Satisfaction with mental health and psycho-social support services provided to Syrians under temporary protection in Turkey, evidence from refugee health training centers

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ARTICLE INFO

ABSTRACT

Aim: The objectives of the study were to determine the level of satisfaction with Mental Health and Psycho-social Support Services (MHPSS) provided to Syrians under temporary protection (SuTP) in Turkey and identify predictors that significantly determine the satisfaction with the MHPSS. This study is part of an effort by Ministry of Health (MoH) and World Health Organization (WHO) to evaluate the improvement in the MHPSS following capacity strengthening of social and health providers.

Methods: 357 Syrians under temporary protection were interviewed as they exited the Refugee Health Training Centers in 7 provinces in Turkey (Adana, Gaziantep, Hatay, Istanbul, Izmir and Sanliurfa), using patient exit interviews during mid-Oct – mid-Nov 2019. Uni and bivariate analysis for association was done using Chi square test for categorical variables, looking for significance at $p < 0.05$. Multivariate analysis (logistic regression) was used to determine the profile of service users and the predictors of satisfaction with MHPSS.

Results: Overall satisfaction with services was 93%. The profile of the MHPSS user suggests that the odds of using the service are twice as much for people aged 40+ years (OR 2.016, CI95% [1.129–3.601]), and five times less for married women (OR 0.180, CI95% [0.083–0.391]). The service characteristics that can predict service satisfaction are "having the needs met" (OR 138.73, CI95% [27.99–687.54]) and "satisfaction with the length of the appointments" (OR 54.50, CI95% [6.07–489.57]). There was no multicollinearity detected between the predictors.

Conclusions: MHPSS services provided by professionals trained by MoH and WHO, have a high satisfaction rate and are serving the SuTP population in need. The high satisfaction rate is predicted by having MHPSS needs met, which is a key indication of the usefulness of these services.

Introduction

Turkey is hosting 3,6 million Syrian refugees under temporary protection (SuTP) in the country and providing essential health services to them (Directorate General of Migration Management, 2020). Syrians that fled the conflict in their country have often witnessed death, injury of relatives, and destruction of property. They suffer from a range of mental health and psychological disorders (Hendrickx et al., 2019). Mental health problems range from major depression, to mental health issues for youth and adolescent, and daily stressors (Hassan et al., 2016, Kaya et al., 2019 Dec).

The importance of the Mental Health and Psycho-Social Services (MHPSS) to refugees and migrants is paramount Otake (2018). Espe-cially for SuTP in Turkey, these services have played an important role in the following: dealing with the past trauma from the conflict in Syria; the adaptation in the new environment in Turkey; and, the challenges and uncertainties of the future in Turkey. The mental health and psychoso-cial support services for refugees are mainly provided by the Ministry of Health (MoH), with additional support from local non-governmental organization (NGOs). The services provided follow the Inter-Agency Steer-ing Committee (IASC) guidelines. Most of the health care providers, em-ployed by the MoH, are trained through WHO supported programs.

General health services to refugees are provided through a network of refugee health centers (RHC) as part of the Turkish family physician network. The services, offered in Arabic, are culturally sensitive and free of charge. These services are provided by Syrian health personnel which are certified by the MoH. The certification followed the successful com-

pletion of a WHO-supported training program on adaptation to Turkish health care system.

The number of psychiatrists per 100,000 population in Turkey is lowest within WHO European Region Countries. The number of other mental health professionals and hospital beds allocated to psychiatry are also limited. The MoH integrated mental health services to primary care, considering limited resources in the area of mental health. Family physicians and healthy life centers are providing mental health and psychosocial services (PSS) to both host and refugee communities. The refugee health centers have also been providing PSS services.

While the MoH provides services throughout the country, WHO provides direct support to the operations of 7 Refugee Health Training Centers (RHTC) in 7 provinces with the majority of the SuTP population. The RHTCs have a dual purpose: PHC service provision (including MHPSS) and they serve as training grounds for Syrian doctors and nurses adaptation training. These are the only RHTCs in Turkey. All Syrian doctors and nurses serving in any of the RHCs (spread in 29 provinces) have completed the adaptation training in one of these 7 RHTCs, located one in each of the following provinces Ankara, Gaziantep, Hatay, Istanbul, Izmir, Mersin, and Sanliurfa. WHO supports the operation of these 7 centers through its implementing partners.

A systematic review of studies assessing utilization of MHPSS services in Europe showed that refugees receive inadequate mental health services relative to their needs (Satinsky et al., 2019). Underutilization of MHPSS can be a result of several factors including language barriers, insufficient services, lack of awareness, accessibility, costs and lack of culturally appropriate services (Fuhr et al., 2019, International Medical Corps, 2017) Information about and access to services may prove difficult for Syrian refugees and may be compounded by stigma and marginalization (Dickson and Bangpan, 2018).

The MoH and WHO have identified unmet need for mental health services and psychological support (Fuhr et al., 2019) and have been strengthening the capacity of the services to respond. MoH and WHO have trained over 3,300 Syrian and Turkish health professionals, dealing with cases needing mental health and psychosocial support, in several topics in MHPSS, since mid-2017. The training in MHPSS aimed to strengthen capacities of health providers to better detect, diagnose and treat cases that needed mental health and psychosocial support. While the long-term impact of improved MHPSS to population health might require years to be evident, the satisfaction with these services might be easier to measure and document in the short-term, and easier and more financially feasible to implement.

To date, there has been no quantifiable information on patient satisfaction for MHPSS in refugee populations. Unpublished data from an assessment on patient satisfaction, recently concluded by WHO, indicates that 78% of the respondents were happy with the general health services provided by the MoH. More specifically, the satisfaction rate was 85% for social and psychological services. Other authors have looked at barriers in provision Otake (2018), long-term impact of Dickson and Bangpan (2018), quality of, and issues of research (Augustinavicius et al., 2018; Bangpan et al., 2019; Tol et al., 2012) and ethics on MHPSS (Chiumento et al., 2017). However, there is limited evidence on MHPSS patient satisfaction in refugee settings.

The aim of this survey was to measure the level of satisfaction of beneficiaries with MHPSS services provided, through patient exit interviews in 7 RHTCs, following the provider capacity strengthening efforts. The specific objectives to understand the level of satisfaction with MHPSS services and to understand the predictors of increased satisfaction with MHPSS services.

This survey is part of a larger effort by WHO to evaluate the impact of the MHPSS provision (after the training of health providers) by looking at improved provider knowledge and increased utilization of services. The assumption is that improvements in the service provision model and the provider capacity strengthening would result in improved clinical knowledge; a more attentive provider behavior in identifying cases; improvement in the quality of services provided; and, ultimately in a better health status of the beneficiaries. The desired impact was increased satisfaction of beneficiaries with services provided. The outcome measure is beneficiary satisfaction.

An adequately trained and motivated health workforce would provide better MHPSS services. The improvements made in the services provided in the RHTCs would eventually be translated to satisfied beneficiaries.

Patient exit interviews have been used with success by previous studies to identify the impact of interventions and treatments in different fields (from diabetes to depression) (Ervin et al., 2019, Lewis et al., 2019). Previous studies have used patient exit interviews to understand the satisfaction with services (Kantorski et al., 2017, Adhikary et al., 2018), quality of service (Cleary and Edgman-Levitan, 1997, Jenkinson et al., 2002) and compliance to treatment when away from health facilities. In this survey we use the interviews to understand the satisfaction with the MHPSS. Based on a previous study, the patient selection is suggested to be done while patients enter the facility, to avoid potential bias based on the length of the consultation (Geldsetzer et al., 2016).

Methods

This survey has a cross sectional design. The study population was the total of Syrians that sought service to any of the 7 RHTCs (in Ankara, Gaziantep, Hatay, Istanbul, Izmir, Mersin, and Sanliurfa) during a period of one month (mid-Oct - mid-Nov 2019). The study population includes patients exiting the RHTC after having an evaluation/session/consultation. The random selection of a representative sample was not possible. We did not have access to, nor was possible to construct a sampling frame listing all the Syrians that would seek service at any of the RHTCs listed. As such, we included in the study, all beneficiaries/service users that decided to seek service at the center during the period in question. Patients exiting from the center were introduced with the purpose of the study and asked verbal permission to be interviewed. Introduction was done and permission to be included in the survey was received verbally by the interviewer before the interview. The overall permission to conduct the study in the 7 RHTCs was obtained from the MoH and RHTCs facility managers prior to starting data collection. As the study was not based on a representative sample, no records were kept for refusals and only data on successful interviews were recorded.

The interview consisted of structured questions, organized in a questionnaire, administered by trained interviewers. Interviewers were used to minimize issues with literacy and data entry. The data collection instrument (questionnaire) was developed jointly by a team of MoH-WHO, and it was tested at the Ankara RHTC. The questionnaire was translated both in Turkish and Arabic.

The interviewers were chosen from the population of bilingual patient guides in the 7 RHTCs with experience in interviewing and case management. Interviewers were trained on the methodology and data collection instrument for one day in September 2019. Training was done by a team of trainers from MoH and WHO.

The interviewers were stationed inside the RHTCs and contacted patients as they were exiting from a consultation provided either by a doctor (for general or mental health consultation) or a psychologist/social worker (for a PSS session), as no other occupational groups were involved in MHPSS provision.

The data was entered online as the interviews were conducted. Data entry utilized an online version of the questionnaire using Google forms. Data entry was completed by interviewers during the interview, giving the study authors the possibility to check for errors and monitor progress of the survey daily. The average time for the interview was 20 minutes for those that reported receiving a MHPSS that day or 5 minutes for those that did not. The interviews were conducted inside the center in secluded areas that ensured patient safety and confidentiality.

Table 1
Study Population Description and MHPSS Usage since Last Month (Chi Square Tests for Associations).

Respondent Characteristics		Gender (N=357)				Did you receive MHPSS last month? (N=357)			
		Male [N=81]	Female [N=276]	Total	p-value	No [N=104]	Yes [N=253]	Total	p-value
Gender	Male	*	*	*	*	25.9	74.1	100.0	0.47
	Female	*	*	*	*	30.1	69.9	100.0	
Age Cat	0-20	8.0	92.0	100.0	0.015	32.0	68.0	100.0	0.048
	21-40	20.7	79.3	100.0		32.5	67.5	100.0	
	40+	32.6	67.4	100.0		18.6	81.4	100.0	
Marital Status	Other	27.9	72.1	100.0	0.185	9.3	90.7	100.0	0.000
	Married	21.0	79.0	100.0		35.4	64.6	100.0	
Ethnicity	Arab	21.6	78.4	100.0	0.251	27.2	72.8	100.0	0.053
	Other	28.9	71.2	100.0		40.4	59.6	100.0	
Registration	No	30.8	69.2	100.0	0.479	46.2	53.9	100.0	0.169
	Yes	22.4	77.6	100.0		28.5	71.5	100.0	
Employment	No	12.0	88.0	100.0	0.000	0.0	100.0	100.0	*
	Yes	55.1	44.9	100.0		0.0	100.0	100.0	
Residence	Rent	23.8	76.2	100.0	0.844	0.0	100.0	100.0	*
	Other	20.0	80.0	100.0		0.0	100.0	100.0	
Income	0-1600 TL	18.7	81.3	100.0	0.039	0.0	100.0	100.0	*
	1600+ TL	29.8	70.2	100.0		0.0	100.0	100.0	
Province	ANKARA	8.0	92.0	100.0	0.000	0.0	100.0	100.0	0.000
	GAZIANTEP	47.7	52.3	100.0		2.3	97.7	100.0	
	HATAY	31.4	68.6	100.0		5.7	94.3	100.0	
	ISTANBUL	17.8	82.2	100.0		84.8	15.3	100.0	
	IZMIR	25.5	74.5	100.0		0.0	100.0	100.0	
	MERSIN	8.3	91.7	100.0		8.3	91.7	100.0	
	SANLIURFA	21.3	78.7	100.0		0.0	100.0	100.0	
Religion	Christian	0.0	100.0	100.0	0.446	100.0	0.0	100.0	0.028
	Muslim	22.5	77.5	100.0		29.1	70.9	100.0	
Education	No Education	26.7	73.3	100.0	0.011	0.0	100.0	100.0	*
	Primary	14.0	86.0	100.0		0.0	100.0	100.0	
	Middle	30.1	69.9	100.0		0.0	100.0	100.0	
	University	39.3	60.7	100.0		0.0	100.0	100.0	
MHPSS during last month?	No	20.2	79.8	100.0	0.470	*	*	*	*
	Yes	23.7	76.3	100.0		*	*	*	*
MHPSS Provider [N=253]	PSS	25.5	74.5	100.0	0.027	*	*	*	*
	DR	4.6	95.5	100.0		*	*	*	*

Once the data collection was completed, the data was exported from Google forms as an Excel file and was analyzed using Stata 16. Data cleaning and quality assurance was performed.

All respondents provided information on demographics (age, gender, marital status, ethnicity) and socioeconomic variables (registration status, religion, employment, residence, income, location, education level). The key question that controlled what happened next was whether the respondents had received a MHPSS session in the past month. If the respondent said "no", then the interview was terminated. If the respondent said "yes", the interview continued with detailed questions on the perception of the services received, as well as characteristics of the service. The comparison between the group that reported no MHPSS service in last month with those that had received MHPSS service allowed to build the profile of the MHPSS service user.

The information collected was satisfaction with services and/or separate elements of the MHPSS service provision (satisfaction with confidentiality, relationship with staff, availability of services, opening hours, length of appointment, frequency of appointment, waiting time, information provided on health status or treatment) as well as with the intention to return and/or whether they would recommend services to family members), recorded as Yes/No questions. "Satisfaction with MHPSS", and "having needs met" were asked as a Likert-like ordinal 0-10 scale. They were recorded as such during the interviews and were recoded as Yes/No with an arbitrary cut-off point of 7 or more during the analysis. We chose not to use it as a continuous measure as these numbered measures are generally considered ordinal and violate some statistical assumptions needed to evaluate them as normally distributed, parametric data (Bishop and Herron, 2015).

Data analysis included univariate and bivariate analysis for associations and significance, using Chi square tests for categorical variables.

Multivariate analysis (logistic regression) was used to explore the associations of multiple variables with the provision and satisfaction with MHPSS services, and measure the strength and direction of associations, reported as Odds Ratios.

As mentioned, it was not possible to have a sampling frame of all SuTP that seek MHPSS service, so we depended on the ones that would show up for a period of 1 month at the RHTCs. As we cannot determine how this specific population differs from the rest of MHPSS service-seeking individuals, we recognize that this might be a limitation to the methodology.

Results

The study population consisted of 357 individuals (276 females, 81 males) that sought service in the 7 RHTCs during one month in late 2019 (mid-October to mid-November). The population characteristics are shown in Table 1, as are the significance of the association with gender, determined by Chi square tests (where p-value is less or equal to 0.05). The majority (68.9%) of the participants are of 21–40 years range; married (75.9%) and of Arab (85.4%) descent. About 96.4% of them have registration as SuTP in Turkey which enables them to have free health service at government facilities. Only 27.3% of the participants have employment and 98% of them are renting. About 55% of the respondents have an income equal or less than 1600 Turkish Lira (range 0–5,500; median 1,500 TL; mean 1,600 TL), compared to the minimum salary for refugees in Turkey at 756 TL and the mean salary at 1,058 TL. Slightly more than 58% have no or primary education and 99.4% were Muslims.

Of all the 357 respondents interviewed, only 253 (70.9%) reported as having received an MHPSS that month, out of which 91.3% re-

Table 2

Characteristics Significantly Linked to "Use of MHPSS" (Stepwise Logistic Regression, dependent variable: "Used MHPSS in last month?").

Use of MHPSS	Odds Ratio	Std. Err.	z	P>z	[95% Conf.	Interval]
Married	0.180	0.07	-4.34	0.000	0.083	0.391
Age 40+	2.016	0.60	2.37	0.018	1.129	3.601
_cons	8.500	3.19	5.71	0.000	4.076	17.725

Table 3

Satisfaction with MHPSS and Demographic and Socio-Economic Characteristics (Chi Square Tests for Associations).

Respondent Characteristics		Satisfied with MHPSS? (N=253) (Row Percentage)			
		No [N=80]	Yes [N=173]	Total	p-value
Gender	Male	5.0	95.0	100.0	0.466
	Female	7.8	92.2	100.0	
Age Categorized	0-20	5.9	94.1	100.0	0.829
	21-40	7.8	92.2	100.0	
	40+	5.7	94.3	100.0	
Marital Status	Other	7.7	92.3	100.0	0.811
	Married	6.9	93.1	100.0	
Ethnicity	Arab	8.1	91.9	100.0	0.100
	Other	0.0	100.0	100.0	
Registration	No	0.0	100.0	100.0	0.458
	Yes	7.3	92.7	100.0	
Employment	No	7.1	92.9	100.0	0.960
	Yes	7.3	92.8	100.0	
Residence	Rent	7.3	92.7	100.0	0.532
	Other	0.0	100.0	100.0	
Income Categorized	0-1600 TL	5.8	94.2	100.0	0.353
	1600+ TL	8.8	91.2	100.0	
Province	ANKARA	14.0	86.0	100.0	0.179
	GAZIANTEP	9.3	90.7	100.0	
	HATAY	3.0	97.0	100.0	
	ISTANBUL	5.6	94.4	100.0	
	IZMIR	0.0	100.0	100.0	
	MERSIN	9.1	90.9	100.0	
	SANLIURFA	8.5	91.5	100.0	
Religion	Muslim	7.2	92.8	100.0	*
Education	No Education	4.4	95.6	100.0	0.189
	Primary	10.3	89.7	100.0	
	Middle	2.7	97.3	100.0	
	University	10.7	89.3	100.0	
Needs Met	No	53.9	46.2	100.0	0.000
	Yes	1.8	98.2	100.0	
Total		7.1	92.9	100.0	

ceived the MHPSS from a PSS staff at the facility (as opposed of the rest that received a consultation from a doctor). The mental health consultations are provided by a general practitioner (GP) and the psycho-social support is provided by either a psychologist or a social worker. No other occupational groups are providing MHPSS at these RHTCs.

The profile of MHPSS service user was determined by comparing the characteristics between participants that reported "use of MHPSS services" during last month, with the respondents that did not receive MHPSS during the last month, by using Chi square tests, looking for associations between respondent characteristics and the variable measuring "use of MHPSS" during last month, where the p-value was equal or less than 0.05. The respondents' characteristics associated with use of MHPSS services are shown in Table 1. After characteristics that were significantly associated with the use of MHPSS during last month were identified using Chi square tests, the significant variables were included into logistic regression models that had the "use of MHPSS during last month" (coded as Yes/No) as the dependent variable. The logistic regression models determined also the strength of the associations (and their direction) reported as Odds Ratios. The results are shown in Table 2. The following characteristics were significantly associated to the use of MHPSS service (determined with Chi square tests): age over 40 years old ($p = 0.048$), being not-married (but being single, divorced, or widowed) ($p < 0.000$), and province ($p < 0.000$).

Multivariate analysis (with logistic regression) of dependent variable "use of MHPSS" coded Yes/No and all population characteristics as independent variables indicates that the odds of using the service are twice as much for people aged 40+ years (OR 2.016, CI95% (1.129–3.601)), and five times less for married women (OR 0.180, CI95% (0.083–0.391)). It seems that registration, income and level of education have no bearing in MHPSS seeking behavior.

"Satisfaction with MHPSS services" and "Having needs met" were determined by a looking at the responses to a question Likert-like scaled 0-10 (10 being maximum). The responses were recoded arbitrarily as "Yes" if they were 7 or more (out of 10). This was done as we regarded these measurements as ordinal and not parametric (Grigoryan et al., 2014). Once the variables of "satisfaction with MHPSS" and "Having needs met" were recoded as Yes/No, the results were reported as percentages.

The overall "satisfaction with MHPSS" was 93% (males 95% and females 92%). The details of levels of satisfaction to MHPSS service are shown in Table 3. Age-group specific satisfaction ranged from 92.2% for 21–40 years old to 94.1% for up to 20 years old. The population char-

Table 4
Satisfaction with MHPSS and Satisfaction with Service Characteristics (Chi Square Tests for Associations).

Service Characteristics		Satisfied with MHPSS? (N=253) (Row Percentage)			
		No [N=80]	Yes [N=173]	Total	p-value
Received MHPSS since last Month?	Yes	7.1	92.9	100.0	*
MHPSS Provider	PSS	6.1	93.9	100.0	0.035
	DR	18.2	81.8	100.0	
Treatment Received	Consultation	4.7	95.3	100.0	0.038
	Prescription	33.3	66.7	100.0	
	Both	11.1	88.9	100.0	
Satisfied with Confidentiality?	No	0.0	100.0	100.0	0.630
	Yes	7.2	92.8	100.0	
Satisfied with Relationship with Provider?	No	66.7	33.3	100.0	0.000
	Yes	6.4	93.6	100.0	
Satisfied with Availability of Service?	No	0.0	100.0	100.0	0.577
	Yes	7.2	92.8	100.0	
Satisfied with Opening Hours?	No	9.1	90.9	100.0	0.794
	Yes	7.0	93.0	100.0	
Satisfied with Length of Appointment?	No	33.3	66.7	100.0	0.011
	Yes	6.5	93.5	100.0	
Satisfied with Frequency of Appointment?	No	14.3	85.7	100.0	0.454
	Yes	6.9	93.1	100.0	
Satisfied with Waiting Time for Appointment?	No	27.3	72.7	100.0	0.008
	Yes	6.3	93.8	100.0	
Satisfied with Information on Health Status?	No	25.0	75.0	100.0	0.166
	Yes	6.9	93.1	100.0	
Satisfied with Information on Treatment?	No	12.5	87.5	100.0	0.547
	Yes	6.9	93.1	100.0	
Would You Come Back for Same Service?	No	0.0	100.0	100.0	0.577
	Yes	7.2	92.8	100.0	
Would You Recommend Family Member?	No	0.0	100.0	100	0.577
	Yes	7.2	92.8	100	
Total		7.1	92.9	100.0	

Table 5
Service Characteristics Significantly Linked to "Satisfaction with MHPSS" (Stepwise Logistic Regression, dependent variable: "Satisfaction with MHPSS").

Satisfaction with MHPSS	Odds Ratio	Std. Err.	z	P>z	[95% Conf.	Interval]
Relationship	32.57	40.89	2.77	0.006	2.78	381.38
Length Appointment	8.14	7.40	2.31	0.021	1.37	48.34
_cons	0.06	0.09	-1.83	0.067	0.00	1.22

Table 6
Final model of "Satisfaction with MHPSS" and all other (Stepwise Logistic Regression, dependent variable: "Satisfaction with MHPSS")

Satisfaction with MHPSS	Odds Ratio	Std. Err.	z	P>z	[95% Conf.	Interval]
Needs Met	138.73	113.29	6.04	0.000	27.99	687.54
Length Appointment	54.50	61.04	3.57	0.000	6.07	489.57
_cons	0.01	0.02	-3.56	0.000	0.00	0.15

acteristics significantly associated to "being satisfied with the MHPSS service" determined using the Chi square test was "having needs met" ($p < 0.000$).

Stepwise logistic regression (entry in model at $p = 0.05$ and removal at $p = 0.06$) identified a 58 times higher likelihood of being "satisfied with MHPSS services" for people that had their needs met (OR 57.6, CI95% (16.22–204.45)). So, it seems that demographic or socioeconomic characteristics have no significant association with being satisfied with MHPSS services. The one factor that is linked is "having the needs met". Tests for multicollinearity using 'collin' package in Stata 16 revealed a variance inflation factor (VIF) of 1.61, indicating that there is no multicollinearity between "being satisfied with MHPSS" and "having needs met".

Predictors of satisfaction with MHPSS were identified with Chi square tests by looking at the individual associations of service characteristic confidentiality, relationship with staff, availability of services, facility opening hours, length and frequency of the appointment, wait-

ing time, information on health status or treatment) with "being satisfied with the MHPSS service" provided. Also, we looked at recommendation of the service for family members and whether the beneficiary would come back for the same treatment.

The results of the Chi square tests for associations (significant where p-value is equal or less than 0.05) are listed in Table 4. The service characteristics that are associated with service satisfaction are provider type ($p = 0.035$), satisfaction with treatment received ($p = 0.038$), satisfaction with relationship with the provider ($p < 0.000$), satisfaction with length of the appointment ($p = 0.011$) and satisfaction with waiting time ($p = 0.008$) (Table 5).

The multivariate analysis (logistic regression) with depend variable "satisfaction with service" identified having the needs met (OR 138.73, CI95% (27.99–687.54)) and satisfaction with the length of the appointments (OR 54.50, CI95% (6.07–489.57)) as the predictors that are the only statistically significant when all predictors are put in one model (Table 6).

Discussion

The overall level of satisfaction is high, with 93% of all respondents responding that they are happy with the MHPSS services.

This high percentage might be understood in the background of the needs of the SuTP. MHPSS needs make a considerable part of the overall health needs of the SuTP. Turkey provides free essential and quality health services to all SuTP and allows Syrian health providers legal employment within their profession, enabling thus barrier free health services to SuTP. The case of Turkey is unique, and it is difficult to find similar cases for comparison on the scale of MHPSS provision.

The high level of satisfaction might also be explained with the *quality of service* provided. As mentioned earlier, MoH-WHO have trained over 3,300 Syrian and Turkish health professionals in MHPSS topics. The knowledge gained has influenced the health professional's behavior, increasing the number of MHPSS consultations, and this may also be related with the increased satisfaction of services as reported by this survey.

The high level of satisfaction may in part be explained by the *low satisfaction threshold* and *low health literacy* of the SuTP in Turkey. Unpublished data from another WHO survey highlight the fact that the Syrian population has very low health literacy. Only 48% of respondents had sufficient health literacy, 25% had problematic health literacy and the remaining 27% had inadequate health literacy. According to the same study, the chances of deteriorating health literacy increase with age over 60 years old, lack of education or low income levels.

In this study we did not collect information on health literacy but did collect on education level. The education level was not associated to either provision or satisfaction with MHPSS. We could not compare the education level of respondents with Directorate General of Migration Management (DGMM) data, but were able to compare them with the Demographic and Health Survey (DHS) Turkey (2018 Turkey Demographic and Health, 2019) results. In our survey, the level of education is slightly higher than the DHS reported data (for both male and female respondents). One explanation might be that our survey respondents do not include age-groups under 18 years, which in the DHS report have the lowest levels of education completed. We did not measure the satisfaction threshhold.

The satisfaction with MHPSS reported (as percentage) in this survey is higher than the satisfaction reported by another WHO survey that looks at general satisfaction and that of social and psychological services (WHO, n.d). The MHPSS satisfaction rate reported in both surveys is higher than for the rest of the general health services.The difference might be due to different study design and/or sampling methods. Our study was not based on a representative sample. Studies suggest that non-response biases survey results depend on the relationship between a patient's satisfaction and her or his propensity to participate in the survey (Perneger et al., 2005). The higher the satisfaction with services, the higher is the response rate for similar studies.

Other studies have looked at satisfaction rates with general or specific health services (McCann and Bamberg, 2016) and have reported different rates of satisfaction. A common theme of those reported findings is that the satisfaction is reported high even in cases when the quality of services is low (Willis et al., 2015). Several of the reasons include fear of being rejected services in the future and/or inadequate preparatory work for the questionnaires used. Only one study reported similar satisafaction rate, but it studied the effects of community-based health insurance coverage and satisfaction with services (Badacho et al., 2016). Only two studies reported high satisfaction rates irrelevant of the needs being met (Grigoryan et al., 2014).

We are not aware of any study or evidence that health services in RHCs in Turkey are only provided if service users report satisfaction with services. On the contrary, a large body of evidence, as shown by our RHTCs service records for the past 30 months, indicated an increasing trend of the monthly consultations provided to service-users. The trend changed only in Mar 2020 and onwards due to the COVID-19 related restrictions, following MoH guidance on quarantine and social distancing, possibly also affected by increased fear and anxiety for COVID-19 exposure while requesting services at RHTCs.

When looking at the profile of the MHPSS service user, data suggests that the most likely user is a non-married beneficiary over 40 years old. The most satisfied are the single and widowed categories with unadjusted 94% and 96% respectively. The married and divorced categories have an unadjusted satisfaction rate at 93% and 85% respectively. This might be an indication of the fact that most needs are concentrated in the single and old category, or alternatively that marriage seems as a way of dealing with many of the issues that may lead to a MHPSS need. Specifically, being a single head of household might prove particularly challenging to leading a normal life as a SuTP in Turkey. The fact that almost all the respondents have registration, and the fact that all services are offered free of charge, might explain why the income or employment variables had no significance.

The Syrian women and girls make up 54% of the total Syrians under Temporary Protection in Turkey (Directorate General of Migration Management, 2020). The higher percentage of the female service users in this survey indicates that more and more women are seeking MHPSS as compared to their male counterparts. We could not find other reports where characteristics of respondents were described in MHPSS patient exit interviews. However, similar population health surveys on MHPSS needs, indicate that the percent females in the population are of similar with those percetanges reported by DGMM in the general population.

We looked at all the service characteristics that could be linked with satisfaction of MHPSS services.

Waiting time was significantly associated with the satisfaction with MHPSS. The median waiting time was 5 minutes, while the mean waiting time was 11 minutes. Satisfaction with the MHPSS might also explain the high rate of return or recommendation that we had in this survey.

"Satisfaction with MHPSS services" is significantly linked to "having the needs met". The multivariate analysis, with satisfaction with MHPSS as dependent variable and service-related predictors and independent variables, indicates that the "satisfaction with the relationship with the provider" and the "satisfaction with length of the appointment" is linked with "satisfaction with MHPSS"; but when looked at all the significant factors together (service-related and respondent characteristics) in one model, "having the needs met" and "satisfaction with the length of the appointment" the only significant ones.

Additional analysis was warranted due to the very large Odds Ratios (OR), reported in the logistic regression models, for having "needs met" as a predictor of the "satisfaction with MHPSS". The additional analysis did not indicate evidence of multicollinearity (between "satisfaction with MHPSS" and "having MHPSS needs met"). One possible explanation for the very large OR reported could be the sparse data bias (Greenland et al., 2016). When the data lack adequate case numbers for some combination of risk factor and outcome levels, the resulting estimates of the regression coefficients can have bias away from the null (downward when the estimate is below 1, upward when it is above 1). However, when considered, it is logical that if the health needs are met during the consultation, the respondent would report satisfaction with the services received.

This survey is limited to the MHPSS services provided in the RHTCs and by staff trained by MoH-WHO, and the perceptions of service users that visited 7 RHTCs for a month during end-2019. As such, we don't claim that the findings are in overall representative for all the refugee MHPSS service users in the whole country. We are not aware of any seasonal variations in the availability or quality of MHPSS services, with maybe an exception during the fasting period during Ramadan, when the monthly number of consultations is lower.

The results of this survey only give a snapshot of the perceptions about the MHPSS in RHTCs in Turkey. These RHTCs have provided more than 83,000 PSS consultations in 24 months (Apr 2018–Mar 2020), with an average of 3,483 PSS consultation/month for all the 7 RHTCs together. If respondents included in this survey would have only a monthly

MHPSS consultation, the sample in this study would make roughly 10.3% of the monthly PSS beneficiaries in all the RHTCs. However, we cannot estimate the average number of MHPSS consultations per person per month. If weekly MHPSS consultations would take place per respondent, the sample would make up 40% of all SuTP that seek MHPSS. As mentioned earlier this sample is not randomly selected and does not represent the total population of all SuTP in Turkey. A representative sample would need a complete sampling frame that lists all the SuTP in the 7 provinces. Due to individual data protection and other sensitivities, this information is not available to researchers.

In conclusion, the MHPSS services provided by MoH, with provider training complemented by WHO, have a high satisfaction rate, and are serving the SuTP population in need. The high satisfaction rate is predicted by having MHPSS needs met, which is a key indication of the usefulness of these services.

Since this survey has been completed, the MHPSS consultations numbers have shown a considerable decrease of 70% due to the recent COVID-19 pandemic. This decrease reflects calls by MoH and WHO for tele-working and social distancing to break the chair of infection spread and to protect the health service providers. However, we are aware that the need for MHPSS is still there, and that's why the MoH and WHO are looking at ways on how to continue deliver online MHPSS services and/or in-person safe services.

Similar models (to Turkey) of the MHPSS services provided to refugee populations may be beneficial to other countries/situations for alleviating the burden of past trauma and daily stressors.

The results so far indicate a usefulness of MHPSS provided by PSS staff. As such it is logical to recommend continued support for this category, in capacity strengthening, support and supervision, to further enhance the capacity to provide patient centered MHPSS services.

Declaration of Competing Interest

The authors declare that they have no competing interests.

Funding

Acknowledgements

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