Risk and teenage parenthood: an early sexual health intervention

Abstract

Purpose - This paper outlines the development of a resource designed to support practitioners, who were not sexual health specialists, but who worked with young people who may be at risk of teenage pregnancy or parenthood. Its aim was to enable practitioners to carry out an assessment using a screening tool, and to use educational interventions designed to reduce risk-taking behaviour or refer to a sexual health specialist. We report a research project to examine the perceptions of practitioners who had used the resource.

Design/methodology/approach – The resource was based on a local needs assessment and developed by a multi-agency working group. The research utilised an on-line questionnaire and telephone interviews with practitioners.

Findings - Practitioners reported using the screening tool with young people with an average age of 13.1 years. They thought the educational interventions provided knowledge and helped with communication, self-awareness, reflection, confidence, attitudes and values clarification.

Research limitations/implications - The project was based in one county in England. A sample of seventeen percent of the practitioners responded to the questionnaire, and they might be those who had engaged most, or most positively, with the resource. Three practitioners undertook interviews. The views and behaviours of young people are yet to be evaluated.

Originality/value - Within a climate of limited resources, the findings suggest that the project was providing an acceptable proportionate universalist, early sexual health intervention for young people.

Key words teenage pregnancy, risk, sex and relationships education, resources

Paper type Research paper

Introduction

A recent international review of research and scholarship concluded that today's sex and relationship education needs to take into account the socio-political and ecological factors that influence an individual's sexual attitudes and behaviour (Simovska and Kane, 2015). In England a report into the Commercialisation and Sexualisation of Childhood (Bailey, 2011) concluded that children are growing up within an increasingly sexual and sexualised culture. Almost half the teenage girls in one study reported feeling sexual pressures and a third reported feeling unsafe often due to sexual harassment (Girlguiding, 2016). The UK Parliament's Women and Equalities Committee (2016) concluded that sexual harassment and sexual violence is a significant problem in schools, especially

for girls. The consequences include emotional and physical harm, a perception that sexual harassment and violence is a socially acceptable norm, sexually transmitted infections and teenage pregnancy. All three reports strongly recommend that children need the appropriate tools to understand the sexual world around them.

Despite a fifty per cent reduction in conceptions among girls under 18 since 1998, the number of teenage pregnancies in England and Wales remains higher than in similar western European countries (ONS, 2016). This includes 22,653 conceptions in the under 18s and 4,160 among the under 16s. A British survey reports that in 2010 the median age of first sexual intercourse was sixteen for both men and women aged 16 to 24 at the time of asking, and for about a third of this sample it was younger than sixteen (Wellings *et al.*, 2013). Comparisons with the answers from older age groups suggest that the numbers reporting the age of their first intercourse at under sixteen has steadily risen over three generations (Wellings *et al.*, 2013). First intercourse at ages 13 to 14 is strongly associated with a lack of sexual competence as measured by both partners being equally willing, autonomy in making the decision, use of contraception and it happening in the right circumstances (Wellings *et al,* 2001). Having sex under 16 is strongly associated with unplanned pregnancy (Wellings *et al*., 2001; 2013). The charity Childline report that three out of every four young people who telephone them about pregnancy, and who provide their age, are fifteen years old or younger (NSPCC, 2006). Among girls under 18 years, the younger the girl, the more likely they report a termination of pregnancy (Wellings *et al.*, 2001).

Teenage conception is associated with a range of physical and social environmental factors such as living in areas of deprivation, unemployment and discrimination (Allen *et al.*, 2007; Imamura *et al*., 2007; Harden *et al.*, 2009). Barnes *et al* (2011) report a link between young people who are engaged in risky behaviours, such as substance misuse, and pregnancy. English under-age drug and alcohol consumption has been falling since 2003 (HSCIC, 2016), but both remain higher among vulnerable groups, and alcohol consumption remains one of the highest in Europe (DfE, 2011). Young people are at increased risk of poor sexual health and drug and alcohol misuse if they belong to a vulnerable social group such as those who truant or have been excluded from school (DfES 2006); being a 'looked after child' (Fallon and Broadhurst, 2015); having a learning disability or special educational needs (Department of Health, 2007) including conduct disorders (Pederson and Mastekaasa, 2011); those who are sexually exploited or working as sex workers (DfE, 2009); those with mental health problems (Magill and Wilcox, 2007); young offenders (Hall and Hall, 2007); and those who have experience of physical or sexual abuse or neglect (DCSF, 2008). Individual risk factors that make

teenage pregnancy more likely include dislike of school (Harden *et al*., 2009), poor educational attainment (Hosie and Dawson, 2005); low expectations for the future (Harden *et al.*, 2009); alcohol and/or substance misuse (Bellis *et al*., 2009); early sexual activity and poor use of contraception (Hoggart and Phillips, 2011; Baxter *et al.*, 2011). Taking risks and making mistakes is common among teenagers, but risk taking is higher among some young people than others, with life-long negative consequences.

Marmot (2010) recommends that in order to reduce inequalities in health among populations, interventions should be universal, for all, but also have a scale and intensity that is proportionate to the level of disadvantage. He calls this proportionate universalism. In the context of sexual health, there is a need for all young people to have access to sex, relationship, drugs and alcohol education and health services, but some vulnerable young people need proportionately greater intervention.

INSERT FIGURE 1

Health education aims to empower young people in order that they are better equipped to understand and cope with the social and physical environment, to change it, and to facilitate changes in their personal behaviour (Weare, 2002; Green, 2012). Factors which are known to increase a young person's resilience to developing sexual health and drug and alcohol problems include having a positive attitude (Department of Health, 2013), a supportive family or social support group (Kirby and Lepore, 2007); being in education, training or employment; having aspirations and ambition; and having positive self -esteem (McKay *et al.*, 2012). The Office of National Statistics (2016) credits the reduction in teenage pregnancies in England and Wales as being due to a shift in some girls' aspirations towards education and to government sponsored programmes such as sex and relationship education and greater awareness of, and access to, contraception. Figure 1 summarises the key factors that are associated with reducing teenage pregnancy rates (LGE/PHE, 2016).

The English Teenage Pregnancy Strategy, a government sponsored national campaign led by sexual health specialists, aimed to halve conceptions and support teenage parents and their children (Social Exclusion Unit, 1999). It ended in 2010 and evaluations showed that it had made significant progress (Hadley *et al*., 2016; Wellings *et al.*, 2016). The Strategy ended due to economic recession, cut backs in public services and a political move towards localised services favoured by the new Coalition Government (Department of Health, 2013). This led to the shutting down of many local sexual health

clinics and reductions in the sexual health specialist workforce. In 2013, it was calculated that maintaining current levels of access to contraception and sexual health services could cost the UK, between 2013 and 2020, £11.4 billion in National Health Service costs because of unintended pregnancies and sexually transmitted infections (Development Economics, 2013). With no compulsory sex and relationship education for all schoolchildren, the result was a concern about all young people's sexual health, but especially those who had the risk factors that linked them to a higher probability of pregnancy and parenthood.

Development of the resource

In the English county of Kent, a resource was developed for local practitioners who worked with young people, but who were not sexual health specialists. The project aimed to (i) establish a risk assessment screening tool for practitioners working with young people to support the early identification of young people at risk of teenage conception (ii) develop a portfolio of educational interventions which could be implemented in partnership with a young person to build in protective factors and reduce a young person's risk of unplanned pregnancy and (iii) to provide workforce training to ensure that practitioners were competent and confident to use the resource.

A broad multi-agency working group identified and assimilated local public health data in order to identify high-risk local populations and local needs. It critically reviewed regional, national and international examples of established screening tools in the field of sexual health and substance misuse in order to distil best practice. The result was a paper based resource comprising two parts: a screening tool and educational interventions (Robinson and Jones, 2011), and a programme of training events for practitioners.

Screening tool

The screening tool aimed to identify young people at risk of teenage conception. The tool comprised a questionnaire which could be completed on paper or on-line through a web site developed for practitioners. It was designed to be completed within the context of a face to face interview with a practitioner or to be used as part of a broader health needs assessment with a group, class or school. It was not intended to be used by a young person alone. The young person was invited to answer fifteen statements using a five point Likert scale of strongly agree to strongly disagree. The statements assessed knowledge, attitudes and behaviour, and drew upon the Contraceptive Self

Efficacy Instrument (Levinson, 1986), the Condom Use Self-Efficacy Scale (Brafford and Beck, 1991) and a scale to measure the effects of peer pressure (Clasen and Brown, 1985). These instruments were chosen because they had been well tried and tested. The outcome was an overall score of risk.

Educational interventions

The educational interventions sought to facilitate cognitive and affective learning in the form of increased awareness, knowledge and understanding; skills in the form of problem solving, decision making and social skills; and affective learning in the form of understanding emotional states, values and attitudes (Green *et al.*, 2015). They were informed by the specific attitudes, values, practical and social skills known to be associated with young people's sexual behaviour (Marston and King 2006; Blum and Mmari, 2006), and by understanding that young people have difficulty with impulse control because the myelination of neurons in the pre frontal region of their brain has not yet completed. This affects both their cognitive ability and their ability to understand others, which can lead to ill-considered or risky behaviour (Burnett *et al.*, 2009). A lack of impulse control is notable among people who have symptoms of conduct disorders such as attention-deficit/hyperactivity (Sebastian, *et al.*, 2014), a group who are at higher risk of unplanned teenage pregnancy.

The activities could be carried out between an adult and a young person, or within a small group. They included quizzes, games, case scenarios, values continuum lines, problem solving exercises, card sorting exercises and fact cards. A chart linked individual questions from the screening tool with relevant educational interventions. For example if a young person strongly agreed with the question: 'It is OK to have sex if you are under 16', which is illegal in UK law, the practitioner was guided towards educational interventions in the resource concerning values and attitudes, consent and sex and the law. The resource also contained information about further support such as sexual health outreach nurses, drug counselling and treatment centres, help lines and web sites. The resource was piloted and finalised.

Workforce training

One thousand and thirty one practitioners, including teachers, youth workers, school nurses, ministers, social workers, midwives, foster carers, youth workers, charities and youth offending teams undertook a half day of training in venues across the county led by two sexual health consultants over 14 months ending in July 2012. The training enabled multidisciplinary practitioners to meet, to obtain the resource, to develop confidence and competence to use the resource and,

importantly, confidence to deal with the outcomes. For example, a young person could disclose having under age sex, or carrying out illegal activity. Using hypothetical scenarios the practitioners used role-play to complete the screening tool, score it, and identify appropriate educational or referral interventions. Some of educational interventions were role played; others were just discussed in the class.

Sixty four per cent of the practitioners (n=662) completed post-training evaluation questionnaires. Eighty per cent rated the trainers as excellent, 84 per cent rated the resource and accompanying power point presentation as excellent, 81 per cent rated the overall training as excellent. All respondents felt confident to use the resource and 99 per cent intended to use the resource. As there was significant demand from local practitioners for the training, but insufficient funding, approximately one fifth of the practitioners were encouraged to cascade their learning to their colleagues, and each were given an extra resource for this purpose.

Researching practitioners' perceptions of the resource

Aims and objectives

The aim of the research was to examine practitioners' perceptions of the resource. The objectives relating to the screening tool were to find out:

- the number of practitioners using the screening tool who were appropriately trained.
- where, how and with whom the practitioners were using the screening tool.
- the practitioners' perceptions about the effectiveness of the screening tool; to help them to identify whether a young person was at risk of teenage conception, to enable them to find out about a young person's health and wellbeing, to enable the young person to identify and communicate their health and wellbeing needs.
- the practitioners' perceptions about the acceptability of screening tool; to what degree having access to the screening tool affected the practitioners' confidence in relation to their discussions with young people, and how easy the practitioners found the screening tool to use
- how using the screening tool affected the number of young people that practitioners referred to specialist services and why.

The objectives relating to using the educational interventions with young people were to find out:

- which educational interventions had been used by practitioners and why.

- practitioners' perceptions about the degree to which the educational interventions had; facilitated useful health related learning, improved young people's self-awareness, enhanced young people's confidence in their ability to make changes, facilitated young people to reflect on their feelings, and challenged young people's existing values and attitudes towards their health.

Method

The resource was evaluated using quantitative and qualitative methods. All research procedures were approved by a university ethics committee. Any scores from screening tools that had been completed on-line were available to one researcher, because she owned and operated the web site, but not the paper screening tools that were completed in-situ. This provided a 'snap shot' of an anonymous convenience sample young people's risky knowledge, attitudes or behaviour collected between May 2011 and October 2013. A practitioners' questionnaire, comprising 57 semi-structured questions about the practitioners' perceptions of the resource was sent out in February 2013, six months after the last training event, to 394 e-mail addresses. These represented approximately a third of the practitioners who had attended the half-day training events, the remainder had attended training on recommendation from others and their contact details were unavailable. Out of these, 147 e-mails bounced or the recipients were no longer in post, leaving a final sample of 247 practitioners. From this, 42 completed the practitioners' questionnaire. The responses were imported into a spread sheet and analysed using Statistical Package for the Social Sciences software (SPSS).

The practitioners' questionnaire invited participants to volunteer for a follow-up telephone interview with a researcher who had no previous involvement in the development of the resource or training. After the results from the practitioners' questionnaire had been analysed, the interview was developed. It comprised eight open questions with occasional prompts and its aim was to illuminate some specific findings from the questionnaire, such as their thoughts about the age range of the young people with whom the practitioners used the resource and reasons for the highest use of some educational interventions and for the lowest use of others. Out of five who initially volunteered to be interviewed, due to their work/time pressures, three participants completed the interview. Responses were handwritten during the interview.

Results

Screening tool

Insert Table 1

Table 1 shows that 484 young people had completed the screening tool on-line. Thirteen to 15 year olds made up two thirds of the sample. Risky knowledge, attitudes and behaviour were reported across all age groups from 11 to 19 years old with a slightly higher average score among males and in the age groups of 16 to 17 and 19.

Insert Table 2

Table 2 shows that the practitioners' questionnaire was completed by 42 (17%) respondents from a wide range of services. This might represent a sample who were motivated to complete the questionnaire due to having greater and more positive engagement with it. The respondents estimated that between 9 and 125 young people per service had engaged in the screening tool, which totalled approximately 708 young people. Out of these, a third were in the context of education (n=118) secondary school (n=36) and alternative curriculum provision (n=112). The resource recommends that practitioners working with young people who have a high score, 'Risky business', may consider referring the young person to the specialist sexual health services. The sexual health outreach practitioners, the only 'specialist sexual health service' in the sample, reported using the screening tool with 107 young people, an average of 26.8 per practitioner, which may have included these referrals. The young people undertaking the screening were aged ten to nineteen, with an average age of 13.1 years. Practitioners working in alternative curriculum provision, youth offending, social services, foster care, voluntary services and 'other', were using the tool with the youngest average ages, and some of the very youngest were in Special Educational Needs, Children's Homes and 'other' services.

The three interviews took place with a young persons' sexual outreach nurse; a social worker with a youth offending team; and a teacher in a school for children with emotional, social or behavioural difficulties, many of whom were looked after children or fostered, and many lived in an attached residential unit. They were asked why the average age for using the screening tool was 13 years. The sexual health outreach nurse suggested,

"13-14 is an age when a lot of adults feel uncomfortable about young people becoming sexually active and undertaking risky behaviour. By 15 it might feel more comfortable to refer someone to sexual health services because at this age it is more acceptable that they might be sexually active. The resource means that something can be formally provided for this age group. It is something that an agency could tell parents that they have in place. It carries more clout than having an 'informal chat'. Use of the tool can be kept as a formal record, and therefore evidence that something was done."

Thirty nine respondents (93%) reported that none of the young people with whom they worked had engaged with the screening tool entirely alone or with no input from a practitioner. The need for practitioner involvement was reinforced by a teacher who said,

"It doesn't necessarily dig into difficult areas. For example we had a girl who got a low score, a good score, and yet we knew that she needed more help than it identified. It doesn't always pick up."

The respondents approximated that 55 per cent of the young people with whom they worked, engaged with the screening tool within a one-to one meeting with themselves (14.9 per practitioner) and 23 per cent within a one to one meeting with another practitioner. The remainder completed the tool in a small or large group. Of these 'other' practitioners, 20 had attended the half day training, and nine were sexual health specialists, health education practitioners or were trained by the respondent. Out of 708 young people, a third (31%) had completed the screening tool in an 'other type of school', which means not mainstream and would include places of alternative curriculum provision; and a fifth (20%) in a youth club or similar service. Smaller numbers had completed it at the young person's home (10%), a care home (9%), secondary schools (8%), further education colleges (6%) or elsewhere. This suggests that the tool was being used as intended.

Three quarters of the respondents in each service thought that the screening tool was very effective and very helpful. Most respondents thought that the screening tool was very effective in helping to identify whether a young person was at risk of teenage conception (88%), very helpful in enabling them to find out more about a young person's health and wellbeing (91%) and very helpful in enabling the young person to identify and communicate their health and wellbeing needs (90%). Ninety six per cent of the respondents felt more confident having access to the screening tool than without it, and 94 per cent reported that the screening tool was straightforward and easy to use.

The screening tool is lovely, I like the simplicity of it. It's like what you see in a magazine and the young people can access it well. (teacher)

The respondents were asked how using the screening tool affected the number of people that the practitioners referred to sexual health specialist services. Seventy nine per cent reported a change, 43 per cent of respondents were referring fewer young people and thirty six per cent were referring more. Eighty seven per cent of those reporting change answered that it was because their own knowledge and skills had improved and 20 per cent answered that it was due to their greater awareness of available services.

Only one respondent reported not having used the tool.

"We work in a multi-professional team so referral is common. Anything sex related, I refer to the health worker. That's not my role. I do relationships, but not the sexual stuff. Also, it wouldn't be in their [the young person's] comfort zone. It's not what they expect from me…. My focus is to stop them from reoffending." (social worker)

Educational interventions

The most used educational interventions were Making Choices (88% of respondents); What is Self Esteem? (88%); What is Love? (86%) and Negotiating Safer Sex (83%). These were some of the more frequently role played interventions during the workforce training events. The interviewees described Making Choices as a core activity for all young people, saying that some young people do not see that they have got choices.

"They know that they need to use condoms, but when it comes to actual situations … they don't really think through the consequences." (teacher)

The interviewees said that the young people with whom they worked often had low self esteem and that this was an underlying factor behind their risky behaviour. They all spoke of the young people as having had no or little experience of good relationships.

A lot of our young people have attachment difficulties. They have a very warped idea of relationships. (social worker)

The three interviewees said that 'What is Love?' might be frequently used because the topic of love was a more acceptable subject than sex.

"Mainly because it sits comfortably in schools. They have to balance the parental view with the young people's more carefully than we do in sexual outreach work. … Love is perceived as more acceptable. They can 'dip their toe in the water' of the transition from friendship to intimate relationship. Young people don't know about friendship, relationships and intimate relationships. They may not have any idea because of their prior experience of good relationships within the family. Some have never had closeness in a family, or a happy satisfying relationship. So they don't know what love really means.

(sexual outreach nurse)

The least used interventions were Baby Budget Worksheet (31% of respondents), Reality Parenting (33%), Reactions (45%), Agony Aunt Letters (52%) and Managing Stressful Situations (55%). These five interventions were rarely role played in training events, with the exception of training events for practitioners who regularly work with teenage parents, though they were discussed in all.

The respondents were asked to consider how well each intervention had facilitated health related learning by providing a score out of ten. The highest were The C-Card (9.44), which was not an activity, but signposts a young person to register with a scheme that provides access to free condoms, Condom Demonstration – In What Order? (9.09) and Sex and the Law and Is this Love? (9.06). The average score was 8.4 and the lowest was 7.41. for Agony Aunt Letters.

Negotiating Safer Sex was the third most frequently used intervention, comprising many statement cards such as 'Using a condom feels like cling film!', or 'If you love me you don't need to use one!'. It was scored the second highest (9.2), and higher than other educational interventions about condoms and contraception.

The need for this is high. They can recall facts, but attitudes, feelings and thinking about what they'd do in a real situation is needed. (teacher)

Probably used with young people who are already displaying risky behaviour. It allows you to investigate with a young person … Damage limitation. Negotiating with a young person to make their behaviour less risky. (sexual outreach nurse)

The respondents thought that the interventions were most successful at enhancing young people's knowledge (94% 'quite a lot'), and improving their self-awareness (89% 'quite a lot') and reflecting on their feelings (91% 'quite a lot'). They thought they were slightly less effective at enhancing

young people's confidence in their ability to make changes (80% 'sometimes') and challenging their values and attitudes towards health (87% 'sometimes'). The overall pattern of findings suggest that the educational interventions were perceived as working better for 13 to 14 year olds and for 17 year olds and older, than for 15 to 17 year olds. They were perceived as working better within social services, alternative curriculum provision, foster homes, children's centres, youth offending and voluntary organisations.

Discussion

Screening tool

In order to replicate Marmot's (2010) proportionate universalist approach to reduce risk taking behaviour that is linked to teenage pregnancy and parenthood among young people, initial screening needs to be widely available. The evaluation showed that the screening tool was used across a wide range of services, including those that work with vulnerable young people. It was most frequently used in educational services where there are large populations of young people and particularly among educational services that provide an alternative curriculum for young people who are unable to attend mainstream schooling due to a range of barriers to their learning. These barriers are often those known to be associated with risk factors for poor sexual health, drug and alcohol misuse and teenage pregnancy, such as being excluded from school (DfES, 2006) poor educational attainment (Hosie and Dawson, 2005); mental health problems (Magill and Wilcox, 2007) and so forth. The findings suggest that the tool was being used in a proportionate universalist way.

Risk taking behaviour, along with vulnerable circumstances, is associated with earlier sexual activity, poor use of contraception (Hoggart and Phillips, 2011; Baxter *et al*., 2011) and consequently a higher prevalence of unplanned teenage pregnancies and terminations (Wellings *et al*., 2001; 2013). More young people are experiencing their first sexual intercourse at younger ages (Wellings *et al.*, 2013), as young as 13 (Wellings *et al*., 2001). According to the practitioners the screening tool was being used with young people at an average age of 13.1 years, and from the age of ten within some services. This suggests that the tool was being used as intended, as an early intervention tool, and that practitioners' perceptions of the age at which to use it reflects current trends in teenage sexual awareness and activity.

The use of the screening tool with those of an average age of 13.1 years is also likely to be explained by the wealth of neuro-scientific, psychological and physiological evidence that shows strong associations between having unstable or unsafe experiences in early life, insecure attachment relationships with carers, low self-esteem and behaviour that is highly reactive, emotionally driven and sometimes unsafe and high risk (Anda *et al.*, 2010; Department of Health, 2011; Radford *et al.*, 2011). It is not surprising that within services that support the most vulnerable children, there are concerns about high risk taking attributes at younger ages.

These findings need to be viewed in the context of understanding that in the UK any practitioner who knows that a young person under the age of sixteen is sexually active must complete the local safeguarding procedures. The Children Act (2004) made Local Safeguarding Children Boards accountable for safeguarding and promoting the welfare of children. In addition, with respect to contraception, UK practitioners may legally provide advice and treatment to those younger than sixteen, with their consent and with or without parental consent provided certain criteria are met (Department of Health, 2004). These criteria, known as the Fraser Guidelines, require the practitioner to be satisfied that the young person understands the practitioner's advice; the young person cannot be persuaded to inform their parent or carer; the young person is likely to begin or continue having sexual intercourse with or without contraceptive advice or treatment; unless the young person receives contraceptive advice and/or treatment their physical or/and mental health, are likely to suffer; the young person's best interests require them to receive contraceptive advice or treatment with or without parental consent (Gillick v West Norfolk & Wisbech Area Health Authority 1985). The Sexual Offences Act (2003) states that children under the age of thirteen are insufficiently mature to consent to sexual activity. If a practitioner finds such a young person to be sexually active they must refer the child to the local child protection team.

The trend towards having first intercourse at ages younger than sixteen (Wellings *et al.*, 2013) is re-igniting the discussion about using age as a legal arbiter of consent. Palmer *et al.* (2017) suggest that having sexual competence at the time of a young person's first experience of intercourse is associated with better sexual health outcomes, such as fewer sexually transmitted infections, at later ages. A previous study indicated that having first intercourse at ages 13 to 14 was strongly associated with a lack of sexual competence in 91 per cent of the sample of girls and 67 per cent among the boys (Wellings *et al.*, 2001) suggesting that the majority were highly vulnerable to being sexually unsafe. The legal age of consent might not accurately reflect each person's readiness,

maturity or vulnerability; but the urgency to understand the causes and consequences of under-age sex, and to err on the side of caution and support, is growing.

The screening tool was not intended to provide a complete assessment of a young person's health and wellbeing, but to make a useful contribution. The practitioners evaluated it as being helpful in this task, enabling both the practitioner and the young person to communicate about the young person's health and wellbeing. It also provided a useful written record of having engaged with an individual at the earliest stages of concern.

The analysis of the screening tools which had been completed on-line, showed that those beginning to exhibit risky knowledge, attitudes and behaviour ('watch your step') ranged from 13 to 19 years old. The scores of risk were highest for 19 year olds and second highest for 16 to 17 year olds. The tool invited practitioners working those young people with high scores, 'Risky business', to consider referral. Forty three per cent of respondents were referring fewer young people to specialist sexual health services and 36 per cent were referring more. Although the research does not examine whether these referrals were appropriate or acted upon, the practitioners reported that their referral pattern changed because they thought that they had increased knowledge, skills and, to a lesser extent, greater awareness of services. These findings suggest that the resource and the workforce training events had enhanced practitioners' feelings of confidence and perceived competence. The research identified only one practitioner who had not used the screening tool, because she did not perceive sexual health to be an appropriate part of her role.

The research showed that the screening tool was perceived positively by practitioners who were not sexual health specialists, in the context of carrying out an assessment, identifying young people at risk of teenage conception and making informed decisions about appropriate interventions for a young person to reduce their risk taking behaviour. It was being used with the young people for whom it was intended, often as an early intervention, and in the way that it was intended. The youngest children to be asked to engage with the tool were associated with those services that support the most vulnerable children. It seems likely that some practitioners will have reasons for not incorporating the screening tool into their work, and they may need to refer to other practitioners. For those that do, the findings support the importance of practitioner training to ensure that they are able to confidently and competently deal with the outcomes from the screening tool.

Educational interventions

There was some evidence that the opportunity to engage experientially with educational interventions in the workforce training might have encouraged those interventions to be used more in practice. The most frequently used interventions appeared to deal with core and common emotional needs among young people and skills development. Poor early relationships are associated with low self-esteem and risky behaviour. The pre frontal cortex of the brain, which controls reasoning and the ability to think through consequences of actions, is often not fully developed until approximately 25 years even among those who have not had the disadvantages of instability in younger life (Burnett *et al.*, 2009). It is not surprising that educational interventions which encourage young people to think through consequences, such as Making Choices and Negotiating Safer Sex were frequently used alongside those about building self-esteem and exploring love.

The resource needed to meet the needs of practitioners who worked within different professional roles and codes of conduct within a variety of services. While all practitioners worked within local safeguarding policies and in accordance with the Sexual Offences Act (2003), those in the education system were working 'in loco parentis' and within their local school or local authority policies, whereas practitioners working in other services were likely to be more heavily guided by the Fraser Guidelines (Department of Health, 2004). Educational interventions about love are likely to be less controversial in some services, such as schools, than ones dealing more directly with sexual behaviour.

All the educational interventions had been used and were positively evaluated. Practitioners perceived them to be particularly good at promoting cognitive and affective learning; providing knowledge, enabling young people to reflect on their feelings and promoting self-awareness. Sometimes the interventions were thought to be successful in challenging values, attitudes and building confidence to make changes. In terms of the Stages of Change/Transtheoretical model (Prochaska and DiClemente, 1982) the practitioners' perceived that the resource was effective at moving a young person from the pre-contemplation stage, which is not being interested in changing, to contemplation, where they were beginning to think about change.

The resource

The evaluation indicated that the multidisciplinary practitioners felt confident to use the resource to carry out an assessment and help them to make informed decisions about appropriate interventions

for a young person to reduce their risk taking behaviour. They thought that the resource had helped with young people's knowledge, communication, self-awareness and reflection about their feelings, critical thinking and confidence. These key capabilities can enable young people to reach their full potential and become more independent. Growth in some capabilities leads to an enhancement of others (McNeil *et al.*, 2012). It is reasonable to claim that the practitioners thought that the resource contributed to the young person's learning and self-empowerment (Green *et al*., 2015).

The on-line screening tool scores showed that risk taking was higher from age 16 years. Within an overall positive evaluation, the participants perceived the resource as having relatively less impact on the 15 to 17 year olds, which is a concern. The resource appeared to be most positively evaluated for the 13 to 14, and 17 year old and over, age groups. The latter might be explained by greater pre-frontal brain development compared to earlier ages, which helps with the ability to reason and to understand others (Burnett *et al.*, 2009). It might also reflect an accumulation of positive emotional and social relationship experiences, possibly from practitioners who have worked with a young person for some time, as this can help to calm emotional impulsivity through changes in the brain (Cozolino, 2006).

Limitations

The results are limited by focussing on one county and the relatively small sample size that might reflect the more motivated. High workloads and limited time were also factors that prevented greater participation in the study, as was practitioners changing jobs and contact details being lost. The research only concerned the practitioners' perceptions, qualitative research with both the young people and practitioners could helpfully illuminate the findings. Further research, perhaps a randomised control trial, is needed to evaluate the effectiveness of the resource. It would be useful to know how accurately the screening tool measures risky behaviour, whether practitioner referrals to other services are appropriate, to compare screening tool scores before and after interventions and to evaluate whether the resource can be directly linked to reductions in young people's risk taking, unplanned pregnancies and parenthood. It would also be useful to research the characteristics of the young people at the time of completing the screening tool, including age, gender, ethnicity, social and family circumstances, academic performance and characteristics associated with risk taking and teenage conception.

A wider limitation is to acknowledge that teenage pregnancy can be a positive experience for some (Seamark and Lings, 2004). Duncan (2005) reports that evidence comparing teenage mothers and

their peer group reveals that the pre-pregnancy social background of a teenage mother is more strongly associated with her future social circumstances than her pregnancy and motherhood. Duncan argues that teenage pregnancy, as a problem, is a social construction of our times. He also points out that there were far more UK teenage pregnancies in the 1950s and early 1960s, the 'golden age of the family', compared to the late 1990s when it they became constructed as a national calamity. Unemployment, discrimination and socioeconomic disadvantage are strongly associated with teenage pregnancy (Allen, *et al*. 2007). Harden *et al.'s* (2009) systematic review found that preschool education and support seem to have a long-term positive impact on outcomes associated with disadvantage, including teenage pregnancy. They note that enjoying school, having positive expectations for the future and living in better material circumstances can all reduce teenage pregnancy rates. Any educational intervention, designed for use with individuals, is in danger of problematizing a young person's behaviour at the expense of analysing and addressing wider social, cultural and environmental factors that shape their lives. The combination of individual education with interventions to address social disadvantage seem to be the most effective way to lower teenage pregnancy rates (Harden *et al*, 2009).

Conclusions

The project was designed in response to a significant reduction in sexual health specialists and their services for young people. It demonstrates that it is possible to develop an acceptable and evidence-based resource for many practitioners who already work with young people, but who are not sexual health specialists. With half a day's training, most thought that they could confidently and competently identify and support young people who were at risk of teenage pregnancy or parenthood. These practitioners, unlike sexual health specialists, are more likely to have worked with young people over a period of time. Their work to build a trusting relationship with the young person can be a bedrock on which to base a conversation about the young person's risk taking attitudes or behaviour, to make an assessment of risk and if possible provide appropriate support. A half day training and the provision of a resource led to four fifths of the respondents making more or fewer referrals to sexual health specialists on the basis of having more knowledge and skills about what they could offer and what the specialists could offer. This represents better use of resources within a climate of needing to be highly cost effective. It reflects a model that better uses the capabilities of the public health workforce rather than a medical model that relies on health specialists, and it emphasises early primary prevention rather than crisis intervention.

Kennard and Cuccu (2016) report that conceptions among the under 18 year olds in Kent have fallen, like the rest of the country. Three quarters of this decrease occurred between 2010 and 2014, when it decreased from 35 to 22 per thousand. The under 16-conception rate fell from 6.6 to 4.4 per thousand, and remains lower than the England average of 4.9 per thousand. There is some evidence to suggest that the reduction in Kent was slightly higher than the southeast England region.
There is no evidence to suggest an association between the resource and the reduction in conceptions. The resource and its training could contribute to meeting the ten key factors for an effective local strategy to reduce teenage pregnancies (LGA/PHE, 2016) (Figure 1). In particular; Targeted prevention for young people at risk, Training on relationships and sexual health for heath and non-health professionals, Advice and access to contraception in non-health youth settings, Consistent messages to young people and practitioners, and SRE (sex and relationships education) in schools and colleges. Although the funding to support the training, the production of hard copy resources and the web site ended, a few organisations have paid for staff training and resources since.

There is optimism in noting that teenage pregnancies, young people's drinking and drug taking are on a downward trend. More young people are having sexual intercourse at young ages, and the negative impacts of today's sexualised culture is of more concern than ever. It is alongside wider social and environmental changes that the provision of proportionate universalist, early, sexual health education for large numbers of young vulnerable people could be most successful.

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