
Adolescent Pregnancy and Parenthood in Germany

Martin Piquart and Jens P. Pfeiffer

Keywords

Germany: adolescent pregnancy • Adoption • Abortion • Parents • Oral contraceptives • Sexual maturation • Risk factors • Financial assistance • Life management

Introduction

Sexual development is a normative developmental task in adolescence, and the majority of young people from Germany and other western countries become sexually active during this period (Krahé 2008). Becoming sexually active is often associated with pleasure and may have positive consequences for adolescent development, for example when being loved by a romantic partner. However, for some adolescents, it has long-term negative consequences, such as in the case of teenage parenthood, if the young people lack the personal and social resources for coping with these demands.

After giving an introduction into the historical context, we discuss antecedents and consequences of adolescent pregnancy in Germany. As

sexual maturation and becoming sexually active are preconditions for adolescent pregnancy, we start with data on these topics. Because the lack of competent use of contraception is another precondition for pregnancy, we then provide data on the use of contraception and contraception failures of German adolescents. In the next part of this chapter, we focus on the prevalence and risk factors for pregnancy in German adolescents. We then review research on the two most frequent outcomes of teenage pregnancy—abortion and teenage parenthood. In the final part of the chapter, we discuss efforts in preventing adolescent pregnancy and supporting young parents and their children. We also provide conclusions for the improvement of prevention of adolescent pregnancy and services for adolescent parents and for future research in that field.

For some topics, we were able to rely on large empirical studies, most often conducted by or with the support of the German Federal Center for Health Education (Bundeszentrale für gesundheitliche Aufklärung—BZgA). For other topics, only small qualitative studies that provide some useful insights but do not offer representative data are available, especially high-quality studies on the evaluation of effects of prevention and interventions were lacking.

J. P. Pfeiffer
Hospital of Child and Adolescent Psychiatry and Psychotherapy, Philipps University,
Gutenbergstrasse 18, 35032, Marburg, Germany

M. Piquart (✉)
Department of Psychology, Philipps University,
Gutenbergstrasse 18, 35032, Marburg, Germany
e-mail: piquart@staff.uni-marburg.de

Historical Context

Over many centuries, German norms about sexuality were shaped by religious commandments and prohibitions. Sexual relationships were sanctioned only within marriage with the goal of procreation. Pregnancies and motherhood outside marriage were considered as sins and led to draconian sanctions. Therefore, virginity before marriage was the main goal of sex education of adolescents during a time, in which each intercourse could result in pregnancy. Getting married was possible before reaching the age of 18 years. For example, in the eighteenth century about 2 % of the farm daughters of the principality of Saxonia were married at the age of 14 or 15 years. Male adolescents usually did not marry before the age of 18 years, except some politically motivated marriages among aristocrats (von Nell 1974). Until 1974, the official minimal age for marriage was 21 years for men and 16 years for women. However, women could ask the guardianship court for an exemption from this rule, for example when being pregnant. Today, the lowest age of marriage is 18 years for both partners, although according to § 1303 of the German Civil Code, a family court could grant an exception from the rule if one partner is at least 16 years old and the other is 18 years or older.

The rebellion of the 1968 movement against the social mores of the previous generation was associated with the hope that sexual liberalization would lead to political changes. Norms and laws about sexuality did become more liberal in (West) Germany. Changes in sexual norms and behaviors were also promoted by the introduction of the birth control pill. In June 1961, the first oral contraceptive became available in the western part of Germany (Jütte 2003). In the eastern part, oral contraceptives were introduced about 10 years later (Ahrendt 1991).

In response to this development, the Protestant Church developed liberal norms about sexuality. According to the Evangelic Church of Germany (EKG), sexuality and contraception are part of the responsibility of every Christian (EKD 1989). Pregnancy can cause unexpected

conflicts, and pregnant women may see no other alternative than abortion. The mother-to-be has to decide whether or not to have the child because the life of the unborn child can only be protected with the mother's will but not against it (EKD 1989). In contrast, the religious commandments and prohibitions of the Catholic Church did not change much (Bischofskonferenz 2005). Premarital sex is still considered to be a sin, and contraception is still rejected. Nonetheless, as will be shown later, norms of the Catholic Church lost their influence on the sexual behavior of many (and probably most) young German Catholics.

A general decline in the influence of religion on sexual attitudes and behaviors is also based on the fact that the number of young church members has declined. According to the 15th Shell Youth Study (Gehrke 2006), 35 % of the 12–25-year-olds in Germany are Protestant, 31 % are Catholic, 5 % are Muslim (mostly the children and grandchildren of work migrants who moved to Germany in the 1960s and 1970s), 4 % are affiliated with other religions, and 25 % show no religious affiliation at all. The numbers of young people without religious affiliation increased slowly in the western part of Germany. In 1981, only 5 % of the young people from the western part of Germany had no religious affiliation, as compared to 12 % in 2006 (Gehrke 2006). As a result of the German separation and 40 years of socialism in the eastern part of Germany, the number of young people without religious affiliation in the eastern part of Germany is very high. In 2006, about 79 % of young people from that area showed no religious affiliation as compared to 12 % of their peers from the western part.

With regard to abortion, for a long time article 218 of the German penal code, which was set up in 1871 under the chancellorship of Otto von Bismarck, allowed abortions only for certain medical or ethical reasons. According to “indication” regulation [*Indikationsregelung*] that was introduced in 1976, abortion was permissible during the first 12 weeks of pregnancy if the pregnancy was the result of a criminal offence or if an abortion is advisable to protect the women

from serious and inevitable distress. The more liberal “time limit” regulation [Fristenregelung] was applied in the former socialist German Democratic Republic, where women were able to terminate pregnancies—without providing a reason—within the first trimester. After the German unification, a compromise had to be found. According to § 218a of the German Criminal Code that was introduced in 1993, abortion is not unlawful if (a) the pregnant woman requests the termination of the pregnancy and she obtained counseling at least 3 days before the operation; (b) the termination of the pregnancy is performed by a physician; and (c) not more than 12 weeks have elapsed since conception. Past this time limit, the termination of pregnancy performed by a physician with the consent of the pregnant woman shall only not be unlawful if, considering the present and future living conditions of the pregnant woman, the termination of the pregnancy is medically necessary to avert danger to life or danger of grave injury to the physical or mental health of the pregnant woman, and if the danger cannot reasonably be averted by other means, from her point of view. The pregnant woman being an adolescent or a young adolescent in particular would be insufficient to fulfill the criteria of a medical necessity for abortion after the 12th week of pregnancy (Rosenberger 2010). Pregnant teenagers of 16 years and older do not need parental consent for abortion. For 14–16-year-olds, the physician has to decide whether parental consent is needed or whether the adolescent can make a responsible decision on her own (BZgA 2009). Adolescents below the age of 14 need parental consent for an abortion.

Today, Germany has quite a liberal policy regarding sexuality. German adolescents are not socialized in abstinence-only education models, and oral contraception is available free of charge for young people below the age of 20. In addition, health care insurance pays for teenage abortions. The principle of compulsory insurance combined with the coinsurance of children ensures that practically all adolescents have insurance coverage.

Adolescent Sexuality and Pregnancy

Sexual Maturation and Timing of First Intercourse

Sexual maturity is a necessary precondition for pregnancy. German adolescents become sexually mature about 3 years earlier than 100 years ago (Starke 1997). In a representative study, Kluge (1998) observed a secular trend in the *acceleration* of the age at onset of *menarche* that has declined from 13.5 years in 1981 to 12.2 years in 1994. The age of the first ejaculation has declined even further, from 14.2 to 12.5 years. In a recent representative study with 3,542 adolescents, 43 % of the assessed girls had their *menarche* at the age of 12 or earlier (BZgA 2010). In 1980, only 35 % had their *menarche* during that age interval. The percentage of boys who reported that they had their first ejaculation before the age of 12 increased from 7 to 13 %. An earlier sexual maturity has been associated with an earlier onset of sexual activities (e.g., Hoier 2003).

In Germany, sexual relations between adolescents are common and widely socially accepted since the sexual liberalization in the 1960s and 1970s. The sexual revolution affected the timing of first sexual intercourse. In Germany, less than 20 % of women born between 1935 and 1950 had their first sexual intercourse before the age of 18. The percentage has increased to more than 70 %. An earlier timing of first intercourse is also found in German men, although the changes were less dramatic (Schmidt 2009). Results from repeated studies between 1980 and 2009 of the BZgA are summarized in Figs. 1 and 2. The percentage of sexually experienced adolescents increased between 1980 and the late 1990s. No systematic differences in the new millennium were observed in the 16- and 17-year-olds. However, the percentage of 14–15-year-olds sexually experienced adolescents declined in recent years. Sigusch and Schmidt (1973) found that in 1970 the average age at first sexual intercourse was 17 years and 9 months among German female adolescents. In the 1990s, Plies et al.

(1999) found a mean age at first coitus of 17.3 years in male and 17.1 years in female participants. In a recent study, the mean age at first intercourse was 16 years (Pinquart 2010). Of course, there is a large inter-individual variability. For example, in the most recent study of the BZgA (2010), 4 % of the sexually experienced female adolescents had their first intercourse at the age of 13 years or earlier, 19 % at the age of 14, and 25 % at the age of 15.

The sexual revolution also affected the conditions for having sexual intercourse. Giese and Siegusch (1968) compared sexual behaviors of students in 1912 and 1968. Almost all male students had sexual intercourse before getting married at both times. However, the circumstances changed dramatically. Whereas in 1912 most students had premarital sex with prostitutes, servant girls, waitresses, or other young women from a lower social class, students from 1968 had sex with young women of their own class, who were possible future wives. Female students did not have sex before marriage in 1912 but were in most cases sexually active before marriage in 1968.

Today, most German adolescents have their first intercourse in a steady romantic relationship. In the recent study of the BZgA (2010), 64 % of the sexually experienced female

adolescents and 58 % of their male peers said that they had their first sexual intercourse in a steady relationship and another 28 and 24 %, respectively, reported that they knew each other well beforehand. Only 1 % of the girls and 3 % of the boys had their first sexual intercourse with a stranger. In another study, 67 % had a stable romantic relationship with their partner before having their first intercourse with him or her, and only 5 % of the adolescents reported that did not know each other before their first intercourse (Pinquart 2010). About two-thirds of the sexually experienced male 14–17-year-olds and three quarters of their sexually experienced female peers had one or two sexual partners so far. Only 21 % of the boys and 11 % of the girls had 3 or more partners. The earlier the first intercourse, the higher the number of partners (BZgA 2010).

The motives for having intercourse also changed over time. Whereas in 1970 80 % of the male adolescents mentioned sex urges as one of their main motives for having their first intercourse, the percentage declined to 40 % in 1990. A smaller decline was observed in female adolescents from 40 to 30 %. The percentage of male adolescents who would sleep with a girl they felt attracted to, no matter whether they loved her or not, declined from 17 to 2 %. The decline in this attitude of female adolescents (from 3 to 2 %)

Fig. 1 Time trends in the percentage of German female adolescents who had their first sexual intercourse (BZgA 2010)

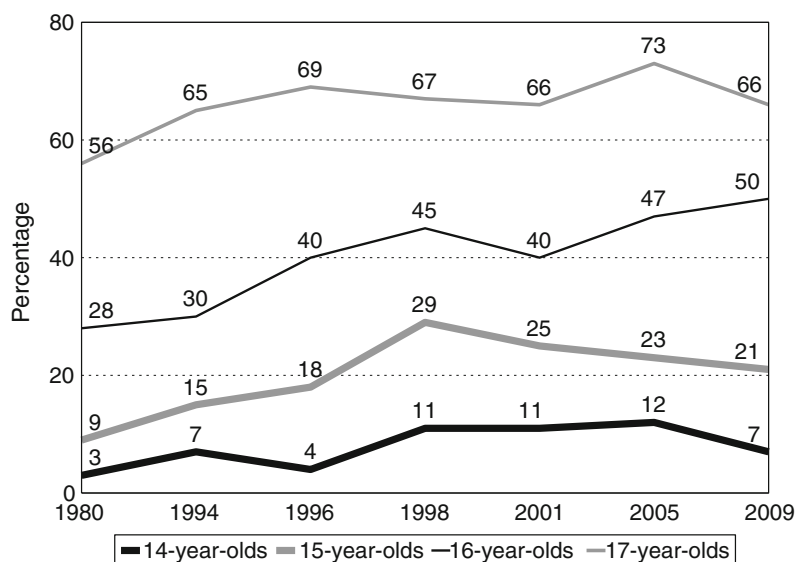
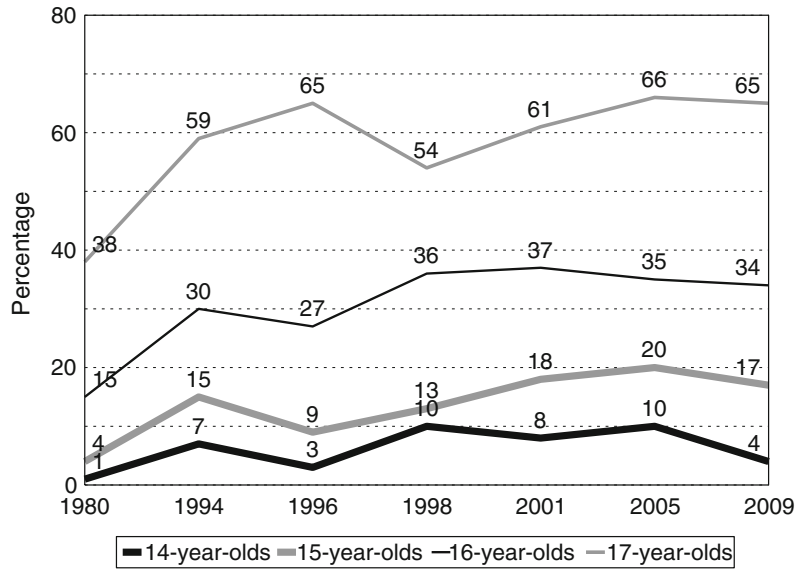


Fig. 2 Time trends in the percentage of German male adolescents who had their first sexual intercourse (BZgA 2010)



was not significant. The role of love for the romantic partner as a motive for having intercourse increased at the same time. The number of German boys who only wanted to have intercourse with someone they love increased from 46 % in 1970 to 71 % in 1990. No increase was observed in female adolescents because love was already their primary precondition for having intercourse in 1970 was (80 % versus 81 %) (Lange 1993; Schmidt et al. 1994).

Contraception

Oral contraceptives are free for adolescents until the age of 20, but they are only available by prescription. A parental consent is not necessary for this, unless the adolescent does not have the capacity to consent. However, some physicians may ask for parental consent, especially in the case of very young teenagers, because the promotion of sexual acts of teenagers is punishable according to German law (Haerty et al. 2005).

According to self-reports, most German adolescents know which options for contraception exist and how to use them. The percentage of knowledgeable adolescents increases with age. In a large-scale study with 14–17-year-old adolescents, only about one quarter of the respondents

reported that they would like to know more about contraception (BZgA 2010). The wish for more information about contraception declined between 1980 and 2009 from 50 to 29 % in girls and from 46 to 25 % in boys, indicating an increase in knowledge over time.

Condoms are the most commonly used contraceptives, followed by oral contraceptives. In a study from 2009, 75 % adolescents used condoms and about 40 % oral contraceptives at their first intercourse. Unsafe methods of contraception were rarely used (BZgA 2010). Similar percentages of condom users (79 %) were observed in another recent study (Pinquart 2010). However, in both studies, 8 % of the German 14–17-year-olds did not use contraceptives at their first intercourse. An earlier age at first intercourse was associated with a lower probability of contraception (BZgA 2010; Pinquart 2010).

The percentage of German adolescents who used condoms and/or oral contraception at their first sexual intercourse increased between 1980 and 2009, whereas the percentage of adolescents who did not use any contraception declined (Figs. 3, 4).

Methods of contraception also change with increasing sexual experience. The use of oral contraception increases, whereas the use of

Fig. 3 Time trends in the use of contraception at first intercourse in German female adolescents and their intimate partners (BZgA 2010)

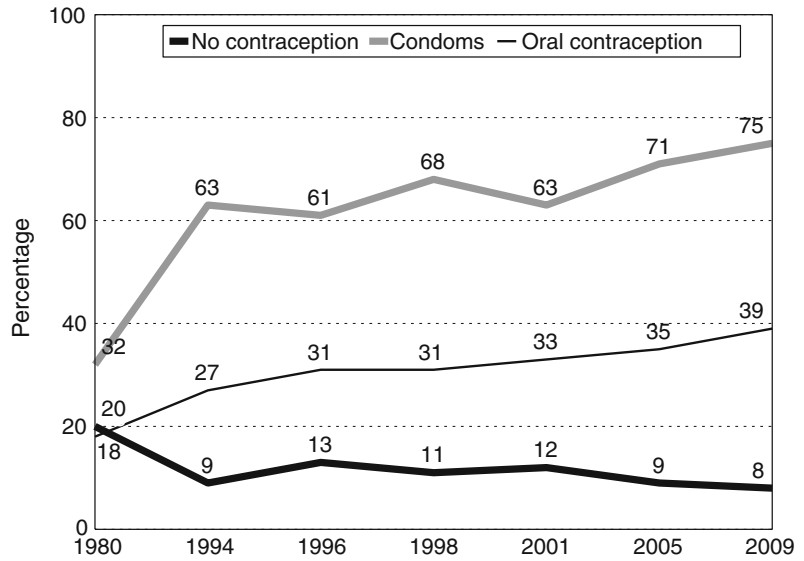
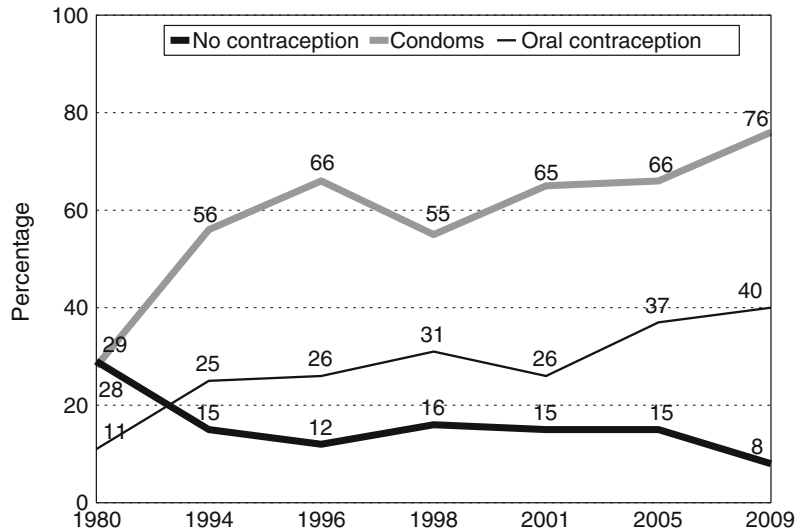


Fig. 4 Time trends in the use of contraception at first intercourse in German male adolescents and their intimate partners (BZgA 2010)



condoms, nonuse of any contraception, and the use of unsafe methods declined. Figure 5 shows the results of the BZgA study (2010) for girls without migration background. Similar results are found for girls with migration background and for boys, although condoms are still the most often used means of contraception for male adolescents at their last intercourse.

The BZgA (2010) study also asked adolescents who did not use contraception at their first intercourse for reasons for not doing so. Because the absolute numbers of adolescents in this

group were quite low, results have to be interpreted with caution. On average, girls reported 2.5 reasons and boys 1.9 reasons. The most frequent reason was the fact that the first intercourse was too spontaneous so that they could not get contraceptives in advance. An optimistic bias that they or their partner would not become pregnant and loss of self-control because of being affected by alcohol or drugs were other prevalent reasons. It was notable that only 3 % of the girls mentioned a lack of information as reason for not using contraceptives (Fig. 6).

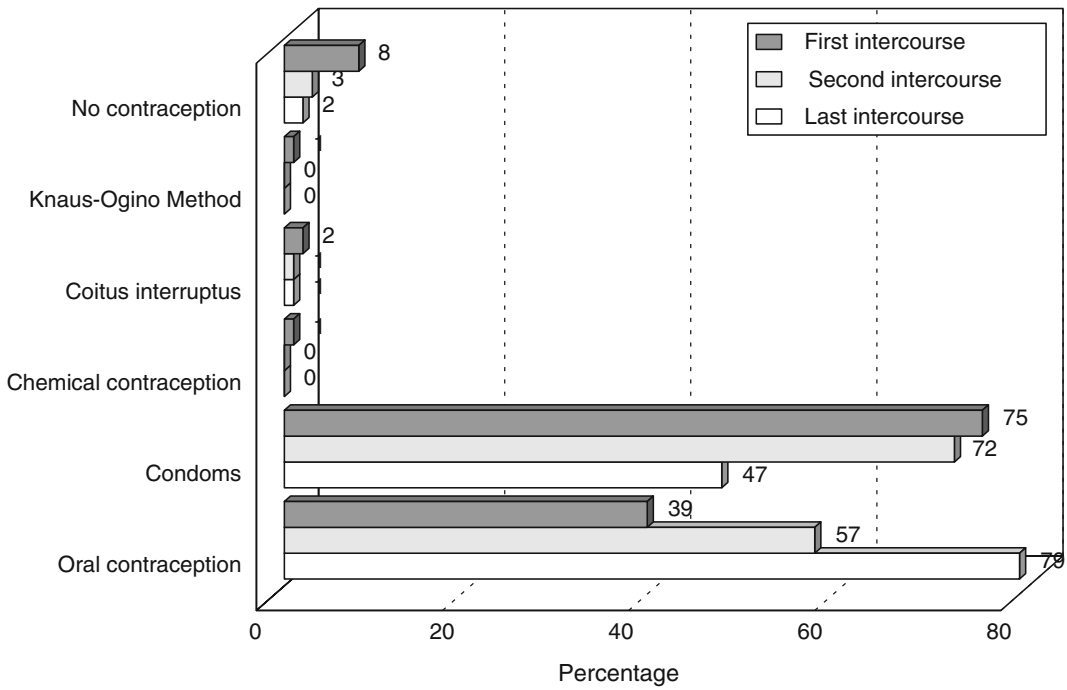


Fig. 5 Ways of contraception at first, second, and last intercourse in German female adolescents without migration background (BZgA 2010)

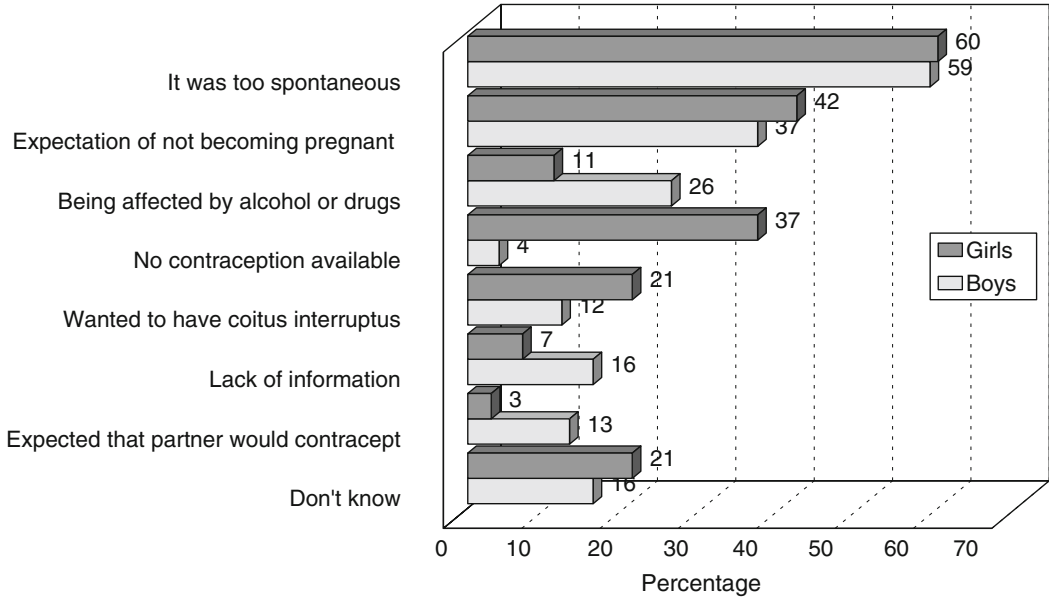


Fig. 6 Reasons for not using contraceptives at the first intercourse (BZgA 2010)

The reported reasons are similar when the adolescents were asked about their contraceptive behavior in general. However, forgetting to take

the birth control pill was reported as another widespread reason for lack of contraception (BZgA 2010).

Despite the high prevalence of safe contraception among German adolescents, about 25 % of the adolescents said that they had at least once used coitus interruptus and up to 10 % that they had at least once used the Knaus–Ogino method. Coitus interruptus was more often used when the adolescents came from families with low educational backgrounds, and this association was stronger for boys (BZgA 2010).

Contraception failures are also quite common. About 22 % of the sexually experienced German adolescents without migration background and 18 % of those with migration background reported that condoms had burst or had been torn at least once. In addition, 57 % of sexually active girls without migration background and 56 % with migration background reported that they had at least once forgotten to take oral contraceptives in time (BZgA 2010).

Similar to regular oral contraception, emergency contraception is only available by prescription in Germany. On average, about 90 % of adolescent girls in Germany know the option of emergency contraception, and 12 % of the 14–17-year-olds sexually active female adolescents had already used this option (2 % even more than once; BZgA 2010). The use of emergency contraception has slightly increased since 2001 (9 % had used it at that time). In most cases, emergency contraception was used after problems with regular contraception (e.g., burst condom, forgetting to take regular oral contraceptives, doubts about the effect of the regular birth control pill due to vomiting or diarrhea; BZgA 2010). Interestingly, in a large study with pregnant adolescents (Schmidt et al. 2006; Matthiesen and Schmidt 2009), only half of them knew about the option of emergency contraception and how to get access to it. Another 23 % knew that this option existed but did not know how to access it, and 27 % did not know about this option at all. In said study, knowledge about emergency contraception was less widespread among the youngest participants (12–14-year-olds 36 %), Muslim adolescents (40 %), in adolescents from the eastern part of

Germany (40 %), and in students from the lowest school track (45 %).

Adolescent Pregnancy

Given the easy availability of contraception and high rates of contraception usage, it could be expected that adolescent pregnancy is quite a rare event in Germany. This is, in fact, the case. Nonetheless, it is estimated that 2.4 % of German female adolescents become pregnant at least once before their 18th birthday (Schmidt 2009). Based on data from the Federal Statistical Bureau of Germany, the number of teenage pregnancies increased from 1996 (9,490) to 2001 (12,845) and declined thereafter (9,746 in 2009). The rates of pregnancy per 1,000 women between the ages of 15 and 17 years increased from 6.9 (in 1996) to 9.1 (2001) and declined to 7.9 in 2005 (Schmidt et al. 2006).

Long-term time trends of numbers of adolescent births are difficult to compare because the ways of computing of the Federal Statistical Bureau changed in 2000 (from only counting those births as adolescent births if the mother did not reach the age of 18 years in the year of giving birth to the exact age when giving birth to a child). Therefore, we provide separate comparisons from the period before and after the year 2000. Kontula (2007) reported that in Germany as well as in some other western European countries, adolescent birth rates declined at least fourfold between 1970 and 1998. The numbers of adolescent births in the recent years are shown in Fig. 7. These numbers increased between 2000 and 2002 and dropped to 4,126 in 2012. When we compare the number of adolescent births with the total numbers of births, less than one percent of all births refer to adolescent mothers. This percentage increased from 2000 (0.93) to 2003 (1.03) and declined thereafter (0.6 in 2012) (Statistisches Bundesamt 2013).

The observed increase in the numbers of adolescent pregnancies in the early 2000s may have been based, in part, on an earlier age of

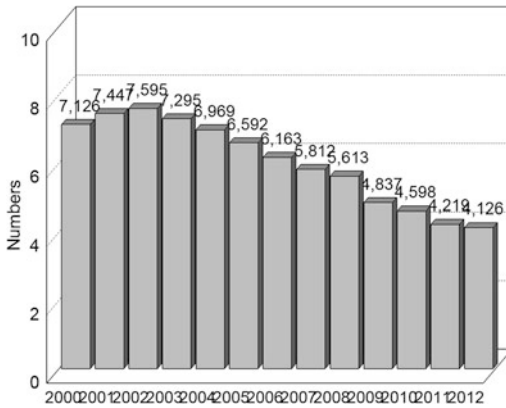


Fig. 7 Time trends in the number of births of female adolescents under the age of 18 years (based on Kluge 2005; Statistisches Bundesamt 2013)

sexual maturation and an associated earlier age at first intercourse (BZgA 2010). Alternatively, Schmidt (2009) and Schmidt et al. (2006) suggested that this may have been a statistical artifact in that not all cases of adolescent pregnancy may have been registered in the earlier statistics. A third explanation might be a decline in the usage of contraceptives, but studies of the BZgA do not support this suggestion (see Figs. 3 and 4).

In international comparisons, adolescent birth rates in Germany are quite low. For example, according to data for 18 industrialized countries from the Alan Guttmacher Institute, Germany had the third smallest rate of adolescent pregnancy. The adolescent birth rate of the USA was 5.25 times higher, and the rate in Canada was 2.8 times higher (Schmidt 2009). Kontula (2007) reports birth rates of 15–19-year-olds from 10 European countries from 1980 to the early 2000s. Across most of this interval, Germany had the second lowest birth rate in that age group (only the Netherlands had consistently lower rates). In 1995, Slovenia fell below the German rate, too. For the interval between 1990 and the early 2000s, comparative data were reported for 43 European countries. The birth rate of German teenagers was consistently located in the lowest third. In 1990, only 11 of the assessed 43 countries had lower birth rates for teenagers than Germany. In 2001, 14 countries had lower rates. At that time, Slovenia and

Switzerland had the lowest rates (6 per 1,000 teenagers) and Bulgaria and Turkey the highest rates (45). The German rate was 13 per 1,000 teenagers. One reason for the relatively low German rate is the higher prevalence of secure contraception for German adolescents as compared to many other assessed countries (Schmidt 2009).

Risk Factors for Adolescent Pregnancy

Many German authors have suggested that teenagers often decide to get pregnant and have a child in order to overcome bad circumstances, such as escaping from conflicts with their parents or from a lack of good opportunities in the field of education and work. Other reasons might be to improve the relationship with their partner or finding purpose in life (e.g., Osthoff 1999; Häußler-Sczepan et al. 2005, 2008; Remberg 2003). In fact, Nickel (1999) found that adolescents from the lower school track were more likely to state that pregnancy would give their life a stronger purpose and that they would have a task in life. However, only 21 and 12 %, respectively, of adolescents from the lowest school track answered these two questions affirmatively.

A large study with 2,278 pregnant German teenagers who filled out a questionnaire between 2005 and 2007 in pregnancy counseling centers shows that in most cases the pregnancy was unwanted (Matthiesen 2008; Matthiesen et al. 2009; Schmidt et al. 2006). About 80 % of pregnant adolescents who attended these centers participated in the study. The mean age of the participants was 16.6 years (range 10.2–17.9), and three quarters of the respondents were 16 or 17 years old. About 10 % of the female adolescents were already pregnant for a second time, and 2.9 % had already given birth to a child, 2.3 % had had a miscarriage in the past and 4.8 % an abortion. About 90 % had a steady relationship with an intimate partner and about half of them asked for counseling in order to fulfill the legal requirements for abortion. About

33 % of the total group had not used any contraception at the coitus that led to pregnancy, and 2 % had used unsafe methods. These percentages were much lower than reports from the general adolescent population (2 and 0 %) (BZgA 2010). The remaining 65 % had used contraception (34 % condoms, 27 % oral contraceptives, 2 % used both forms) and, nonetheless, got pregnant. Thus, about two-thirds of the pregnancies resulted from failure to use contraceptives. In fact, more than 90 % of the adolescents reported that their pregnancy was unplanned (Schmidt et al. 2006). Additional qualitative interviews with 61 women showed large heterogeneity of conditions that led to pregnancy: From being totally careless to failure of competent use of contraception and a few cases in which it remained unclear why they became pregnant despite contraception. Some nonusers were frustrated by the previous use of contraceptives (e.g., due to weight gain after taking oral contraceptives or other side effects they experienced in the past; Matthiesen 2008).

Similarly, Ziegenhain et al. (2003) reported that 76 % of pregnant adolescents in their study said that their pregnancy was unplanned. Again, failures of contraception usage, such as forgetting to take the pill, were widespread. These numbers sharply contrast the beliefs (or prejudices) about widespread intentional pregnancies in that age group from experts in the field working with pregnant adolescents. Several risk factors for adolescent pregnancy have been identified in German studies.

Age: The risk for getting pregnant increases with age. For example, Schmidt and colleagues (2006) estimated that about 5 out of 100,000 12-year-old German girls get pregnant, as compared to 5 out of 1,000 15-year-olds and 12 of 1,000 17-year-olds.

Socioeconomic status: Unfortunately, information about the social situation of pregnant teenagers is not part of official German statistics. However, relevant data are available from a large empirical study. Adolescent pregnancy rates vary by school type. After the completion of elementary school, German pupils are separated into three different school types: a lower

track (*Hauptschule*, completed after 9 years of schooling), a middle track (*Realschule*, completed after 10 years), and a higher track which offers access to university (*Gymnasium*, completed after 12–13 years, depending on the laws of the federal state). The selection of school tracks is based mainly on the students' performance during elementary schooling and students from higher school tracks have better career opportunities after graduating from school.

Schmidt et al. (2006) observed that the risk of female adolescents from the lowest school track of becoming pregnant was three times higher than the risk of students from the highest school track. Nonetheless, pregnancy was also a relatively rare event in female adolescents from the lowest school track as only 15 out of 1,000 15–17-year-olds were estimated to become pregnant. The risk for a second pregnancy in adolescence was also higher for female adolescents from the lowest school track (12.5 %) than for those from the highest school track (4 %) (Block and Schmidt 2009). One explanation for the differences by school track is the fact that girls from the lowest school track became sexually active earlier than their peers from other tracks (e.g., 7–8 months earlier than students from the highest school track) (Thoss et al. 2006). Another reason is the lower usage of safe contraception in students from the lowest school track. For example, the BZgA study found that female adolescents from the lowest school track were more than twice as likely not to use contraception at their first intercourse (13 %) than peers from the highest school track (6 %) (BZgA 2010). However, this difference was confounded with age differences at first intercourse. Finally, lower knowledge about emergency contraception in students from the lowest school track may have contributed to school track differences in the risk of becoming pregnant. The same study found that emergency contraception had been used by 17 % of female adolescents from the highest school track as compared to 7 % of their peers from the lowest school track.

The authors also compared pregnant adolescents who did and did not use safe contraception

at the time they got pregnant. Higher numbers of social disadvantages were associated with a higher risk for nonuse. This index was a sum variable that consisted of low educational attainment of the female adolescent and her partner and of unemployment of the target person's mother and father. Only 22 % of the female adolescents with none of these risk factors did not use contraception or used unsafe forms compared to 48 % of the group with the highest number of risk factors (Matthiesen 2008). Female adolescents with social disadvantages were also more likely to experience their second pregnancy (15.8 %) as compared to those without disadvantages (6 %) (Block and Schmidt 2009).

Religious affiliation: Given the strict prohibition of premarital sex by the Catholic Church, it could be expected that young Catholics have a lower risk for becoming pregnant than young Protestants or their peers without religious affiliation. However, Block and Schmidt (2009) found no evidence for lower rates of adolescent pregnancy in Catholic adolescents than in other adolescents. Catholic and Muslim pregnant adolescents were even somewhat less (!) likely to decide to give birth to their child (17 and 18 %) than Protestant adolescents (23 %) and those without confession (32 %), despite the fact that the Catholic Church considers abortion to be form of murder, making it a sin, and that any Catholic that obtains or takes part in an abortion is considered to be excommunicated from the Church (Bischofskonferenz 2005).

Family of origin: Some studies with small and non-representative samples reported that pregnant adolescents and adolescent mothers often come from families with high levels of conflicts and that many of them had lost an attachment figure, for example, due to parental divorce (e.g., Berger 1987; Noe 1994).

Characteristics of the intimate relationship: Three aspects of the intimate relationship were found to be associated with an increased risk for adolescent pregnancy (Matthiesen 2008). The first risk factor is the lack of effective communication about contraception. For example, some

teenage girls did not communicate to their partners that they did not use oral contraception or that they would only be willing to have safer sex. Second, non-egalitarian gender relations increased the risk of unprotected sex of girls who in turn became pregnant. Above average risks were observed if the coitus was "male dominated" and the female adolescent felt pressured (61 % in that group did not use contraception or used unsafe methods), if the female adolescent came from a male-dominated foreign country (51 %), if she was Muslim (51 %), or if her partner was at least 8 years older (41 %). Finally, emotional distance between the intimate partners increased the risk for adolescent pregnancy. For example, out of those adolescents who reported that their first coitus with the particular partner led to pregnancy, 50 % had not used contraception or had used unsafe contraception. Out of those who did not have a steady relationship with the particular partner, 48 % had not used any contraception or used unsafe forms. These percentages were significantly higher than the average percentage of nonusers or users of unsafe methods (35 %).

Migration background: The term migration background refers to the question whether the adolescents and/or one of their parents was born outside of Germany. Migration background per se is not a risk factor for adolescent pregnancy, but the combination of migration background and being sexually active. In the large study by Schmidt et al. (2006), young people with migration background were not overrepresented among pregnant teenagers. Two opposed trends explain the lack of differences: Female adolescents with migration background have their first intercourse later than other adolescents, but they are less likely than their peers to use safe forms of contraception when becoming sexually active. For example, in the most recent study of the BZgA (2010), 37 % of female adolescents with migration background were, according to their self-reports, virgins as compared to 26 % of female adolescents without migration background. However, 9 % of sexually active female adolescents with migration background used

unsafe contraception or no contraception at all as compared to only 2 % of female adolescents without migration background.

Previous pregnancy: Female adolescents who had already been pregnant in the past had a risk of becoming pregnant again during adolescence that was twice as high as female adolescents who had not been pregnant before (Block and Schmidt 2009). Thus, at least some of them have risk factors that are stable over time.

Regional differences: Birth rates of teenagers are higher in the eastern part of Germany than in the west. For example, at the time of the German reunification in 1990, the birth rates of 19-year-olds were three times higher in the east (63 births per 1,000 women) than in the west (19 births per 1,000 women) (Pötzsch 2005). The east–west difference is still visible but has declined over time. The east–west difference in 1990 can, in part, be explained by differences in the social policy of the former socialist German Democratic Republic and the Federal Republic of Germany. For example, due to housing shortages in eastern Germany, having a child increased the chance of getting their own flat and moving out of the parental home. In addition, much higher numbers of cheap day care facilities were available which allowed for combining motherhood with education and work. More than 20 years after the German unification, the availability of day care facilities is still higher in the eastern part of Germany. Norms of earlier parenthood may still be passed on from the parental generation to their adolescent children, but higher present rates of adolescent pregnancy in eastern Germany might also reflect a lack of alternative positive social roles (due to lower availability of apprenticeships and higher rates of unemployment).

In another study, Walther (2004) observed higher rates of teenage pregnancy in regions with higher percentages of welfare recipients ($r = 0.63$), with higher unemployment rates ($r = 0.67$), with higher percentage of school dropouts ($r = 0.46$), and with higher levels of urbanization ($r = 0.29$).

Adoption and Abortion

If pregnant adolescents feel unable to care for their child, there are two options, abortion (in the first 12 weeks of pregnancy) and adoption. As some adolescents notice their pregnancy too late for an abortion (Schmidt and Mix 2009), adoption may be a good choice for them. We did not find representative data on the numbers of German teenagers who put up their child for adoption. In a study by Barchmann (2009) with 100 adolescent mothers and 100 adult mothers, 5 out of 200 children were put up for adoption immediately after being born, all of them having adult mothers. According to the German Federal Statistical Office, a total of 3,888 children were adopted in Germany in 2009, 2,050 of them having single biological mothers and 1,175 being at an age of below 3 years when being adopted (Statistisches Bundesamt 2010). Given the fact that less than 1 % of all births were adolescent births and 4,837 adolescent mothers gave birth to a child in that year, it can be concluded that few adolescent mothers put their child up for adoption. Thus, in the case of not being able or not wanting to care for a child, the large majority of pregnant adolescents decide for abortion.

In fact, a similar number of German adolescents decide for abortion and for giving birth to their child. For example, the ratio of the number of adolescent abortions and the number of adolescent births was 0.89 in 2000, 1.13 in 2004, and 1.01 in 2009 per 1,000 births (see, Figs. 7 and 8). According to national statistics, the number of abortions by German adolescents increased between 1996 and 2004 and declined thereafter (Fig. 8). Similar trends are observed when relating the numbers of abortions of adolescents to the total number of abortions. In 1996, 3.6 % of all abortions referred to adolescents up to 18 years of age: The percentage rose to 6.1 % in 2004 and declined to 3.6 % in 2012. The abortion rate of German adolescents is four times lower than in the USA, 6 times lower than in France, and 8 times lower than in the Netherlands (Vögele 2006).

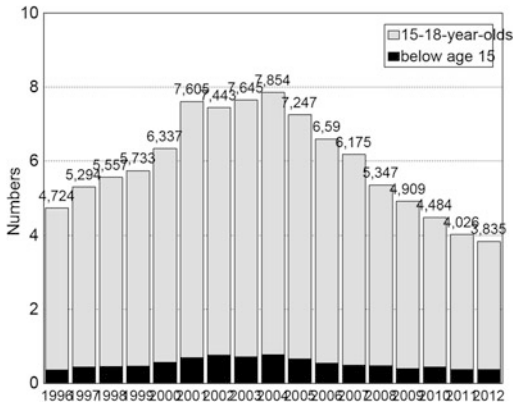


Fig. 8 Time trends in abortions of German adolescents (Statistisches Bundesamt 2013)

The younger the adolescents, the lower the numbers of abortions: For example, only 4 adolescents 10–11 year of age in 2004 had an abortion, as well as 11 adolescents who were 12-year-olds, 143 adolescents who were 13-year-olds, 621 adolescents who were 14-year-olds, and 1,418 adolescents who were 15-year-olds. Most adolescent abortions (5,657 of the 7,854 cases) were registered in girls 16- and 17-year-olds (Häußler-Sczegan et al. 2008).

Vacuum aspiration is used in about 80 % of the adolescent abortions—a number slightly higher than in abortions with adults (Schmidt and Mix 2009). Medication-based abortion (Mifegyne®; RU 486) has been available in Germany since 1999. However, it is rarely used by pregnant adolescents because their pregnancy is often noticed rather late, and this method can only be applied in the first 7 weeks of pregnancy.

Schmidt and Mix (2009) asked 60 former pregnant adolescents about their reasons for having an abortion. The most prevalent reasons were that parenthood would have serious negative consequences for their own development (82 %; e.g., finishing school) and that they would not have enough resources for rearing a child (73 %; e.g., money, own flat). Other reasons were the lack of a stable romantic relationship, not wanting to lose personal freedom, or—in very few cases—being pressured by their parents or their partner. Only one-third of the

adolescents decided for abortion without inner conflicts/ambivalence. Inner conflicts of the other adolescents usually remained—with fluctuating intensity—until abortion or even beyond. About 40 % experienced conflicts between motives for abortion and moral values. The others experienced conflicts between anticipated positive and negative aspects of parenthood. About 2–3 months after abortion, approximately 80 % of the initially highly conflicted adolescents had solved their conflict and were satisfied with their decision (that is with having abortion), while the remaining 20 % still doubted whether they made the right decision. About one quarter of the respondents said that they would give birth to a child if they would become pregnant again. A large number of adolescents experienced the immediate time before abortion as the most stressful experience, associated with anxiety and dejection (Block 2009), such as fears about possible physical consequences of the procedure (e.g., injuries or pain). The abortion itself was usually less distressing for them, and almost two-thirds were completely satisfied with the medical care.

The experience of abortion was associated with behavior changes, at least in a larger number of the female adolescents: In the study by Schmidt and Mix (2009), about half of them reported a lower coitus frequency, often due to fears of getting pregnant again. About 70 % of those who had sex after the abortion showed improved usage of contraception. As the adolescents were interviewed 2–3 months after abortion, it remained unclear whether these changes are stable over time.

Adolescent Parents and Their Children

Adolescent parents have to cope with a lot of new demands that, for them, emerge much earlier than for other parents, such as caring for their child, running a household and securing one's livelihood. At the same time, they have to solve the developmental tasks of adolescence, such as finishing school, preparing for a career,

and gaining autonomy from their parents. Whereas other young people can solve these developmental tasks in succession (e.g., starting a career, followed by leaving parental home, building a steady romantic relationship, and becoming parents), adolescent parents have to solve many tasks simultaneously. Adolescent parenthood is often associated with backward steps with regard to solving the developmental tasks of adolescence. For example, young people may have to leave school before graduating or give up their apprenticeship, they are no longer able to maintain some social activities with their peer-group or experience a lack of understanding by many peers. In addition, instead of gaining autonomy from their parents, they often become more dependent on them when needing financial support or having to move back to the parental home. Thus, adolescent parenthood is associated with high personal costs, especially for adolescent mothers. These costs are most obvious in the field of education and work.

Education and work: In a qualitative longitudinal study with 36 adolescent mothers that started during pregnancy (the mean age at the first time of measurement was 17 years), Friedrich and Remberg (2005) observed that 25 % of the young mothers dropped out of school during pregnancy or after giving birth to a child, and only 22 % of these mothers re-entered school in the first 2 years after giving birth to a child. Seventeen percent of the total sample had not completed school 2 years after giving birth to their child. Another study reported that 40 % of teen mothers had not graduated from school, whereas most others (50 %) completed the lowest school track that only offers very limited career opportunities (Thiessen and Anslinger 2004).

Friedrich and Remberg (2005) observed that 2 years after giving birth to their child, 42 % of the mothers were in the work force (vocational training or being employed), while 47 % were at home (neither employed nor in the educational system). Most teenage parents in that study had not changed their general career aspiration, but they planned to finish their education and start a career after taking a more or less long break for

child care. However, a subgroup felt that their career plans could no longer be fulfilled and reduced their career aspirations or even gave them up completely. A few others even started developing career plans because of their pregnancy and parenthood in order to become independent from welfare benefits.

Material situation: Young mothers are at increased risk for poverty. For example, Thiessen and Anslinger (2004) reported that 35 % of the assessed young mothers received social welfare assistance as compared to 9.5 % of the total population. High rates of welfare recipients were also found in the study by Friedrich and Remberg (2005), in particular if the mothers were not in a steady relationship.

Housing: Friedrich and Remberg (2005) observed that during pregnancy about one-third of the respondents lived with their parents or the parents of their boyfriend and a similar number had their own home. Other ways of living were mother-child homes or other forms of supervised living. Two years after giving birth to their child, more than two-thirds of the mothers had their own home.

Social situation/intimate relationship: Greven (2008) compared the social situation of 237,058 German primiparous mothers, 3,842 of them being adolescents. Data were collected around birth. Adolescent mothers were more likely to have no intimate relationship at the time of the interview (58.7 %) than older mothers (18.4 %). In a study with 100 adolescent and 100 adult patients from a birth clinic, 97 % of the adolescents had no such relationship at present, as compared to 62 % of the control group members (Barchmann 2009).

Two years after giving birth to a child, only 39 % of the young mothers from the study by Friedrich and Remberg (2005) still had an intimate relationship with the father of their child. However, 42 % had a new intimate relationship.

Mental health: Unfortunately, almost all available German studies with teenage parents did not assess mental health. In a small sample with adolescent mothers, Ziegenhain et al. (2003) observed that depressive symptoms were widespread (average scores were at the 70th

percentile of a depression scale). However, because these adolescent females were recruited with the help of service agencies for young mothers at risk, this study probably overestimated the prevalence of depressive symptoms.

Life management/Coping with the new role: In the past, pregnancy during adolescence and teenage parenthood has often been described as severe maturation crisis (Berger 1987). However, these authors referred to non-representative samples of teenage mothers of children in psychiatric treatment. Available recent studies show a large variability and that some German adolescents cope with parenthood quite well. Friedrich and Remberg (2005) reported that many young mothers have strong feelings of responsibility for their child and are able to organize different roles in the field of motherhood, their own education, and intimate relationship. About 30 % of their sample coped quite well with the new role. They felt more mature after giving birth to a child, were able to organize their daily life, and balance their own needs and the needs of the child. If they had a romantic relationship, they got sufficient support from their partner. In total, this group was satisfied with their role. A second group of similar size was defined by the authors as precarious motherhood. In this group, motherhood led to serious problems for the mothers and/or the child. For example, mothers felt overwhelmed by the excessive demands and lacked relevant abilities and psychological stability. They showed neglectful behavior or even aggression toward the child. Adolescent mothers without romantic partners were overrepresented in this group. The third group (40 %) experienced positive and negative aspects of parenthood (e.g., blocking of previous life goals and having a new meaningful role) and found these aspects difficult to integrate. They sometimes felt overwhelmed by the demands of parenthood but showed less negative consequences than the second group. Due to the small sample size, the results are difficult to generalize.

Health behaviors and child health: Health-related behaviors during pregnancy affect the health of the child. A central question is whether

pregnant adolescents care less for their health (and for the health of the unborn child) than pregnant adults. Barchmann (2009) compared data from 100 pregnant adolescents (mean age at birth $M = 16.5$ years, range 13–17 years) with 100 pregnant adults (18–35 years). In this study, 44 % of the adolescents reported that they had smoked during pregnancy, as compared to 18 % of the control group. Based on a much larger sample size (birth clinics data from 237,058 German primiparous mothers, 3,842 of them being adolescents), Greven (2008) observed that 39.8 % of the adolescents were smokers as compared to 15.1 % of the older mothers.

As a general recommendation, German pregnant women should have at least 10 pregnancy examinations. Some 57 % of the pregnant adolescents in the study by Barchmann (2009) did not have the expected number of pregnancy examinations, as compared to 39 % of pregnant adults. More than 50 % of the adolescents did not have their first pregnancy examination until after the first 12 weeks of pregnancy. This number was much lower for the pregnant adults (21 %).

Does this lower level of health care translate to higher numbers of complications during pregnancy and at birth? Haerty et al. (2005) compared data from 46 adolescent birth and 96 adult births at the University Hospital of Munich. They found no significant differences with regard to biological risks, such as premature birth and low birth weight of children of adolescent mothers. However, the lack of significant differences may have been based on a small sample size.

In another study with 100 pregnant adolescents and 100 pregnant adults, Barchmann (2009) observed that complications during pregnancy—such as gestosis, anemia, and bleedings—were just as common in pregnant adolescents as in pregnant adults. Preterm deliveries (before the 37 week of pregnancy) were slightly more prevalent in pregnant adolescent, but the difference did not reach statistical significance. The numbers of complications at birth did not differ between both groups. Pathological APGAR scores were slightly more

prevalent in the control group, but this difference was insignificant. However, the average birth weight was significantly lower for children of adolescent mothers (3,275 vs. 3,435 g). In addition, pathologies in the early postnatal period were more prevalent in children of adolescent mothers (43 vs. 22 %; and a higher probability of icterus in particular, 26 vs. 16 %).

Klapp (2003) reported that the Berlin perinatal study found an increased rate of premature infants for adolescent mothers (9.9 %) as compared to adult mothers (7 %). Furthermore, Greven (2008) reported that 10.9 % of the infants of adolescents were born prematurely. In the total population, only 7.2 % of the children were premature babies. In addition, children of adolescent mothers had lower birth weight than children of 18–36-year-olds. About 9.1 % of these children had low birth weight (<2,500 g) as compared to 5.7 % of children of 18–35-year-old mothers. Finally, another study showed that differences in birth weight and risk for early birth between adolescent mothers and older mothers are no longer significant after controlling for between-group differences in smoking, relationship status, and educational aspirations (Bohne-Suraj and Reis 2009).

In sum, although the results of available studies are, in part, inconsistent, the existing data indicate that—similar to studies from other countries—pregnant adolescents from Germany do less for their own health and for the health of their child than pregnant adults. Preterm births and low birth weight are more common in teenage pregnancies, but these differences are small and only become significant in large samples.

In a study on families who sought psychological help, Berger (1988) observed that children of adolescent mothers show depressive and psychosomatic symptoms more often than children of adult mothers. In another study with patients from a psychiatric hospital, 59 % of children of adolescent mothers received a diagnosis of emotional or behavioral disorders (Bohne-Suraj and Reis 2009). However, representative German data are lacking on that topic.

Public Policy

With regard to public policy, we start with initiatives for the prevention of pregnancy, followed by services for pregnant adolescents as well as for adolescent parents and their children. If available, we include data on the evaluation of the effects of these initiatives and services.

Pregnancy Prevention

In principle, the prevention of adolescent pregnancy could focus on each step in the chain of risk factors, such as reducing risk factors for early sexual maturation (obesity in particular), delaying the timing of the first intercourse, reducing the number of sexual contacts, and improving contraceptive behavior. However, most German initiatives focus on the last risk factor.

School-based sex education: Sex education is seen as the most important form of pregnancy prevention (Häußler-Sczepan et al. 2005, 2008). Schools are the main place of sex education. Other forms include information brochures and Web sites on the Internet.

In the early 1960s, the first guidelines for sex education at schools were implemented in Hamburg and West Berlin. In 1968, the Conference of the Ministers of Education and Cultural Affairs of the (western) German federal states adopted general recommendations for sex education at all German schools. According to these recommendations, sex education should not be a topic of a singular subject, such as biology or religion, but a topic of interdisciplinary education. Themes, such as sexual behaviors, contraception, and abortion, should be addressed in sex education until grade 9 or 10. The federal states developed guidelines and framework curricula for implementing sex education at their school according to these recommendations. Rules for sex education were less formalized in the former German Democratic Republic, but general hints for sex education existed in the curricula of biology (beginning with 5th graders), German literature

as well as History and Civic classes (only with regard to gender roles). In 2002, the recommendations of the Conference of the Ministers of Education and Cultural Affairs were annulled and each German federal state now has its own guidelines and/or curricula. However, not all schools may follow these guidelines and rules to the same extent (for a comprehensive overview, see Hilgers et al. 2004).

Hilgers et al. (2004) compared sex education in the German federal states. Starting from primary school, topics of sexuality are implemented in the curricula of the schools. Contraception is an explicit topic of the curricula of all but one federal state (Bavaria did not include this topic); although the time of approaching this content varies between grade 4 and grade 10 (most federal states implement the topic in grade 5 or 6). All but two federal states included abortion in their curricula, but they differ regarding whether abortion should be seen as generally wrong or as a meaningful option in the case of an unwanted pregnancy. Almost all federal states conceptualize sex education as interdisciplinary topic. Only in the federal state of Bavaria, biology and religion are seen as the leading subjects of sex education. Parents should be informed about the contents and methods of sex education. However, based on court decisions, they have no right to forbid the participation of their child. Adolescents often report that sex education at school did not sufficiently address some relevant topics, such as emergency contraception (Remberg and Weiser 2003).

In the field of sex education, many German schools cooperate with health practitioners. For example, the Medical Society for Health Promotion of Women (Ärztliche Gesellschaft zur Gesundheitsförderung der Frau e. V.) supports school-based sex education and reaches about 60,000 adolescents per year (Gille 2005).

Infant simulators (Baby Think It Over[®] infant simulators) have been used in Germany since 2000. This simulator articulates hunger and other supply requirements and reports exactly how it was cared for (a computer registers these care activities). It does not only register how promptly the “parents” reacted toward its needs

but also registers misuse, such as shaken baby syndrome or broken neck. Nowadays, most German advice centers for pregnancy counseling work with infant simulators. These simulators are most often used as part of school curricula (in the lowest school tracks in particular). Some youth welfare services (e.g., dormitories for adolescents at psychosocial risk) and centers for children with special needs also work with these simulators.

In the last decade, the number of persons who work with these simulators has continuously increased. About two-thirds of them are social workers and about 25 % teachers. About 90 % of the multipliers received advanced training in working with these simulators. They most often use infant simulators for pregnancy prevention (about 90 %), help with life planning (about 90 %), and prevention of child abuse (about 75 %; Spies 2008). Role overload and failure with the mother role are supposed to act as a deterrent. Some multipliers also combine the use of infant simulators with peer education and introduce teenage mothers who report on their experiences and problems.

In an evaluation study without a control group, Spies (2008) found that the participating adolescents feel overwhelmed. The respondents experienced failures when trying to master the excessive demands of their new role. Six months after the parent practice, they did not have clear memories of the learning contents of the program but remembered the number of broken necks and the percentage of cases that met (or did not meet) the demands of the baby. The attitudes about whether to get a baby during adolescence did not change. However, all but one adolescent already had a negative attitude in this regard at the beginning of the project.

The use of infant simulators has been criticized because the excessive experience of one's incompetence in meeting the infant's demands may undermine adolescents' general self-efficacy beliefs, in particular in the case of underprivileged adolescents who often experience failures in other areas of their life.

Sex education brochures: Service providers have developed sex education brochures. For

example, the German Federal Center for Health Education used questions that adolescents asked on the Internet platform “loveline” (www.loveline.de) for developing such brochures. However, brochures alone have a very limited effect. In an experimental study, Krahe et al. (2005) observed that reading a sex education brochure was insufficient to affect variables relevant for adolescent condom use, such as intentions and general attitudes toward condom use. Additional motivational strategies were necessary for change.

Electronic and print media: In the most recent study of the BZgA on adolescent sexuality, 36 % of female adolescents and 26 % of their male peers prefer using journals as a source of information about sexuality, 36 % of girls and 24 % of boys preferred free information brochures, and 27 % of girls and 26 % of boys reported that they prefer using the Internet. Print media was more important for sexually inexperienced adolescents (BZgA 2010).

Starting in 1963, the most widespread German magazine for teenagers (“Bravo”) has been answering reader’s letters about sexuality. This service is now supplemented by a Web page (<http://www.bravo.de/dr-sommer>). The Internet platform “loveline” that is run by the BZgA offers information about love, intimate relationships, sexuality, and contraception (<http://www.loveline.de>). It includes an online lexicon, frequently asked questions, surveys, news, knowledge-based games, and chats. About 500,000 people per year visit the Web site, and about 160,000 adolescents use the chat/forum. The family counseling agency *Pro Familia*’s (<https://profamilia.sextra.de>) Web site “Sextra” offers online counseling and information that were sent to about 13,000 of those who requested it in the year 2010.

In 2009, a documentary soap by a private broadcasting company “Erwachsen auf Probe” [Adult on trial] that was based on the British TV documentary “Baby Borrowers,” featured some adolescent couples starting off to attempt at looking after a baby for a few days. The official goal of the TV documentary was to sensitize teenagers about imprudent pregnancy by showing

them the difficulties that would arise. The documentary was harshly criticized by the Federal Psychotherapeutic Association, the Children Protection Alliance, and others because during these days the infant was separated from his or her biological parents and became distressed.

Support for Pregnant Adolescents

Counseling and education: Advice centers for pregnancy conflict counseling or pregnancy counseling exist all across Germany, although there are no specialized advice centers for pregnant adolescents. As already reported, participating at pregnancy conflict counseling is a legal requirement for abortion. It offers information about legal aspects, social assistance for pregnant women and for mothers (e.g., financial assistance from state), costs and funding for abortion, medical information about abortion procedures, and help with emotional and social conflicts, and with life planning in the case of abortion or parenthood. Counselors are required to be open to all possible outcomes.

Advice centers that are run by the Catholic welfare agency only offer pregnancy counseling and do not provide the attestation that would be needed for abortion. In addition to counseling centers, online information for pregnant teenagers is provided by the German Federal Center for Health Education at the Web site <http://www.schwanger-unter-20.de>.

All advice centers offer help for getting access to state benefits and visits of authorities or referrals to other specialists. Block (2009) reported that more than two-thirds of pregnant adolescents evaluated the counseling experience positively. Critiques referred to the large age difference between the adolescent and the counselor and to the bias of some counselors who preferred a particular solution (abortion or giving birth) rather than promoting a dialogue that takes all outcomes into account without bias.

In order to get access to some sources of support, pregnant adolescents have to visit public authorities. Friedrich and Remberg (2005) found that pregnant adolescents felt more

accepted when asking for services of the youth welfare office than when asking for services of the (non-age-specific) social welfare office.

Family education centers offer classes for expectant mothers, for example with regard to antenatal gymnastics, preparation for birth, preparation for breast feeding, and others. Because less than one percent of all pregnancies refer to adolescents, these centers usually do not offer special classes for pregnant adolescents.

Antenatal care: As for other pregnant women, regular antenatal care for pregnant adolescents is paid for by the health care insurance.

Material support: Maternity allowance (a maximum amount of 385 Euro per month) is paid by the health care insurance in the last 6 weeks before giving birth to employed pregnant women. Thus, most pregnant adolescents do not receive this money. If pregnant women do not have sufficient income, they can receive public welfare benefits for buying maternity wear and basic equipment for new parents. Pregnant teenagers can also apply for a non-recurring financial support for basic equipment and housing from the Foundation “Mother and Child—Protection of Unborn Life.” The amount of this support differs considerably between the German federal states, and there is no legal entitlement to this subsidy. Church-based advice centers for pregnant women may also have their own social fund for supporting pregnant women.

Services for Young Mothers and Parents

Counseling: Basic social security is the most common topic of counseling for adolescent parents, followed by school-/education-related topics, questions about partnership, child care, general future planning, and legal advice (Häußler-Sczapan et al. 2005, 2008). According to experts from the field of counseling, the most important support needs of adolescent parents are educational counseling, adaptation of modes of vocational training to the needs of young mothers, financial/material support, offering

child care facilities, and housing for teenage mothers and their children/assisted living. Friedrich and Remberg (2005) observed that most teenage parents used counseling services only once or twice (e.g., when searching for material support), but most of them would have needed them over a longer period.

Material support: Since 2007, German parents receive parental benefits (Elterngeld) during the first year after childbirth (and for an additional 2 months if fathers take paternal leave for that time). Parents who were not in the work force before the birth of the child receive a minimal amount of 300 Euros. In addition, parents receive child benefits (Kindergeld)—in 2013 184 Euros per month for each child. Combining parent and child benefits, adolescent mothers receive 484 Euros in the first year of life for their child. During this time, some teenage parents may have more money than they had before, although this amount may be insufficient for running their own household and has to be supplemented by welfare benefits for the poor. When parental benefits end, adolescent parents have to apply for welfare benefits as long as they have no other sources of sufficient income. Children of teenage mothers also have the right to receive alimentation (child support) from their fathers, the amount depending on his income level. If the father does not pay or is not able to do so, the youth welfare office pays the child support.

Special housing/assisted living: According to the Social Code volume 8 on child and youth services, single mothers or fathers who care for a child under the age of 6 years of age have the right to attend an appropriate type of accommodation as long as they need this support because of their personality development. During this time, they should get help with continuing with or starting school or occupational training or finding a job (§19). Of course, this service is not restricted to adolescent parents. For example, in 2009, 17.7 % of the residents of mother–child facilities in Catholic sponsorship were between 14 and 17 years of age ($N = 147$) and another 27.1 % were between 18 and 20 years of age ($N = 225$) (Winkelmann 2010).

The percentage of adolescent residents (<18 years) varied between 14.5 % (in 2007) and 23.9 % (in 2000). The law does not pertain to young couples with children. Not surprisingly, this service is in most cases used by mothers rather than fathers.

In the so-called mother–child homes, mothers and their children usually live in mother–child groups. They have one or two rooms for themselves and their child and common rooms for the whole group. Services include support with child care, finishing school, career entry, solving financial problems, visit to the authorities, partnership, household, and spare time. The services also include crisis intervention and relief from excessive demands and cooperation with other service providers. Teenage mothers usually live in these mother–child homes between one and 3 years (Wallner 2010).

Help with finishing education and starting a career: Most schools and centers for vocational training are not well prepared for adolescent parents. According to the Law for Increasing Day Care (Tagesbetreuungsausbaugesetz), young mothers who still go to school or are in vocational training have the right to a nursery place, although no sufficient numbers of places might exist in their community. An amendment of the German Vocational Training Act from 2005 allows reducing the weekly duration of training by 25 % without reducing the total duration of the vocational training, although this option is not yet used very often (Stauber 2010).

Only few pilot schemes for help with finishing school or starting a career are available, such as the Bremer Förderkette Junge Mütter (Support chain for young mothers from Bremen; Pregitzer and Jones 2004; Thiessen and Anslinger 2004) which includes the cooperation of school, youth welfare services, and kindergarten. For example, a project school has a day care center and individualized curricula are developed for each young mother so that they fit her previous knowledge level. Social work helps with life planning and career planning, and with developing social competence (e.g., parenting education). Another program was developed for 16–20-year-old mothers who have finished

school and who are preparing for an apprenticeship and job. The program combines internships, classes to increase knowledge that are relevant to their future job (overcoming deficits in knowledge and in career-relevant abilities), and day care for the infants. It is supposed to help with making career decisions and with starting a career. At the end of the program, they receive help with finding an apprenticeship or job.

Parenting education for adolescent parents: As in other developed countries, parenting education is offered for couples, but these programs are usually not developed for the special needs of adolescent parents. A model project by Ziegenhain and co-workers focused on video-based parenting education for adolescent parents. The goal was to increase knowledge about child development, parental self-efficacy beliefs and sensitivity. The intervention was relationship based, focused on video feedback of mother–infant interactions, and gave suggestions on how to improve the behavior. The results of this study reveal that the relationship-based intervention improved maternal sensitivity during the babies' first 3 months compared to a group of adolescent mothers who only received an intervention based on counseling and compared to a group of adolescent mothers without any intervention. Although the intervention effects declined in the first 3 months after the end of the intervention, there still was a significant effect at follow-up (Ziegenhain et al. 2003, 1999).

Conclusions

In the final part of this chapter, we will provide a general evaluation of teenage pregnancy in Germany and provide suggestions for future research, policy, and programs. In an international comparison, German rates of teenage pregnancy, births, and abortions are quite low. Given this fact and the further decline of these numbers in prior years, we conclude that prevention works quite well. Although we do not believe that every pregnant teenager is one too many (because some of them make a well-informed decision and cope

quite well with their new roles) (Friedrich and Remberg 2005), the fact that most teenage pregnancies are unwanted and have considerable costs for the young people and society, there is room for further improvement.

Conclusions for Policy

With regard to prevention of adolescent pregnancy, we conclude, first, that further improvements of sex education are needed. As about one quarter of the German 14–17-year-olds reported that they wanted more information about contraception (BZgA 2010), as contraception failures are widespread among pregnant adolescents (Schmidt et al., 2006; Matthiesen and Schmidt 2009), and about 50 % of the pregnant adolescents did not have information about emergency contraception (*ibid.*); such better knowledge of contraception could reduce the rate of adolescent pregnancy. Given the fact that 4 % of sexually experienced female adolescents have their first intercourse at the age of 13 or earlier (BZgA 2010), contraception should be a topic of sex education as early as grade 5 or 6. Thus, curricula of sex education of about half of the German federal states (Hilgers et al. 2004) would have to be revised, as they only include this topic in grades 7–10 or do not explicitly mention it at all. The importance of earlier sex education can also be derived from the fact that younger adolescents were less likely to use safe contraception than older adolescents (BZgA 2010). Regular contraception and emergency contraception should be a main topic of sex education in all schools.

Second, with regard to the content of education about contraception, the high prevalence of contraception failures (Schmidt et al. 2006; Matthiesen and Schmidt 2009) indicate that adolescents should be recommended the combined usage of oral contraceptives and condoms. This could reduce the negative effects of single contraception failure and the prevalence of adolescent pregnancy. Alternatively, forms of contraception that need low compliance could be developed.

Third, in contrast to many other countries, emergency contraception in Germany is only available by prescription. Difficult access to emergency contraception, such as time-consuming procedures if one has to go to a gynecologist or to a hospital, was one (but not the only) reason for unwanted pregnancy in the study by Matthiesen and Schmidt (2009). Free availability of emergency contraception would therefore be another important step in further reducing the rate of teenage pregnancy. In 2013, the Federal Council of Germany voted for this solution.

Fourth, because lack of effective communication about contraception was often observed in pregnant adolescents (Matthiesen 2008), measures for improving communication abilities and assertiveness could contribute to a reduction in teenage pregnancy. The promotion of life skills is part of three German prevention programs with a focus on sex education (for overview, see Vierhaus 2009), but their effects on use of contraception or risk for pregnancy have not been evaluated as yet.

Fifth, with regard to work with pregnant adolescents, studies on health care (Barchmann 2009; Greven 2008) indicate that efforts are needed in order to reduce smoking during pregnancy and increasing the regular use of pregnancy examinations. Higher degrees of cross-linking between psychosocial services for pregnant adolescents and gynecologists may be one way to reach this goal. In addition, as the age difference between adolescents and pregnancy counselors and gynecologists sometimes impairs effective communication (Block 2009), training of counselors and medical staff in the work with adolescents may help to improve the use and the effects of these services. In addition, available advisory services may be supplemented by peer counseling.

Sixth, because motherhood in adolescence is a risk factor for school dropout and poverty (Friedrich and Remberg 2005; Thiessen and Anslinger 2004), more efforts are needed to increase the compatibility of teenage motherhood with education, vocational training, and work. The model projects that combined individualized

curricula, internships, availability of child care, and counseling worked quite well and should be disseminated as regular services across the whole country (Pregitzer and Jones 2004; Thiessen and Anslinger 2004). In addition, increasing the availability of child care facilities would help young mothers in entering the work force.

Seventh, because special accommodations (such as mother–child homes) are only available for single mothers and fathers according to the German Social Code, this service is inappropriate for supporting adolescent couples and their children. Thus, teenage family homes as a form of assisted living would be highly recommended.

Conclusions for Future Research

As reported in this chapter, some recent high-quality studies with large samples are available on adolescent sexuality (such as the repeated studies of the BZgA) and on the situation of pregnant teenagers (Matthiesen et al. 2009). Nonetheless, more research is needed with regard to other relevant topics.

First, large quantitative studies are needed on the situation of adolescent parents and their children. They should provide data on adolescent and adult roles (e.g., education, employment), support use, health care, parenting, parental psychological health, and child development. Comparison groups of adult parents and adolescents without children are needed. For example, because teenage pregnancy is more common in socially disadvantaged groups (Block and Schmidt 2009; Schmidt et al. 2006), some of the observed problems of adolescent mothers with finishing school and getting a job might be explained by their lower school track or other social risk factors rather than by adolescent parenthood. The relative effects of parenthood and of other risk factors still have to be determined. The collection of longitudinal data would be recommended for assessing the process of coping with the demands of parenthood.

Second, despite the availability of studies with pregnant adolescents, we still do not know much about predictors for abortion versus giving birth

to a child. In addition, because only a limited number of risk factors for adolescent pregnancy have been assessed in the available German studies, more research on risk factors is recommended. For example, do impulsivity, social competence, future-related expectations, and other psychological variables play a role? This knowledge would have implications for the future development of prevention and support programs.

Third, high-quality studies are needed in the field of evaluation of pregnancy prevention programs and of support services for pregnant adolescents and young parents. At best, these studies need to have sufficient sample sizes and a randomized design that compares the intervention condition with treatment as usual or alternative prevention programs. Because numbers of adolescent pregnancies and adolescent births are rather low in Germany, multicenter studies are recommended.

References

- Ahrendt, H. J. (1991). Sexuelle Entwicklung, Sexualverhalten und Kontrazeption weiblicher Jugendlicher in der DDR (Sexual development, sexual behavior, and contraception in female adolescents from the GDR). In R. Kuntz-Brunner & H. Kwast (Eds.), *Sexualität BRD/DDR im Vergleich* (pp. 69–83). Braunschweig: Holtzmeier.
- Barchmann, R. H. (2009). *Schwangerschaft bei minderjährigen Müttern: Eine Risikoschwangerschaft? Eine Analyse der Geburtsakten der Jahrgänge 1993 bis 2000* (Pregnancy of adolescent mothers: A pregnancy at risk? Analysis of the birth records 1993–2000). Unpublished dissertation, University of Rostock.
- Berger, M. (1987). Das verhaltensgestörte Kind mit seiner Puppe—Zur Schwangerschaft in der frühen Adoleszenz (The disturbed child and her doll—Pregnancy in early adolescence). *Praxis für Kinderpsychologie und Kinderpsychiatrie*, 36, 107–117.
- Berger, M. (1988). Die Mutter unter der Maske—Zur Entwicklungsproblematik von Kindern adoleszenter Eltern (The mother behind the mask: Developmental problems of children with adolescent parents). *Praxis der Kinderpsychologie und Kinderpsychiatrie*, 37, 333–345.
- Bischofskonferenz, D. (2005). *Katechismus der Katholischen Kirche—Kompendium (Catechism of the catholic church—compendium)*. München: Pattloch.
- Block, K. (2009). Erfahrungen mit der Schwangerschaftsabbruchversorgung (Experience with abortion care).

- In S. Matthiesen, K. Block, S. Mix, S., & G. Schmidt (Eds.), *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen* (pp. 197–251). Cologne: BZgA.
- Block, K. & Schmidt, G. (2009). Jugendliche Schwangere und ihre Partner (Pregnant adolescents and their partners). In S. Matthiesen, K. Block, S. Mix, S., & Schmidt, G. (Eds.), *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen* (pp. 41–57). Cologne: BZgA.
- Bohne-Suraj, S., & Reis, O. (2009). ADHS und Teenagemutterschaft (ADHD and adolescent motherhood). In F. Häußler (Ed.), *Das ADHS Kaleidoskop* (pp. 69–113). Berlin: Wissenschaftliche Verlagsgesellschaft.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA). (2009). *Häufig gestellte Fragen zum Thema minderjährige Schwangere* (Frequently asked questions about pregnant teenagers). Cologne: Author.
- Bundeszentrale für gesundheitliche Aufklärung (BZgA). (2010). *Jugendsexualität: Wiederholungsbefragung von 14–17-jährigen und ihren Eltern. Aktueller Schwerpunkt Migration* (Adolescent sexuality: Repeated assessment of 14–17-year-olds and their parents: Actual focus on migration). Cologne: Author.
- Evangelische Kirche in Deutschland [EKD]. (1989). *Gott ist ein Freund des Lebens: Herausforderungen und Aufgaben beim Schutz des Lebens* (Good is a friend of life: Demands and tasks for the protection of life). Gütersloh: Author.
- Friedrich, M., & Remberg, A. (2005). *Wenn Teenager Eltern werden: Eine qualitative Studie im Auftrag der Bundeszentrale für gesundheitliche Aufklärung* (When teenagers become parents: A qualitative study on the behest of the Federal Center of Health Education). Köln: BZgA-Verlag.
- Gehrke, T. (2006). Jugend und Religiosität (Youth and religiosity). In K. Hurrelmann & M. Albert (Eds.), *Jugend 2006* (pp. 203–239). Frankfurt/Main: Fischer.
- Giese, H., & Schmidt, G. (1968). *Studenten-Sexualität: Verhalten und Einstellung. Eine Umfrage an 12 westdeutschen Universitäten* (Student sexuality: Behavior and attitudes - A study in 12 West German universities). Reinbek: Rowohlt, 1968.
- Gille, G. (2005). Frühe Schwangerschaften—Ursachen und Möglichkeiten der ärztlichen Prävention (Early pregnancies—causes and opportunities of medical prevention). *Gynäkologische und Geburtshilfliche Rundschau*, 45, 225–234.
- Greven, F. (2008). *Soziale und klinische Risikostruktur von Erstgebärenden unter besonderer Berücksichtigung ihres Alters* (Social and clinical risk structure of primiparae under consideration of their age). Unpublished dissertation, University of Munich.
- Haerty, A., Hasbargen, U., Huber, C., & Anthuber, S. (2005). Schwangerschaft bei Jugendlichen (Pregnancy in adolescents). *Monatsschrift für Kinderheilkunde*, 153, 114–118.
- Häußler-Szcepan, M., Wienholz, S., & Michel, M. (2005). *Teenagerschwangerschaften in Sachsen. Angebote und Hilfebedarf aus professioneller Sicht* (Teenage pregnancies in Saxonia: Offers and support need from a professional view). Cologne: BZgA.
- Häußler-Szcepan, M., Wienholz, S., Busch, U., Michel, M., & Jonas, A. (2008). *Teenagerschwangerschaften in Berlin und Brandenburg: Angebote und Hilfebedarf aus professioneller Sicht* (Teenage pregnancies in Berlin and Brandenburg: Offers and support needs from a professional view). Cologne: BZgA.
- Hilgers, A., Krenzer, S., & Mundhenke, N. (2004). *Richtlinien und Lehrpläne zur Sexualerziehung* (Guidelines and curricula for sex education). Cologne: BZgA.
- Hoier, S. (2003). *Das frühe erste Mal: Familie, Pubertät und Partnerschaft: Eine evolutionspsychologische Untersuchung* (The early first coitus: Family, puberty, and partnership: An evolutionary psychological study). Lengerich: Pabst.
- Jütte, R. (2003). *Lust ohne Last: Geschichte der Empfängnisverhütung* (Pleasure without burden: History of contraception). München: Beck.
- Klapp, C. (2003). Schwangerschaft bei Mädchen (Pregnancy in young girls). *Zentralblatt für Gynäkologie*, 125, 209–217.
- Kluge, N. (1998). *Sexualverhalten Jugendlicher* (Sexual behavior of adolescents). München: Juventa.
- Kluge, N. (2005). *Wider den allgemeinen Trend: Während die Gesamt-Geburten- und Schwangerschaftsabbruchzahlen in Deutschland fallen, steigen sie bei der Altersgruppe der Minderjährigen größtenteils an* (Against the general trend: While the total numbers of births decline in Germany, numbers of teenage births mostly increase). Report of the Research Center for Sexual Science and Sex Education, University of Landau.
- Kontula, O. (2007). Geburtenraten minderjähriger Mädchen in Europa: Trends und Determinanten (Birth rates of adolescent girls in Europe: Trends and determinants). *Forum Sexualaufklärung und Familienplanung*, 2, 29–33.
- Krahé, B. (2008). Sexualität im Jugendalter (Sexuality in adolescence). In R. K. Silbereisen & M. Hasselhorn (Eds.), *Entwicklungspsychologie des Jugendalters* (pp. 461–496). Göttingen: Hogrefe.
- Krahé, B., Abraham, C., & Scheinberger-Olwig, R. (2005). Can safer sex promotion leaflets change cognitive antecedents of condom use? An experimental evaluation. *British Journal of Health Psychology*, 10, 203–220.
- Lange, C. (1993). Jugendsexualität: Veränderungen in den letzten 20 Jahren, Unterschiede zwischen West und Ostdeutschland und der Einfluss von Aids (Adolescent sexuality: Change in the last 20 years, differences between East and West Germany and the influence of AIDS). In C. Lange (Ed.), *Aids: Eine Forschungsbilanz* (pp. 241–252). Berlin: Edition Sigma.
- Matthiesen, S. (2008). Wenn Verhütung scheitert—Qualitative und quantitative Analysen zu Verhütungspannen bei Jugendlichen (When contraception

- fails—Qualitative and quantitative analyses of contraception nuts of adolescents). *Zeitschrift für Sexualforschung*, 21, 1–25.
- Matthiesen, S., & Schmidt, G. (2009). Das Scheitern der Verhütung (The failure of contraception). In S. Matthiesen, K. Block, S. Mix, S., & G. Schmidt (Eds.), *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen* (pp. 69–111). Cologne: BZgA.
- Matthiesen, S., Block, K., Mix, S., & Schmidt, G. (Eds.). (2009). *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen (Pregnancy and abortion in adolescent women)*. Cologne: BZgA.
- Nickel, B. (1999). Kind oder Karriere: Ergebnisse zu den Themen Kinderwunsch, Einstellung zur Schwangerschaft und Schwangerschaftsabbruch (Child or career: Results on desire to have children, attitudes about pregnancy, and abortion). In K. Plies, B. Nickel, & P. Schmidt (Eds.), *Zwischen Lust und Frust: Jugendsexualität in den 90er Jahren* (pp. 205–252). Opladen: Leske + Budrich.
- Noe, C. (1994). *Schwangerschaft und Mutterschaft in der Adoleszenz* (Pregnancy and motherhood in adolescence). Unpublished diploma thesis. Ludwigshafen.
- Osthoff, R. (1999). *Schwanger werd' ich nicht alleine: Ursachen und Folgen ungeplanter Teenager Schwangerschaften (I won't become pregnant alone: Causes and consequences of unplanned pregnancies in adolescence)*. Landau: Knecht.
- Pinquart, M. (2010). Ambivalence in adolescents' decisions about having their first sexual intercourse. *Journal of Sex Research*, 47, 440–450.
- Plies, K., Nickel, B., Schmidt, P., Reinecke, J., & Attermeyer, U. (1999). Kontrazeption (contraception). In K. Plies, B. Nickel, & P. Schmidt (Eds.), *Zwischen Lust und Frust: Jugendsexualität in den 90er Jahren* (pp. 69–130). Opladen: Leske + Budrich.
- Pötzsch, O. (2005). Unterschiedliche Facetten der Geburtenentwicklung in Deutschland. *Statistisches Bundesamt. Wirtschaft und Statistik*, 6, 569–661.
- Pregitzer, S., & Jones, V. (2004). Schulausbildung und Qualifizierung für junge Mütter—Innovative Kooperationsmodelle aus Bremen (Education in school and qualification of young mothers—innovative cooperation models from Bremen). *BZgA Forum*, 4, 27–31.
- Remberg, A. (2003). 'Ein leerer Geldbeutel ist eine schwere Last'. Die materielle Situation jugendlicher Eltern und ihr Umgang mit Geld (An empty wallet is a severe burden: The material situation of young parents and their use of money). *Sozialmagazin*, 10, 28–34.
- Remberg, A., & Weiser, S. (2003). Wie konnte das passieren: Schwangerschaften im Jugendalter (How could this happen: Pregnancies in adolescence). *Pro Familia Magazin*, 31, 12–15.
- Rosenberger, R. (2010). Voraussetzungen der medizinisch-sozialen Indikation für den Abbruch einer sog. "Teenager-Schwangerschaft" (Preconditions of the medical-social indication for terminating a teenage pregnancy). *Medizinisches Recht*, 28, 41–44.
- Schmidt, G. (2009). Jugendsexualität und Jugendschwangerschaften: Zeitliche Trends (Adolescent sexuality and adolescent pregnancies: Time trends). In S. Matthiesen, K. Block, S. Mix, S., & G. Schmidt (Eds.), *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen* (pp. 13–27). Cologne: BZgA.
- Schmidt, G. & Mix, S. (2009). Schwangerschaftsabbrüche im Jugendalter: Beweggründe und Konflikte (Abortions in adolescence: Motives and conflicts). In S. Matthiesen, K. Block, S. Mix, S., & G. Schmidt (Eds.), *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen* (pp. 115–156). Cologne: BZgA.
- Schmidt, G., Klusmann, D., Zeitzschel, U., & Lange, C. (1994). Changes in adolescents' sexuality between 1970 and 1990 in West-Germany. *Archives of Sexual Behavior*, 23, 489–513.
- Schmidt, G., Thoss, E., Matthiesen, S., Weiser, S., Block, K., & Mix, S. (2006). Jugendschwangerschaften in Deutschland. Ergebnisse einer Studie mit 1801 schwangeren Frauen unter 18 Jahren. *Zeitschrift für Sexualforschung*, 19, 334–358.
- Sigusch, V., & Schmidt, G. (1973). *Jugendsexualität—Dokumentation einer Untersuchung (Adolescent sexuality—Documentation of an empirical study)*. Stuttgart: Enke.
- Spies, A. (2008). *Zwischen Kinderwunsch und Kinderschutz – Babysimulatoren in der pädagogischen Praxis (Between desire to have children and child protection—Baby simulators in educational practice)*. Wiesbaden: Verlag für Sozialwissenschaften.
- Starke, K. (1997). Partnerschaft und Sexualität Jugendlicher: 8 synoptische Aussagen (Partnership and sexuality of adolescents: 8 synoptical statements). In U. Schlegel & P. Förster (Eds.), *Ostdeutsche Jugendliche: Vom DDR-Bürger zum Bundesbürger* (pp. 263–283). Opladen: Leske & Budrich.
- Statistisches Bundesamt. (2010). *Statistiken zur Kinder- und Jugendhilfe: Adoptionen (Statistics of child and youth welfare)*. Wiesbaden: Author.
- Statistisches Bundesamt. (2013). *Lebendgeborene nach dem Alter der Mütter* (Live birth according to the age of the mothers). Retrieved from <http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Statistiken/Bevoelkerung/GeburtenSterbefaelle/Tabellen/Content50/LebendgeboreneAlter.templateId=renderPrint.psml>
- Stauber, B. (2010). Unter widrigen Umständen: Entscheidungsfindungsprozesse junger Frauen und Männer in Hinblick auf die Familiengründung (Under difficult circumstances: Decision making processes of young women and men with regard to starting a family). In A. Spies (Ed.), *Frühe Mutterschaft* (pp. 76–100). Baltmannsweiler: Schneider.
- Thiessen, B., & Anslinger, E. (2004). Also für mich hat sich einiges verändert—eigentlich mein ganzes Leben

- (For me several things changed—virtually my whole life). *BZgA Forum*, 4, 27–31.
- Thoss, E., Schmidt, G., Block, K., Matthiesen, S., Mix, S., & Weiser, S. (2006). *Schwangerschaft und Schwangerschaftsabbruch bei minderjährigen Frauen. Teilstudie 1. Soziale Situation, Umstände der Konzeption, Schwangerschaftsausgang. Ergebnisse einer empirischen Studie an 1801 schwangeren Frauen unter 18 Jahren* (Pregnancy and abortion in adolescent women. Study 1: Social situation, conditions of contraception, ending. Result of a study with 1801 pregnant women below the age of 18 years). Köln: BZgA.
- Vierhaus, M. (2009). Sexualität [Sexuality]. In A. Lohaus & H. Domsch (Eds.), *Psychologische Förder- und Interventionsprogramme für das Kindes- und Jugendalter* (pp. 200–215). Heidelberg: Springer.
- Vögele, K. (2006). Sexualverhalten. In A. Lohaus, M. Jerusalem, & J. Klein-Heßling (Eds.), *Gesundheitsförderung im Kindes- und Jugendalter* (pp. 221–247). Göttingen: Hogrefe.
- von Nell, A. (1974). *Die Entwicklung der generativen Strukturen bürgerlicher und bäuerlicher Familien von 1750 bis zur Gegenwart* (The development of generative structures of bourgeois and farmer families from 1750 until present). Dissertation, University of Bochum.
- Wallner, C. (2010). Junge Mütter in der Kinder- und Jugendhilfe: Sanktioniert, moralisiert, vergessen oder unterstützt? (Young mothers in child and youth services: Sanctioned, moralized, forgotten or supported?). In A. Spies (Ed.), *Frühe Mutterschaft* (pp. 47–75). Baltmannsweiler: Schneider.
- Walther, M. (2004). Demografische Strukturen und soziokulturelle Entwicklungen. In M. Friese (Ed.), *Kompetenzentwicklung für junge Mütter. Förderansätze der beruflichen Bildung* (pp. 37–72). Bielefeld: Bertelsmann.
- Winkelmann, D. (2010). *Mutter-Kind-Einrichtungen in katholischer Trägerschaft 2009* (Mother-child facilities in Catholic sponsorship 2009). Retrieved from http://www.skf-zentrale.de/MuKi_Statistik_2009.pdf
- Ziegenhain, U., Dreisörner, R., & Derksen, B. (1999). Intervention bei jugendlichen Müttern (Interventions with adolescent mothers). In G. J. Suess & W. K. Pfeifer (Eds.), *Frühe Hilfen: Die Anwendung von Bindungs- und Kleinkindforschung in Erziehung, Beratung, Therapie und Vorbeugung* (pp. 222–245). Gießen: Edition Psychosozial.
- Ziegenhain, U., Derksen, B., & Dreisörner, R. (2003). Frühe Elternschaft: jugendliche Mütter und ihre Kinder (Early motherhood: Adolescent mothers and their children). *Monatsschrift für Kinderheilkunde*, 151, 608–612.