Drugs misuse prevention guideline

Evidence statements from evidence review 1, evidence review 2, cost effectiveness review and health economic modelling

Overarching evidence statements from evidence review 1	2
Evidence statements from evidence review 1	
Evidence statements from evidence review 2	30
Evidence statements from the cost effectiveness review	42
Evidence statements from the health economic modelling report	

Overarching evidence statements from evidence review 1

Evidence statement a: Skills training alone for children and young people at risk of drug misuse

There was weak evidence from 3 RCTs^{1,2,3} [+^{1,2}, -³], 1 nRCT⁴ [-], and 2 before and after studies^{5,6} [-^{5,6}] that skills training alone for children and young people at risk of drug misuse had an inconsistent effect on drug use and personal and social skills, an unknown effect on intention to use drugs, and a significant improvement in knowledge of drugs.

Two RCTs^{1,3} reported mixed effects of the intervention on drug use, with the use of some drugs being significantly reduced (p<0.05^{1,3}, d=0.34¹, effect size not calculable³) but no significant change in the use of other drugs (p>0.05^{1,3}, d=0.006¹, effect size not calculable³). A third RCT² reported no difference in drug use (p value not reported, d=0.047). One RCT¹ reported significant improvement in drug refusal skills, problem solving skills, and coping skills after the intervention (all p<0.05, all d=0.32) but a before and after study⁵ reported no significant effect on self-worth (p value and effect size not reported). One before and after study⁶ reported that the intervention may have affected intention to use drugs, but the data were not reported (p value and effect size not reported). One nRCT⁴ reported a statistically significant improvement in knowledge of drugs and their risks after the intervention with peer educators (p<0.001, effect size not calculable) but not with adult educators (p=0.13, effect size not calculable).

[Based on evidence statements 7, 8, 12, 20, 23, 24, 32]

Applicability: The evidence is only partially applicable because the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Schwinn et al. (2015) [+]
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² Lee et al. (2010) [+]

³ Nyamathi et al. (2012) [-]

⁴ Fors and Jarvis (1995) [-]

⁵ Dore et al. (1999) [-]

⁶ Lynsky et al. (1999) [-]

Evidence statement b: Skills training alone for parents or carers of children or young people at risk of drug misuse

There was weak evidence from 4 RCTs [+^{1,2}, -^{3,4}], a secondary analysis of 1 of the RCTs⁵ [+], and 2 follows up studies of another RCT [-^{6,7}] that skills training alone for parents or carers of children or young people at risk of drug misuse had an inconsistent effect on drug use in the children or young people they care for, with some studies showing a significant improvement and some studies showing no change.

One RCT⁴ and 2 follow up studies^{6,7} reported no statistically significant difference in drug use (p>0.05, effect size not calculable). Three RCTs^{1,2,3} and a secondary analysis of one of the RCTs⁵ reported significantly reduced drug use after the intervention (p<0.05, effect sizes ranged from d=0.39 to d=0.792).

[Based on evidence statements 10, 14, 17, 18]

Applicability: The evidence is only partially applicable because the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Prado et al. (2012) [+]
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Evidence statement c: Skills training for children and young people combined with skills training for parents or carers

There was moderate evidence from 2 RCTs [+^{1,2}] and 2 before and after studies [+^{3,4}] that skills training for children and young people at risk of drug misuse combined with skills training for their parents or carers was associated, in general, with a significant reduction in drug use and an improvement in personal and social skills.

² Smith et al. (2012) [+]

³ Rhoades et al. (2014) [-]

⁴ Catalano et al. (1999) [-]

⁵ Huang et al. (2012) [+]

⁶ Catalano et al. (2002) [-]

⁷ Haggerty et al. (2008) [-]

One RCT¹ reported statistically significantly reduced drug use after the intervention (p<0.01, d=0.57). One RCT² reported statistically significantly reduced use of some drugs after the intervention (p<0.001, d=0.13) but not cannabis, which significantly increased (p<0.001, d=-0.40). One before and after study³ reported no statistically significant difference in drug use after the intervention (p>0.05, effect size not calculable). One RCT¹ and 2 before and after studies^{3,4} reported significant improvements in personal and social skills after the intervention (p<0.05, d=0.46 or not calculable).

[Based on evidence statements 11, 13, 15, 16, 21, 23]

Applicability: The evidence is only partially applicable because the studies were undertaken in the USA^{1,2,3} and Spain⁴, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Kim and Leve (2011) [+]
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Evidence statement d: Skills training for adults at risk of drug misuse

There was moderate evidence from 1 RCT [++¹] that skills training for adults at risk of drug misuse had no statistically significant effect on drug use (p>0.05, effect sizes ranged from d=0.010 to d=0.342).

[Based on evidence statement 1]

Applicability: The evidence is only partially applicable because the study was undertaken in Australia, however, the interventions would be feasible in a UK-based setting.

Evidence statement e: Brief interventions for people at risk of drug misuse

There was moderate evidence from 4 RCTs [++ 1 , + 2 , - 3,4] that there was inconsistent evidence for a significant reduction in drug use in people at risk of drug misuse after a brief intervention. There was also inconsistent evidence for a significant difference in intention to use drugs, with 1 RCT 1 showing a statistically significant reduction (p<0.001, effect size not calculable) and another RCT 4 showing no statistically significant difference (p>0.05, d=-0.068). There were significant improvements in personal and social skills in 1 study 1 (p<0.01, effect size not calculable) and knowledge of drugs in 1 study 4 (p<0.01, d=0.516).

² Milburn et al. (2012) [+]

³ Cervantes et al. (2004) [+]

⁴ Orte et al. (2008) [+]

¹ Edwards et al. (2006) [++]

One RCT 2 reported a significant reduction in drug use (p<0.05, effect size not calculable) and 1 RCT 1 reported a statistically significant difference in the use of some drugs at some time points (p<0.01, d=-0.320, d=-0.338) but not others. Two other RCTs 3,4 reported no statistically significant difference in drug use 1,3 (p>0.05, effect sizes ranged from 0.023 to 0.313) or problems from drug use 1,4 (p>0.05, d=0.236).

[Based on evidence statements 2, 3, 4, 26, 35, 36, 37, 39, 40, 41]

Applicability: The evidence is only partially applicable because the studies were undertaken in the USA^{1,2}, Canada³, and Spain⁴, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Walton et al. (2013) [++]
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Evidence statement f: Motivational interviewing interventions for people at risk of drug misuse

There was moderate evidence from 6 RCTs [++ 1 , + 2,3,4,5,6] that, in general, motivational interviewing did not have a significant effect on drug use in people at risk of drug misuse. Two RCTs 4,5 reported significantly lower drug use after the intervention (p<0.01; OR 0.82, 95% CI 0.75 to 0.89), however, 4 other RCTs 1,2,3,6 reported no statistically significant difference in drug use (p>0.05, effect sizes ranged from d=0.052 to 0.131; OR 1.48, 95% CI 0.84 to 2.59).

[Based on evidence statements 6, 19, 22, 28]

Applicability: The evidence is only partially applicable because 5 of the studies were undertaken in the USA^{2,3,4,5,6}, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> McCambridge et al. (2008) [++]
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² De Dios et al. (2012) [+]

³ Fischer et al. (2013) [-]

⁴ Goti et al. (2010) [-]

² Baer et al. (2007) [+]

³ D'Amico et al. (2013) [+]

⁴ Morgenstern et al. (2009) [+]

⁵ Parsons et al. (2014) [+]

⁶ Peterson et al. (2006) [+]

Evidence statement g: Motivational enhancement therapy for people at risk of drug misuse

There was moderate evidence from 4 RCTs [$++^1$, $+^{2,3,4}$] and 1 before and after study [$+^5$] that, in general, motivational enhancement therapy did not have a significant effect on drug use in people at risk of drug misuse. Intention to use drugs was significantly reduced in 1 before and after study⁵ (p<0.0001, effect size not calculable).

Three RCTs^{1,2,4} reported no statistically significant difference in drug use after the intervention (p>0.05, d=0.033 and d=0.15; rate ratio 1.11, 95% CI 0.85 to 1.43). One RCT³ reported no significant difference in drug use compared to information (p>0.05, d=-0.024) but a significant difference compared to no intervention (p<0.05, d=-0.293). One before and after study⁵ reported statistically significantly reduced drug use in some contexts (OR 0.54, 95% CI 0.31 to 0.95, p=0.03) but not others (OR 0.70, 95% CI 0.42 to 1.17, p=0.17).

[Based on evidence statements 27, 29, 30, 31, 38]

Applicability: The evidence is only partially applicable because 3 of the studies were undertaken in the USA^{3,4,5}, 1 in the Netherlands¹ and 1 in Australia², however, the interventions would be feasible in a UK-based setting.

¹ De Gee et al. (2014) [++]

² Norberg et al. (2014) [+]

³ Walker et al. (2011) [+]

⁴ Lee et al. (2013) [+]

⁵ Shrier et al. (2014) [+]

Evidence statements from evidence review 1

Evidence Statement 1: Effectiveness of a cognitive behavioural intervention (skills training) for preventing or reducing drug misuse in people with mental health problems

There was moderate evidence from 1 RCT¹ [++] that there was no statistically significant difference in the percentage of people using cannabis in the previous 4 weeks (p>0.05; end of intervention d=0, 6 months d=0.010), the percentage of days cannabis was used in the previous 4 weeks (p>0.05; end of intervention d=0.317, 6 months d=0.342), or the severity of cannabis use (p>0.05; end of intervention d=0.071, 6 months d=0.069) after a cognitive behavioural intervention compared to after psychoeducation, either immediately after the intervention or 6 months later for people aged 15 to 29 continuing to use cannabis following initial treatment for first episode psychosis. Both groups (cognitive behavioural intervention and psychoeducation) showed a statistically significant reduction in cannabis use compared to before each intervention (p<0.001, effect sizes not calculable). The cognitive behavioural intervention used a harm minimisation approach and included a detailed assessment, education about cannabis, and building motivation to change.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Australia, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 2: Effectiveness of a brief intervention based on motivational interviewing for young people combined with information, counselling and skills training for their parents for preventing or reducing drug misuse in people with mental health problems

There was weak evidence from 1 RCT¹ [-] that there was no statistically significant difference at 1 month in the number of problems from drugs after a brief intervention based on motivational interviewing for young people combined with information, counselling and skills training for parents compared with standard care in young people aged 12 to 17 who have reported substance misuse and who have been referred to a child psychiatry and psychology department for a disorder not directly related to substance misuse (p>0.05, d=0.236). Further details of the skills training provided were not reported.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 3: Effectiveness of a brief intervention based on motivational interviewing for young people combined with information, counselling and skills training for parents for reducing intention to misuse drugs in people with mental health problems

There was weak evidence from 1 RCT¹ [-] that there was no statistically significant difference at 1 month for intention to use drugs after a brief intervention based on motivational interviewing for young people combined with information, counselling and skills training for parents compared with standard care in young people aged 12 to 17 who have reported substance misuse and who have been referred to a child psychiatry and psychology department for a disorder not directly related to substance misuse (p>0.05, d=-0.068). Further details of the skills training provided were not reported.

¹ Edwards et al. (2006) [++]

¹ Goti et al. (2010) [-]

Applicability: The evidence is only partially applicable to reducing intention to misuse drugs in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 4: Effectiveness of a brief intervention based on motivational interviewing for young people combined with information, counselling and skills training for parents for increasing knowledge of drugs and their risks in people with mental health problems

There was weak evidence from 1 RCT¹ [-] that knowledge of drugs was statistically significantly greater at 1 month after a brief intervention based on motivational interviewing for young people combined with information, counselling and skills training for parents compared with standard care in young people aged 12 to 17 who have reported substance misuse and who have been referred to a child psychiatry and psychology department for a disorder not directly related to substance misuse (p=0.01, d=0.516). However, there was no statistically significant difference in the perception of risks between the 2 interventions (p>0.05, d=0.245). Details of the skills training provided were not reported.

Applicability: The evidence is only partially applicable to increasing knowledge of drugs and their risks in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 5: Effectiveness of drug misuse prevention interventions for people involved in commercial sex work or who are being sexually exploited No relevant evidence was identified.

Evidence Statement 6: Effectiveness of motivational interviewing for preventing or reducing drug misuse in people who are lesbian, gay, bisexual or transgender. There was moderate evidence from 2 RCTs^{1,2} [+^{1,2}] that the use of 'club drugs' in men who have sex with men was statistically significantly lower after motivational interviewing compared with after educational videos at 3 months (p<0.01, effect size not calculable)¹, 6 months (p<0.01, effect size not calculable)¹, 9 months (p<0.02, effect size not calculable)¹ and 12 months (OR 0.82, 95% CI 0.75 to 0.89, p≤0.001)².

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because both of the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 7: Effectiveness of online skills building for preventing or reducing drug misuse in people who are lesbian, gay, bisexual or transgender. There was weak evidence from 1 RCT¹ [+] that online skills building had a mixed effect on the misuse of drugs in young people aged 15 or 16 who identified as gay, lesbian, bisexual or transgender. The use of drugs other than cannabis was statistically significantly lower 3 months after an online skills building intervention compared to after a control intervention (no further details provided by study authors) (p<0.05, d=0.34), however, there was no statistically significant difference in cannabis use at 3 months (p>0.05, d=0.006). The skills training in this study included learning how to identify and manage stress, how to make decisions, and refusal skills.

¹ Goti et al. (2010) [-]

¹ Goti et al. (2010) [-]

¹ Morgenstern et al. (2009) [+]

² Parsons et al. (2014) [+]

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 8: Effectiveness of online skills building for improving personal and social skills related to drug misuse prevention in people who are lesbian, gay, bisexual or transgender

There was moderate evidence from 1 RCT¹ [+] that drug refusal skills, problem solving skills and coping skills were statistically significantly better 3 months after an online skills building intervention compared to a control intervention (no further details provided by study authors) (all p<0.05, all d=0.32) in young people aged 15 or 16 who identified as gay, lesbian, bisexual, or transgender. The skills training in this study included learning how to identify and manage stress, how to make decisions, and refusal skills.

Applicability: The evidence is only partially applicable to improving personal and social skills related to drug misuse prevention in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 9: Effectiveness of drug misuse prevention interventions in people not in employment, education or training

No relevant evidence was identified.

Evidence Statement 10: Effectiveness of family based intervention (skills training for parents and case management) for preventing or reducing drug misuse in children and young people whose parents use drugs

There was weak evidence from 1 RCT¹ [-] and 2 follow-up studies from the same RCT².³ [-²,-³] that drug misuse was not statistically significantly different after a family-based intervention involving skills training for parents and case management (Focus on Families) compared to standard care in children aged between 3 and 14 whose parents had received methadone treatment. The RCT and the first follow up paper reported no statistically significant difference in cannabis use at 6 months (p>0.05, effect size not calculable)¹, 12 months (p>0.05, effect size not calculable)². The second follow up paper reported no statistically significant difference between Focus on Families and standard care for the risks of developing cannabis abuse (HR 0.72, 95% CI not reported, p value not significant)³ or cocaine or amphetamine abuse (HR 0.99, 95% CI not reported, p value not significant)³ 12 to 15 years after the original RCT. The skills training focused on improving parents' communication skills.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the RCT was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 11: Effectiveness of family based approaches (skills training for parents and children) for improving personal and social skills related to drug misuse prevention in children and young people whose parents use drugs

¹ Schwinn et al. (2015) [+]

¹ Schwinn et al. (2015) [+]

¹ Catalano et al. (1999) [-]

² Catalano et al. (2002) [-]

³ Haggerty et al. (2008) [-]

There was moderate evidence from 1 controlled before and after study¹ [+] that there was a statistically significant improvement in several personal and social skills related to drug misuse prevention, including impulsive behaviour (p=0.001, effect size not reported), the ability to make new friends (p=0.02, effect size not reported), and problem solving skills (p=0.004, effect size not reported), after a family based intervention involving skills training for parents and children (Family Competence Program) in children aged 6 to 14 who had 1 parent with a diagnosis of addiction (follow up period not reported). Skills training for children focused on listening skills, improving relationships, and coping with criticism. Skills training for parents focused on improving relationships and problem solving.

Applicability: The evidence is only partially applicable to improving personal and social skills related to drug misuse prevention in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 12: Effectiveness of skills training for children for improving personal and social skills related to drug misuse prevention in children and young people whose parents use drugs

There was weak evidence from 1 before and after study¹ [-] that skills training for children (Friends in Need) had no effect on feelings of self-worth in children aged approximately 5 to 11 whose teachers believed they were particularly affected by drug abuse in their homes and neighbourhoods (follow up time not reported; data, p value and effect size not reported). Further details of the skills training provided were not reported.

Applicability: The evidence is only partially applicable to improving personal and social skills related to drug misuse prevention in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to improving personal and social skills related to drug misuse prevention in children and young people whose parents use drugs because the study included children whose teachers believed were particularly affected by drug abuse in their homes and neighbourhood.

Evidence Statement 13: Effectiveness of skills training for foster parents combined with skills training and information for children for preventing or reducing drug misuse in looked after children and young people

There was moderate evidence from 1 RCT¹ [+] that skills training for foster parents combined with skills training and information for children was statistically significantly associated with reduced cannabis use at 36 months (p<0.01, d=0.57) in young females aged 10 to 12. The difference in cannabis use after skills training and after standard care was not compared. The skills training for foster parents included developing a behavioural reinforcement system and the skills training for children included improving social skills and learning how to deal with feelings of exclusion.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to preventing or reducing drug use in all children because the study only included female participants.

¹ Orte et al. (2008) [+]

¹ Dore et al. (1999) [-]

¹ Kim and Leve (2011) [+]

Evidence Statement 14: Effectiveness of behaviour management systems with skills training for foster parents for preventing or reducing drug misuse in looked after children and young people

There was weak evidence from 2 RCTs^{1,2} [+1,-2] that the evidence for the effectiveness of behaviour management systems combined with skills training for foster parents (Multidimensional Treatment Foster Care) in looked after children and young people was mixed. At 12 months, the use of drugs other than cannabis in males aged 12 to 17 was statistically significantly lower after the intervention compared to standard care (p<0.05, d=-0.39)¹, however, there was no statistically significant difference in use of cannabis (p>0.05, d=-0.28)1. At 18 months, there was statistically significantly lower use of cannabis (p<0.01, d=-0.65)¹ and drugs other than cannabis (p<0.05, d=-0.46)¹ in males aged 12 to 17 after the intervention compared to standard care. From 7 years to 9 years after the intervention, 1 study reported a statistically significant reduction in drug use (p<0.05, effect size not calculable)² in young females aged 13 to 17. At 9 years, 1 study reported a statistically significant association between the intervention and reduced drug use (p<0.001, effect size not calculable)² but not between standard care and drug use (p>0.05, effect size not calculable; d=0.39, p value not reported for difference in change between groups)². The skills training for foster parents included developing a daily behaviour management system tailored to each child.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to preventing or reducing drug misuse in all children because 1 study included only male participants¹ and 1 study included only female participants².

Evidence Statement 15: Effectiveness of skills training for foster parents combined with skills training and information for children for improving personal and social skills related to drug misuse prevention in looked after children and young people. There was moderate evidence from 1 RCT¹ [+] that skills training for foster parents combined with skills training and information for children was associated with statistically significant improvements in prosocial behaviour (not defined) at 6 to 12 months (p<0.05, d=0.46) in young females aged 10 to 12. The skills training for foster parents included developing a behavioural reinforcement system and the skills training for children included improving social skills and learning how to deal with feelings of exclusion.

Applicability: The evidence is only partially applicable to improving personal and social skills related to drug misuse prevention in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to improving personal and social skills related to drug misuse prevention in all children because the study only included female participants.

Evidence Statement 16: Effectiveness of skills training for parents and children for preventing or reducing drug misuse in children and young people who are in contact with young offender teams but not in secure environments

There was moderate quality evidence from 1 before and after study¹ [+] that there was no statistically significant difference in drug use before and immediately after a family-based intervention involving skills training for parents and children (Programa Shortstop) (p>0.05, effect size not calculable) in Hispanic juvenile first time offenders. The average age of the participants was 14.6. The skills training included videos on behaviour choices and options

¹ Smith et al. (2010) [+]

² Rhoades et al. (2014) [-]

¹ Kim and Leve (2011) [+]

and improving communication skills for children and young people, and improving communication skills for parents.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 17: Effectiveness of skills training for parents for preventing or reducing drug misuse in children and young people who are in contact with young offender teams but not in secure environments

There was moderate quality evidence from 1 RCT¹ [+] and a secondary analysis of the same RCT² [+] that drug use was statistically significantly lower 12 months after a family-based intervention involving skills training for parents (Familias Unidas) compared with standard care (p=0.04 and d=0.792¹, p=0.05 and effect size not calculable²) in young people aged 12 to 17 who identified themselves as Hispanic or Latino and who had been arrested or had committed a 'level 3' behaviour problem. The skills training for parents focused on enhancing communication skills.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the RCT was undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 18: Effectiveness of behaviour management systems with skills training for foster parents for preventing or reducing drug misuse in children and young people who are in contact with young offender teams but not in secure environments

There was weak evidence from 2 RCTs^{1,2} [+1,-2] that the effectiveness of behaviour management systems combined with skills training for foster parents (Multidimensional Treatment Foster Care) compared to standard care on drug misuse was mixed in children and young people who were in contact with young offender teams but not in secure environments. At 12 months, the use of drugs other than cannabis in males aged 12 to 17 was statistically significantly lower after the intervention compared to standard care (p<0.05, d=-0.39)¹, however, there was no statistically significant difference in use of cannabis after the intervention compared to after standard care (p>0.05, d=-0.28)¹. At 18 months, there was statistically significantly lower use of cannabis (p<0.01d=-0.65)¹ and drugs other than cannabis (p<0.05, d=-0.46)¹ in males aged 12 to 17. From 7 years to 9 years after the intervention, 1 study reported a statistically significant reduction in drug use (p<0.05, effect size not reported)² in young females aged 13 to 17. At 9 years, 1 study reported a statistically significant association between the intervention and reduced drug use (p<0.001, effect size not reported)² but not between standard care and drug use (effect size not reported, d=0.39 for difference in change between groups, p value not reported for difference in change between groups)². The skills training for foster parents included developing a daily behaviour management system tailored to each child. There was no true control in either study.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to preventing or reducing drug use in all children because 1 study included only male participants¹ and 1 study included only female participants².

¹ Cervantes et al. (2004) [+]

¹ Prado et al. (2012) [+]

² Huang et al. (2012) [+]

Evidence Statement 19: Effectiveness of group-based motivational interviewing for preventing or reducing drug misuse in children and young people who are in contact with young offender teams but not in secure environments

There was moderate evidence from 1 RCT¹ [+] that there were no statistically significant differences in cannabis use at 3 months (p=0.519, d=0.12) or cannabis problems at 3 months (such as getting into fights, neglecting responsibilities, missing a day of work or school; p=0.772, d=-0.03) after group-based motivational interviewing (Free Talk) compared with Alcoholics Anonymous in young people aged 14 to 18 with a first time alcohol or cannabis offence. There was no true control in the study.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 20: Effectiveness of skills training and information for young people for reducing intention to misuse drugs in children and young people who are in contact with young offenders teams but not in secure environments

There was weak evidence from 1 uncontrolled before and after study¹ [-] that skills training and information for young people aged 12 to 19 may have affected intention to use cannabis and perception of risks in young people with a conviction of a civil or criminal offence related to alcohol or controlled substances immediately after the intervention, however, the statistical significance and size of these effects was not reported. The skills training focused on decision making skills and coping skills.

Applicability: The evidence is only partially applicable to reducing intention to misuse drugs in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 21: Effectiveness of skills training for parents and children for improving personal and social skills related to drug misuse prevention in children and young people who are in contact with young offender teams but not in secure environments

There was moderate evidence from 1 before and after study¹ [+] that there was a statistically significant improvement in 'academic social skills' (p<0.001, effect size not calculable), 'family social skills' (p<0.05, effect size not calculable), and 'community social skills' (p<0.05, effect size not calculable) when comparing skills before and immediately after a family-based intervention involving skills training for parents and children (Programa Shortstop) in Hispanic juvenile first time offenders. The average age of the participants was 14.6. The skills training included videos on behaviour choices and options for children and young people, and improving communication skills for parents.

Applicability: The evidence is only partially applicable to improving drug-related social skills in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

¹ Smith et al. (2010) [+]

² Rhoades et al. (2014) [-]

¹ D'Amico et al. (2013) [+]

¹ Lynsky et al. (1999) [-]

¹ Cervantes et al. (2004) [+]

Evidence Statement 22: Effectiveness of brief motivational interventions for preventing or reducing drug misuse in people who are considered homeless

There was moderate evidence from 2 RCTs^{1,2} [+^{1,2}] that there was no significant difference in drug use at 3 months after a brief motivational intervention compared to standard care (p>0.05; d=0.131 for cannabis use, d=0.052 for other drug use)¹, or after a brief motivational intervention compared to assessment only (cannabis use η^2 =0.001, days of use of drugs other than cannabis η^2 =0.07, p values not reported)² in young people aged 13 to 19 with unstable housing ('stability' defined in 1 study as living in 1 place for the prior 30 days with the anticipation of being housed there in the following 30 days¹, not defined in the other study²). There was also no statistically significant difference after a brief motivational intervention compared to after assessment only in problems resulting from drugs at 3 months (p value not reported, effect size not calculable)². Drugs other than cannabis were used statistically significantly less 1 month after a brief motivational intervention compared to after assessment only (p<0.03, effect size not reported), however, there was no statistically significant difference in use at 3 months (p<0.3, effect size not calculable)².

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting. The evidence is only partially applicable to preventing or reducing drug use in the wider population of people who are considered homeless as the studies only included young people.

Evidence statement 23: Effectiveness of skills training for preventing or reducing drug misuse in people who are considered homeless

There was weak evidence from 2 RCTs^{1,2} [+¹,-²] that skills training had a mixed effect on drug use in young people aged 12 to 17¹ and 18 to 25² and who were considered homeless. At 6 months after skills training there was a statistically significant reduction in the use of cocaine (p<0.05, effect size not calculable)² and methamphetamines (p<0.05, effect size not calculable)², but not in crack (p>0.05, effect size not calculable)², heroin (p>0.05, effect size not calculable)², sedatives (p>0.05, effect size not calculable)² or cannabis (p>0.05, effect size not calculable)². At 12 months after skills training there was a statistically significant reduction in use of drugs other than cannabis (p<0.001, d=0.13)¹, but not in the use of cannabis, which statistically significantly increased (p<0.001, d=0.40)¹. There was no significant difference in drug use after skills training compared to after art sessions (p value not reported, effect size not calculable)². The skills training in 1 study focused on improving problem solving and conflict resolution skills¹ whereas the other study focused on improving self-management and communication skills².

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to preventing or reducing drug misuse in the wider population of people who are considered homeless as the studies only included young people.

Evidence Statement 24: Effectiveness of skills training and information for increasing knowledge of drugs and their risks in people who are considered homeless

There was weak evidence from 1 non-randomised controlled trial¹ [-] that there was a statistically significant improvement in knowledge about drugs and their risks after skills training and information (Drug Prevention in Youth) with peer educators in young people

¹Baer et al. (2007) [+]

² Peterson et al. (2006) [+]

¹ Milburn et al. (2012) [+]

² Nyamathi et al. (2012) [-]

aged 10 to 19 living in shelters (p<0.001, effect size not calculable). There was no statistically significant improvement in knowledge about drugs and their effects after a Drug Prevention in Youth programme that used adult educators (p=0.13, effect size not calculable) or after no programme (p=0.33, effect size not calculable). The skills training focused on ways to intervene if a family member or friend is using drugs.

Applicability: The evidence is only partially applicable to increasing knowledge of drugs and their risks in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The evidence is only partially applicable to increasing knowledge of drugs and their risks in the wider population of people who are considered homeless as the study only included young people.

Evidence Statement 25: Effectiveness of drug misuse prevention interventions for people who attend nightclubs and festivals

No relevant evidence was identified.

Evidence Statement 26: Effectiveness of a brief intervention combining motivational interviewing with mindfulness meditation for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that a brief intervention combining motivational interviewing with mindfulness meditation effectively reduced drug misuse in females aged 18 to 19 who were known to use drugs occasionally/recreationally. Cannabis was used on statistically significantly fewer days after mindfulness meditation compared to after a control intervention at 1 month, 2 months, and 3 months (all p<0.05, effect sizes not calculable). The study reported no differences in the number of participants who were abstaining from cannabis at 1 month, 2 months or 3 months, however, the data and p values for these comparisons were not reported (effect sizes not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 27: Effectiveness of motivational enhancement therapy compared to education or information sessions for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was strong evidence from 3 RCTs^{1,2,3} [++¹, +^{2,3}] that motivational enhancement therapy did not significantly prevent or reduce drug misuse compared to information sessions in people aged 14 to 21¹, 14 to 19³, and over 16² who were known to use drugs occasionally/recreationally. Some participants in 1 study also received cognitive behaviour therapy³.

There was no statistically significant difference in the number of joints used per week at 3 months (p>0.05, d=0.033 1); the number of days cannabis was used per week (p>0.05, d=0.125 1) at 3 months or per month at 12 months (p>0.05, d=-0.024 3); cannabis problems at 3 months (p>0.05, d=0.133 1) or 12 months (p>0.05, d=-0.103 3); severity of dependence score or number of dependence symptoms at 3 months (p>0.05, d=-0.037 1 ; 3), or 12 months (p>0.05, d=-0.088 3) in young people who used cannabis at least weekly 1 or on at least 9 of the previous 30 days 3 prior to the study.

There were no statistically significant differences between motivational enhancement therapy and an education session at 6 months in the change in the number of ecstasy pills used (p=0.70, d=0.15²), change in the number of days of ecstasy use (p=0.80, d=0.05²), or

¹ Fors and Jarvis (1995) [-]

¹ De Dios et al. (2012) [+]

change in severity of dependence score (p=0.96, d=0.01²) in people who had used ecstasy at least 3 different times in the previous 90 days.

There were also no significant differences reported between motivational enhancement therapy and educational sessions in the use of drugs other than cannabis at 3 months or 12 months (p value not reported, effect size not calculable³). However, in 1 of the studies, young people who used more than 14 joints per week before the start of the study had a statistically significantly greater reduction in cannabis use at 3 months after motivational enhancement therapy than after an information session (p=0.05, effect size not calculable¹).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the Netherlands¹, Australia² and the USA³, however, the interventions would be feasible in a UK-based setting. The studies may have included participants who were drug dependent.

Evidence Statement 28: Effectiveness of motivational interviewing compared to education or information sessions for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹[++] that motivational interviewing did not significantly prevent or reduce drug misuse compared to information sessions in people aged 16 to 19 who were known to use drugs occasionally/recreationally.

There was no statistically significant difference in the prevalence of cannabis use at 3 months (odds ratio 1.45, 95% CI 0.65 to 3.21¹) or 6 months (odds ratio 1.48, 95% CI 0.84 to 2.59¹); the number of joints used in the past week at 3 months (mean difference -0.84, 95% CI -2.33 to 0.66¹) or 6 months (mean difference 1.33, 95% CI -1.72 to 4.38¹); the number of times cannabis was used over 30 days at 3 months (mean difference 0.53, 95% CI -1.23 to 2.29¹) or 6 months (mean difference -0.28, 95% CI -2.90 to 2.35¹); cannabis problems at 3 months (mean difference 0.04, 95% CI -0.61 to 0.70¹) or 6 months (mean difference 0.23, 95% CI -1.11 to 1.58¹); severity of dependence score or number of dependence symptoms at 3 months (mean difference -0.32, 95% CI -1.04 to 0.40¹) or 6 months (mean difference -0.61, 95% CI -1.35 to 0.12¹) in young people who used cannabis at least weekly

Applicability: The evidence is applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the UK. The study may have included participants who were drug dependent.

Evidence Statement 29: Effectiveness of a brief motivational enhancement intervention compared to assessment only for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that a brief motivational enhancement intervention did not significantly prevent or reduce drug misuse compared to assessment only in people who were known to use drugs occasionally/recreationally. The average age of the participants was 20. There was no statistically significant difference in the mean number of days cannabis was used at 3 months (rate ratio 0.96, 95% CI 0.80 to 1.15, p value not significant) or 6 months (rate ratio 1.11, 95% CI 0.85 to 1.43, p not significant). Although the mean number of cannabis joints smoked per week by people who smoked cannabis on 5 or more days in the month prior to the study starting was statistically significantly lower after a brief motivational enhancement intervention than after assessment only at 3 months (rate ratio 0.76, 95% CI 0.60 to 0.96, p<0.05), this did not remain statistically significantly different

¹ De Gee et al. (2014) [++]

² Norberg et al. (2014) [+]

³ Walker et al. (2011) [+]

¹ McCambridge et al. (2008) [++]

at 6 months (rate ratio 1.03, 95% CI 0.73 to 1.46, p value not significant). There was no statistically significant difference in the mean number of cannabis related problems at 3 months (rate ratio 0.90, 95% CI 0.76 to 1.07, p<0.10) or 6 months (rate ratio 1.15, 95% CI 0.90 to 1.47, p value not significant).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the interventions would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 30: Effectiveness of motivational enhancement therapy compared to no intervention or assessment for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that motivational enhancement therapy may have prevented or reduced drug misuse compared to no assessment or intervention in young people aged 14 to 19 who were known to use drugs occasionally or recreationally. Some participants in the study also received cognitive behaviour therapy. There was a statistically significant reduction in the number of days of cannabis use (p<0.05, d=-0.293), the number of cannabis abuse symptoms (p<0.05, d=-0.445), the number of cannabis dependence symptoms (p<0.05, d=-0.540) and the number of cannabis problems (p<0.05, d=-0.587) at 3 months after motivational enhancement therapy compared to after no assessment or intervention.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 31: Effectiveness of brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally There was moderate evidence from 1 uncontrolled before and after study¹ [+] that brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging had some effect on preventing or reducing drug misuse in young people aged 15 to 24 who were known to misuse drugs occasionally/recreationally. The odds of using cannabis in a context that participants identified was likely to trigger cannabis use ('top 3 trigger contexts') were statistically significantly less 3 months after brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging compared to before (OR 0.54, 95% CI 0.31 to 0.95, p=0.03), although the odds were not statistically significantly different at 4 weeks (OR 0.85, 95% 0.60 to 1.20, p=0.35). The odds of using cannabis in any other context were not statistically significantly different at 4 weeks (OR 0.85, 95% 0.58 to 1.25, p=0.41) or 3 months (OR 0.70, 95% CI 0.42 to 1.17, p=0.17). There was no statistically significant difference in the number of times cannabis was used at 4 weeks (RR 0.78, 95% CI 0.60 to 1.02, p=0.07), or 3 months (RR 0.73, 95% CI 0.49 to 1.08, p=0.11). The evidence showed no statistically significant differences at 3 months in the percentage of days abstinent in the previous 30 days (p=0.13, effect size not calculable) or the cannabis problems score (p=0.16, effect size not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the study was undertaken in the USA, however the intervention would be

¹ Lee et al. (2013) [+]

¹ Walker et al. (2011) [+]

feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 32: Effectiveness of web-based personalised feedback intervention based on a motivational interviewing approach with skills training for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that there was no significant difference in cannabis use or cannabis-related problems after a web-based personalised feedback intervention based on a motivational interviewing approach with skills training compared to assessment only, or compared to baseline when the two groups were combined, in young people aged 17 to 19 who had used cannabis in the 3 months prior to starting the study (p values not reported; use d=0.005 at 3 months, d=0.047 at 6 months; problems d=0.145 at 3 months, d=0.115 at 6 months). The skills training focused on skills for avoiding cannabis and making changes to personal use.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 33: Effectiveness of web-based assessment and feedback for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that there was no statistically significant difference between a web-based assessment with feedback and assessment only (eToke) at 1 month in the number of days cannabis was used in the previous month (p>0.05, d=0.08), the number of cannabis problems (p>0.05, d=0.10), the number of cannabis abuse symptoms (p>0.05, d=-0.04), or the number of cannabis dependence symptoms (p>0.05, d=0.03) in young people aged 18 to 23.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 34: Effectiveness of a web-based decisional balance and behaviour change intervention for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that a web-based decisional balance and behaviour change intervention (breakingtheice) was no more effective than a waiting list control in preventing or reducing drug misuse in people (average age 22) who reported use of amphetamine type stimulants in the past 3 months. There were no statistically significant differences at 3 months (p=0.95, effect size not calculable) or 6 months (p=0.65, effect size not calculable) in the use of amphetamine-type stimulants, use of more than one drug at the same time (p=0.08 and p=0.68), or quality of life (p=0.43 and p=0.69) after a web-based decisional balance and behaviour change intervention and a waiting list control (effect sizes not calculable).

¹ Shrier et al. (2014) [+]

¹ Lee et al. (2010) [+]

¹ Elliott et al. (2014) [+]

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Australia, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 35: Effectiveness of different types of brief interventions for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was weak evidence from 1 RCT^1 [-] that oral and written brief interventions on cannabis use or general health did not significantly prevent or reduce drug misuse in people aged 18 to 28 who used cannabis on at least 12 of the previous 30 days. There was no statistically significant difference at 3 months in the number of days cannabis was used in the previous 30 days before and after a brief oral cannabis intervention (p=0.125, effect size not calculable), brief written cannabis intervention (p=0.469, effect size not calculable), brief oral general health intervention (p=0.737, effect size not calculable) or brief written general health intervention (p=0.108, effect size not calculable). There was also no statistically significant difference at 3 months in the percentage of participants driving under the influence of cannabis before and after a brief oral cannabis intervention (p=0.414, effect size not calculable) or brief written general health intervention (p=0.317, effect size not calculable) or brief written general health intervention (p=0.414, effect size not calculable). However, there were statistically significantly fewer participants driving under the influence of cannabis 3 months after the written cannabis intervention compared to before the intervention (p=0.020, effect size not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the study was undertaken in Canada, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence statement 36: Effectiveness of a therapist-based brief intervention compared to standard care for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT 1 [++] that a therapist-based brief intervention was no more effective than standard care for preventing or reducing drug misuse in young people aged 12 to 18 who were known to misuse drugs occasionally/recreationally. There was no statistically significant difference between a therapist-based brief intervention and standard care in the frequency of cannabis use, cannabis problems, or the frequency of other drug use at 3 months, 6 months or 12 months (p values not reported, effect sizes ranged from d=0.023 to d=0.313). Driving under the influence of cannabis was statistically significantly less frequent after a therapist-based intervention compared to standard care at 3 months (p<0.01, d=-0.162), but not at 6 months (p value not reported, d=0.092) or 12 months (p value not reported, d=0.210).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

¹ Tait et al. (2015) [+]

¹ Fischer et al. (2013) [-]

¹ Walton et al. (2013) [++]

Evidence statement 37: Effectiveness of a computer-based brief intervention compared to standard care for preventing or reducing drug misuse in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [++] that a computer-based brief intervention was not more effective than standard care at preventing or reducing drug misuse in young people aged 12 to 18 who were known to misuse drugs occasionally/recreationally. There were no significant differences in the frequency of cannabis use between a computer-based brief intervention and standard care at 3 months (d=-0.019), 6 months (d=-0.039) or 12 months (d=-0.045) (p values not reported). There was a statistically significantly lower frequency of driving under the influence of cannabis at 3 months (p \leq 0.01, d=-0.057) and statistically significantly fewer cannabis problems at 3 months (p \leq 0.05, d=) after a computer-based brief intervention compared to standard care. However, there were no significant differences in frequency of driving under the influence of cannabis or the number of cannabis problems between the computer-based brief intervention and standard care at 6 months or 12 months (p>0.05, effect sizes ranged from d=0.037 to d=0.210). There was a statistically significant reduction in the frequency of other drug use after the computer-based brief intervention compared to standard care at 3 months (p \leq 0.01, d=-0.338) and 6 months (p \leq 0.01, d=-0.320), but not 12 months (p>0.05, d=-0.075).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 38: Effectiveness of brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging for reducing intention to misuse drugs in people who are known to use drugs occasionally/recreationally. There was moderate evidence from 1 uncontrolled before and after study¹ [+] that brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging reduced desire to misuse drugs in young people aged 15 to 24 who were known to misuse drugs occasionally/recreationally. There was a statistically significantly reduced desire to use cannabis in a context that participants identified was likely to trigger cannabis use ('top 3 trigger contexts') 3 months after brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging (p<0.0001), however, there was no statistically significant difference in desire 4 weeks after the intervention (p=0.48, effect size not reported). The evidence showed statistically significant differences in the desire to use cannabis in contexts other than the top 3 trigger contexts 3 months after the intervention (p<0.0001, effect size not calculable), but not 4 weeks after the intervention (p=0.08, effect size not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 39: Effectiveness of brief interventions for reducing intention to misuse drugs in people who are known to misuse drugs occasionally/recreationally. There was moderate evidence from 1 RCT¹ [++] that a therapist-based brief intervention and a computer-based brief intervention both significantly reduced intention to misuse drugs in young people aged 12 to 18 who were known to misuse drugs occasionally/recreationally. Intention to misuse drugs was statistically significantly lower immediately after a therapist-

¹ Walton et al. (2013) [++]

¹ Shrier et al. (2014) [+]

based brief intervention and after a computer-based brief intervention (both p≤0.001, effect sizes not calculable). Some participants also received cognitive behaviour therapy.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 40: Effectiveness of brief interventions for improving personal and social skills related to drug misuse prevention in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT^{1} [++] that a therapist-based brief intervention and a computer-based brief intervention both significantly improved self-efficacy in young people aged 12 to 18 who were known to misuse drugs occasionally/recreationally. Self-efficacy was statistically significantly higher immediately after a therapist-based brief intervention and after a computer-based brief intervention (both p≤0.01, effect sizes not calculable). Some participants also received cognitive behaviour therapy.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 41: Effectiveness of brief interventions for increasing knowledge of drugs and their risks in people who are known to misuse drugs occasionally/recreationally

There was moderate evidence from 1 RCT 1 [++] that a therapist-based brief intervention and a computer-based brief intervention significantly increased the perceived risk of drug misuse in young people aged 12 to 18 who were known to misuse drugs occasionally/recreationally. Perceived risk was statistically significantly higher immediately after a therapist-based brief intervention (p \leq 0.01, effect size not calculable) and after a computer-based brief intervention (p \leq 0.001, effect size not calculable). Some participants also received cognitive behaviour therapy.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting. The study may have included participants who were drug dependent.

Evidence Statement 42: Effectiveness of group-based skills training with or without information provision for preventing or reducing drug misuse

There was weak evidence from 5 RCTs^{1,2,3,4,5} [+^{1,2,3},-^{4,5}], 1 secondary analysis of 1 of the RCTs⁶ [+], 2 follow up studies of 1 of the RCTs^{7,8} [-^{7,8}], and 2 before and after studies^{9,10} [+⁹,-¹⁰] that group-based skills training with or without information provision had a mixed effect on drug use. The group-based skills training in the studies focused on improving social skills¹, dealing with feelings of exclusion¹, improving problem solving skills², improving conflict resolution skills², improving communication skills⁵, improving self-management skills⁵, behaviour choices and options⁹, decision making skills¹⁰, and coping skills¹⁰ in people at risk

¹ Walton et al. (2013) [++]

¹ Walton et al. (2013) [++]

¹ Walton et al. (2013) [++]

of drug misuse, and improving communication skills in parents of children and young people at risk of drug misuse^{3,4,6,7,8,9}.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because all of the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Kim and Leve (2011) [+]
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Evidence Statement 43: Effectiveness of group-based skills training with or without information provision for improving personal and social skills related to drug misuse prevention

There was strong evidence from 1 RCT¹ [+] and 2 before and after studies^{2,3} [+^{2,3}] that group-based skills training with or without information provision was associated with a significant improvement in personal and social skills related to drug misuse prevention. The group-based skills training in the studies focused on improving social skills¹, dealing with feelings of exclusion¹, behaviour choices and options², improving listening skills³, improving relationships³, and coping with criticism³ in people at risk of drug misuse, and improving relationships³, communication skills², and problem solving skills³ in parents whose children are at risk of drug misuse.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the studies were undertaken in the USA^{1,2} and Spain³, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 44: Effectiveness of group-based skills training with or without information provision for increasing knowledge of drugs and their risks

There was weak evidence from 1 non-randomised controlled trial¹ [-] that group-based skills training with or without information provision had a mixed effect on knowledge of drugs and their risks. The skills training focused on ways to intervene if a family member or friend is using drugs.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 45: Effectiveness of drug misuse prevention interventions based on one-to-one skills training, information provision and advice given as part of planned outreach activities

No relevant evidence was identified.

² Milburn et al. (2012) [+]

³ Prado et al. (2012) [+]

⁴ Catalano et al. (1999) [-]

⁵ Nyamathi et al. (2012) [-]

⁶ Huang et al. (2014) [+]

⁷ Haggerty et al. (2008) [-]

⁸ Catalano et al. (2002) [-]

⁹ Cervantes et al. (2004) [+]

¹⁰ Lynsky et al. (1999) [-]

¹ Kim and Leve (2011) [+]

² Cervantes et al. (2004) [+]

³ Orte et al. (2008) [+]

¹ Fors and Jarvis (1995) [-]

Evidence Statement 46: Effectiveness of drug misuse prevention interventions based on one-to-one skills training, advice and information provided using peer education initiatives

No relevant evidence was identified.

Evidence Statement 47: Effectiveness of opportunistic skills training, advice and information provision as part of planned outreach activities for increasing knowledge of drugs and their risks

There was weak quality evidence from 1 non-randomised controlled trial¹ [-] that using a peer educator to deliver an intervention in a shelter to people who were homeless leads to a statistically significant improvement in knowledge about drugs and their risks compared to before the intervention (p<0.001, effect size not calculable), however, using an adult educator in a shelter did not lead to a statistically significant improvement in knowledge about drugs and their effects (p=0.13, effect size not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 48: Effectiveness of web-based approaches for groups at risk of drug misuse

There was strong evidence from 4 RCTs^{1,2,3,4} [$+^{1,2,3}$,- 4] that a web-based approach to drug misuse prevention did not prevent or reduce drug misuse. There was no statistically significant effect on cannabis use at 1 month (p>0.05, d=0.08 for number of days cannabis was used¹), 3 months (p value and effect size not reported⁴; p value not reported, d=0.005²), or 6 months (p value not reported, d=-0.047)². There was also no statistically significant difference in the use of amphetamine type stimulants, use of more than one drug at the same time, or quality of life (p>0.05, effect sizes not calculable³). However, 1 study found a web-based approach did statistically significantly reduce the use of drugs other than cannabis at 3 months (p<0.05, d=0.34)⁴.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA^{1,2,4} and Australia³, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 49: Effectiveness of responsive text messaging for groups at risk of drug misuse

There was moderate evidence from 1 before and after study¹ [+] that the odds of using cannabis in a context that participants identified was likely to trigger cannabis use ('top 3 trigger contexts') were statistically significantly lower 3 months after an intervention that included responsive text messaging than before (OR 0.54, 95% CI 0.31 to 0.95, p=0.03) but there was no statistically significant difference in odds in other trigger contexts (OR 0.70, 95% CI 0.42 to 1.17, p=0.17).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

¹ Fors and Jarvis (1995) [-]

¹ Elliott et al. (2014) [+]

² Lee et al. (2010) [+]

³ Tait et al. (2015) [+]

⁴ Schwinn et al. (2015) [-]

¹ Shrier et al. (2014) [+]

Evidence Statement 50: Effectiveness of family-based interventions for preventing or

reducing drug misuse in children and young people

There was weak evidence from 7 RCTs (+1,2,3,4,-5,6,7), 2 follow up studies of 1 of the RCTs^{8,9} (-8,9), 1 secondary analysis of 1 of the RCTs¹⁰ (+) and a before and after study¹¹ (+) that family-based interventions had a mixed effect on drug misuse. Five 1,3,4,7,10 of the papers from 4 RCTs reported a significant improvement in drug use (at 12 months^{1,3,4,10}, 18 months⁴, and 7 to 9 years⁷). Two studies reported a significant association between family-based interventions and reduced drug misuse at 36 months² and 9 years⁷. Six of the papers^{1,4,5,8,9,10} from 3 RCTs reported no significant improvement in drug misuse (immediately after the intervention¹², or at 6 months^{5,11}, 12 months^{1,4,5,10}, 24 months⁸, or 12 to 15 years⁹). One study showed a significant increase in drug use at 12 months³. One study reported no significant difference in drug problems at 1 month in 1 study⁶.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA^{1,2,3,4,5,7,9,10,11,12} and Spain⁶. however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Prado et al. (2012) [+]
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Evidence Statement 51: Effectiveness of family-based interventions for reducing intention to misuse drugs

There was weak evidence from 1 RCT¹ [-] that family-based interventions had no significant effect on intention to use drugs.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 52: Effectiveness of family-based interventions for improving personal and social skills related to drug misuse prevention

There was strong evidence from 1 RCT¹ [+] and 2 before and after studies [+^{2,3}] that familybased interventions were associated with a significant improvement in personal and social skills.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA^{1,2} and Spain³, however, the interventions would be feasible in a UK-based setting.

² Kim and Leve (2011) [+]

³ Milburn et al. (2012) [+]

⁴ Smith et al. (2010) [+]

⁵ Catalano et al. (1999) [-]

⁶ Goti et al. (2010) [-]

⁷ Rhoades et al. (2014) [-]

⁸ Catalano et al. (2002) [-]

⁹ Haggerty et al. (2008) [-]

¹⁰ Huang et al. (2014) [+]

¹¹ Cervantes et al. (2004) [+]

¹ Goti et al. (2010) [-]

¹ Kim and Leve (2011) [+]

² Cervantes et al. (2004) [+]

³ Orte et al. (2008) [+]

Evidence Statement 53: Effectiveness of family-based interventions for increasing knowledge of drugs and their risks

There was weak evidence from 1 RCT¹ [-] that family-based interventions had no significant effect on perception of risks of drugs.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

¹ Goti et al. (2010) [-]

Evidence Statement 54: Effectiveness of group-based behaviour therapy for children and young people for preventing or reducing drug misuse

There was weak evidence from 3 RCTs^{1,2,3} [+^{1,2},-³] and 1 before and after study⁴ [+] that group-based skills training had a mixed effect on drug misuse. One study¹ [+] reported a statistically significant association between group-based skills training and reduced cannabis use (p<0.01, d=0.57) but another study⁴ [+] reported no statistically significant difference in illicit drug use before and after group-based skills training (p>0.05, effect size not calculable). A third study² [+] reported a statistically significant increase in cannabis use (p<0.002, d=-0.40) but a statistically significant decrease in hard drug use (p<0.001, d=0.13) compared to standard care. One RCT³ [-] reported a statistically significant reduction in the use of some drugs at 6 months (p<0.05, effect size not reported or calculable) but no significant difference in drug use compared to art sessions (p value and effect size not reported, effect size not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 55: Effectiveness of group-based behaviour therapy for children and young people for improving personal and social skills related to drug misuse prevention

There was strong quality evidence from 1 RCT 1 [+] and 2 before and after studies 2,3 [+ 2,3] that group-based skills training as part of a family-based approach improved social and personal skills (all p<0.05 2,3 , effect sizes range from 0.456 to 1.193 3 or not reported 2) and was associated with a statistically significant improvement in prosocial behaviour (p<0.05, d=0.46) 1 .

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in Spain³ and the USA^{1,2}, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 56: Effectiveness of group-based behaviour therapy for children and young people for increasing knowledge of drugs and their risks

¹ Kim and Leve (2011) [+]

² Milburn et al. (2012) [+]

³ Nyamathi et al. (2012) [-]

⁴ Cervantes et al. (2004) [+]

¹ Kim and Leve (2011) [+]

² Cervantes et al. (2004) [+]

³ Orte et al. (2008) [+]

There was weak quality evidence from one non-randomised controlled trial¹ [-] that group-based behaviour therapy for children and young people was associated with a statistically significant improvement in knowledge about drugs and their risks in young people after group-based skills training with peer educators (p<0.001, effect size not calculable) but not with adult educators (p=0.13, effect size not calculable).

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 57: Effectiveness of parental skills training alone for parents or carers of children who are at risk of drug misuse for preventing or reducing drug misuse

There was moderate evidence from 1 RCT¹ [+] and 1 secondary analysis of the RCT² [+] that skills training for parents alone significantly lowered illicit drug use in children, but had no significant effect on children's cannabis dependence. The skills training for parents focused on enhancing communication skills.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the RCT was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 58: Effectiveness of parental skills training in combination with other interventions for parents or carers of children who are at risk of drug misuse for preventing or reducing drug misuse

There was weak evidence from 6 RCTs^{1,2,3,4,5,6} [+^{1,2,3},-^{4,5,6}], 2 follow up studies of 1 of the

There was weak evidence from 6 RCTs^{1,2,3,4,5,6} [+^{1,2,3},-^{4,5,6}], 2 follow up studies of 1 of the RCTs^{7,8} [-^{7,8}] and 1 before and after study⁹ [+] that skills training for parents in combination with other interventions (such as brief interventions, or skills training for children) had a mixed effect on drug misuse and no significant effect on problems with drugs or severity of dependence on drugs. The group-based skills training in the studies focused on improving social skills¹, dealing with feelings of exclusion¹, improving problem solving skills², improving conflict resolution skills², behaviour choices and options⁹ in people at risk of drug misuse, and improving communication skills^{4,7,8,9} or developing a daily behaviour management system^{3,6} in parents or foster parents of children and young people at risk of drug misuse. One study did not report what the skills training focused on⁵.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA^{1,2,3,4,6,7,8,9} and Spain⁵, however, the interventions would be feasible in a UK-based setting.

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    Kim and Leve (2011) [+]
    Milburn et al. (2012) [+]
    Smith et al. (2010) [+]
    Catalano et al. (1999) [-]
    Goti et al. (2010) [-]
    Rhoades et al. (2014) [-]
    Catalano et al. (2002) [-]
    Haggerty et al. (2008) [-]
    Cervantes et al. (2004) [+]
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¹ Fors and Jarvis (1995) [-]

¹ Prado et al. (2012) [+] ² Huang et al. (2014) [+]

Evidence Statement 59: Effectiveness of parental skills training for parents or carers of children who are at risk of drug misuse for reducing intention to misuse drugs. There was weak evidence from 1 RCT¹ [-] that skills training for parents in combination with other interventions (such as brief interventions) had no statistically significant effect on children's intention to use drugs. Further details of the skills training that was provided were not reported.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 60: Effectiveness of parental skills training for parents or carers of children who are at risk of drug misuse for improving personal and social skills related to drug misuse prevention

There was strong evidence from 1 RCT¹ [+] and 2 before and after studies [+^{2,3}] that skills training for parents in combination with other interventions (such as skills training for children) was associated with a significant improvement in personal and social skills. Parental skills training in the studies focused on developing a behavioural reinforcement system¹, improving communication skills², improving relationships³, and improving problem solving skills³.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the studies were undertaken in the USA^{1,2} and Spain³, however, the interventions would be feasible in a UK-based setting.

Evidence Statement 61: Effectiveness of parental skills training for parents or carers of children who are at risk of drug misuse for increasing knowledge of drugs and their risks

There was weak evidence from 1 RCT¹ [-] that skills training for parents in combination with other interventions (such as brief interventions) had no statistically significant effect on perception of risks of drugs. Further details of the skills training provided were not reported.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in Spain, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 62: Variation in effectiveness by content and framing

There was limited evidence on whether the effectiveness of interventions for preventing or reducing drug misuse varied by framing and content. Only 1 RCT¹ [+] directly compared different content (a harm-minimisation approach and an abstinence-based approach in reducing cannabis use or cannabis related problems) and found no statistically significant differences.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

¹ Goti et al. (2010) [-]

¹ Kim and Leve (2011) [+]

² Cervantes et al. (2004) [+]

³ Orte et al. (2008) [+]

¹ Goti et al. (2010) [-]

¹ D'Amico et al. (2013) [+]

Evidence Statement 63: Variation in effectiveness by mode of delivery for interventions for preventing or reducing drug misuse

No relevant evidence was identified.

Evidence Statement 64: Variation in effectiveness of group skills training by who delivers the intervention

There was weak quality evidence from 1 non-randomised controlled trial¹ [-] that knowledge of drugs and their risks in young people was statistically significantly improved using a peer educator (p<0.001, effect size not reported) and was not statistically significantly improved with an adult educator (p>0.05, effect size not calculable). The skills training focused on ways to intervene if a family member or friend is using drugs.

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because the study was undertaken in the USA, however, the intervention would be feasible in a UK-based setting.

Evidence Statement 65: Variation in effectiveness of motivational interviewing or motivational enhancement therapy by who delivers the intervention

There was moderate quality evidence from 2 RCTs^{1,2} [++¹,+²] that it was unclear whether the person delivering motivational interviewing¹ or a motivational enhancement intervention² had an impact on the effectiveness of the intervention. One study found a significant difference in cannabis use when different people delivered a motivational interviewing intervention¹, however, another study found no difference in ecstasy use when different people delivered a motivational enhancement intervention².

Applicability: The evidence is only partially applicable to preventing or reducing drug misuse in the UK because one of the studies was undertaken in Australia², however, the interventions would be feasible in a UK-based setting.

Evidence Statement 66: Variation in effectiveness by where the intervention is delivered

No relevant evidence was identified.

Evidence Statement 67: Variation in effectiveness of motivational interviewing and brief motivational interventions by intensity/duration

There was strong quality evidence from 3 RCTs^{1,2,3} [+^{1,2,3}] that the effectiveness of motivational interviewing² and brief motivational interventions^{1,3} did not appear to vary by the intensity or duration of the intervention.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

¹ Fors and Jarvis (1995) [-]

¹ McCambridge et al. (2008) [++]

² Norberg et al. (2014) [+]

¹ Baer et al. (2007) [+]

² Morgenstern et al. (2009) [+]

³ Peterson et al. (2006) [+]

Evidence Statement 68: Variation in effectiveness of family-based interventions by intensity/duration

There was weak quality evidence from 2 RCTs^{1,2} [-^{1,2}], 2 follow up studies of 1 of the RCTs^{3,4} [-^{3,4}], and 1 before and after study⁵ [+] that the effectiveness of family-based interventions did not appear to vary by the intensity or duration of the intervention.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because the studies were undertaken in the USA, however, the interventions would be feasible in a UK-based setting.

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<sup>1</sup> Catalano et al. (1999) [-]
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Evidence Statement 69: Variation in effectiveness by intended recipient for interventions for preventing or reducing drug misuse

No relevant evidence was identified.

² Rhoades et al. (2014) [-]

³ Catalano et al. (2002) [-]

⁴ Haggerty et al. (2008) [-]

⁵ Cervantes et al. (2004) [+]

Evidence statements from evidence review 2

Evidence Statement 1: Acceptability of interventions for preventing or reducing drug misuse in people with mental health problems

No relevant evidence was identified.

Evidence Statement 2: Views on more effective interventions for preventing or reducing drug misuse in people with mental health problems

No relevant evidence was identified.

Evidence Statement 3: Acceptability of interventions for preventing or reducing drug misuse in people involved in commercial sex work or who are being sexually exploited

No relevant evidence was identified.

Evidence Statement 4: Views on more effective interventions for preventing or reducing drug misuse in people involved in commercial sex work or who are being sexually exploited

No relevant evidence was identified.

Evidence Statement 5: Acceptability of public health advertising campaigns for preventing or reducing crystal methamphetamine misuse among men who identify as gay or bisexual

There was weak evidence from 1 cross-sectional study¹ [-] that 75% of gay and bisexual men aged 18 and older who had seen anti-crystal methamphetamine advertising campaign (posters) were positive that that someone was doing something about the use of this drug in the gay community. 58.4% indicated that the campaigns made them think about not starting to use crystal methamphetamine or cutting down on their use, 38.7% agreed that the campaigns made them want to talk to their friends/partner about their use of crystal methamphetamine, and 36.1% reported that the campaigns made them want to get help to stop using crystal methamphetamine or avoid starting to use it. There was some evidence that the campaigns may have had unintended consequences as 11.9% of respondents indicated that the advertisements made them want to start using crystal methamphetamine or use it more.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because this study was undertaken in the USA and specifically targeted the use of crystal methamphetamine. However, an intervention of this type may be feasible in a UK-based setting. The evidence is only partially applicable to people who are lesbian, gay, bisexual or transgender (LGBT) as the study described an intervention targeted specifically at gay and bisexual men.

Evidence Statement 6: Views on more effective interventions for preventing or reducing drug misuse in young people who identify as lesbian, gay, bisexual or transgender (LGBT)

There was moderate evidence from 1 qualitative focus group study¹ [+] that an existing skills-training prevention programme could be adapted to make it more acceptable for LGBT-identifying young people aged 14 to 17. Adaptation themes included the importance of gender neutrality, areas of difference and commonality with heterosexual peers, incorporation of topics of sex and sexual identity, and addressing an interest in perceived adult lifestyles.

¹ Nanin et al. (2006) [-]

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because this study was undertaken in the USA, however, an adapted intervention of this type may be feasible in a UK-based setting. It is unclear if the evidence is applicable to all people who identify as lesbian, gay, bisexual or transgender (LGBT) as the study only included young people and participants did not report their sexual orientation.

Evidence Statement 7: Acceptability of interventions for preventing or reducing drug misuse in people not in employment, education or training

No relevant evidence was identified.

Evidence Statement 8: Views on more effective interventions for preventing or reducing drug misuse in people not in employment, education or training No relevant evidence was identified.

Evidence Statement 9: Acceptability of interventions for preventing or reducing drug misuse in children and young people whose parents use drugs

No relevant evidence was identified.

Evidence Statement 10: Views on more effective interventions for preventing or reducing drug misuse in children and young people whose parents use drugs No relevant evidence was identified.

Evidence Statement 11: Acceptability of brief motivational interviewing and SBIRT interventions for preventing or reducing drug misuse in looked after children

There was moderate evidence from 1 qualitative focus group study¹ [+] among foster staff and parents that there may be barriers to foster children engaging with interventions that use a brief motivational interviewing or SBIRT (screening, brief intervention, and referral to treatment) approach to prevent or reduce drug misuse. Staff and parents were of the view that there may be insufficient time for foster children to form a relationship with the person delivering the intervention as well as negative consequences of abruptly ending that relationship once the intervention was complete. Staff and parents were also of the view that foster children may not disclose drug use to service managers or case workers due to their fear of potential consequences as well as a perceived lack of empathy and understanding on the part of the person delivering the intervention. The views of children in foster care were not considered in this study.

Applicability: The evidence is only partially applicable to the UK as this study was conducted in the USA, however, adapted interventions of this type may be feasible in UK-based settings.

Evidence Statement 12: Views on more effective interventions for preventing or reducing drug misuse in looked after children

There was moderate evidence from 1 qualitative focus group study¹ [+] among foster care staff and parents that adaptations could be made to brief motivational interviewing approaches to prevent or reduce drug misuse to potentially make them more appropriate for foster children. The participants were of the view that interventions should be made engaging, relevant and creative in order to affect substance use among foster children. Participants proposed that foster care staff should not deliver interventions due to concerns about confidentiality and power relations. Participants were of the view that providing information about substance use could be helpful if it was tailored to the individual and discussions were not forced or mandatory. Text messaging was proposed as a culturally

¹ Goldbach and Steiker (2011) [+]

¹ Braciszewski et al. (2014) [+]

preferred way to communicate with foster children. Foster children's views were not considered in this study.

Applicability: The evidence is only partially applicable to the UK as this study was conducted in the USA, however, adapted interventions of this type may be feasible in UK-based settings.

Evidence Statement 13: Acceptability of an intervention combining group information sessions and skills training for preventing or reducing cannabis misuse in children and young people who are in contact with young offender teams but not in secure environments

There was weak evidence from 1 uncontrolled before and after study¹ [-] that young people aged 12 to 19 in the juvenile court system gave positive feedback about a group information and skills training intervention aimed at reducing cannabis use. Feedback themes included a greater awareness of the consequences of cannabis use, surprise that the intervention did not involve being lectured by adults and comments that the intervention had changed their life. The skills training focused on decision making skills and coping skills.

Applicability: The evidence is only partially applicable to preventing or reducing drug use in the UK because this study was undertaken in the USA and specifically targeted cannabis use. However, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 14: Views on more effective interventions for preventing or reducing drug misuse in children and young people who are in contact with young offender teams but not in secure environments

No relevant evidence was identified.

Evidence Statement 15: Acceptability of a brief motivational intervention to prevent or reduce drug misuse among young people who are considered homeless

There was moderate evidence from 1 RCT¹ [+] that a brief motivational interviewing (MI) intervention was acceptable to young people aged 13 to 19 who were defined as unstably housed. Participants randomised to the intervention group received up to 4 sessions of MI that covered self-selected topics such as drug use frequency, perceived norms for substance abuse, consequences related to substance abuse, symptoms of substance dependence, personal goals, motivation for change, and social influences. On a scale of 1 to 5 (1=not at all to 5=completely), participants indicated that their counsellor understood them (mean=4.5, SD=0.58) and was very supportive of them (mean=4.6, SD=0.3). Most participants said they would recommend the session to a friend (mean=4.4, SD=0.89).

Applicability: This evidence is only partially applicable to the UK as the study was conducted in the USA although an intervention of this type may be feasible in a UK-based setting. There are limitations to generalising the study's findings to all homeless people as the study sample was restricted to young people aged 13 to 19.

Evidence Statement 16: Acceptability of a skills training intervention to prevent or reduce alcohol and other drug (AOD) misuse among young women who are considered homeless

There was weak evidence from 1 qualitative study¹ [-] that a skills training intervention was enjoyable and generally positively received among a sample of homeless young women

¹ Braciszewski et al. (2014) [+]

¹ Lynsky et al. (1999) [-]

¹Baer et al. (2007) [+]

aged 18 to 25, with satisfaction scores ranging from 3.9 to 5.0. Participants found the provision of normative information and discussion of triggers helpful. The participants liked the session moderators, brochures and assurances of confidentiality. Details of the skills training was not provided.

Applicability: This evidence is only partially applicable to the UK as the study was conducted in the USA although an intervention of this type may be feasible in a UK-based setting. There are limitations to generalising the study findings to all homeless people as the study sample was restricted to young women aged 18 to 25.

Evidence Statement 17: Views on more effective interventions for preventing drug misuse among young women who are considered homeless

There was weak evidence from 1 qualitative focus group study¹ [-] and 1 qualitative focus group and interview study² [-] that participants felt the following adaptations to an existing skills training intervention could improve the intervention for young women who are considered homeless: providing resources, for example, on housing^{1,2}; formal and informal support from role models, mentors, counsellors, and family²; providing normative data on drug use²; using a harm reduction approach based on cognitive behavioural techniques¹; using a non-judgemental facilitator¹; supporting women to make better decisions and taking care of themselves¹. Details of the skills to be covered in the training were not reported.

Applicability: This evidence is only partially applicable to the UK as both studies were conducted in the USA although an intervention of this type may be feasible in a UK-based setting. There are limitations to generalising the studies' findings to all homeless people as the study samples were restricted to young women aged 17 to 25.

Evidence Statement 18: Views on more effective interventions for preventing the initiation of drug misuse in young people who are considered homeless

There was moderate evidence from 1 qualitative focus group study¹ [+] that 24 drug-using homeless young people aged 17 to 25 suggested a range of ways to discourage youth from initiating drug use. These included supporting youth with employment as well as engaging them in activities such as sport and using art, music or film to create messages that might dissuade young people from becoming interested in initiating drugs. Participants also indicated that exposing young people to the realities of drug misuse (for example, by arranging for them to speak to homeless drug-users) would be a powerful approach to preventing drug initiation.

Applicability: This evidence is only partially applicable to the UK as the study was conducted in the USA. There are limitations to generalising these studies' findings to all homeless people as the study sample was restricted to young people aged 17 to 25.

Evidence Statement 19: Views on more effective interventions for reducing drug misuse in young people who are considered homeless

There was moderate evidence from 1 qualitative focus group study¹ [+] that 24 drug-using homeless young people aged 17 to 25 indicated a number of elements that should be incorporated into strategies to reduce drug misuse. Participants indicated that young people themselves should be responsible for making the decision to seek help and that creating a home base with various activities could be useful in aiding the reduction of drug misuse.

¹Wenzel et al. (2009) [-]

¹ Wenzel et al. (2009) [-]

² D'Amico et al. (2009) [-]

¹ Hudson et al. (2009) [+]

Participants felt that constructing a trusting environment free of regulations and full of likeminded individuals could stop them and their peers from using drugs.

Applicability: This evidence is only partially applicable to the UK as the study was conducted in the USA. There are limitations to generalising these studies' findings to all homeless people as the study sample was restricted to young people aged 17 to 25.

Evidence Statement 20: Acceptability of a harm minimisation approach used in a mass media campaign to address recreational drug misuse among dance music nightclub attendees

There was weak evidence from 1 mixed methods study¹ [-] that the harm minimisation approach used in a mass media campaign (including posters and information booklets) was acceptable to an audience of people who attend dance music nightclubs (age of participants not reported). A high proportion of participants indicated that they liked the design of the campaign materials and were engaged by the realistic, non-judgemental approach. Participants expressed some concern that those outside the target audience may find the campaign content offensive and that targeting specific audiences would be required to avoid this

Applicability: While this study was conducted in the UK, it is difficult to assess its applicability to all people who attend nightclubs as the sample characteristics are not reported. It is not clear whether the evidence is applicable to people who attend festivals as well as those who attend dance music nightclubs.

Evidence Statement 21: Acceptability of prevention and harm reduction measures at dance music events among people misusing drugs at such events

There was weak evidence from 1 cross-sectional study¹ [-] that people aged 16 to 46 attending dance music events including clubs and open-air raves were particularly receptive to harm reduction measures such as the presence of emergency staff and free water on site at such events. The importance of providing access to counselling appeared slightly less important. When party drug users were asked about their intention to use pill testing if it were available, 27.4% indicated that they would never use it, 31.1% said they would use it systematically before taking a pill, and 41.6% reported that they would not use it unless they did not know the substance, the dealer or both. Participants' perceptions of prevention measures varied according to their level of drug use.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in Switzerland, however it is feasible that similar types of prevention and harm reduction measures could be implemented in a UK-based setting. It is not clear whether the evidence is applicable to people who attend festivals as well as those who attend dance music events such as clubs and open-air raves.

Evidence Statement 22: Acceptability of self-administered health and social risk assessments in preventing or reducing drug misuse among people who regularly attend nightclubs and misuse both club and prescription drugs

There was weak evidence from the qualitative focus group component of 1 mixed methods study¹ [-] that undertaking a detailed assessment of substance use and other risk behaviours may prompt reductions in drug misuse among clubbers aged 18 to 29 who misuse both club and prescription drugs but who were not previously contemplating change. Assessments

¹ Hudson et al. (2009) [+]

¹ Branigan and Wellings (1999) [-]

¹ Chinet et al. (2007) [-]

may have intervention-type effects such as prompting self-reflection on levels of drug use, increasing awareness of the link between drug use and health and social problems (such as problems with family and school or employment responsibilities), and motivating changes in substance use among individuals not previously contemplating change.

Applicability: This evidence is only partially applicable to the UK as the study was conducted in the USA. There are limitations to generalising the study's findings to a wider population of people who attend nightclubs or festivals as the study sample was restricted to young people aged 18 to 29 who regularly use both club and prescription drugs.

Evidence Statement 23: Acceptability of an educational outreach event in preventing or reducing the risk from recreational drug toxicity among people who attend nightclubs and other late night venues

There was weak evidence from 1 mixed methods study¹ [-] that an educational outreach event that comprised information about drugs, a practical workshop on managing drug toxicity, and a question-and-answer session with drug experts, was acceptable to an audience of recreational drug users and their friends who attend nightclubs and other late night venues (age of participants not reported). 100% participants felt the event was useful, 96% felt the duration of the event was appropriate, and 98.8% would recommend the event to a friend.

Applicability: While this study was conducted in the UK, it is difficult to assess its applicability to all people who attend nightclubs as the sample characteristics are not reported. It is also not clear whether the evidence is applicable to people who attend festivals as well as those who attend nightclubs and other late night venues.

Evidence Statement 24: Views on more effective interventions for preventing or reducing drug misuse in in people who attend nightclubs and festivals

No relevant evidence was identified.

Evidence statement 25: Acceptability of motivational enhancement therapy for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was moderate evidence from 2 RCTs^{1,2} [+^{1,2}] that motivational enhancement therapy interventions were generally acceptable to people who use ecstasy¹ and cannabis². In 1 RCT¹ targeting cannabis use among young people aged 14 to 18, 92% of respondents indicated that that they were satisfied with their session and 95% reported being satisfied with their counsellor. However, there were no significant differences in satisfaction ratings between participants who had received the motivational enhancement therapy intervention and those in the control group who had received an educational feedback intervention except that those in the control group were more likely to endorse the utility of free information about cannabis. In 1 RCT² targeting ecstasy use, respondents (average age 23 to 24) who received the intervention reported higher satisfaction than those in the education only control group (*d*=0.5, p=0.004) although there were no significant between-group differences in participant ratings of credibility and expectancy for their assigned interventions at pre-test. Some participants in 1 study also received cognitive behaviour therapy¹.

Applicability: The evidence is only partially applicable to the UK as the studies were conducted in the USA¹ and Australia² although it is feasible that interventions of this type could be implemented in a UK setting. One study only focused on cannabis use among

¹ Kurtz et al. (2013) [-]

¹Wood et al. (2010) [-]

young people while the other focused solely on ecstasy use; this may limit their generalisability to wider populations of people who use drugs occasionally/recreationally.

Evidence statement 26: Acceptability of brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally. There was moderate evidence from 1 before and after study¹ [+] that brief motivational enhancement therapy with mobile self-monitoring and responsive text messaging was generally acceptable to young people aged 15 to 24 who use cannabis. Participants reported that the study instruments (such as tools for recording the days on which they had used cannabis) and mobile devices were easy to use and the instructions were clear and understandable. Participants reported that they read the text messages and the text messages motivated them not to use cannabis. Participants indicated that they felt comfortable with participation and found the study interesting, motivating, and helpful. They tended to be neutral or disagree that the study was burdensome.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA although it is feasible that an intervention of this type could be implemented in a UK setting. The study was conducted among a sample of young people who use cannabis 3 times a week or more which may limit its generalisability to a wider population of people who use drugs occasionally/recreationally.

Evidence statement 27: Acceptability of different types of brief interventions for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was moderate evidence from a qualitative sub-study¹ [++] of 1 RCT that oral and written cannabis brief interventions were generally acceptable to high frequency cannabis users (average age 21). 85.5% thought the brief interventions were helpful for them or could be useful for others, and 69.4% believed they had undergone changes regarding their cannabis use. Participants cited various reasons for enjoying the interventions, describing them as short, convenient, informative, straightforward, unbiased, non-threatening, non-patronising, and non-judgmental. Several elements of the interventions were identified as helping participants to change their cannabis use including: increased awareness of healthier smoking practices, increased awareness of the risks of dual use with tobacco, and setting cannabis use goals. However some participants did not perceive the interventions to be effective with half of the sample providing suggestions to improve their content and format. Some participants who had received the written version of the brief intervention questioned the utility of providing information via printed pamphlets and criticised the formal language used in the materials.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in Canada although it is feasible that an intervention of this type could be implemented in a UK setting. The study was conducted among a sample of young, high frequency cannabis users which may limit its generalisability to a wider population of people who use drugs occasionally/recreationally.

Evidence statement 28: Acceptability of brief interventions for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

¹ Walker et al. 2011

² Norberg et al. 2014

¹ Shrier et al. (2014) [+]

¹ Rudzinski et al. (2012) [++]

There was moderate evidence from 1 RCT¹[++] that brief interventions were generally acceptable to young people aged 12 to 18 who use cannabis. 77.4% participants rated the brief interventions as 'liked' or 'liked a lot' with no significant differences between groups who received a therapist-based intervention and those who received a computer-based intervention. 82.6% participants rated at least one section of the intervention 'very or extremely helpful'. The most well-liked elements of the interventions were the section on reviewing the reasons to change cannabis use and the role-plays. Some participants in the study also received optional cognitive behaviour therapy.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA although it is feasible that an intervention of this type could be implemented in a UK setting. The study was conducted among a sample of young people who had used cannabis in the previous year which may limit its generalisability to a wider population of people who use drugs occasionally/recreationally

Evidence statement 29: Acceptability of web-based assessment and feedback for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was weak evidence from 1 RCT¹ [+] that participant satisfaction with a web-based assessment and feedback intervention for young people aged 18 to 23 who use cannabis was mixed. Only 56% of respondents remembered completing the intervention. Participants found the sections about norms and cannabis-related expenses the most useful while lower utility ratings were given to the sections on ways to decrease use and local resources. Responses indicated that participants liked the intervention's online format and found it easy to use. However, respondents indicated that they were not likely to recommend the intervention to friends.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA although it is feasible that an intervention of this type could be implemented in a UK setting. The study was conducted among a sample of young university students who use cannabis which may limit its generalisability to a wider population of people who use drugs occasionally/recreationally.

Evidence statement 30: Acceptability of a web-based decisional balance and behaviour change intervention for preventing or reducing drug misuse in people who are known to use drugs occasionally/recreationally

There was moderate evidence from 1 RCT¹ [+] that a web-based decisional balance and behaviour change intervention was generally positively received by people (average age 22) who use amphetamine type stimulants. 86% participants indicated that they would recommend the website, 86% endorsed online delivery, 91% rated the website as easy to use and 91% were satisfied with the programme. 63% indicated that the intervention had reduced their adverse drug effects. The use of fictional case stories was identified as an engaging approach. The main reported criticisms of the intervention included the assumption that people wanted to change their behaviour and the lack of information on potential benefits of drug use. The most frequently cited negative reactions to the intervention were concerns about privacy and boredom.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in Australia although it is feasible that an intervention of this type could be implemented in a UK setting. The study was conducted among a sample of people who use amphetamine

¹Walton et al. (2013) [++]

¹ Elliott et al. (2014) [+]

type stimulants which may limit its generalisability to a wider population of people who use other drugs occasionally/recreationally.

Evidence statement 31: Views on more effective interventions for preventing or reducing drug misuse among people who are known to use drugs occasionally/recreationally

There was moderate evidence from a qualitative sub-study¹ [++] of 1 RCT that adaptations could be made to oral and written cannabis brief interventions to make them more acceptable to high frequency cannabis users (average age 21). Half of participants suggested improvements to both the content and the format of the interventions to make them more effective. The most common suggestion was to tailor information to the person receiving the intervention by providing specific, individualised, and concrete advice. Many participants who had received the written version of the brief intervention indicated a desire for information to be provided in a more interactive and attention-grabbing format. They also stressed the value of being able to ask questions. The printed materials provided in the written version of the intervention was felt to be an outdated method of providing information with some participants suggesting that the formal tone and language should adapted to make it more relevant for young people who use cannabis.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in Canada although it is feasible that an intervention of this type could be implemented in a UK setting. The study was conducted among a sample of young, high frequency cannabis users which may limit its generalisability to a wider population of people who use drugs occasionally/recreationally.

Evidence statement 32: Views on more effective interventions for preventing or reducing drug misuse among people who are known to use drugs occasionally/recreationally

There was weak evidence from 1 qualitative focus group and interview study¹ [-] that there are barriers to prevention among people aged 18 to 31 who use ecstasy. Convincing people that there are significant health risks associated with ecstasy was identified as a challenge with participants seeming more open to harm reduction approaches than what they perceived as "war on drugs" messages. Participants wanted general information on the risks of ecstasy use so they could make their own informed decisions about using it in the future.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA. The study was conducted among a sample of young, white, heterosexual ecstasy users which limit its generalisability to a wider population of people who use drugs occasionally/recreationally.

Evidence Statement 33: Acceptability of group-based skills training or information provision

There was weak evidence from 2 qualitative focus groups studies^{1,2} [+¹,-²], 1 uncontrolled before and after study³ [-], and 1 mixed methods study⁴ [-] that group-based skills training or information provision is acceptable to participants. The skills training consisted of critical thinking skills¹, communication skills¹, conflict resolution skills¹, drug refusal skills¹, decision making skills³, coping skills³, goal setting³, and how to manage an unwell individual⁴. One study did not report further details of the skills training provided².

¹ Tait et al. (2015) [+]

¹ Rudzinski et al. (2012) [++]

¹ Carlson et al. 2004

Applicability: The evidence is only partially applicable to the UK as 3 of the 4 studies were conducted in the USA^{1,2,3}, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 34: Views on more effective group-based skills training or information provision

There was weak evidence from 1 qualitative focus group study¹ [-] that participants felt that providing information on housing would improve group-based skills training and information interventions for young women who are considered homeless. No further details of the skills training was provided.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 35: Acceptability of one-to-one skills training, advice and information provided using peer education initiatives

No relevant evidence was identified.

Evidence Statement 36: Views on more effective one-to-one skills training, advice and information using peer education initiatives

No relevant evidence was identified.

Evidence Statement 37: Acceptability of one-to-one skills training, advice and information given as part of planned outreach activities

No relevant evidence was identified.

Evidence Statement 38: Views on more effective one-to-one skills training, advice and information given as part of planned outreach activities

No relevant evidence was identified.

Evidence Statement 39: Acceptability of opportunistic skills training, advice and information provision

There was weak evidence from 1 qualitative focus group study¹ [-] that opportunistic skills training, advice and information provision is acceptable to participants. The study did not report further details of the skills training provided.

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 40: Views on more effective opportunistic skills training, advice and information provision

There was weak evidence from 1 qualitative focus group study¹ [-] that participants felt that providing information on housing would improve group-based skills training and information interventions for young women who are considered homeless. No further details of the skills training was provided.

¹ Goldbach and Steiker (2010) [+]

²Wenzel et al. (2009) [-]

³ Lynsky et al. (1999) [-]

⁴Wood et al. (2010) [-]

¹Wenzel et al. (2009) [-]

¹Wenzel et al. (2009) [-]

Applicability: The evidence is only partially applicable to the UK as the study was conducted in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 41: Acceptability of web-based interventions

There was moderate evidence from 2 RCTs^{1,2} [+^{1,2}] that web-based interventions are somewhat acceptable to participants. The evidence showed that some participants were unlikely to recommend the interventions to their friends¹, and that they found the interventions boring².

Applicability: The evidence is only partially applicable to the UK as one of the studies was undertaken in the USA¹ and the other in Australia², however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 42: Acceptability of text messages

There was moderate evidence from 1 before and after study¹ [+] that text messages are generally acceptable to young people.

Applicability: The evidence is only partially applicable to the UK as the study was undertaken in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 43: Views on more effective use of targeted print and new media. There was moderate quality evidence from 1 qualitative focus group study¹ [+] that text messages would be a culturally relevant way to communicate with young people.

Applicability: The evidence is only partially applicable to the UK as the study was undertaken in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 44: Acceptability of family-based programmes providing structured support for children and young people at risk of drug misuse No relevant evidence was identified.

Evidence Statement 45: Views on more effective family-based programmes providing structured support for children and young people at risk of drug misuse

There was weak evidence from 1 qualitative focus group study¹ [-] that participants felt family members should be included in future interventions for young females who are considered homeless.

Applicability: The evidence is only partially applicable to the UK as the study was undertaken in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 46: Acceptability of group-based behaviour therapy for children and young people at risk of drug misuse

¹Wenzel et al. (2009) [-]

¹ Elliott et al. 2014 [+]

² Tait et al. 2015 [+]

¹ Shrier et al. 2014 [+]

¹Braciszewski et al. (2014) [+]

¹Wenzel et al. (2009) [-]

There was weak evidence from 1 qualitative focus group study¹ [-] that interventions with group-based behaviour therapy for children and young people were generally well received and that participants found them enjoyable.

Applicability: The evidence is only partially applicable to the UK as the study was undertaken in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 47: Views on more effective group-based behaviour therapy for children and young people at risk of drug misuse

There was moderate evidence from 1 qualitative focus group study¹ [+] that participants felt existing group-based behaviour therapy interventions for young people who are gay, lesbian, bisexual or transgender and at risk of drug misuse could be improved by taking a gender neutral approach, including discussions on differences and similarities with heterosexual peers, sex and sexuality, and perceived adult lifestyles.

Applicability: The evidence is only partially applicable to the UK as the study was undertaken in the USA, however, an intervention of this type may be feasible in a UK-based setting.

Evidence Statement 48: Acceptability of skills training for parents or carers of children

No relevant evidence was identified.

Evidence Statement 49: Views on more effective skills training for parents or carers of children

No relevant evidence was identified.

¹Wenzel et al. (2009) [-]

¹Goldbach and Steiker (2011) [+]

Evidence statements from the cost effectiveness review Cost effectiveness evidence statement 1

An economic evaluation based on a criminal justice orientated cost-benefit model identified that peer mentoring interventions targeting at-risk students including regular truants (benefit cost ratio 16.42; total benefits \$29,819, total costs \$1,816) were estimated to be cost saving. Not all peer mentoring interventions included within the cost-benefit model were targeted to a specific population. There was noted to be potentially serious to minor limitations with the model's applicability outside a criminal justice perspective and uncertainty regarding methodology. There is further uncertainty about the applicability of the model to the UK, as it is based upon policy options available in Washington State, sources for costs and resources are from the United States, and all evaluations of intervention effectiveness included in the model were from the United States.

Cost effectiveness evidence statement 2

An economic evaluation based on a criminal justice orientated cost-benefit model identified that an intervention targeting looked after children, Multidimensional Treatment Foster Care, (benefit cost ratio 2.11; total benefits \$17,356, total costs \$8,230) was estimated to be cost saving. There were noted to be potentially serious to minor limitations with the model's applicability outside a criminal justice perspective and uncertainty regarding methodology. There is further uncertainty about the applicability of the model to the UK, as it is based upon policy options available in Washington State, sources for costs and resources are from the United States, and all evaluations of intervention effectiveness included in the model were from the United States with the exception of one evaluation from Sweden.

Cost effectiveness evidence statement 3

Economic evaluations based on a criminal justice orientated cost-benefit model identified that for two multicomponent interventions targeting at risk children, CASASTART (benefit cost ratio unavailable, total benefits -\$4,979, total costs \$7,038) and the Family Check Up (benefit cost ratio 0.24; total benefits \$77, total costs \$328) costs outweighed benefits. CASASTART targeted children in 'high risk' neighbourhoods including, but not exclusively, truants and school drop outs. Family Check-Up targeted children identified as being 'at-risk' by their teachers. There were noted to be potentially serious to minor limitations with the model's applicability outside a criminal justice perspective and uncertainty regarding methodology. There is further uncertainty about the applicability of the model to the UK, as it is based upon policy options available in Washington State, sources for costs and resources are from the United States, and all evaluations of intervention effectiveness included in the model were from the United States.

Evidence statements from the health economic modelling report Health economic modelling statement 1

An economic model was built based on an experimental intervention with families of substance users by Catalano et al (1999) and a follow-up study by Haggerty et al (2008). The economic and health benefits are limited to 12 months in the model as beyond 12 months of the study, each individual in the intervention or control cohorts had the same probability of using cannabis. The model found that this intervention was unlikely to be cost effective at a willingness to pay threshold of £20,000 per QALY due to the restricted duration of benefits and high intervention costs (£3,367) of 'Focus on Families' for one year. The ICER (incremental cost effectiveness ratio) in the base case scenario was around £99m per QALY gained. The intervention would have to cost less than £4 per person to be considered cost-effective, based on results being limited to 12 months.

Health economic modelling statement 2

An economic model was informed by results from Lee et al (2010) based on a brief, web-based personalized feedback selective intervention for college student cannabis use. Subgroup analysis found promising effects for those with a family history of drug problems and therefore supported selective targeting of the intervention which was applied in the model. Based on a cost of £15 the intervention would not be cost effective but if the intervention could be provided at a low cost of £1 or less then it would be dominant, i.e. less costly and more effective than a 'do nothing' alternative, as it provides resource savings and reductions in cannabis use. The ICER (incremental cost effectiveness ratio) in the base case scenario was around £329,000 per QALY gained.

Health economic modelling statement 3

An economic model was informed by Prado et al (2012) based on an intervention called Familias Unidas to reduce drug use (in particular, cannabis) and alcohol use. Familias Unidas is most effective for adolescents with parents exhibiting high stress and lower levels of social support. Familias Unidas includes eight 2-hour multi-parent group sessions and four 1-hour family visits. The model found that this intervention was unlikely to be cost effective at a willingness to pay threshold of £20,000 per QALY due to restricted benefits of the intervention and the costs of delivery (£154.25 per family). The ICER (incremental cost effectiveness ratio) in the base case scenario was around £241,000 per QALY gained. The intervention would have to cost less than £135 and the effects extrapolated to an additional 12 months to be considered cost-effective.

Health economic modelling statement 4

An economic model based on a study of motivational interviewing to reduce ecstasy use in those attending nightclubs, based on Martin et al. 2010, found that the intervention was not likely to be cost effective at a willingness to pay threshold of £20,000 per QALY gained. The ICER (incremental cost effectiveness ratio) in the base case scenario was around £485,000 per QALY gained. Even if the effect of reducing drug use was maintained for at least two years, the cost halved to £32 and a discount rate of 1.5% applied, the ICER was still £70,000. In fact, the intervention could only be cost effective if delivered at a cost of £4.20 per hour or less in the base case scenario.

Health economic modelling statement 5

An economic model based on a study of motivational interviewing to reduce drug use in young gay and bisexual men, based on Parsons et al., (2014) found that the intervention was not likely to be cost effective at a willingness to pay threshold of £20,000 per QALY gained. The ICER (incremental cost effectiveness ratio) in the base case scenario was around £301,000 per QALY gained. This intervention would only be cost effective if the effect of reducing drug use was maintained for at least two years, and if the intervention could be provided at a cost of less than £88.

Health economic modelling statement 6

An economic model based on a study of a motivational interviewing intervention to reduce club drug use and HIV risk behaviours among men who have sex with men by Morgenstern et al. (2009) found that the intervention was not likely to be cost effective at a willingness to pay threshold of £20,000 per QALY gained. The ICER (incremental cost effectiveness ratio) in the base case scenario was around £131,000 per QALY gained. This intervention would only be cost effective if the effect of reducing drug use was maintained for at least two years, and if the intervention could be provided at a cost of less than £190. The intervention was targeted to men with an average age of 38 but if it could be provided to younger men then it would be more likely to be cost effective as younger people are more likely to become drug dependent and to lose more years of life through early death associated with drug use.

Health economic modelling statement 7

An economic model based on a study of a family intervention called STRIVE (Support to Reunite, Involve and Value Each Other) by Milburn et al (2012) found that this intervention was not likely to be cost effective at a willingness to pay threshold of £20,000 per QALY. The ICER (incremental cost effectiveness ratio) in the base case scenario was around £117,000 per QALY gained. If the intervention cost was less than £500, and the intervention had a longer term effect over two years or more, then it would be cost effective.

Health economic modelling statement 8

The results of the economic modelling suggest that, to be cost effective, drug use prevention interventions would need to cost less than £100 per person, and would need to reduce drug use by at least five percentage points, maintained over two years (for example to reduce drug use from 20% to 15% of a population). Targeting interventions at individuals who are at high risk of drug use or harmful consequences of drug use, or at individuals who are already drug users, would most likely make interventions more efficient. If interventions can prevent more harmful forms of drug use like opiate use then they will be more likely to be cost effective.

Health economic modelling statement 9

If drug prevention interventions that are effective over a period of time can be provided as part of multicomponent interventions at an additional cost of less than around £100, then they may represent a cost effective component of these programmes.