

Tackling the problem of teenage pregnancy in looked-after children: a peer mentoring approach

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ABSTRACT

Teenage pregnancy is associated with adverse health and social outcomes, even after adjusting for prior disadvantage, and is recognized as a major public health issue. Rates of teenage pregnancy in the UK are among the highest in Europe. Interventions introduced in the past decade to address the problem, such as improved sex and relationships education in schools, have been accompanied by a fall in teenage pregnancy rates in the UK. However, this decline has not been mirrored among looked-after children. In this paper, we discuss why this may be the case. We suggest that a system of peer mentoring, involving a young person, whose experience of life post-care has been positive, may be an effective approach to tackling the problem of pregnancy in this group. Peer mentoring has the potential to assist young people in developing self-esteem, confidence and in making choices regarding their education, personal development and relationships.

INTRODUCTION

In this paper, we discuss peer mentoring as a potentially useful approach to reducing teenage pregnancy rates among looked-after children (LAC). The risk of teenage pregnancy is particularly high among LAC (Garnett 1992; Biehal *et al.* 1995; Brodie *et al.* 1997; Corlyon & McGuire 1997); however, there is evidence suggesting that trends showing a national decline in teenage pregnancy rates do not appear to have benefitted LAC. We propose that a peer mentoring intervention, in which older, more experienced care leavers act as mentors for younger LAC, may address some of the particular risk factors that LAC experience for

Competing interests

The authors declare that they have no competing interests.

Disclaimer

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teenage pregnancy. The focus of this paper is on girls and young women, although we acknowledge that boys and young men also represent a potentially important target group in terms of reducing teenage pregnancy (Swann *et al.* 2003).

TEENAGE PREGNANCY IN THE UK: THE EXTENT OF THE PROBLEM

In England and Wales in 2012, there were an estimated 27 834 conceptions in young women under the age of 18, a rate of 27.9 per 1000 girls aged 15–17. Although this figure represented a 10% decrease in conceptions from the preceding year (Office for National Statistics 2014), rates of teenage pregnancy in the UK remain among the highest in Europe (Avery & Lazdane 2008). Teenage parenthood may be negotiated positively by some young people (Duncan 2007; Duncan *et al.* 2010) and early motherhood can be perceived as a means of rectifying early negative life experiences (McMahon 1995). However, it is also associated with a wide range of adverse socio-economic and health outcomes for teenage mothers and their children, even

after adjusting for prior disadvantage (Dickson *et al.* 1997; Botting *et al.* 1998; Hobcraft & Kiernan 1999; Ermisch 2003a; Ermisch & Pevalin 2003b; Swann *et al.* 2003; Mayhew & Bradshaw 2005). Teenage pregnancy has been recognized as an important cause, and consequence, of social exclusion (Social Exclusion Unit 1999).

Women who give birth as teenagers are more likely to be living in poverty than women who delay becoming mothers (UNICEF 2001; Mayhew & Bradshaw 2005). Furthermore, the children of teenage parents are more likely to become teenage parents themselves, indicating a continuing inter-generational impact (Botting *et al.* 1998). The association between socio-economic deprivation and teenage pregnancy is widely evidenced in the UK (Smith 1993; Diamond *et al.* 1999; McLeod 2001; Swann *et al.* 2003). Contributors to teenage pregnancy include: educational disadvantage and low expectations for employment; a lack of accurate information about contraception and sexually transmitted infections; sexualized images in the media, combined with a lack of openness about sex (Social Exclusion Unit 1999). Applying multiple regression to data from all local authorities in England, Bradshaw *et al.* (2005) found that deprivation explained about three-quarters of area variation in teenage conceptions and abortions. A review of qualitative studies exploring views on early parenthood among UK young people found that the main themes associated with teenage pregnancy were: dislike of school, poor material circumstances, unhappy childhood and low expectations for the future (Harden *et al.* 2009).

In 1999, the UK government set up the teenage pregnancy unit (TPU), which introduced a number of initiatives aimed at halving the rate of conceptions for under 18, over the next 10 years including: improving provision of sex and relationships education (SRE) in schools and increasing young people's access to contraceptive and sexual health services (CASH) (Department for Children, Schools & Families 2010). The Teenage Pregnancy Strategy resulted in an increased number of school and college-based CASH services and improvements to SRE across many schools (Department for Children, Schools & Families 2010). Additional support for teenage parents was also made available, e.g. through 'Care to Learn', which contributes to child-care costs for young people aged under 20 who wish to study, and the Family Nurse Partnerships, which aim to improve pregnancy outcomes for first time mothers aged 19 or under. In some areas, where there was effective implementation of the strategy, the rate of under-18 conceptions fell by

up to 25% of the 1998 baseline (Teenage Pregnancy Independent Advisory Group 2010). Although the strategy did not achieve its overall target of halving the rate of teenage pregnancy, under-18 conceptions in England as a whole fell by 13.3% from the 1998 baseline to 2008 to the lowest level for 20 years. Immediate challenges to maintaining the achievements of the Teenage Pregnancy Strategy were identified as: public spending cuts, a lack of young person-friendly CASH services and variation in provision and quality as well as unequal provision of SRE (Teenage Pregnancy Independent Advisory Group 2010).

In 2012, the TPU was disbanded and responsibility for improving the quality of SRE in schools and colleges and integrating it within personal, social health and economic education was taken over by the Department for Education. Subsequent initiatives to reduce rates of teenage pregnancy included: increasing the availability of young person-friendly contraception and sexual health services and targeted SRE advice for groups of young people at risk of teenage pregnancy. Since April 2013, Local Authority Health and Well-being Boards have had a statutory duty to improve health and well-being and reduce health inequalities in the local population through joint strategic needs assessments, as well as supporting young people to prevent unhealthy lifestyle choices, which include risky sexual behaviour (Department for Education 2011b). Reducing teenage pregnancies and sexually transmitted infections now form a key part of the work of local areas to tackle child poverty and address health inequalities (Department for Education 2011a). This reflects research evidence that illustrates the impact of socio-economic disadvantage on rates of teenage pregnancy.

Since 2010, rates of under-18 conceptions in England and Wales have continued their downward trend (Office for National Statistics 2014). It is predicted that legislative changes introduced in 2013 that require 16 and 17 year olds to participate in education or training will result in a further fall in conception rates among this age group (Wilson 2013).

LAC

The term 'looked-after children' is used in England and Wales to refer to children and young people who are in the care of the state. They are generally subjected to a care order (Section 31 of the Children Act 1989; 1989), although the term is also used to describe children and young people who are looked after on a voluntary basis at the request, or with the

agreement, of their parents (Section 20 of the Children Act 1989; Great Britain 1989). Children may also be removed from their parents and placed in care, on a non-voluntary basis, e.g. under an assessment or an emergency protection order. The majority of LAC (75%) in England are placed with foster carers (Department for Education 2012a).

In March 2013, there were 72 880 children and young people in England and Wales under the care of the local authorities, designated as looked after (NSPCC 2014). Between 2008 and 2013, the number of LAC increased by 14% (NSPCC 2014). This increase has, at least in part, been attributed to the number of high profile cases involving the deaths of young children, which may have been prevented if they had been removed from their homes at an earlier stage (Department for Education and Skills 2003; Macleod *et al.* 2010). In 2012, Cafcass, which safeguards the welfare of children involved in family court proceedings, received a record amount of care applications (Cafcass 2013). This is expected to rise further as a result of changes to the benefits system (Cassidy *et al.* 2013) although, so far, the figures do not seem to support this prediction. Indeed, Cafcass reported a 5% decrease in care applications from 2013 to 2014 (Cafcass 2014).

LAC are widely recognized as a vulnerable population, bearing a greater burden of health and social problems than the most disadvantaged non-LAC. (Francis 2000; Polnay & Ward 2000; Ward *et al.* 2002). Child protection policy in the UK is based on the Children Acts 1989 and 2004 (1989, 2004), and in the past decade a raft of major initiatives has been introduced to promote the rights and health and welfare of children and young people (e.g. *Keeping Children Safe Report* [Department for Education and Skills 2003], the *Every Child Matters programme* [Chief Secretary to the Treasury 2003], *Working together to safeguard children* guidance [Department for Education 2010]). Additional measures have also been introduced to safeguard the well-being of LAC and to improve their experiences of the care system (e.g. the Care Matters White Paper [Department for Education and Skills 2007] and the Children and Young Persons Act [2008]).

TEENAGE PREGNANCY AND LAC

Risk factors

LAC and care leavers are significantly more likely than non-LAC to become pregnant and then to carry that

pregnancy to term, compared with non-LAC (Craine *et al.* 2014). Between 20% and 50% of 16–19 year olds with a background of care become parents compared with a rate of around 5% in the general population (Garnett 1992; Biehal *et al.* 1995; Brodie *et al.* 1997; Corlyon & McGuire 1997). A recent study conducted in Wales found a conception rate of 5.8% in LAC aged 14–17 years compared with 0.8% in non-LAC over a 14-month period in 2012–2013 (Craine *et al.* 2014).

LAC are more likely to have experienced more of the identified risk factors for teenage pregnancy than non-LAC. High levels of social deprivation (Brodie *et al.* 1997; Francis 2000; Polnay & Ward 2000; Williams & Jackson 2001; Viner & Taylor 2005; Ford *et al.* 2007), unstable family backgrounds and frequent placement moves undermine their emotional and physical security and are associated with unplanned pregnancies and early motherhood (Wellings *et al.* 2001; Bonell *et al.* 2003; Haydon 2003; Swann *et al.* 2003; Social Care Institute for Excellence 2004). LAC have lower educational attainment than non-LAC (Daniels *et al.* 2003; Department for Education 2012a) and are about twice as likely to be not in employment, education or training at the age of 19 compared with their non-looked-after peers (Department for Education 2012b). Disengagement from education, truancy and school exclusion may also be the consequence of teenage parenthood (Bonell *et al.* 2005; Dawson & Hosie 2005). Recent amendments to the Children and Families Bill have increased the age at which children in England can remain with their foster parents, from 18 to 21, hoping that this will encourage LAC to remain in education longer (Department for Education 2013b). LAC also have higher rates of learning difficulties (Ford *et al.* 2007), which may impair their ability to understand and negotiate safe and stable sexual relationships and their knowledge and decision-making around contraceptive use and fertility.

LAC are around three times more likely to run away or go missing compared with non-LAC (The Children's Society 2011; Department for Education 2013a). This makes them vulnerable to being physically or sexually abused or exploited (Child Exploitation and Online Protection Centre 2011; Department for Education 2011b; Home Office 2011). More than half of LAC in England and Wales became looked after in 2012/2013 as a result of abuse and neglect (NSPCC, 2014). Experiencing childhood abuse increases the risk of future sexual abuse and exploitation (Coid *et al.* 2001) as well as the risk of teenage pregnancy (Friedberg 2000; Pearce 2006; Hadley 2007). In 2011, the Child Exploitation and

Online Protection Centre gathered data on 2083 victims of sexual exploitation and found that 311 (34.7%) of 896 children whose living situation was known were looked after at the time of the exploitation (Child Exploitation and Online Protection Centre 2011). LAC and care leavers are also over represented among sex workers (Friedberg 2000; Pearce 2006; Barnardo's 2011), which make them vulnerable to sexual exploitation and abuse, including unsafe sexual practices thereby increasing the risk of early or unplanned pregnancy.

Why are existing teenage pregnancy interventions less effective with LAC?

Although there has been a decline in under-18 conception rates in some local authority areas that included targeted work with LAC and care leavers (Hadley 2007), no experimental evaluations of teenage pregnancy interventions in the UK or internationally have looked at subgroup effects on LAC. Moreover, there are reasons to suggest that interventions that have been developed for and have had some success with non-LAC and young people might be less beneficial and acceptable to LAC as discussed in the following text.

There is some evidence that comprehensive provision of SRE is effective in delaying intercourse and increasing consistent contraceptive usage (Oringanje *et al.* 2009; Department for Children, Schools & Families 2010). However, high rates of truancy, school exclusion and frequent placement moves mean that LAC tend to miss out on curriculum-based SRE, as well as health interventions and other school-based interventions to reduce teenage pregnancy (Williams & Jackson 2001; Ward *et al.* 2002; Knight *et al.* 2006). In addition, evidence suggests that discussion and communication about sexual relationships between parents and their children impacts positively on children delaying sex and using contraception consistently (Department for Children, Schools & Families 2010); however, as LAC may have no or minimal contact with their parents, they are less likely to receive sex and relationships education from them (Turnbull *et al.* 2008). LAC often have to rely on their carers or professionals in their care network to provide them with accurate information, guidance and support on issues relating to sex and relationships. This in turn, depends on them having an open and trusting relationship (Corlyon & McGuire 1997), which LAC find particularly hard to establish because of past experi-

ences of maltreatment, abandonment and rejection by adults (Knight *et al.* 2006). Foster carers are also often unclear about their role in providing information on sex and relationships or find it uncomfortable to approach the topic because of personal lack of knowledge or different cultural values from the young person in their care (Knight *et al.* 2006).

There is a strong association between teenage pregnancy and age of first intercourse (Manlove *et al.* 2000). The third National Survey of Sexual Attitudes and Lifestyles reported that the median age of first sexual intercourse among young people aged 16–24 (both males and females) in the UK is 16 (Mercer *et al.* 2013). LAC generally become sexually active earlier than other groups of young people (McGlone 2000): reasons include low self-esteem, feelings of isolation and increased vulnerability to peer pressure (Corlyon & McGuire 1997). For some young women in care, parenthood may be viewed as a positive aspiration and an opportunity when they have few other aspirations and choices in their life (Haydon 2003). Young women who have been in care are less likely to attend antenatal classes, than non-LAC, and are therefore at greater risk of obstetric complications (Corlyon & McGuire 1997, 1999). They are also less likely to opt for a termination and therefore more likely to carry the pregnancy to term compared with non-LAC (Corlyon & McGuire 1997; Craine *et al.* 2014). It has been suggested that LAC and care leavers are more likely to perceive their pregnancy as giving them an opportunity to rectify their own negative or absent experiences of family life and 'having someone to love' (Haydon 2003). Thus, motherhood may provide a very powerful opportunity for LAC to have their emotional needs met (Knight *et al.* 2006; Arai 2007).

PEER MENTORING AS AN INTERVENTION TO PREVENT PREGNANCY IN LAC

The increased risk of teenage pregnancy in LAC and the relative lack of success of standard interventions to reduce rates of teenage pregnancy in this group point to the need to develop new interventions to address this problem.

The term mentoring refers to the development of a trusting relationship between an older, more experienced person and a younger, less experienced person over an extended period of time, with the aim of providing social support (Philip & Spratt 2007). Mentoring usually involves some form of goal-oriented work (Philip & Spratt 2007), and can occur

in formal contexts, in which the mentor is acting in a voluntary or paid capacity by an external organization, or in natural contexts, usually involving a non-familial adult who is already present in the young person's life (Philip 1999; Hall 2003). 'Peer mentoring' programmes have increased in recent years (Karcher 2007), particularly in schools (Mentoring & Befriending Foundation 2010). Over a third of schools in England operate some form of peer mentoring or peer support scheme to reduce bullying and promote self-confidence and self-esteem, which have had a degree of success (Mentoring & Befriending Foundation 2010). The 'peer' element of mentoring reflects the fact that the mentors are a similar age or have had similar life experiences to the young people they are supporting. In relation to LAC, the Scottish Government's report *Peer Mentoring Opportunities for Looked After Children and Care Leavers* identified that the most important criterion of being a peer is having a shared experience of being in care (Middleton 2012).

The concept of peer mentoring for LAC is consistent with the coalition government's key factors for success, particularly 'aspirational, personal and social development programmes, targeted sex and relationships education and sexual health advice for at risk groups of young people' as well as local areas' work to tackle child poverty and address health inequalities (Department for Education 2011a). Programmes, which are focused on the development of strong bonds with appropriate adults and maintaining regular involvement in positive activities, also sit well within the Positive Youth Development framework (Harden *et al.* 2009; Gavin *et al.* 2010). There is evidence to suggest that PYD programmes tend to be more successful in preventing young people from engaging in risky behaviours than programmes which focus on a 'problem' which has to be solved (Harden *et al.* 2009; Gavin *et al.* 2010). One systematic review of PYD programmes in the USA, using experimental or quasi-experimental evaluation design, found 15 programmes that had led to an improvement in at least one sexual and reproductive health outcome for young people including condom use, recency and frequency of sexual intercourse, number of sexual partners and teenage pregnancy (Gavin *et al.* 2010).

Some evidence exists for the positive benefits of peer support programmes (Harden *et al.* 1999; Hutson & Cowie 2007; Campbell *et al.* 2008; Stephenson *et al.* 2008). The Ripple project, which employed peer educators to provide sex education

within schools, appeared to be effective in reducing self-reported pregnancies by age 18 (Stephenson *et al.* 2008). There is also evidence from other groups of young people that mentoring can be an effective sexual health intervention (Clark *et al.* 2005). However, the only comprehensive systematic review of the effectiveness of peer-led health promotion interventions for young people, half of which were concerned with sexual health, concluded that, while a peer-led approach was promising, there were too few studies to be able to identify what comprised an effective model (Harden *et al.* 1999).

Impacts of peer mentoring schemes have been variable. In 2006, the Mentoring and Befriending Foundation conducted a national pilot of formalized peer mentoring schemes in 180 secondary schools in England. Self-report and qualitative data demonstrated some benefits; however, there was no clear impact on pupils' behaviour, school attendance or educational attainment (Parsons *et al.* 2008). A study of year 10 students, supporting year 7 pupils with the transition from primary to secondary school, found that following the mentoring, year 7 pupils reported increased self-esteem, confidence and less anxiety (Nelson 2003). A US meta-analysis of 55 evaluations of mentoring programmes found small benefits in general from mentoring, but greater benefits for disadvantaged youth (DuBois *et al.* 2002). Very few controlled evaluations of mentoring have been carried out in the UK. However, an evaluation of the *Mentoring plus* programme found that mentoring had positive impacts on training, education and work engagement for disaffected young people (Shiner *et al.* 2004; Newburn & Shiner 2006).

Mentoring for care leavers, using adult mentors, has been shown to increase confidence, self-esteem and aspirations (Clayden & Stein 2005). One large scale study, supported by the Department for Children, Schools and Families, evaluated one-to-one mentoring relationships to increase educational engagement and performance for 449 LAC aged 10–15. The programmes were managed mainly by voluntary organizations and the majority of mentors were adults, although some providers included peer mentors (Mentoring & Befriending Foundation & Prince's Trust 2008). The evaluation found marked improvements in school work, attendance, participation in hobbies and social activities, as well as young people's feelings about themselves, the future and relationships with others. Providers that were located within a local authority were found to be most effective at delivering these programmes.

Very little evidence exists with regard to the effectiveness of using peer mentors with LAC and care leavers and there are no programmes in the UK that specifically use peer mentors to address any problems associated with teenage pregnancy. However, a system of peer mentoring and support, involving a young person, whose experience of life post-care has been positive, may be a promising approach to intervention with this group. Peer mentoring has been shown to have a beneficial impact on many of the risk factors for teenage pregnancy in LAC including: low self-esteem, loneliness, mistrust of others, lack of assertiveness and lack of perceived choices or options in life (Haydon 2003; Knight *et al.* 2006). The concept of resilience, which is associated with building self-esteem and self-efficacy, has been shown to be protective in the context of care and teenage pregnancy and is increasingly seen as offering a framework for intervention with disadvantaged and vulnerable young people. Resilience can be enhanced by the presence of positive role models and at least one secure attachment relationship (Gilligan 1999; Daniel 2003) as provided in a peer mentoring relationship.

It could be argued that a peer mentoring intervention could benefit LAC through increasing their capacity for secure attachments and through social modelling (Liang *et al.* 2002). Attachment theory conceptualizes attachment as an affectional bond, or tie, between an individual and an attachment figure (Bowlby 1980). Having access to a peer mentor, who provides affection, respect and guidance, through and beyond the period of care, may therefore go some way towards creating emotional security and improving self-esteem and confidence, increased self-efficacy and independence.

Social Learning Theory (Bandura 1977) would predict that having a peer mentor who is a positive role model may assist LACs in making choices and taking decisions about their education and personal development, while also reducing the likelihood of them engaging in negative behaviours (e.g. substance use, criminal activity). Finally, peer mentors may be able to deliver important messages and information around relationships, sexuality and pregnancy which LAC would be less willing to listen to from a carer, professional or even an adult mentor. Qualitative research of young people's experiences of mentoring has found that mentees often value their mentors having a shared understanding gained through similar life experiences (Philip *et al.* 2004; Clayden & Stein 2005).

RECOGNIZING AND RESPONDING TO THE POTENTIAL CHALLENGES OF A PEER MENTORING APPROACH

There are undoubtedly a number of challenges associated with this approach. It may be difficult to recruit and retain young people to act as mentors (Wight 2008), particularly where, like many care leavers, the young person may also have a range of unresolved psychological and social issues in their own lives (Mentoring & Befriending Foundation 2010). There is also the possibility that LAC mentors may over-identify with their mentee and find themselves re-living past negative experiences (Garraway & Pistrang 2010). Furthermore, without proper screening, there is the potential for 'peer deviancy training', in which the mentee begins to model inappropriate behaviour displayed by their mentor (Patterson *et al.* 2000). There is evidence from other intervention studies that this could occur, e.g. in crime prevention programmes (Petrosino *et al.* 2004) and targeted youth programmes (Dishion *et al.* 1999).

The mentoring relationship itself presents potential challenges in terms of the mentor and mentee building rapport and trust and maintaining a strong emotional connection. LAC may find it particularly difficult to establish and maintain trusting relationships because of previous disrupted attachments and relationship breakdowns (Knight *et al.* 2006), as well as instabilities in their lives, which could potentially negatively impact on their engagement with a mentor. The early or unplanned termination of a mentoring relationship is likely to impact detrimentally on a mentee, potentially resulting in feelings of rejection and reduced sense of self-worth (Satchwell *et al.* 2006; Goldner & Maysless 2009).

Given these potential problems, it is important to develop strategies for overcoming them. It is crucial to provide sufficient screening, training, support and supervision to peer mentors, not only to prevent deviancy training, but also to ensure their retention and emotional well-being throughout a mentoring programme (Mentoring & Befriending Foundation 2010). Attention should be given to selecting mentors who are most resilient, who are empathic and who themselves have good coping styles and high levels of self-esteem. Programme providers require sufficient resources and funding to commit to training, managing and monitoring the intervention, including the provision of a project manager whose role would be to coordinate the programme (Rainer, Prince's Trust & Mentoring & Befriending Foundation 2008).

There is evidence to suggest that the greatest positive improvements for young people are among those whose mentoring relationships continue for a year or longer (Rhodes & DuBois 2008; Goldner & Maysseless 2009), as well as the consistent presence of a mentor who persists with the relationship regardless of the circumstances (DuBois & Neville 1997). Therefore, defining and sensitively managing the termination of the relationship is an important consideration for providers. Planned endings should be structured and carefully considered according to the individual relationship between the mentor and mentee.

CONCLUSIONS

In this paper, we have examined research on teenage pregnancy among LAC, focusing on why they are particularly vulnerable to teenage pregnancy and then continuing that pregnancy to term, interventions that have been used to address this problem in non-LAC and the reasons why these interventions may be less successful with this group. Given the failure of standard interventions, such as sex and relationships education, an alternative approach needs to be identified which takes into account the specific needs of LAC. Peer mentoring involves an older, more experienced care leaver providing support and guidance to a young woman in care. Providing LAC with a mentor, who may have been through similar experiences as them, has the potential to assist young people in developing new identities, in making choices regarding their education and personal development, in increasing self-confidence and self-esteem and in providing real opportunities for alternative life choices. Incorporating additional protective factors, as well as giving mentors the opportunity to impart knowledge on sex and relationships, may be effective in reducing rates of teenage pregnancy among this group. There is sufficient evidence to provide a basis for developing and formally evaluating peer mentoring interventions for LAC, as a strategy to address persistently high rates of teenage pregnancy and parenthood in this particularly vulnerable population.

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REFERENCES

- Arai, L. (2007) Peer and neighbourhood influences on teenage pregnancy and fertility: qualitative findings from research in English communities. *Health and Place*, **13**, 87–98.
- Avery, L. & Lazdane, G. (2008) What do we know about sexual and reproductive health of adolescents in Europe? *European Journal of Contraception and Reproductive Health Care: The Official Journal of the European Society of Contraception*, **13** (1), 58–70.
- Bandura, A. (1977) *Social Learning Theory*. General Learning Press, Morristown, NJ.
- Barnardo's (2011) *Puppet on A String: The Urgent Need to Cut Children Free From Sexual Exploitation*. Available at: http://www.barnardos.org.uk/ctf_puppetonastring_report_final.pdf (accessed December 2013).
- Biehal, N., Clayden, J., Stein, M. & Wade, J. (1995) *Moving On: Young People and Leaving Care Schemes*. HMSO, London.
- Bonell, C., Strange, V., Stephenson, J., Oakley, A., Copas, A., Forrest, S. *et al.* (2003) Effect of social exclusion on the risk of teenage pregnancy: development of hypotheses using baseline data from a randomised trial of sex education. *Journal of Epidemiology and Community Health*, **57** (11), 871–876.
- Bonell, C., Allen, E., Strange, V., Copas, A., Oakley, A., Stephenson, J. *et al.* (2005) The effect of dislike of school on risk of teenage pregnancy: testing of hypotheses using longitudinal data from a randomised trial of sex education. *Journal of Epidemiology and Community Health*, **59** (3), 223–230.
- Botting, B., Rosato, M. & Wood, R. (1998) Teenage mothers and the health of their children. *ONS Population Trends*, **93**, 19–28.
- Bowlby, J. (1980) *Attachment and Loss: Loss Sadness and Depression*, Vol. 3. Penguin, Harmondsworth.
- Bradshaw, J., Finch, N. & Miles, J. (2005) Deprivation and variations in teenage conceptions and abortions in England. *Journal of Family Planning and Reproductive Health Care, Royal College of Obstetricians & Gynaecologists*, **31** (1), 15–19.
- Brodie, I., Berridge, D. & Beckett, W. (1997) The health of children looked after by local authorities. *British Journal of Nursing*, **6** (7), 386–390.
- Cafcass. (2013) *Year-End Care Application Figures Show Another Record-Breaking Year: March 2013 Statistics from Cafcass*. Available at: <http://www.cafcass.gov.uk/news/2013/april/year-end-care-application-statistics-2012-13.aspx> (accessed May 2014).
- Cafcass. (2014) *Care applications in March 2014: March 2014 Statistics from Cafcass*. Available at: <http://www.cafcass.gov.uk/news/2014/april/march-2014-care-demand-statistics.aspx> (accessed May 2014).
- Campbell, R., Starkey, F., Holliday, J., Audrey, S., Bloor, M., Parry-Langdon, N. *et al.* (2008) An informal school-based peer-led intervention for smoking prevention in adolescence (ASSIST): a cluster randomised trial. *Lancet*, **371** (9624), 1595–1602.
- Cassidy, S., Duggan, O. & Milmo, C. (2013) *Benefit Cuts 'Will See More Children Taken into Care'*. *Warning of Economic Impact*

- on *Struggling Households*. The Independent. Available at: <http://www.independent.co.uk/news/uk/home-news/benefit-cuts-will-see-more-children-taken-into-care-8440235> (accessed January 2013).
- Chief Secretary to the Treasury. (2003) *Every Child Matters*. HMSO, London.
- Child Exploitation and Online Protection Centre. (2011) *Out of Mind, Out of Sight: Breaking Down the Barrier to Understanding Child Sexual Exploitation*. London, CEOP. Available at: http://ceop.police.uk/Documents/ceopdocs/ceop_thematic_assessment_executive_summary (accessed May 2014).
- Clark, L., Miller, K., Nagy, S., Avery, J., Roth, D., Liddon, N. et al. (2005) Adult identity mentoring: reducing sexual risk for African-American seventh grade students'. *Journal of Adolescent Health*, 37 (4). doi:10.1016/j.jadohealth.2004.09.024.
- Clayden, J. & Stein, M. (2005) *Mentoring for young people leaving care: 'Someone for me'*. York, Joseph Rowntree Foundation.
- Coid, J., Petruckevitch, A., Feder, G., Chung, W., Richardson, J. & Moorey, S. (2001) Relation between childhood sexual and physical abuse and risk of revictimisation in women: a cross-sectional survey. *Lancet*, 358, 450–454.
- Corlyon, J. & McGuire, C. (1997) *Young Parents in Public Care: Pregnancy and Parenthood Among Young People Looked After by Local Authorities*. National Children's Bureau, London.
- Corlyon, J. & McGuire, C. (1999) *Pregnancy and Parenthood: The Views and Experiences of Young People in Public Care*. National Children's Bureau, London.
- Craine, N., Midgley, C., Zou, L., Evans, H., Whitaker, R. & Lyons, M. (2014) Elevated teenage conception rates amongst looked after children: a national audit. *Public Health*, 128, 668–670.
- Daniel, B. (2003) The value of resilience as a concept for practice in residential settings. *Scottish Journal of Residential Child Care*, 2 (1), 6–15.
- Daniels, H., Cole, T., Sellman, E., Sutton, J., Visser, J. & Bedward, J. (2003) Study of young people permanently excluded from school. Research Report RR405. (1841859257). DfES Publications, Nottingham.
- Dawson, N. & Hosie, A. (2005) *The Education Of Pregnant Young Women And Young Mothers In England Bristol*. University of Newcastle and University of Bristol. Available at: <http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/RW40> (accessed December 2013).
- Department for Children, Schools & Families. (2010) *Teenage pregnancy strategy: Beyond 2010*. Department for Children, Schools & Families, London.
- Department for Education. (2010) *Working Together to Safeguard Children: A Guide to Inter-Agency Working to Safeguard and Promote the Welfare of Children 2010*. HMSO, London.
- Department for Education. (2011a) *Positive for Youth A New Approach to cross-Government Policy for Young People Aged 13 to 19*. HMSO, London. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/175496/DFE-00133-2011 (accessed May 2014).
- Department for Education. (2011b) *Tackling Child Sexual Exploitation: Action Plan*. HMSO, London. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180867/DFE-00246-2011 (accessed May 2014).
- Department for Education. (2012a) *Children Looked after in England (including Adoption and Care Leavers) Year Ending 31 March 2012. SFR 20/1012*. Department for Education, London.
- Department for Education. (2012b) *Outcomes for Children Looked After by Local Authorities in England, as at 31 March 2012. SFR 32/2012*. Department for Education, London. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/191969/SFR32_2012Text (accessed May 2014).
- Department for Education. (2013a) *Children and families bill*. HMSO, London.
- Department for Education. (2013b) *Statutory guidance on children who run away or go missing from home or care*. HMSO, London.
- Department for Education and Skills. (2003) *Keeping children safe: the government's response to the Victoria Climbié inquiry report and joint chief inspectors' report safeguarding children*. HMSO, London.
- Department for Education and Skills. (2007) *Care matters: time for change*. Secretary of State for Education and Skills, London.
- Diamond, I., Clements, S., Stone, N. & Ingham, R. (1999) Spatial variation in teenage conceptions in south and west England. *Journal of the Royal Statistical Society. Series A, (Statistics in Society)*, 162 (3), 273–289.
- Dickson, R., Fullerton, D., Eastwood, A., Sheldon, T. & Sharp, F. (1997) Preventing and reducing the adverse effects of unintended teenage pregnancies. *Effective Health Care*, 3 (1), 1–12.
- Dishion, T., McCord, J. & Poulin, F. (1999) When interventions harm. *American Psychologist*, 54 (9), 755–764.
- DuBois, D. & Neville, H. (1997) Youth mentoring: investigation of relationship characteristics and perceived benefits. *Journal of Community Psychology*, 25 (3), 227–234.
- DuBois, D., Holloway, B., Valentine, J. & Cooper, H. (2002) Effectiveness of mentoring programs for youth: a meta-analytic review. *American Journal of Community Psychology*, 30 (2), 157–197.
- Duncan, S. (2007) What's the problem with teenage parents? And what's the problem with policy? *Critical Social Policy*, 27 (3), 307–334.
- Duncan, S., Edwards, R. & Alexander, C. (eds) (2010) *Teenage Parenthood: What's the Problem?* Tufnell Press, London.
- Ermisch, J. (2003a) *Does a 'teen-birth' have longer-term impacts on the mother?* ISER Working Papers Number 2003-32.
- Ermisch, J. & Pevalin, D. (2003b) *Who has a child as a teenager?* Institute for Social & Economic Research, London.
- Ford, T., Vostanis, P., Meltzer, H. & Goodman, R. (2007) Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. *The British Journal of Psychiatry: the Journal of Mental Science*, 190, 319–325.

- Francis, J. (2000) Investing in children's futures: enhancing the educational arrangements of 'looked after' children and young people. *Child & Family Social Work*, 5 (1), 23–33.
- Friedberg, M. (2000) Damaged children to throwaway women: From care to prostitution. In: *Women, Violence and Strategies for Action* (eds J. Radford, M. Friedberg & L. Harne), pp. 72–85. Oxford University Press, Buckingham. Available at: <http://www.w.openupusa.com/openup/chapters/0335203698> (accessed December 2013).
- Garnett, L. (1992) *Leaving care and after*. National Children's Bureau, UK.
- Garraway, H. & Pistrang, N. (2010) Brother from another mother': mentoring for African-Caribbean adolescent boys. *Journal of Adolescence*, 33 (5), 719–729.
- Gavin, L., Catalano, R., David-Ferdon, C., Gloppen, K. & Markham, C. (2010) A review of positive youth development programs that promote adolescent sexual and reproductive health. *Journal of Adolescent Health*, 46, S75–S91.
- Gilligan, R. (1999) Enhancing the resilience of children and young people in public care by mentoring their talents and interests. *Child & Family Social Work*, 4 (3), 187–196.
- Goldner, L. & Maysless, O. (2009) The quality of mentoring relationships and mentoring success. *Journal of Youth and Adolescence*, 38 (10), 1339–1350.
- Great Britain. (1989) *Children Act 1989*. The Stationary Office, London.
- Great Britain. (2004) *Children Act 2004*. The Stationary Office, London.
- Great Britain. (2008) *Children and Young Persons Act 2008*. The Stationary Office, London.
- Hadley, A. (2007) The teenage pregnancy strategy (England). In: *Teenage Pregnancy and Reproductive Health* (eds P. Baker, K. Guthrie, C. Hutchinson, R. Kane & K. Wellings), pp. 95–102. Royal College of Obstetricians and Gynaecologists, London.
- Hall, J. (2003) *Mentoring and young people: a literature review*. The SCRE Centre, Faculty of Education, University of Glasgow, Glasgow.
- Harden, A., Weston, R. & Oakley, A. (1999) *A review of the effectiveness and appropriateness of peer-delivered health promotion interventions for young people*. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London, London.
- Harden, A., Brunton, G., Fletcher, A. & Oakley, A. (2009) Teenage pregnancy and social disadvantage: systematic review integrating controlled trials and qualitative studies. *BMJ (Clinical Research Ed.)*, 339, b4254.
- Haydon, D. (2003) *Teenage pregnancy and looked after children/care leavers*. Barnardo's, London.
- Hobcraft, K. & Kiernan, K. (1999) *Childhood Poverty, Early Motherhood and Adult Social Exclusion*. Available at: <http://sticerd.lse.ac.uk/dps/case/cp/CASEpaper28.pdf> (accessed December 2012).
- Home Office. (2011) *Missing Children and Adults: A Cross Government Strategy*. Home Office, London. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/117793/missing-persons-strategy (accessed December 2012).
- Hutson, N. & Cowie, H. (2007) Setting up an email peer support scheme. *Pastoral Care in Education*, 25 (4), 12–16.
- Karcher, M. (2007) Cross-age peer mentoring. *Youth mentoring: Research in Action*, 1 (7), 3–17.
- Knight, A., Chase, E. & Aggleton, P. (2006) Teenage pregnancy among young people in and leaving care: messages and implications for foster care. *Adoption & Fostering*, 30 (1), 58–69.
- Liang, B., Tracy, A., Taylor, C. & Williams, L. (2002) Mentoring college-age women: a relational approach. *American Journal of Community Psychology*, 30 (2), 271–288.
- McGlone, F. (2000) Families. *Research Matters*, 9, 32–34.
- Macleod, S., Hart, R., Jeffes, J. & Wilkin, A. (2010) *The impact of the Baby Peter Case on Applications for Care Orders*. LGA Research Report, Slough.
- McLeod, A. (2001) Changing patterns of teenage pregnancy: population based study of small areas. *BMJ (Clinical Research Ed.)*, 323 (7306), 199–203.
- McMahon, M. (1995) *Engendering Motherhood: Identity and self-Transformation in Women's Lives*. Guilford Press, New York.
- Manlove, J., Terry, E., Gitelson, L., Papillo, A. & Russell, S. (2000) Explaining demographic trends in teenage fertility, 1980–1995. *Family Planning Perspectives*, 32, 166–175.
- Mayhew, E. & Bradshaw, J. (2005) Mothers, babies and the risks of poverty. *Poverty*, 121, 13–16.
- Mentoring & Befriending Foundation. (2010) *Peer mentoring in schools: A review of the evidence base of the benefits of peer mentoring in schools including findings from the MCB outcomes measurement programme*. Mentoring & Befriending Foundation, Manchester.
- Mentoring & Befriending Foundation & Prince's Trust. (2008) *Final evaluation report of the DCSF funded national mentoring pilot for looked after children*. Department for Children, Schools and Families, London. Available at: <http://www.mandbf.org/policy-and-evidence/building-the-evidence/final-evaluation-report-of-the-dcsf-funded-national-mentoring-pilot-for-looked-after-children> (accessed December 2013).
- Mercer, C., Tanton, C., Prah, P., Erens, B., Sonnenberg, P., Clifton, S. et al. (2013) Changes in sexual attitudes and lifestyles in Britain through the life course and over time: findings from the National Surveys of Sexual Attitudes and Lifestyles (Natsal). *Lancet*, 382, 1781–1794.
- Middleton, S. (2012) *Peer mentoring opportunities for looked after children and care leavers*. The Scottish Government, Edinburgh. Available at: <http://www.scotland.gov.uk/Resource/0039/00394530> (accessed December 2013).
- Nelson, A. (2003) Peer mentoring: a citizenship entitlement at Tanfield school. *Pastoral Care in Education*, 21 (4), 34–41.
- Newburn, T. & Shiner, M. (2006) Young people, mentoring and social inclusion. *Youth Justice*, 6 (1), 23–41.
- NSPCC. (2014) *Statistics on Looked after Children*. Available at: http://www.nspcc.org.uk/Inform/resourcesforprofessionals/lookedafterchildren/statistics_wda88009.html (accessed May 2014).

- Office for National Statistics. (2014) *Conceptions in England and Wales, 2012*. Office for National Statistics.
- Oringanje, C., Meremikwu, M., Eko, H., Esu, E., Meremikwu, A. & Ehiri, J. (2009) Interventions for preventing unintended pregnancies among adolescents. *Cochrane Database of Systematic Reviews*, (4), CD005215.
- Parsons, C., Maras, P., Knowles, C., Bradshaw, V., Hollingworth, K. & Monteiro, H. (2008) *Formalised Peer Mentoring Pilot Evaluation*. DCSF, London. Available at: <http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/DCSF-RR033-R> (accessed May 2014).
- Patterson, G., Dishion, T. & Yoerger, K. (2000) Adolescent growth in new forms of problem behavior: macro- and micro-peer dynamics. *Prevention Science*, 1 (1), 3–13.
- Pearce, J. (2006) 'Finding the "I" in sexual exploitation: Young people's voices within policy and practice'. In: *Sex Work Now* (eds R. Campbell & M. O'Neill), pp. 190–201. Willan Press, Cullompton.
- Petrosino, A., Turpin-Petrosino, C. & Buehler, J. (2004) 'Scared Straight' and other juvenile awareness programs for preventing juvenile delinquency. *Campbell Systematic Reviews*, 2, 1–58. doi: 10.4073/csr.2004.2.
- Philip, K. (1999) *Young people and mentoring: A literature review for the Joseph Rowntree Foundation*. University of Aberdeen, Aberdeen.
- Philip, K. & Spratt, J. (2007) *A synthesis of published research on mentoring and befriending*. The Mentoring and Befriending Foundation.
- Philip, K., Shucksmith, J. & King, C. (2004) *Sharing a laugh? A qualitative study of mentoring interventions with young people*. Joseph Rowntree Foundation, York.
- Polnay, L. & Ward, H. (2000) Promoting the health of looked after children. Government proposals demand leadership and a culture change. *BMJ (Clinical Research Ed.)*, 320 (7236), 661–662.
- Rainer, Prince's Trust & Mentoring & Befriending Foundation. (2008) *Mentoring for Looked After Children: Dissemination Manual*. Rainer, Kent. Available at: http://www.mandbf.org/wp-content/uploads/2011/02/Mentoring_for_LAC_national_pilot_Dissemination_Manual (accessed May 2014).
- Rhodes, J. & DuBois, D. (2008) Mentoring relationships and programs for youth. *Current Directions in Psychological Science*, 17 (4), 254–258.
- Satchwell, K., Waring, S. & Walters, R. (2006) *Mentoring Literature Review*. Alberta Children's Services. Retrieved from: <http://humanservices.alberta.ca/documents/mentoring-literature-review> (accessed May 2014).
- Shiner, M., Young, T., Newburn, T. & Groben, S. (2004) *Mentoring disaffected young people*. London School of Economics, Joseph Rowntree Foundation.
- Smith, T. (1993) Influence of socioeconomic factors on attaining targets for reducing teenage pregnancies. *BMJ (Clinical Research Ed.)*, 306 (6887), 1232–1235.
- Social Care Institute for Excellence. (2004) *Preventing Teenage Pregnancy in Looked after Children*. Report No: Research briefing 9.
- Social Exclusion Unit (1999) *Teenage pregnancy*. Stationery Office, London.
- Stephenson, J., Strange, V., Allen, E., Copas, A., Johnson, A., Bonell, C. et al. (2008) The long-term effects of a peer-led sex education programme (RIPPLE). *PLoS Medicine*, 5 (11), e224.
- Swann, C., Bowe, K., McCormick, G. & Kosmin, M. (2003) *Teenage pregnancy and parenthood: a review of reviews*. HDA, London.
- Teenage Pregnancy Independent Advisory Group. (2010) *Teenage Pregnancy: Past Successes – Future Challenges*. Department for Education, London. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181078/TPIAG-FINAL-REPORT (accessed May 2014).
- The Children's Society. (2011) *Make Runaways Safe*. Available at: http://www.childrenssociety.org.uk/sites/default/files/tcs/make_runaways_safe_report.pdf (accessed December 2013).
- Turnbull, T., Van Wersch, A. & Van Schaik, P. (2008) A review of parental involvement in sex education: the role for effective communication in British families. *Health Education Journal*, 67 (3), 182–195.
- UNICEF. (2001) A league table of teenage births in rich nations. Innocenti Research Centre, Florence, Italy.
- Viner, R.M. & Taylor, B. (2005) Adult health and social outcomes of children who have been in public care: population-based study. *Pediatrics*, 115 (4), 894–899.
- Ward, H., Lynch, M., Skuse, T. & Jones, H. (2002) Issues concerning the health of looked after children. *Adoption & Fostering*, 26 (4), 8–18.
- Wellings, K., Nanchahal, K., Maccowall, W., McManus, S., Erens, B., Mercer, C. et al. (2001) Sexual behaviour in Britain: early heterosexual experience. *Lancet*, 358 (9296), 1843–1850.
- Wight, D. (2008) Theoretical bases for teacher- and peer-delivered sexual health promotion. *Health Education*, 108 (1), 10–28.
- Williams, J. & Jackson, S. (2001) Case control study of the health of those looked after by local authorities. *Archives of Disease in Childhood*, 85 (4), 280–285.
- Wilson, T. (2013) *Compulsory education and teenage motherhood*. Royal Holloway, London.