BMJ Public Health

Navigating healthcare barriers: a cross-sectional study using respondent-driven sampling to assess migrant women sex workers' access to primary care in France

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To cite: Jego M, Shahbazkia R, Hoyer M, *et al*. Navigating healthcare barriers: a cross-sectional study using respondent-driven sampling to assess migrant women sex workers' access to primary care in France. *BMJ Public Health* 2025;**3**:e002234. doi:10.1136/bmjph-2024-002234

Received 21 October 2024
Accepted 24 February 2025

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ABSTRACT

Introduction Migrant women sex workers (MWSWs) are affected by higher morbidity rates, reflecting the complex health risks associated with sex work and migration which they face. This study aimed to assess MWSWs' use of primary care services in France, as well as the factors associated with having a family doctor.

Methods This cross-sectional observational study of 135 cisgender and transgender MWSWs is part of the larger Favoriser l'Accès à la Santé Sexuelle des Travailleuses du Sexe project, which aims to improve global knowledge of and access to sexual healthcare among this population. MWSWs aged 18 years and older were enrolled over 1 year between 2022 and 2023. The primary outcome was the percentage of MWSWs who reported having a family doctor. A best model analysis and a regression model were used to examine associations between having a family doctor and MWSWs' health and social characteristics.

Results Only 33% of participants reported having a family doctor. Among these, 24% had disclosed they were sex workers to the latter. In general, MWSWs had poor access to preventive healthcare (33% had been HIV tested in the previous year, 33% had used contraception and 19% reported lifetime cervical cancer screening). In contrast, most participants (63.5%) perceived they were in good health. In the multivariate analysis, having a family doctor was not significantly associated with better health outcomes or with the quality of healthcare.

Conclusions The majority of MWSWs did not have a family doctor; this fact compounds existing health vulnerabilities faced by this marginalised population. Improved targeted interventions are needed to increase healthcare access and quality for MWSWs. These interventions should include strategies to enhance communication with healthcare providers about this population's specific needs.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Migrant women sex workers (MWSWs) face social vulnerabilities which are risk factors for poor health; these include having migrant status, homelessness and insecure housing, unemployment, poverty and the criminalisation of sex work. Individual vulnerabilities such as comorbidities, substance addiction, violence of all kinds, psychiatric disorders and sexually transmitted infections are also risk factors for poor health in this population.

WHAT THIS STUDY ADDS

⇒ This study sheds light on the major barriers that MWSWs in France face when trying to access healthcare, including stigma, language barriers and a limited understanding of the local healthcare system. It presents new quantitative evidence revealing that less than one-third of MWSWs have a family doctor. Having a family doctor is not associated with better health outcomes or improved quality of care pathways. Moreover, MWSWs do not frequently discuss their sex work activities with their family doctor during consultations, which results in suboptimal healthcare.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Our findings underscore the urgent need to tailor healthcare services to the unique challenges which MWSWs face, especially in terms of improving healthcare access, reducing stigma and enhancing healthcare providers' sensitivity to their specific needs.

INTRODUCTION

The concept of sex work among migrant women is highly heterogeneous, reflecting diverse representations and practices shaped by cultural, economic and individual contexts.[1] Migrant women do not necessarily identify as sex workers but may engage in transactional sex or have arrangements with 'sugar daddies' as a means of navigating economic or social vulnerabilities.[2]

Migrant women sex workers (MWSWs) face specific vulnerabilities, including a history of migration associated with social precarity (especially undocumented migrants and asylum seekers),[3] female gender, criminalisation of sex work, stigma and poor living conditions (homelessness, unemployment, poverty).[4] Female migrants are at greater risk of sexual violence in the host country; this violence includes extortion and sex work, whether in the context of trafficking or in terms of survival needs (access to food and shelter).[5–7] These various vulnerabilities lead to a higher risk of poor health: particularly substance addiction, psychiatric disorders and sexually transmitted infections (STIs).[8 9]

In France, where we conducted the present study, of the estimated 35 000 sex workers residing in the country in 2015, 85% were women and 93% were migrants. Most were from Eastern Europe (43%), West Africa (38.5%, mainly Nigeria) and China (9%).[10]

The poor health status and associated factors described above reflect the more complex health needs MWSWs migrants have than the general population. Added to this is the fact that vulnerable migrants face several barriers to accessing adequate and effective healthcare, such as cultural misunderstandings, language barriers, discrimination, negative care experiences and financial obstacles.[11–14] For MWSWs, poor knowledge of the local healthcare network, the lack of a residence permit and/or no social security cover, inappropriate working hours and stigmatisation by health professionals[15–17] are additional obstacles to their use of healthcare.[18–20]

Primary care is a model that promotes first-contact, accessible, continuous, comprehensive and coordinated person-focused care. It aims to optimise population health and reduce disparities across the population by ensuring that subgroups have equal access to services.[21] It inherently provides a more equitable level of care than other care models. It is also less costly and narrows disparities in health between population groups with different levels of social precarity.[22] Family doctors are responsible for providing primary care to individuals seeking medical care irrespective of their age, sex and illness. One of their primary goals is to protect, prolong and improve patients' quality of life in the community.[23]

In France, family doctors are almost exclusively general practitioners (GPs). Moreover, as all the MWSWs in our study who reported having a family doctor had a GP, we shall refer to GPs rather than family doctors throughout the rest of the manuscript. GPs are the main frontline healthcare providers for MWSWs and contribute to offering accessible, affordable, cost-effective and less stigmatising care.[21] They are also gatekeepers for access to specialised care, acting as the pivotal point in the coordinated care pathway of the general health scheme.

All non-nationals in France, irrespective of their residency status, theoretically have the right to healthcare. PASS (Permanences d'Accès aux Soins de Santé) are specific primary healthcare facilities that provide care to vulnerable people who do not have health insurance and therefore cannot access common primary care (either because they have never had any health insurance—for example, newly-arrived migrants—or because they have lost their entitlement to health insurance).[24] Once vulnerable migrants who attend PASS acquire health insurance, they are referred to the common primary care system, where they select a GP and enter the coordinated care pathway.[25] There is a lack of data on the follow-up of MWSWs by GPs in France and the impact of having a GP on their health and access to preventive care.

In 2022, the mixed-methods implementation study FASSETS (Favoriser l'Accès à la Santé Sexuelle des Travailleuses du Sexe or Promoting Access to Sexual Health for Sex Workers) was conducted in a major city in the South of France, which has a poverty rate of 25%—making it one of the poorest cities in France—and where 15% of the city's population were born outside France. FASSETS had two primary objectives: first, to analyse the individual and structural determinants of access to sexual healthcare—specifically, access to pre-exposure prophylaxis (PrEP)—among migrant cisgender and transgender MWSWs; second, to monitor a representative cohort of 150 MWSWs to evaluate their retention in care.[26]

FASSETS was conducted with the involvement of community health mediators and used a holistic approach.

The ancillary study described here aimed to assess MWSWs' use of primary care services, as well as factors associated with having a GP.

MATERIALS AND METHODS

Study design

We conducted a cross-sectional observational study using questionnaires among MWSWs enrolled in the FASSETS study.

Setting and participants

FASSETS was a participatory, multilevel, mixed-methods study among MWSWs' in a major city in the south of France, which aimed to improve this population's global knowledge of and access to sexual healthcare, in particular PrEP, through the implementation of tailored empowerment strategies.[26] Inclusion criteria were being a cisgender or transgender woman aged 18 years or older, having provided sexual services in exchange for a service or financial compensation in the previous 12 months, being born outside of France and working, living or regularly passing through the study city. All participants were informed of the study's objectives in their native language and provided written consent. MWSWs were recruited over 1 year between 2022 and 2023 using respondent-driven sampling. This strategy was chosen in order to obtain a cohort that was as representative as possible of the different communities of MWSWs in a context where some are registered with the national care system while others are hidden and are hard to reach.[27 28]

Data collection

Variables were collected using standardised tablet-based questionnaires. The data collected included demographic characteristics, sex work characteristics, behavioural characteristics (alcohol use, drug use), self-reported medical history, level of health literacy and sexual health needs. All eligible MWSWs who were invited to participate agreed to do so. Participants were free to skip individual items in the study questionnaire if they wished; this did not lead to their exclusion from the analysis. Therefore, the final data set included complete and incomplete data for all participants. This approach ensured inclusivity while respecting participants' autonomy. The number of missing data is specified in the tables according to each variable. For the multivariate analysis, only MSMWs with complete data were included.

STATISTICAL ANALYSES

The primary outcome was the percentage of women who reported having a GP.

Secondary outcomes were the utilisation of care and medical follow-up in terms of average number of consultations, the percentage of MWSWs with up-to-date screening for STIs and cervical cancer, the percentage of those who used contraception (ie, intrauterine devices, implants, oral contraception, condoms), the percentage of participants with chronic illness, the percentage who were refused care by healthcare professionals and average self-perceived health.

Categorical variables were presented as proportions, while quantitative variables were summarised using means and SD, or medians when more appropriate. Analyses were performed on complete cases only. We explored the association between having a GP and various sociodemographic, healthcare and care pathway characteristics using logistic regression in a univariate framework. Bayesian model averaging (BMA) was used for variables with a p value of≤0.20 in the univariate analyses. We only selected covariates with a p value of ≤0.20 in the univariate analysis for inclusion in the BMA process. This threshold was chosen to capture covariates with plausible associations while ensuring statistical rigour in model selection. The BMA approach combines estimates according to the posterior probabilities (p!=0) of the associated models and indicates whether the covariates are in some way associated with the primary outcome or not (p!=0 indicates a probability of a variable being included in a model, taking into account all the models considered). We used the frequency of occurrence of the variables (p!=0) to select the variables to be included in the logistic analysis. Only variables with p!=0>20 were selected. A generalised linear model was constructed using the variables from the BMA. We then applied the stepwise method to the regression to obtain a final model. All statistical analyses were performed using the BMA package of the R statistical software. Post hoc power calculation was 99% with an alpha of 5%, bearing in mind that the percentage of participants who had a GP was 33%.

RESULTS

Sociodemographic characteristics of participating MWSWs

A total of 135 participants were included. Most were aged between 18 and 35 (n=88, 65%). The mean period of time working as a MWSW was 6 years (±10), and the mean length of time living in France was 8 years (SD±10). 59 MWSWs (43%) had lived in France for less than 3 years. Most participants were from sub-Saharan Africa (n=94, 70%) and North Africa (n=24, 18%). Among them, 86 (64%) could not write at all in French or had a poor level. Only 26 (19%) spoke good/very good French. With regard to access to healthcare, 38 (29%) had no or incomplete health coverage (table 1).

Health behaviours, health needs and care pathways

Only 45 MWSWs (33%) reported having a GP. The mean period of time they had consulted the same GP was 8 years (±9 years). Of these 45, 31 (71%) consulted this professional more than four times a year. Only 11 (24%) had informed the latter about their sex work activity. Most (n=60) of the MWSWs consulted a private office when a medical need arose, while 26 reported emergency departments as their first resort for a healthcare need. A total of 27 MWSWs had consulted an emergency department in the previous year. Although 116 MWSWs (89%) were satisfied/very satisfied with their most recent consultation, 15 (11%) declared they were unable to get the care they needed, and 7 (5%) had been refused care by healthcare professionals (tables 2 and 3).

In the sample, 86 (64%) MWSWs self-assessed their physical health as good/very good, whereas only 32 (26%) self-assessed their mental health as good.

22 MWSWs (7%) did not report any health needs. Non-medical needs were those most frequently expressed, specifically food aid (23%), followed by accommodation (22%) and accessing rights (20%). Sexual health was the most cited medical need expressed, specifically condoms for contraception (10%).

With regard to prevailing chronic conditions, 34 (25%) MWSWs suffered from at least one chronic illness. In the previous year, 12 (9%) had been diagnosed with an STI; 45 (33%) had been tested for HIV during last year, while 25 (19%) had never been tested for HIV. 76 (59%) had had an abortion; only 42 of the 128 cisgender MWSWs (33%) who should have been using contraception were using contraception at the time of the study. In terms of cervical cancer screening, 70 of the 87 cisgender MWSWs aged 25–64 years (80%) had never been tested.

Factors associated with having a GP (ie, a family doctor)

The factors associated with having a GP in univariate and multivariate analyses are described in table 4. In the multivariate analyses, MWSWs who were home owners (p!=0: 52.8, OR: 4.28, CI 95 (1.53; 12.7)) and those with a chronic disease (p!=0: 99.8, OR: 8.55, CI 95 (3.04; 26.9))

Table 1 Sociodemographic characteristics (n=135)

Women migrant sex workers' characteristics	Total without missing data	Number	%
Gender	135		
Cisgender		128	95
Transgender		7	5
Age, years	135		
(18–35)		88	65
(36–55)		30	22
(56–85)		17	13
Geographical origin	135		
Sub-Saharan Africa		94	70
North Africa		24	18
East Europe		10	7
Other		7	5
Marital status	135		
Married		6	4.5
In a relationship		42	31
Single		85	63
Did not want to answer		2	15
Children	135		
Yes		118	87
No		17	13
Self-reported French-language writing level	135		
Could not write in French		32	24
Poor		54	40
Good to excellent		49	36
Self-reported French-language speaking level	135		
Did not speak French		48	36
Spoke a little French		61	45
Spoke French quite well		10	7
Spoke French very well		16	12
Housing	134		
Living in the street		2	1
Emergency housing (shelter or hostel)		57	43
Squat or slum		27	20
Living with friends or family		10	7
Homeowner		33	25
Other		5	4
Number of years living in France	135		
<1 year		6	4
1–3 years		53	39
>3 years		76	56
Social insurance	131		
Universal health cover only (ie, basic cover)		3	2
Complete health coverage (ie, basic+complementary cover)		45	34

Continued

Table 1 Continued

Women migrant sex workers' characteristics	Total without missing data	Number	%
Complete health coverage (ie, State medical aid specific for undocumented migrants)		48	37
No insurance		35	27
Number of years as a sex worker (mean, ±SD)	135	6	±6

SD, Standard Deviation.

were more likely to have a GP. MWSWs with no social insurance were less likely to have one (p!=0: 64.9, OR: 0.20, CI 95 (0.04; 0.73)). There were no significant differences for other variables, especially concerning healthcare pathways (ie, number of emergency department visits during the previous year, hospitalisations, seeking medical care, being refused care by a professional) and health prevention (ie, diagnosed with an STI during the previous year, cervical cancer screening, HIV testing, contraception) in the multivariate analysis.

DISCUSSION

In our study, only one-third of the sample reported having a GP (ie, family doctor) and less than one-third of the latter regularly consulted this professional (ie, ≥3 consultations in the previous year). In comparison, in 2022, the average access to GPs in the French general population was 3.3 consultations per year per inhabitant,[29] and 88% of the general population had seen a GP in 2017. These data highlight that MWSWs in France are less likely to visit a GP for consultation than the general population. Only 24% of those with a GP discussed their sex work activity with the latter. In multivariate analysis, only MWSWs with chronic illness (OR 8.55, CI 95 (2.56; 28.58)) were more likely to have a GP. There were no significant differences between MWSWs who had a GP and those who did not with respect to healthcare pathways (ie, emergency department visits, hospitalisations, not seeking care, being refused treatment) and health prevention (contraception, HIV testing, cervical cancer screening).

Adapting healthcare organisations to promote access and adherence to care for MWSWs

Our findings suggest that the most vulnerable MWSWs (eg, those without personal housing or with no social insurance) experience delays and greater difficulties in accessing primary care. In order to be able to adapt interventions to MWSWs' specific needs through a patient-centred approach, it is first essential to ensure that they are able to access the health system. In a qualitative study of 16 MWSWs involved in street-based sex work, participants mentioned that access to primary care was problematic and that consultations with GPs did not meet their expectations, which impacted their future healthcare use behaviour.[30] A systematic review published in 2023 analysed health and social interventions to improve the health and wider determinants of health of adult sex workers in high-income countries. It revealed that multicomponent interventions and interventions focused on education and empowerment were beneficial for adult sex workers in terms of substance misuse, sexual risk behaviours, safety of sex work and mental health and well-being. Moreover, peer-designed and delivered interventions were shown to be effective.[31]

Although our results highlighted poor overall access to preventive healthcare (ie, only 33% of participants had been tested for HIV in the previous year or were using contraception at the time of the study, and only 19% reported having been tested for cervical cancer screening at least once), most (63.5%) reported being in good health (good/very good self-assessed physical health); only 11.2% did not seek treatment when they felt it was needed. This contrast between low rates of access to preventive sexual healthcare indicators and positive self-assessed health may suggest that MWSWs underestimate their care needs and the importance of sexual health prevention. MWSWs often experience significant health inequalities with the general population, primarily due to their limited access to accurate health information and healthcare services, as well as social and structural determinants of health.[17 32 33] Moreover, many MWSWs have misconceptions about their health risks.[34] Legal and social environments significantly impact their health behaviours and access to care, as restrictive laws and stigma around sex work can impede their use of health services, including essential screenings for infectious diseases, cervical cancer screening, mental health and sexual health.[35] This highlights the urgent need for interventions that not only aim to improve access to healthcare but also enhance the health literacy of migrant sex workers, thereby enabling them to make informed health choices.

A key aspect of care services for marginalised people is their ability to provide outreach services. This 'off-site' approach is used to generate demand for medical care and then to support that demand throughout the care process.[36] In France, health mediation is an emerging profession that aims to improve access to rights, prevention and healthcare for underserved populations.[37] According to the French National Health Agency (HAS), health mediators create links and help to change perceptions and practices between the health system and a population that has difficulty accessing it. They are competent

Table 2 Health behaviours and consultation sites

	Total without missing data	Number	%
Reported having a GP (ie, a family doctor)	135		
Yes		45	33
No		90	67
Among those with the 'yes' modality (n=45)			
Informed their GP about their sex work activity		11	24
Mean time consulting the same GP (years) (mean±SD)		8	±9
Number of consultations per year (mean±SD)		10	±11
Number of consultations per year			
≤3		13	29
4–10		17	38
≥11		15	33
Consultation sites (multiple choices)	128		
Private office		60	46
Free common primary healthcare structures		24	19
Emergency department		26	20
Specific primary healthcare facility for vulnerable people without health insurance (PASS)		15	12
Other		9	7
Foregoing care despite feeling the need to consult		5	4
At least one emergency department visit during the previous year	135		
No		108	80
Yes		27	20
Hospitalised since arrival in France	134		
Yes		39	29
No		95	71
Had never sought medical care despite being needed since arrival in France	134		
Yes		15	11
No		119	89
Had been refused treatment by a doctor since arrival in France	134		
Yes		7	5
No		127	95
Satisfaction with most recent medical consultation	130		
Very satisfied		26	20
Satisfied		90	69
Quite satisfied		6	5
Not very or not at all satisfied		8	6

GP, general practitioner; PASS, Permanences d'Accès aux Soins de Santé; SD, Standard Deviation.

and trained to identify, inform, guide and provide temporary support. They have detailed knowledge about the area in which they work, the actors involved and the public concerned. Mediation is a temporary process of 'going towards' and 'doing with', with the aim of fostering (1) health equity, by encouraging people to return to mainstream services, (2) prevention and care uptake, (3) people's autonomy and their ability to take responsibility

Table 3 Health needs and prevention

	Total without missing data	Number	%
Health and social needs during the previous 3 months (multiple choice)	135		
No health or global need		22	7
Contraception		20	7
General health screening		12	4
Free condoms		31	10
Care after experiencing violence		7	2
Accessing rights		63	20
Housing		67	22
Food aid		72	23
Other		15	5
Self-assessed physical health	134		
Good/very good		86	64
Moderate		39	29
Poor/very poor		9	7
Self-assessed mental health*	124		
Good		32	26
Anxious		24	19
Depressed		65	52
Delirious		3	2
Chronic disease	134		
Yes		34	25
No		101	75
Sexually transmitted infections diagnosed during the previous year	133		
Yes		12	9
No		121	91
HIV testing	135		
Never tested		25	19
Last test<1 year		45	33
Last test>1 year		65	48
History of abortion (cisgender MWSWs)	128		
Yes		76	59
No		52	41
Sexual relations with anal or vaginal penetration without a condom	117		
Yes		17	15
No		100	85
Use of contraception	128		
Yes		42	33
No		68	53
Not concerned		18	14
Type of contraception when used (among the 42 MWSWs who used contraception)	41		
Oral contraception		9	22
Intrauterine devices		6	15

Continued

Table 3 Continued

	Total without missing data	Number	%
Progestin injections		1	2.5
Contraceptive implants		24	58
Condoms		1	2.5
Cervical cancer screening	135		
At least once		21	16
Never		80	59
Not concerned		34	25

*Self-assessment scale with four modalities: good, anxious, depressed and delirious.
MWSWs, migrant women sex workers.

for their own health and (4) health professionals' understanding of the importance of taking into account the specific characteristics, potential and vulnerability of the population.[37]

Peer mediators could be a relevant lever for the empowerment of MWSWs as they take into account the cultural and community specificities of the relevant population.[38] In the FASSETS study, we followed a representative cohort of 150 MWSWs to evaluate the effectiveness of a holistic approach to improve PrEP use based on community empowerment interventions implemented by community health workers. The results demonstrated that this holistic approach using health mediators was effective in recruiting this hidden population and increasing their knowledge of PrEP, as well as maintaining a high retention in care rate.[28]

A national experiment is currently underway in France to evaluate innovative organisational and financial arrangements for coordinated practice in primary care through so-called 'participatory health centres'. These centres aim to provide primary health and social care in towns and cities which is tailored to the needs of users; they are generally located in disadvantaged areas.[39] These centres could provide a more appropriate response to the needs of vulnerable populations, including MWSWs, and reduce the stigma embedded in the care system. Participatory centres provide medical, psychological and social support provided by a multidisciplinary team, including GPs and paramedics, psychologists, 'welcome' mediators (persons who ensure the visitor is greeted warmly on arrival to the centre), health mediators and professional interpreters.[40] The impact of this ongoing experiment on MWSWs still needs to be assessed.

Increasing healthcare efficiency by adapting the approach to care in general practice

A US study found that having a GP was the best predictor of health system use among sex workers.[41] In a French survey of migrant and non-migrant sex workers in 2010–2011, while 81% had consulted a GP during the previous year, only 41% had done so on their own initiative. Furthermore, only 47% had informed the doctor about their working activity.[42] In our study, having a GP was not associated with the quality of care or prevention (eg, HIV testing, contraception, preventing abortion, cervical cancer screening, number of emergency department visits, seeking care) in the multivariate analyses. Only 37% of MWSWs in the sample who reported having a GP had undergone at least one cervical cancer screening, whereas the current screening rate among women in the general French population is 58.7%.[43] This result highlights the broader structural barriers to care that MWSWs face. In addition to these structural barriers, the fact that MWSWs who had a GP did not have better health outcomes may be explained by the fact that all too often, MWSWs fail to discuss their sex work activity with their GP, which in turn prevents them from being able to initiate care tailored to their needs (risk of STIs, screening and management of violence, consideration of specific vulnerabilities, etc). Language barriers in healthcare lead to miscommunication between the medical professional and patient, reducing both parties' satisfaction and decreasing the quality of healthcare delivery and patient safety.[44] In our study, only 18.7% of the sample said they spoke French well/very well. Having an interpreter is therefore essential during medical consultations.[45]

In France, the government has an abolitionist approach to sex work. Although it is illegal, sex workers are considered victims of a system that exploits them; accordingly, they are not punishable by law for their activities. In contrast, clients can be punished, which in turn exacerbates the precariousness of MWSWs (eg, having to practise sex work in more hidden and less safe locations, limited funding under non-legal conditions).[9 19 46] Fear of stigma, influenced by the grey 'illegal but not sanctionable' status of sex work, may explain their reluctance to disclose their activities to healthcare professionals.[47] A qualitative study conducted in Hong Kong highlighted that women sex workers who experienced stigma developed coping strategies when accessing health services. It also highlighted the need for non-judgmental, holistic healthcare for these persons.[32] Based on the results of a qualitative study which highlighted the need for comprehensive medical, psychological and social care, as well as interpersonal and communication skills when caring

Table 4 Factors associated with having a GP (ie, a family doctor) (univariate and multivariate analyses)

	Univariate analyses			Multivariate analysis			
				Best model (BMA)**	Logistic regression		
Covariates	**OR**	**(CI)**	**P value**	**p!=0**	**OR**	**(CI 95)**	**P value**
Gender							
Cisgender	ref						
Transgender	0.9	(0.11 to 3.84)	0.8				
Age, years (mean)	1.07	(1.04 to 1.1)	**<0.001**	23			
Geographical origin							
Sub-Saharan Africa	ref						
North Africa	7.5	(2.86 to 21.6)		14.8			
Other	1.29	(0.38 to 3.88)	**<0.001**	6.7			
Marital status							
Single	ref						
Married or in a relationship	0.45	(0.19 to 0.97)	**0.04**	2.7			
Children							
Yes	–						
No	0.81	(0.24 to 2.36)	0.7				
Housing							
Other	–						
Homeowner	6.87	(2.97 to 16.8)	**<0.001**	**52.8**	**4.28**	**(1.53 to 12.7)**	**0.007**
Years living in France	1.07	(1.03 to 1.12)	**<0.001**	3.5			
French language speaking proficiency							
Did not speak French	1.28	(0.55 to 2.96)		1.2			
Spoke a little French	–						
Spoke French quite well/very well	3.28	(1.27 to 8.74)	**0.046**	4.4			
Self-reported French language writing level							
Could not write in French	3.03	(1.15 to 8.34)		1.4			
Poor	2.48	(1.04 to 6.21)		11.2			
Good to excellent	–		**0.044**				
Social insurance							
Universal health coverage (with or without complementary health)	13.7	(4.18 to 62.7)					
State medical aid	4.85	(1.43 to 22.4)		1.8			
No insurance	–	–	**<0.001**	**64.9**	**0.20**	**(0.04 to 0.73)**	**0.026**
Number of years as a sex worker	1.09	(1.02 to 1.17)	**0.005**	2.8			
Sexually transmitted infection during the previous year (n=133)							
Yes	1.5	(0.42 to 5)					
No	–		0.5				
Chronic illness							
No	Ref						
Yes	7.51	(3.25 to 18.3)	<0001	**99.8**	**8.55**	**(3.04 to 26.9)**	**<0.001**
Lifetime HIV testing							
At least once	–						

Continued

Table 4 Continued

Covariates	Univariate analyses			Multivariate analysis			
				Best model (BMA)**	Logistic regression		
	OR	(CI)	P value	p!=0	OR	(CI 95)	P value
Never	0.74	(0.27 to 1.86)	0,5				
Abortion history (among cisgender MWSWs)							
Yes	–						
No	1.08	(0.51 to 2.27)	0,8				
Use of contraception							
Yes	0.39	(0.14 to 0.98)		21.2			
No	–						
Not concerned	2.93	(1.16 to 7.75)	**0.001**	4.5			
Lifetime cervical cancer screening							
At least once	2.92	(1.00 to 9.00)		22.5			
Never	–			27.1			
Not concerned	0.92	(0.35 to 2.30)	0.12				
Number of emergency department visits during the previous year (mean)	1.57	(1.07 to 2.50)	**0.01**	10			
Hospitalised since arrival in France							
No	–						
Yes	4.05	(1.86 to 9.05)	**<0.001**	3.4			
Had never sought medical care despite being needed since arrival in France							
Yes	0.72	(0.19 to 2.25)					
No	–		0.6				
Had been refused care by a doctor since arrival in France							
No	–						
Yes	1.52	(0.29 to 7.19)	0.6				
Satisfaction with most recent medical consultation							
Very satisfied	2	(0.82 to 4.89)		1.4			
Satisfied	–						
Quite satisfied	0			7.2			
Not very satisfied or not at all satisfied	0.67	(0.09 to 3.1)	**0.044**				

Bold values indicate significant associations in univariate and multivariate analyses.
*The BMA analysis was performed on 105 people. The other 30 people had too many missing data; accordingly, they were not included in the model.
BMA, Bayesian model averaging; GP, general practitioner; MWSWs, migrant women sex workers.

for sex workers, French authors recently published a consultation guide for GPs which provides keys to (1) identifying factors which could lead to sex work, (2) taking into account the specific situation of sex work in terms of healthcare (eg, providing more frequent STI screening) and (3) adapting one's attitude to the medico-psychosocial needs of MWSWs.[48]

Strengths and limitations

FASSETS is the largest cohort study of MWSWs in France to date. By concentrating on MWSWs, it addresses a group which faces multiple layers of vulnerability, including the risk of HIV/STIs, gender-based stigma and challenges navigating healthcare systems as migrants. The Respondent Driven Sampling method we used is particularly effective for reaching hidden populations like MWSWs and ensures a more representative sample than traditional sampling methods.[49 50] Post hoc power calculation was 99% with an alpha of 5%, indicating satisfactory study power.

While the present ancillary study provides valuable insights into the health challenges and barriers faced

by MWSWs in France, several limitations should be considered when interpreting the findings. First, its geographical specificity limits the generalisability of the results to other cities, regions and populations with different socioeconomic and cultural contexts. Second, using self-reported data may have introduced biases—especially social desirability bias—given the sensitivity surrounding topics like sex work and health behaviours. This is compounded by the potential for under-reporting behaviours and needs due to the stigma associated with sex work. Third, the cross-sectional design of the study captured only a snapshot in time, hindering our ability to infer causality or observe longitudinal changes in health outcomes or service utilisation. Fourth, we used non-validated markers of general health for this ancillary study focusing on GPs. Finally, while the FASSETS study acknowledges the legal context of sex work in France, a more detailed analysis of how specific laws and policies affect MWSWs' health and access to healthcare in the country could yield more actionable insights for policymakers and advocates, thereby enhancing the study's impact on public health strategies and legal reforms.

CONCLUSION

The majority of MWSWs in our study did not have a GP (ie, a family doctor), highlighting a significant weakness in the French health system's ability to provide continuous, coordinated care to this vulnerable group. Having a GP did not correlate with better health outcomes or improved quality of care pathways. This finding highlights the complex barriers that MWSWs face in accessing healthcare, which go beyond the mere availability of healthcare providers. A critical barrier to accessing appropriate care is the reluctance of MWSWs to disclose their professional status to health professionals, due to stigma and their fear of discrimination, which in turn hinders the provision of comprehensive and tailored health services.

Our findings underscore the need for a healthcare system that is responsive to the unique needs and circumstances of MWSWs and highlight the importance of patient-centred approaches that prioritise the sexual health and well-being of this group. In addition, the potential of community health initiatives to empower MWSWs and improve their access to care warrants further exploration. Such interventions could play a key role in bridging gaps in healthcare and promoting health equity among MWSWs, thereby improving their overall quality of care and health outcomes.

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Acknowledgements We would like to extend our gratitude to all the community health mediators who participated in this study, as well as to the following partner associations and institutions: l'Amicale du Nid, Autres Regards, AIDES, Sindiane and Marseille sans Sida. Special thanks to Michel Bourrelly and Marc Lescaudron for their assistance and support. We also wish to thank Prospective Coopération and the Truth non-governmental organisations for their role in implementing this project. Finally, our thanks to Jude Sweeney (Milan, Italy) for copyediting this manuscript.

Contributors MJ conducted the study and drafted the manuscript, RS conducted the study, participated to data collection and revised the manuscript, MH performed the statistical analyses, contributed in drafting the manuscript (sections methods and results) and revised the manuscript, MM supervised the study on the field, contributed to participant recruitment and data collection and revised the manuscript, JG contributed to the conception of the study and revised the manuscript, PR supervised the study and revised the manuscript, BS contributed to the conception of the study and revised the manuscript, GI contributed to participant recruitment and data collection, and revised the manuscript, DM contributed to the conception of the study and revised the manuscript, MSR contributed to the conception of the word and revised the manuscript, SV contributed to the conception of the study and revised the manuscript, CE supervised the study and revised the manuscript, EM conceived, designed the study, conducted the study, supervised the study and drafted the manuscript. All the coauthors approved this version to be published. The guarantor (EM) accepts full responsibility for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

Funding This work was financially supported by: The Bouche du Rhone Administrative Department, Grant/Award Number: Not Applicable. - The city of Marseille, Grant/Award Number: Not Applicable. The NGO group 'Vers Marseille Sans Sida et Sans Hépatites', Grant/Award Number: Not Applicable. Sidaction, Grant/Award Number: 2020-2-AEQ-12890, The ViiV Healthcare, Grant/Award Number: Not Applicable. The authors declare that the funders had no role in the study design, data collection, analysis, or interpretation, in the writing of the manuscript, or in the decision to submit the article for publication.

Competing interests None declared.

Patient and public involvement Favoriser l'Accès à la Santé Sexuelle des Travailleuses du Sexe is a community-based participatory research study. It was initially developed by two French community-based non-governmental organisations (NGOs)—AIDES and The Truth—which provide community-based sexual and reproductive health support to migrant sex workers. Both NGOs include community-based health workers from the communities involved in the research. In line with the principles of community-based participatory research, this study involved the creation of partnerships, regular exchanges between researchers and community organisations/groups and the sharing of experiences between researchers, community-based health workers and the community of migrant women sex workers (MWSWs) in the city where this study was carried out. The first MWSWs included, the 'seeds', received three vouchers to be distributed to three MWSWs who met the inclusion criteria of the study and so on. Participants received a €10 food voucher for each follow-up questionnaire and €10 food vouchers for each person recruited.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by French Ethics Committee (no. 2021—A01746-35). Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. The original contributions presented in the study are included in the article; further inquiries can be directed to the corresponding author.

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