Supplementary File 3. Table of characteristics

Supplemental material

Author, year	Country	Study design	Data collection method (s)	Participant characteristics	Other demographic data as reported by the authors	Type of homelessness	Barriers	Enablers
Aparicio et al., 2018	USA	Qualitative (part of a larger examination of Wahine Talk's)	Focus group interviews with homeless youth and an interdisciplinary team of providers One provider focus group Two group participants focus groups One individual participant interview (for one participants unable to meet during either focus group time offered)	N=11 young people experiencing homelessness Age (for the 20 youth participants who were enrolled in the bigger study): Mean age: 16.45 years (SD=1.57) (range: 14-19 years) Female N=4 female providers who deliver Wahine Talk: health educator, peer mentor, programme manager and medical provider.	The majority of participants were mixed race/ethnicity (65%) or Native Hawaiian and other Pacific Islander (30%). Sexually active participants (n=19) reported sexual initiation between 13 and 18 years old (M=14.9 years). 25% of study participants (n=5) were pregnant at least once prior to Wahine Talk - 15% of participants were pregnant once, 5% were pregnant twice, and 5% were pregnant three times. Fifteen percent of study participants had one to two miscarriages, 5% of participants had an abortion, 5% had one live births and 5% had two live births. 35% of participants (n=7) reported being in foster care at some point during their lives.	Homeless youth and youth at risk for homelessness	Complexity, Feelings, Patient-provider interaction, Healthcare system	Patient-provider interaction, Healthcare system
Aparicio et al., 2019	USA	Mixed-method quasi- experimental pilot study	In-depth individual and focus groups	N=51 young people experiencing homelessness Mean age: 17.74 (SD=2.47) (range: 14-22 years) Female (In depth interviews with 25 youth participants) N=7 providers involved in the Wahine Talk programme.	55% of participants identified as multi-racial, 37% identified as Native Hawaiian or other Pacific Islander (often of multiple ethnicities within this racial category), and 2% identified as Caucasian/White. Participants were allowed to select as many race and ethnicity categories as applied. 43% of participants identified as Native Hawaiian. 28% identified as Micronesian, 20% identified as Chinese, 12% identified as Japanese, and 14% identified as Samoan. Participants were aged, on average, 15.84 years at first sex. 39% of participants had a prior pregnancy, 22% had ever given birth to a child, 8% had ever had an abortion, and 29% had ever had a miscarriage. Nearly half (43%) of youth had been in foster care at some point during their lives.	Homeless youth that completed a newly developed, holistic sexual health program for homeless youth and youth atrisk for homelessness.	Patient-provider interaction, Knowledge, Healthcare system	Healthcare system, Patient-provider interaction, Feelings, Knowledge
Begun et al., 2019	USA	Phenomenological qualitative study	Semi-structured interviews using a topic guide	N=30 homeless youth aged 19.1 years (SD=0.8) 53.3% (n = 16) identified as women, 33.3% (n = 10) as men, and 13.3% (n = 4) as transgender, gender non-conforming, or genderfluid.	The sample was diverse both in terms of racial identity and sexual orientation; however, most commonly reported was White (43.3%, $n=13$), and straight/heterosexual (60.0%, $n=18$). On average, youth had experienced homelessness for 8.9 (SD = 9.0) months. 30.0% ($n=9$) has been in foster care at some point, and four young women (13.3%) indicated that they were currently pregnant. Pro-pregnancy attitudes were reported among 60% ($N=18$) of participants and 40% ($N=12$) hold anti-pregnancy attitudes.	Staying in an overnight youth shelter	Complexity, Knowledge, Feelings, Healthcare system, Patient-provider interaction	Healthcare system, Feelings

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Côté, 2019	Canada	Qualitative	Semi-structured interviews	N=33 homeless youth Mean age: 22 years (range: 18-25 years) 17 men and16 women	Time spent homeless: 1 month to 11 years. 32 participants were sexually active and 31 had already had sexual relationships within the context of homelessness. 29 youth had already experienced a romantic relationship within the context of homelessness and 18 had suffered violence (insults, threats, beatings, etc.) by one of their romantic partners. Six participants had already contracted an STBBI and eight young women had experienced a pregnancy in their lifetime. 12 participants, of which seven were women and five were men, had already engaged in prostitution within the context of homelessness. All of the participants had used sexual health services at least once during their homeless experience.	"situation and experience of young people between the ages of 13 and 24 who are living independently of parents and/ or caregivers, but do not have the means or ability to acquire a stable, safe or consistent residence" who have been homeless for more than three consecutive days within the past 6 months.	Feelings, Complexity	Feelings, Patient- provider interaction, Healthcare system
Dang et al., 2019	USA	Qualitative-youth participatory action research	Focus groups and in-depth interviews	Focus groups: N=22 homeless youth Mean age: 19.42 years. 68% were identified as male and 32% as female; Interviews: N=20 homeless youth Mean age: 20.75 years (range: 18-24 years) 70% males, 25% females and 5% transgender	Focus groups: 5% identified as multiracial, 32% as African American, 14% as Latino/Hispanic, and 9% as White. Interviews: 55% identified as African American, 25% as White and 20% as multiethnic. The majority were identified as heterosexual (60%). 30% and 10% were identified as non-heterosexual and other, respectively. 95% reported that they had received STI testing at least once in the past; 55% reported that they were tested within the past 3 months; 20% in the past 3–6 months; 5% in the past 6–12 months; 15% more than a year ago, and 5% reported that they had never been tested. The most frequently cited locations for STI testing were EDs, Planned Parenthood, and community clinics, respectively. The majority of participants (75%) reported that they had health insurance while only 15% reported that they had a "regular doctor."	Homeless youth attending a drop-in service.	Feelings, Complexity, Healthcare system, Knowledge	Knowledge, Healthcare system, Patient-provider interaction
Dasari et al., 2016	USA	Descriptive Mixed methods	(Survey=Quant) Interviews using semi structured interview guide with probes	N=15 homeless youth Mean age: 21 years (range:18-24 years) Female	8 identified as black, 5 as white and 2 as multiracial. Two of the 15 women were pregnant at the time of the study, 8 had a history of pregnancy, and of these four reported being pregnant more than twice.13 reported they did not pan on becoming pregnant in the next year. 9 reported currently using contraceptives and 6 not. 11 had intimate partner violence history and 4 (out of 15) had at some point experienced reproductive and/or sexual coercion.	Currently homeless or experienced recent homeless ness Defined as: occurrence of 2 or more nights within past 12 months when a women does not have a home, was told to leave her home, or was unable to stay at her home and forced to stay elsewhere.	Knowledge, Patient- provider interaction, Healthcare system	Healthcare system

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Draucker et al., 2015	USA	Qualitative Descriptive	Focus groups	N=18 Shelter residents- all were females Mean age: 35.8 years (SD = 10.40; range: 18 to 55 years) N=10 staf- all females	Eleven of the resident participants were White; four were African American; two were Biracial, and one was American Indian/Alaska Native. One participant identified as Hispanic. Eight of the shelter staff participants were White, and two were African American.	Resident in domestic violence shelter	Knowledge, Healthcare system	Patient-provider interaction, Healthcare system
Ensign & Panke, 2002	USA	Qualitative Ethnographic Descriptive	Focus groups & Individual Interviews	N=20 female adolescents experiencing homelessness Mean age: 18.2 years (range: 14- 23 years)	The racial/ethnic mix of the women in the study was close to that of the clinic population overall (in the latter: 68% Caucasian, 12% each for native American and Hispanic, and 7% African American).	Clinic- based homeless. Self-identified as currently being homeless or having been homeless in the past 12 months, attending a youth clinic offering allopathic, naturopathic health care, mental health, HIV and substance abuse counselling	Complexity, Feelings, Patient-provider interaction, Healthcare system	Patient-provider interaction, Healthcare system
Gelberg et al., 2004	USA	Qualitative First stage of a mixed method study	Interviews	N=47 women experiencing homelessness Mean age: 35.6 (SD=10.6; range: 18-57 years)	22 women were African American, 12 European American, nine Latina, and one was Asian American. The ethnic background of three participants was missing. Eight of the 47 women were pregnant and 43%had at least one child under the age of 18. About 26% of the women reported some form of health insurance. Two women admitted being employed either full-time or part-time. One woman admitted to current prostitution as her current source of income. Other women in the sample were either on some form of public assistance (38%) or had no other stated source.	Chronically and episodically homeless pregnant women and non- pregnant women	Complexity, Feelings, Knowledge, Patient- provider interaction, Healthcare system	Patient-provider interaction, Healthcare system
Hartwell et al., 1994	USA	Ethnographic	Observation	2 homeless shelters Male Age range in the shelters: 18-65 years	The racial and ethnic composition within the shelter is relatively constant. On any given night, 60% of those who are sheltered are black, 20% are white, and the remaining 20% are Latino or of another ethnic background. Most are unemployed and the only structured activity many of the men have is Narcotics Anonymous or Alcoholics Anonymous.	Homeless males staying at night shelters	Complexity, Feelings, Knowledge, Healthcare system	Healthcare system

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Hathazi et al., 2009	USA	Qualitative Based on a 2 phased longitudinal study of young Injection drug users (IDUs)	Interviews Baseline interview with eligibility to participate for a series of 5 follow- up interviews.	N= 41 homeless young people injecting drugs Mean age: 21.7 (range: 16-28 years) 21 males and 20 females Injection drug users Injected ketamine at least once within past two years History of pregnancy	The majority (73.2%) were White/Caucasian, while 12.2% identified as of multiracial identity. 73.2% identified as heterosexual, 24.4% as bisexual, 4.9% as other/undecided and none as gay/lesbian. Young women were much likely to report being bisexual than young men (45% VS 4.8%). More men than women reported history of drug treatment (71.4% v. 50%) and mental health care (85.7% v. 65%). Although none had tested HIV positive 22% tested HCV positive (87.8% tested for HCV). Women were more likely to be tested for HCV than men (95% v. 81%), and women more commonly reported a positive result (30% v. 14.3%). The sample reported using a wide variety of drugs within the previous 30 days. A higher proportion of men than women reported using alcohol, marijuana and drugs. Twelve women became pregnant at least once for a total of 14 pregnancy events, which resulted in eight births, four miscarriages, one termination, and one current pregnancy. Among women, a birth was the most commonly reported outcome (10/20), whereas termination was the most common outcome reported among men (11/21). A higher proportion of women than men reported the most recent pregnancy ended in miscarriage (5/20 v. 3/21). Among women, pregnancy outcomes varied by age: women who gave birth to a child were older on average (21.8 year old) than women who terminated (18.8 years old) or experienced a miscarriage (18 years old).	Homeless at baseline interview. Majority self-identified as 'homeless travellers' who moved frequently between cities	Complexity, Healthcare system	Healthcare system
Henning et al., 2007	Australia	Qualitative	Semi structured interviews using 5 focus groups	N=25 young people experiencing homelessness Aged: 16-26 years 19 males and 6 females	Not reported.	Homeless young people who have lived in a variety of places since leaving home; with friends, on the street, youth refugees, or in supported accommodation; And attending an inner city clinic providing nurse led interventions to homeless young people	Complexity, Feelings, Knowledge, Healthcare system	Healthcare system
Holger-Ambrose et al., 2013	USA	Qualitative	Individual interviews-all four interviewers had extensive experience working with sexually exploited youth and came from diverse backgrounds	N=13 sexually exploited youth Aged: 14-22 years Female	6 identified their race as African-American, 2 Caucasian, 1 Native-American, and 4 multi-racial. 4 out of 13 participants identified their sexual orientation as gay, lesbian or bisexual. All of the participants experienced multiple types of sexual exploitation in venues ranging from private homes, spas, strip clubs, hotels, brothels and street prostitution. Most were exploited by 13 years of age. Nearly all had a pimp. All the participants experienced homelessness and substance use. The majority had been in government care in either a juvenile detention center, in foster care, hospitalized for mental health issues or in substance abuse treatment; most girls reported more than one type of placement.	Homeless youth from youth shelters, street corners or areas where exploited youth congregate as well as from a support group for girls who had been sexually exploited		Patient-provider interaction, Healthcare system

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Kachingwe et al., 2019	USA	Qualitative	In-depth focus group interviews (N=2) and one in- depth interview (N=1).	N=11 adolescents experiencing homelessness. Mean age: 15.64 years (SD= 1.29; range: 14-18 years) Female	Seven identified primarily as mixed race (N=7) or as Native Hawaiian and four as Pacific Islander (Micronesian, Samoan, or Tongan) (N=4) Number of pregnancies before 'Wahine Talk' sexual health program: 0-3. Number of pregnancies after entering 'Wahine Talk: 0). The majority of participants were sexually active (n=9), among whom age at first sex ranged from 13 to 18 years (M=15.1 years). None of the participants were using birth control when coming into the sexual health program, and the majority (n=8) had adopted a birth control method within the last five months while part of the larger program.	Homeless youth at a youth drop-in center that completed a newly developed, holistic sexual health program for homeless youth and youth at-risk for homelessness.	Feelings	Feelings, Patient-provider interaction, Healthcare system
Kennedy et al., 2014	USA	Qualitative Informed by Grounded Theory	Semi-structured interviews in English and Spanish	N=22 homeless women with children Mean age: 32 years (range: 20-44 years).	English or Spanish speaking. 5 identified as Black, 2 as Black, Native American, 5 as Hispanic, 3 as White, 1 as Black Native American, White, 1 as Asian, while 5 did not report their race. Had custody of at least one minor child. Sexually active with at least one man in the past year.	Currently housed or seeking housing in a family shelter	Complexity, Feelings, Knowledge, Healthcare system	Patient-provider interaction, Healthcare system
Killion,1998	USA	Ethnographic - Qualitative	Participatory Observation: including informal unstructured interviews with informants and interviews with a number of service providers.	Primary sample N=15 homeless pregnant women (in various staged of pregnancy) Aged: 18-39 years In addition: shelter administrators, landlords, social workers, nurses, physicians, housing officials, family members and significant others.	The primary sample consisted of African American, Latina, and Caucasian women. Three were married, two were cohabitating, four were divorced, and six were single; each had at least one other child. One woman had 13 children, although only 8 of them were with her during the time of the study. During the study, none of the women were employed and their education ranged from having attended high school to an associate degree.	Recruited from shelters	Complexity, Feelings, Knowledge	Healthcare system

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Leidel et al., 2017	Australia	Prospective Mixed Methods study	Semi structured Interviews by video chat a application	N=8 health care providers at a Homeless Health Care organisation (opt-out HIV testing study); 3 GPs, 4 practice nurses, and 1 practicioner	Not reported.	Health provision service for homeless and marginalised patients.	Patient-provider interaction	Healthcare system
McGregor et al., 2018	UK	Mixed-methods study (but only using data from qualitative part)	Semi structured interviews	14 residents (males and females) and 8 hostel staff	Not reported.	People living in hostels for homeless people	Complexity, Feelings, Knowledge	Patient-provider interaction, Healthcare system
Oliver & Cheff, 2012	Canada	Qualitative Multiple case study approach	Life history interviews & participant observation	N=8 young women experiencing homelessness living in Toronto	Not reported.	Recruited from shelters and from street visits to those not sheltered	Feelings, Knowledge, Patient-provider interaction	Patient-provider interaction, Healthcare system

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Rew et al., 2002	USA	Qualitative study based on a conceptual model of SH practices, synthesised from social learning behaviour and the theory of reasoned action.	Focus groups of 5 or 6 participants conducted over 6 months.	N=22 adolescents experiencing homelessness Randomly selected from the cross sectional sample of 425 participants in a survey study. Mean age: 16.18 years (range: 16-20 years) 11 females and 11 males	Most participants (82%) were White, one was American Indian, two were Hispanic, and one male did not indicate his ethnicity. The majority identified themselves as heterosexual; three (13.6%) were gay or lesbian, and four (18.2%) said they were bisexual. Focus group participants had been homeless an average of 37.8 months while those in the original sample reported being homeless for an average of 33.1 months.	Homeless adolescents who sought health and social services from a street outreach programme. Participants homeless an average 37.8 months	Complexity, Feelings, Knowledge, Patient- provider interaction, Healthcare system	Patient-provider interaction, Healthcare system
Rew et al., 2008	USA	Qualitative descriptive study	Data from qualitative open ended questions collected via email	N=13 health educators who had provided the street - based sexual health intervention to adolescents experiencing homelessness. 7 female (health educators) with a mean age: 35.7 years (range: 24-56 years) 6 male (health educators) with a mean age of 30.8 years (range: 29-34 years)	All the female educators had baccalaureate degrees in psychology or nursing and all but one had post-graduate education. One had completed a PhD in nursing. Six of the female educators were Caucasian and one was Hispanic. All male educators had baccalaureate degrees, 5 were enrolled in post-graduate education, and one had completed a PhD in social psychology. Four of the male educators were Caucasian, one was Hispanic, and one was Asian. Male and female educators were assigned to their respective gender-specific intervention groups. Only one male educator had previously worked with a group of homeless adolescents.	Homeless adolescents who sought social and health services from a street drop-in centre in an urban setting.	Complexity, Knowledge, Patient- provider interaction	Patient-provider interaction, Healthcare system
Shah et al., 2019	UK	Qualitative	Semi-structured interviews using a topic guide	14 English-speaking women with median age of 27 years, from two homeless shelters in central London.	Not reported.	Previously street homeless and/or living in temporary accommodation	Complexity, Healthcare system, Feelings, Patient-provider interaction	Patient-provider interaction, Healthcare system, Knowledge, Feelings

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Stringer et al., 2012	USA	Qualitative descriptive design	Self- administered brief demographic surveys and Focus Groups Guided by the Integrative Model of Behaviour Prediction and change	N=45 homeless, urban, childbearing women living in shelters Mean age: 28.7 years (range: 18-44 years)	English speaking The racial background included 73% (n = 33) Black, 9% (n = 4) White, 9% (n = 4) Hispanic, and 9% (n = 4) Other. The authors note that these demographic data are typical of women from the local community, with women being multiparous, Black, and heads of households. Approximately 87% of the participants had custody of their children. Approximately 87% (n = 39) of women were multiparous (parity range = 2-7 births), 9% (n = 4) of women were primiparous, and 4% (n = 2) nulliparous. All women (100%) considered themselves as heads of households.	Homeless, living in shelters	Complexity, Feelings, Knowledge, Healthcare system	Healthcare system