reported on the views and experiences of Black and minority ethnic fathers [17, 27].

Nine papers reported on in-depth interviews undertaken with young men [15–20, 25, 26, 30], five reported findings from focus groups [21, 22, 27–29], one [23] used a multi-method approach involving documentation, observation and in-depth interviews and one used structured interviews, but allowed some flexibility for the interviewers to probe [24].

In terms of quality, a number of the studies are noteworthy as they provide a well-justified and reliable analysis.

- Coleman [18] adopted an interpretative phenomenological analysis.
- Higginbottom *et al.* [17] analysed data using the 'framework' approach [31].
- Forrest *et al.* [21] and Silverman *et al.* [28] provided a well-reported grounded theory approach.
- Pearson [22] employed a four-stage thematic process [32] and considered the interaction features of the focus group data.
- Tyrer *et al.* [16] used a constant comparative method.
- Reeves [26] employed a narrative approach.

#### Main themes from qualitative studies

In relation to sexual health promotion, presentations that were too negative, i.e. those based on 'scare tactics', or that contained an overly biological emphasis were perceived as unhelpful by young men [29], as was an overly moralistic

approach [21, 29]. Teachers who viewed boys stereotypically, as sexual predators, were likely to create negative responses from teenage boys thereby alienating them from health promotion messages [21]. A Randomised Intervention trial of PuPil-Led sex Education in schools, although primarily concerned with peer education [21], found that peer-led sexual health education was perceived as less likely to be moralistic and more engaging than that led by teachers.

A number of problematic areas were also identified in terms of delivering sexual health promotion to young men. Teaching styles that boys did not find acceptable were likely to be met with overt strategies of resistance such as young males 'acting up' or being provocative [21]. Hostility and intolerance towards homosexuality during sexual health promotion sessions were also found among young men [29]. For the most vulnerable young men, who had had difficult childhoods or highly unstable ones due to being 'looked after' in local authority placements, experience of school-based health promotion had often been negligible, due to absence, illness or exclusion [16].

In relation to young men's sexual health decision-making strategies, a number of studies reported on the complexity of providing appropriate services for young men. A theme identified by a number of studies is that cultures of masculinity appear to function negatively for young men. For example, adolescent males may be aware of sexual health services but feel that they should be knowledgeable about sexual matters and not need help or support [21, 22]. In addition, services targeted specifically at young men could be problematic as dominant values relating to heterosexuality meant that male-only material was rejected [22]. Familiarity with the clinic setting and professionals appeared to increase acceptability of services [19] and the skills, attitudes and knowledge of the workers appear critical to success [23]. Young fathers reported that health care professionals including community staff such as health visitors tended to marginalize them and exclude them from decision making during pregnancy and the early post-partum period [25], something that may be reduced by specifically targeted services provided by initiatives such as Sure Start Plus [14].

A central theme of papers concerned with young fatherhood is that an unhappy childhood is a contributing factor, particularly where children have been rejected by their own parents [15, 16, 20]. Looked-after young men, who had had a very unstable childhood such as a high numbers of placements and foster homes, were especially prone to expressing the desire to create their own families. Social exclusion such as time spent in care also made it difficult for young men to form trusting relationships either with partners, family members or services and professionals [16].

Studies showed that young men had varying attitudes to fatherhood. One study [28] of young male perpetrators of dating violence explored the influence of masculine behavioural and attitudinal norms on sexual risk and pregnancy. This study identified that among this group of young men, adversarial attitudes to sex and young women were associated with male avoidance of responsibility and negative responses to young women who become pregnant. However, it is important to note that this study focused on perpetrators of sexual violence and may not be typical of the wider population of young men. Other studies of young fathers, and particularly those where young men expressed a desire to maintain involvement with their child, found that young men held somewhat idealized and romantic perceptions of fatherhood which were similar to those of vulnerable young women.

Young men's desire to create a family in which they were a better father and role model than their own fathers featured strongly in some of the accounts from young men, and this was found to correlate with the likelihood of early parenthood [15, 16, 20, 25–27]. Although young men often reported difficulties with the transition to father-hood, for some fatherhood provided an opportunity to construct a new positive identity and a transition out of antisocial behaviour and addiction [25, 26]. Young fathers were also found to be aspirational in terms of educational opportunities for their children [17]. However, despite these desires, many young

fathers had long periods of poor contact with their children [20].

#### **Discussion**

This paper has identified, and mapped, primary studies exploring the role of young men in preventing teenage pregnancy and ways of improving outcomes for young fathers. Previous work had highlighted a number of gaps in the evidence, especially in the UK [6, 7], and suggested that different groups of young people, especially males and females, may require different intervention strategies. This mapping highlights the findings from relevant quantitative and qualitative studies that have evaluated interventions involving young men or exploring their perspective.

Only three quantitative studies met our inclusion criteria: two from the United States [11-13] and one from the UK [14]. However, 15 qualitative studies [15-30] explored issues around teenage pregnancy and the role or attitudes of young fathers/young men. A number of key issues emerged from the quantitative studies and these were supported by the qualitative studies. Studies highlighted the importance of dispelling negative stereotypes about young men. such as considering all young men to be irresponsible sexual predators, and instead addressing young men's concerns and decision-making processes. Some factors that might be key in delivering effective interventions included messages about male responsibility, delivery in the participants' own community settings, group participation, promotion of a sense of worth, appreciation of relationships and the encouragement of the sharing of knowledge and information with peers and parents. In addition, they suggested the importance of strengthening links with clinical services, promoting familiarity with clinic settings and professionals, tailoring strategies and providing reinforcing messages about sexual responsibility. The studies included in this mapping also raised implications for the education and attitudes of health care professionals [25, 26]. The development of communication styles and approaches that include rather than exclude young fathers may be key in supporting an effective transition to fatherhood among young men. The significance of the quality of the relationship between the young couple in determining fathers' continued involvement with their child, as well as the influence such relationships appear to have on male risk-taking behaviours, highlights the potential value of interventions that are inclusive of fathers as opposed to a narrow focus on the mother and child.

Targeted support and interventions that address the specific needs of young fathers have been found to be valued by young men [25]. The evaluation of Sure Start Plus [14] found that although as time went on more of the intervention sites introduced specific strategies for working with young men, there remained a tendency to prioritize work with young women over young fathers. Interventions need to address the complexities of young fathers' situations including the association of teenage parenthood with unhappy childhoods and difficulties in forming trusting and meaningful relationships. Qualitative studies found that teenage fathers had educational aspirations for their children and a desire for continuing contact, factors that should be taken into consideration by those developing interventions [15–17, 20].

There are a number of methodological issues that could have an important bearing on the validity of these results. The lack of good-quality evaluations of sex and relationship interventions for adolescents has been documented by a number of commentators [6, 7]. We found only three quantitative evaluations, none of which was randomized and only one of which was directly applicable to the UK. Therefore, only tentative conclusions can be drawn about the effectiveness of these interventions. In contrast, the majority of qualitative studies was based in the UK and scored well on applicability. In addition, difficulties sampling young men and reliance on reaching them through young mothers or support services may mean that those fathers who are still involved with their partner or child are over-represented. Despite these limitations, this mapping does provide useful pointers for further research and the findings from qualitative studies, especially the barriers and facilitators identified, need to be incorporated into the future development of programmes.

# Gaps in research: recommendations for research and intervention development

Overall, there are very few primary studies from the UK that could usefully inform intervention development and evaluation. The limitations of current studies need to be addressed through high-quality large-scale research with evaluation as an integral part of all programmes. Areas for future research identified by this mapping around the prevention of teenage pregnancies include the following:

- Consideration of how best to provide sexual health promotion to looked-after young men, those who have had very unstable childhoods and for whom school-based interventions are inappropriate. Interventions should take account of the factors influencing young parenthood; in particular, the influence of a 'romantic ideal' of parenthood.
- Evaluation of the provision of tailored strategies and messages for different groups of participants.
- Exploration and evaluation of partnerships with other youth-serving providers and community stakeholders to determine what is necessary to build links with clinical care and prevention educational services and to assess what supplementary supports are essential to successfully enrol young men in clinical settings.

In addition, as there was some evidence that interventions provided by peers may reduce risky sexual behaviour and may be more acceptable to young men, the development and evaluation of different peer provider models [21] informed by views from qualitative studies should be considered. These should take into account potential barriers such as factors that underlie dislike of school and lack of expectations about education and training [33].

Tailored interventions aimed at changing peer norms and which address negative aspects of cultures of masculinity should be developed and evaluated. Overall, work on peer-based health promotion illustrates the importance of sex education connecting with young peoples' sexual cultures [33]. Such intensive community outreach interventions, as part of school-based interventions, have

the potential to reach large numbers of youths and could involve social workers and public health professionals who work with 'at-risk' youth, particularly young men. Models that incorporate behavioural and contextual factors into group as well as individual programme components have the potential to improve programme outcomes and should be developed and evaluated in the UK. In terms of supporting young fathers, there is a need for the development and evaluation of services focused on, and responsive to the needs of, young fathers and that link health, housing and social services.

Overall, there are a number of key areas that require further study. Most notably, this includes the need for studies with fathers who have not remained in contact with mothers and studies exploring models of masculinity and methods that assist in engaging with young fathers.

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None declared.

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