Evaluation of MHPSS Hotline Data to Enhance its Services during COVID-19 Pandemic

Cairo 2021

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Background

General secretariat of Mental Health and Addiction Treatment (GSMHAT) is considered the main provider of service in the field of mental health in Egypt. It was established after the Ministerial Decree (No. 32) for the year 1998, as a central administrative entity, directly affiliated to the Minister of Health, for management of mental health hospitals and centers. At the beginning, the General Secretariat included only five hospitals, at present 20 hospitals and centers are affiliated to the General Secretariat, which provides mental health services around the country.

GSMHAT is under direct supervision of the Minister of Health; and applies the Psychiatric Patients Welfare Act (Act No. 71 of 2009), in addition to the Civil Service Act (Act No. 18 of 2015) and other laws, regulations and decrees that regulate work within facilities.

In the last few years, the number of patients with mental disorder seeking help from the health care system has grown significantly throughout the country. Lack of human and financial resources for community mental health is a significant barrier to progress in the treatment of patients in the community.

There is a disproportionate distribution of mental health facilities and services between urban and rural areas, as they are more prevalent in urban areas (especially in large cities) than in rural areas. They are deficient in areas such as Sinai, Matrouh, Hurghada, and New Waadi. In addition, there is a deficiency of community and preventive mental health services all over the country.

- The current population of Egypt is around 105 million based on the latest CAPMAS estimates.
- Mental health services provided for psychiatric patients through 20 governmental mental health hospitals all over the Egypt.
- Number of Primary Care units: 5391 distributed in all cities according to population density in each city.
- Total outpatient frequency in GSMHAT hospitals (Aug 2021): were 62732
- Total inpatient cases in mental health hospitals (Aug 2021): were 4751

the strategic plan was formulated and written (2015-2016). The proposed plan and strategies were put into a time line to be followed easily and clearly. This plan was reviewed by the General Secretary of Mental Health and Addiction Treatment to be approved, and finally given to all the hospital directors and department heads.

The current plan of the GSMHAT is based on the general framework of objectives of the strategic development plan of the MOH set by His Excellency, the Minister of Health; which forms a main strategic axis for development in all sectors as follows:

- Achieving better equitable health outcomes that lead to more prosperity and promotes economic development.
- Achieving full health care coverage so that all Egyptians can access good and safe health care services when needed, without incurring financial burdens.
- Increasing investments in health care, with optimal utilization of available resources.
- Developing and strengthening public health programs that promote and protect health.
- Ensuring the quality and safety of health services. Improving the mental health services management to ensure efficiency, accountability and transparency at all levels.

Introduction

The telephone Hotline for Mental Health and Addiction Treatment commenced working on 16th of December 2015. Hotline service was provided daily in specific limited hours from 8:00 am till 8:00 pm except for Friday from 2:00 pm to 8:00 pm.

It provided the following services:

1- Answers to inquiries concerning the services offered in its psychiatric hospitals of the GSMHAT
2- Receiving complaints concerning the services provided.

In 2016, a new service was added with a group of specialists also offering psychiatric consultations.

By the 1st of April 2020, with the spread of the Corona Virus the Secretariat of Mental Health and Addiction Treatment promoted and enhanced its Hotline services. The Secretariat believes that mental health plays an important and effective role in the current crisis and is essential to provide social awareness and psychological support to help people to overcome the crisis.

It exerted all effort to address the crisis by making psychological support available to all communities by increasing Hotline activities. A Hotline Team began to answer calls and provide services 24/7.

The services are provided through carefully chosen, well trained team members who are continuously supervised by an experienced Psychiatrist.

The team consists of groups as follows: (See the definitions chapter):

1. Service Providers

2. Therapists, consisting of:

    a. The main team

    b. Specialized Service Team

    c. volunteer team

3. Supervisors, consisting of:

    a. admin supervisors

    b. Technical Supervisors

4. Technical Supervisor of Hotline Teams

5. Hotline Manager

These Professional Therapists are volunteers, who work in the Secretariat hospitals,

- A professional Team of 10 volunteer social workers or nurses receive the initial calls and offer information and refer those who need consultation to the Psychiatric Team.
- A Psychiatric Consultation Team consisting of 50 volunteer therapists, physicians, specialists from the staff of the General Secretariat Hospitals for Mental Health and Addiction Treatment. They offer professional mental health consultation.
- A Supervision Team supervises all volunteers and monitors the quality of care provided by the therapists and received by the callers.
- An expert Supervisor monitors the work of the Supervisors and prepares training plans for the teams.
- An Administrative Team is responsible for coordination, follow up and logistical matters.

Purpose of hotline development:

1. Promoting awareness of mental illness
2. Dealing with psychological emergencies and transferring them to specialized services
3. Continuing and developing the services provided by the 24/7 hotline
4. Connecting clients to mental health hospitals
5. Support in times of crisis, for example, during the Covid-19 crisis

Project Aims (Objectives):

1. Analyzing collected data of the national hotline service for Psycho Social Support during the COVID-19 Pandemic to evaluate outcomes.
2. To support the observation of errors in the data collection process.
3. To submit full comprehensive report with detailed Hotline profile to stakeholders to identify needed actions to enhance its services and overcome challenges.

Methodology

Study design:

A cross-sectional study was conducted.

Phase 1. Data cleaning, validation and analysis

Objective: Inspecting and modeling the selected available data of the hotline service to conclude useful targeted information.

The Principle Coordinator with 2 experts/team members met for 6 days to detect biased, inaccurate or irrelevant data records in order to replace or delete it, and to clean, review the available selected data from missed or biased data in order to ensure the accuracy of potentially analyzed information.

A specialized statistician worked on data analysis using SPSS program). Excel sheet was used to describe the collected data. Double entry method was done for the collected data to ensure the validity.

Time frame: 3 months

Phase 2. Data Interpretation and Report writing

Objective: Extracted meaningful inference, conclusions and recommendations were written in the report.

The Principle Coordinator with 3 experts /team members had 6 meetings; they came out with results interpretation, conclusions and recommendations for hotline service development transferring the results into evidence-based recommendation to enhance the Hot line services to provide remote MHPSS services information.

Time frame: 3 months

Project timeline: 6 months

Ethical considerations:

Permission was obtained from the Secretary General of General Secretariat of Mental Health and Addiction treatment

Operational Definitions

Service Providers: A number of 21 employees who have been trained to receive and to handle the calls to provide the necessary service. The service provider is the first line to receive the calls and according to the type of call, the necessary service was provided to the client as follows:

1. Dealing with psychological emergencies and transferring them to services designated for them.
2. Referring the psychological consultation from the callers to the therapists.
3. Referring the psychological consultations from medical teams who are in the quarantine hospitals to the therapists for evaluation and then transferring them to the services designated for them.
4. Responding to inquiries about psychiatric services provided by government sector in the Arab Republic of Egypt.
5. Receiving complaints about the services provided in GSMHAT hospitals.
6. Referral to the specialized service team for providing psychological support to patients with Covid-19 and in quarantine isolation.
7. Referral to the specialized service team for providing psychological support to anyone of the medical teams.

Therapists (doctor, social worker, or psychologist): The therapists' team is divided into:

1. **The main team**: A number of 32 therapists from the hospitals of the General Secretariat for Mental Health and Addiction Treatment, and they work full time 8 hours on specific days.
2. **Volunteer team**: A number of 15 therapists from inside or outside of the GSMHAT hospitals work for specific hours at separate times (one or two hours per week).
3. **Specialized Service Team**: A number of 10 therapists, distributed during weekdays, and they provide psychological support to individuals who have been diagnosed with Covid-19 while they are in home quarantine and need psychological support, or any of the medical teams who feel stressed or suffering from any psychological symptoms and need specialized support.

Supervisors: they are divided into:

1. **Administrative supervision**: they are consisting of two administrative supervisors of service providers, and two administrative supervisors of the therapists, and the supervisor is responsible for the following tasks:
   - Coordinating the workflow of the hotline (as the hotline works throughout the day and is divided into 3 periods):
   - From 8 am to 4 pm
   - From 4 pm to 12 midnight
   - From 12 midnight to 8 am
   - Removing any administrative or logistical difficulties facing the work.
2. **Technical supervision:** they are consisting of 10 technical supervisors for service providers and the therapists' team.

The supervision is done through the following:

1. The therapists are divided into 3 teams; each team has two supervisors. Each team and its supervisors perform peer supervision once every two weeks (6 peer supervision per month).
2. A daily supervisor for the entire 24 hours.
3. Supporting service providers and therapists if necessary and in need.
4. Teaching and guiding service providers and therapists on how to deal with emergency calls and challenging calls.

Hotline Technical Supervisor:

1. Following up the workflow of the hotline and ensure that the agreed rules and policies are implemented.
2. Supervising the technical supervisors.
3. Attending monthly meetings.
4. Developing the work system plan and training plan in accordance with the developments and work system.
5. Submitting monthly and annual reports.
6. The technical supervisor is under the continuous supervision of an expert and the Secretary General of Mental Health and Addiction Treatment.

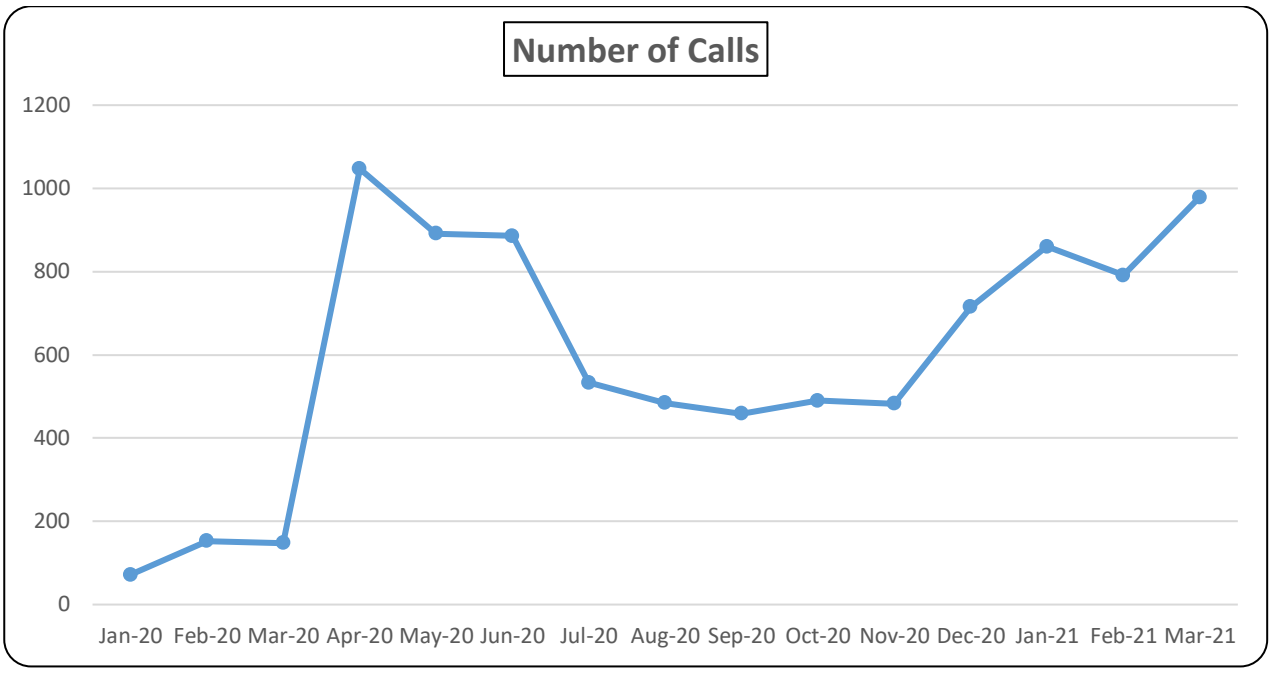
Hotline manager:

1. Follow up the workflow of the line and ensure that the agreed rules and policies are implemented.
2. Administrative supervision of supervisors and hotline teams.
3. Development of the work system within the hotline and follow-up work.
4. Attending monthly meetings.
5. Submitting monthly and annual reports.
6. The director of the hotline unit is under the permanent supervision of the Secretary-General of Mental Health and Addiction Treatment.

Results

Table (1): Description of calls received by the hotline overtime (January 2020 - March 2021)

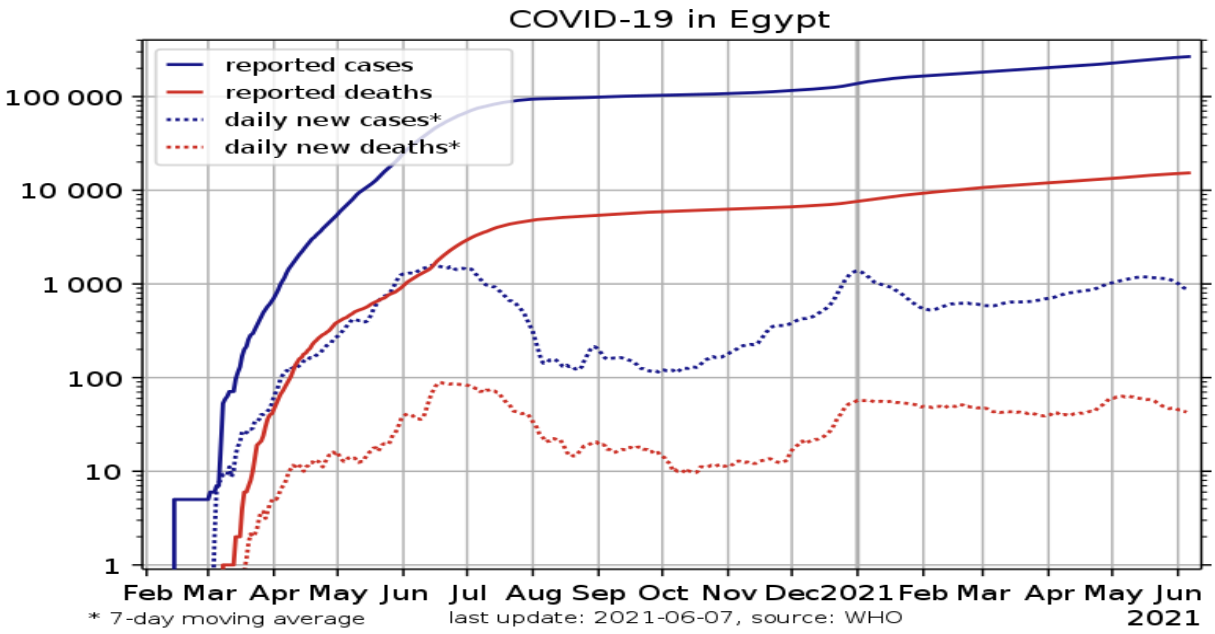
Month		No. of Calls	Women	Men	1st Shift	2nd Shift	3rd Shift	Information about mental health service	Complaints	Support and consulting
January 2020		72	29	43	68	4	0	67	4	1
February 2020		153	40	113	139	14	0	144	7	2
March 2020		148	42	106	137	11	0	130	9	9
April 2020		1047	595	452	406	525	116	355	6	686
May 2020		891	479	412	276	415	200	307	10	574
June 2020		886	469	417	393	405	88	292	11	583
July 2020		533	250	283	258	207	68	243	6	284
August 2020		484	241	243	218	209	57	237	10	237
September 2020		459	217	242	193	199	67	241	17	201
October 2020		490	206	284	195	232	63	318	13	159
November 2020		483	198	285	225	204	54	306	15	162
December 2020		715	233	482	313	337	65	418	30	267
January 2021		860	314	546	360	406	94	496	12	352
February 2021		791	248	484	357	378	56	401	21	310
March 2021		979	315	515	426	453	100	489	24	317
Sum		8991	3876	4907	3964	3999	1028	4444	195	4144



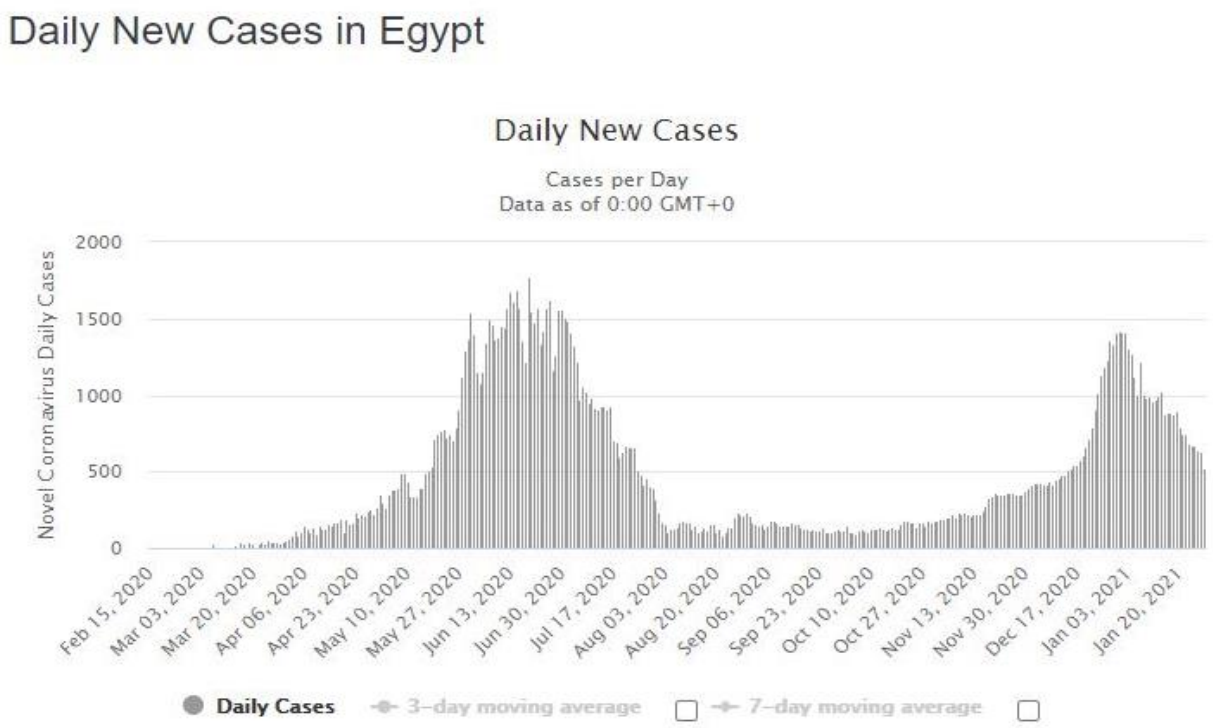
Graph (1): Number of calls received by the hotline overtime (January 2020 - March 2021)

The service was developed to reach 24 hours/seven days a week (24/7), starting from April 2020, the data for the months (January, February, March 2020) were added for the noticeable difference in providing the service after development.

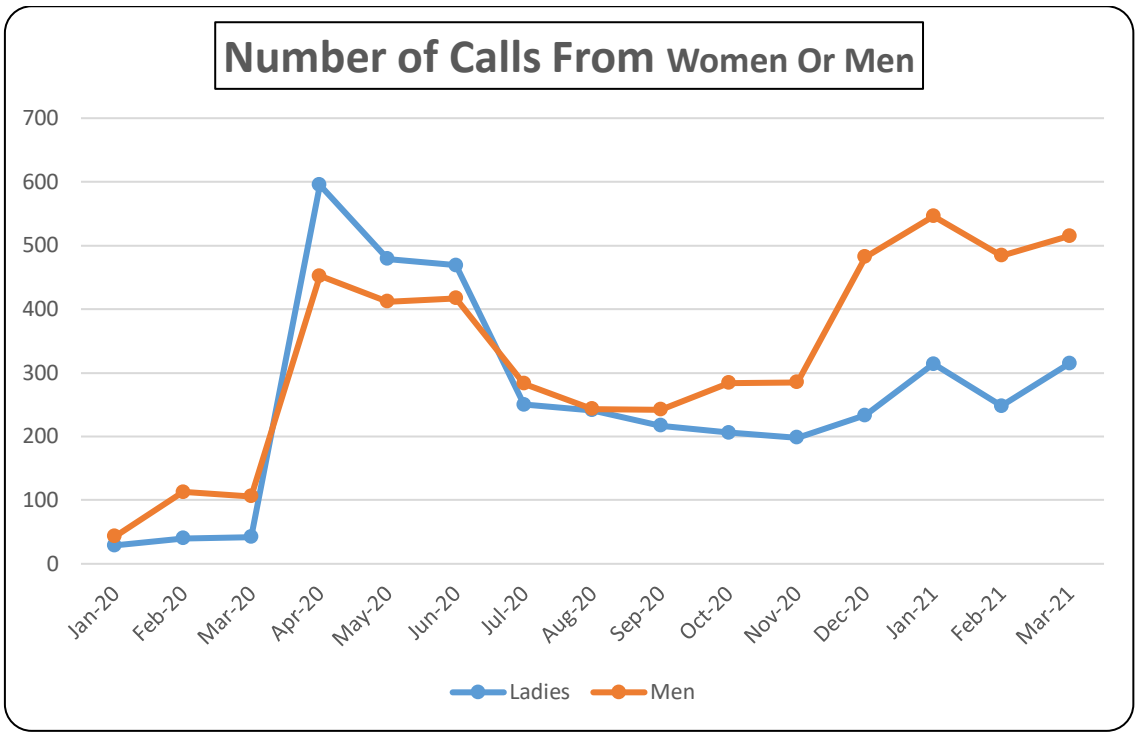
The hotline from April 2020 to March 2021 showed an increase in the number of calls during April, May and June 2020, which reflects the importance of the hotline as the first line of mental health support service during the Covid-19 pandemic and then showed a gradual decrease in the number of calls between June 2020 - November 2021 for several reasons that may be due to the advent of the holy month of Ramadan, the lack of publicity for the service and the decline of the numbers after the first wave, which necessitated the provision of publicity for the service in various forms, which in turn led to an increase in the number of calls starting from December 2020 and also coinciding with the increase in the number of covid-19 cases in the same period. (Table 1) (Chart 1,2,3).



Graph (2): Incidence of COVID-19 cases in Egypt overtime (February 2020 - June 2021)

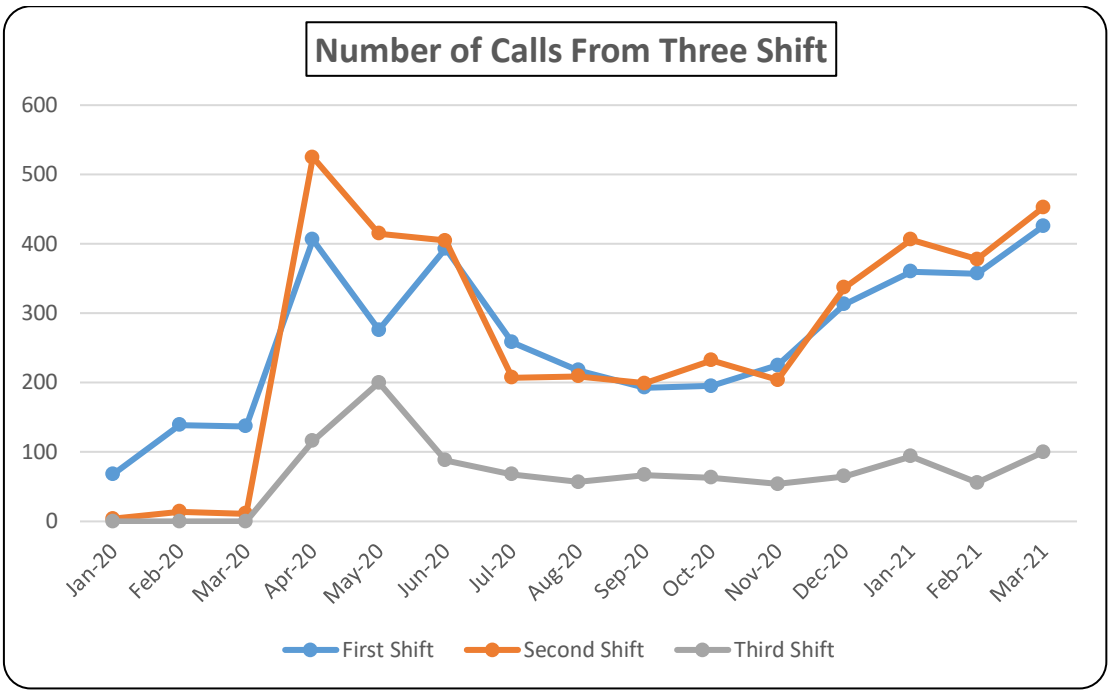


Graph (3): Incidence of COVID-19 new cases in Egypt overtime (February 2020 - January 2021)



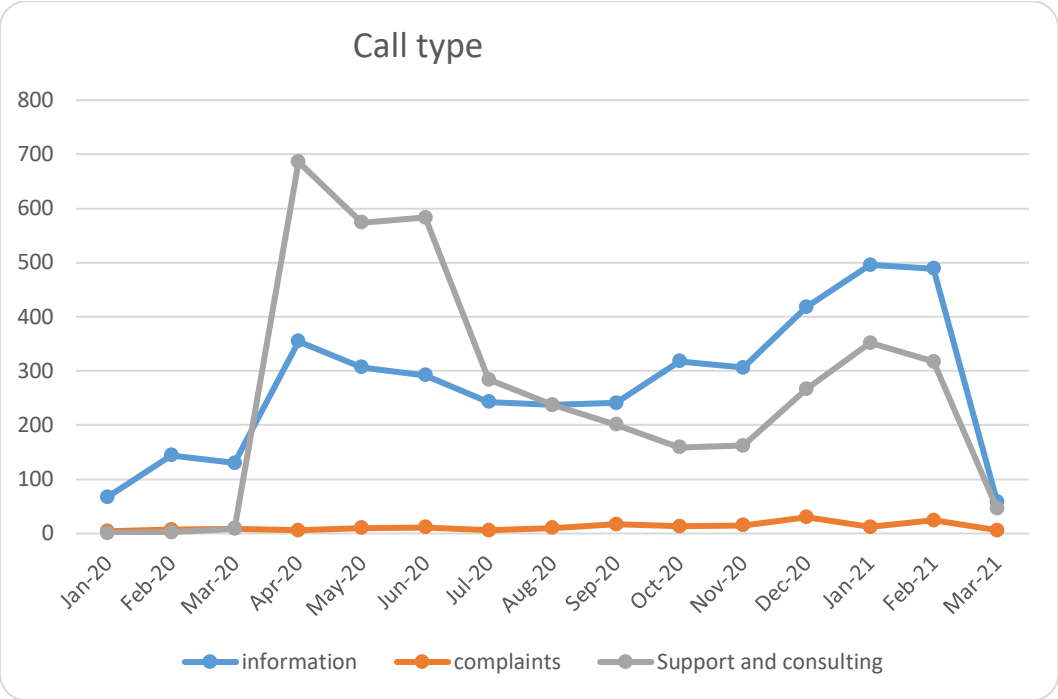
Graph (4): Gender distribution of the received calls by the hotline overtime (January 2020 - March 2021)

The difference in distribution between males and females in hotline calls from April 2020 to March 2021 reflects the special needs of women for counseling and psychological support in the Egyptian society, and that the hotline is a mental health service that is easily accessible for females in Arab countries and eastern societies, while a rise in the number of calls from men appears in the period from December 2020 to March 2021, may be due to increasing the awareness and promotion of the service during this period. (Table 1) (Chart4)



Graph (5): Number of the received calls by the hotline in different working periods overtime (January 2020 - March 2021)

An increase in the number of calls received from the hotline service was observed in the second period of working hours (from 4 in the afternoon to 12 at night) and the number of calls in the night period (from 12 at night to 8 in the morning) was withdrawing, which reflects the need to intensify advertising in the morning and evening period to provide the service in the available times for those interested in the service. (Table 1) (Graph 5)

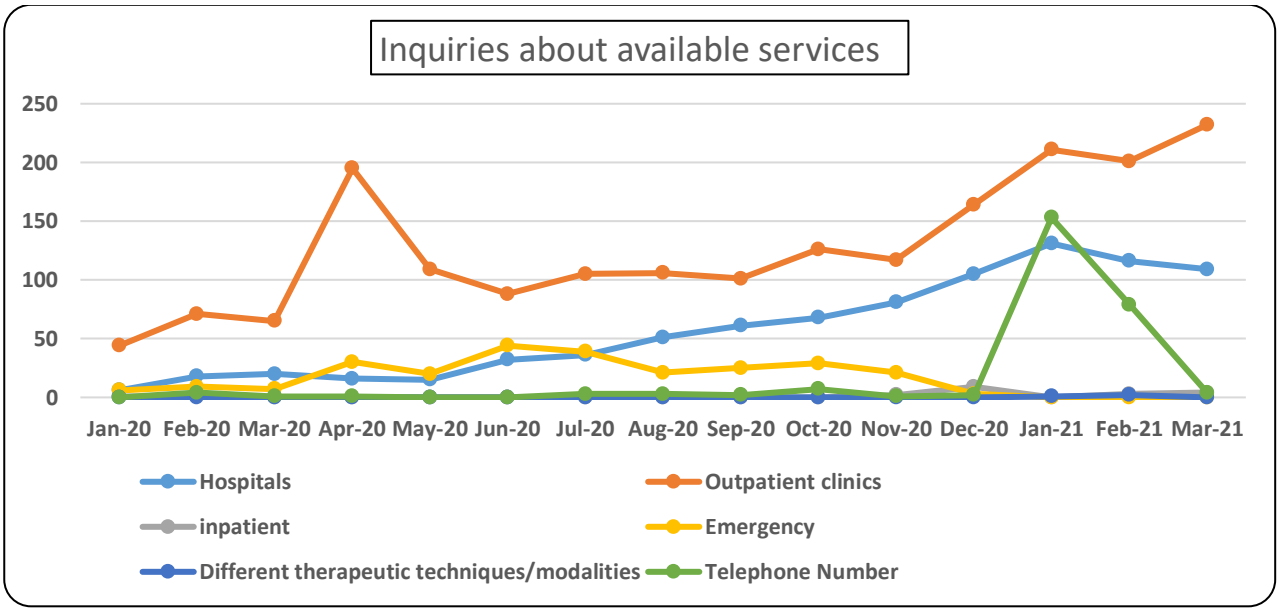


Graph (6): Number of the received calls by the hotline overtime (January 2020 – March 2021) according to the type of service needed (inquiries- complaints-consultation)

There was an increase in the number of service required for counseling and psychological support, as well as an increase in the number of calls for those wishing to inquire about the services provided by the GSMHAT, which reflects the increased awareness during counseling and psychological support and the desire of clients to learn about the various direct services provided by the GSMHAT. While the decrease in complaints received by the hotline reflects the importance of awareness of the services provided by the hotline and the need for speedy resolution of complaints, which will lead to an increase in customer confidence. (Table 1) (Graph 5)

Table (2): Description of inquiries received by the hotline overtime (January 2020 - March 2021)

Month	Inquiries received by the hotline overtime							
	Hospitals	Outpatient clinics	Inpatient	Emergency	Different therapeutic techniques/ modalities	Phone Number	Other	Sum
January 2020	6	44	1	6	0	0	10	67
February 2020	18	71	1	9	0	4	41	144
March 2020	20	65	0	7	0	1	37	130
April 2020	16	195	0	30	0	1	113	355
May 2020	15	109	0	20	0	0	163	307
June 2020	32	88	0	44	0	0	128	292
July 2020	36	105	0	39	0	3	60	243
August 2020	51	106	0	21	0	3	56	237
September 2020	61	101	0	25	0	2	52	241
October 2020	68	126	0	29	0	7	88	318
November 2020	81	117	2	21	0	1	84	306
December 2020	105	164	9	3	0	2	135	418
January 2021	131	211	0	0	1	153	0	496
February 2021	116	201	3	0	2	79	0	401
March 2021	109	232	4	0	0	4	140	489
Sum	**770**	**1729**	**17**	**254**	**3**	**273**	**967**	**4013**

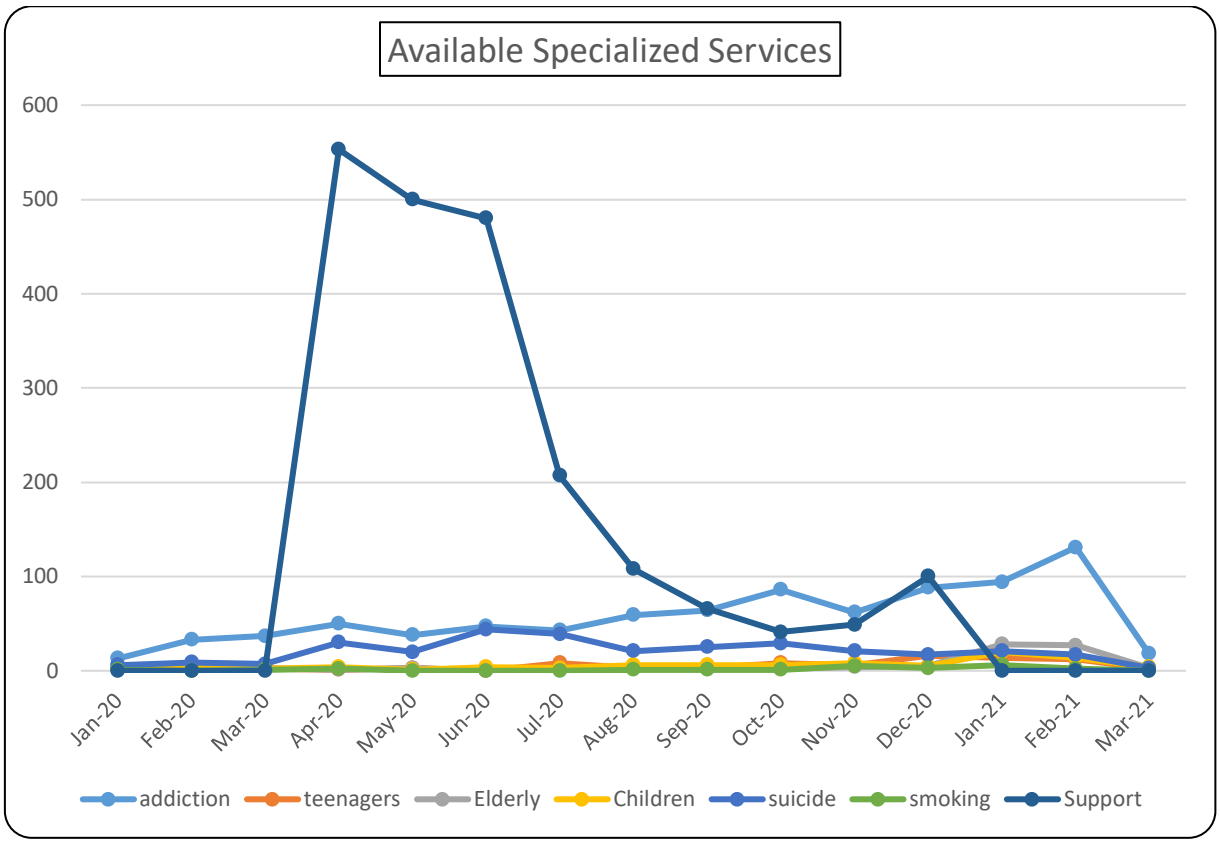


Graph (7): Description of inquiries received by the hotline overtime (January 2020 - March 2021)

Inquiries in the incoming calls to the hotline showed an increase in the inquiries for the outpatient clinics of the GSMHAT. (Table 2) (Graph 7)

Table (3): Description of services inquiries received by the hotline overtime (January 2020 - March 2021)

Month	Addiction	Teenagers	Elderly	Children	Suicide	Smoking	Support	Sum
January 2020	13	2	2	1	6	1	0	25
February 2020	33	4	0	5	9	0	0	51
March 2020	37	2	3	2	7	1	0	52
April 2020	50	1	1	4	30	2	553	641
May 2020	38	3	3	1	20	0	500	565
June 2020	47	0	0	4	44	0	480	575
July 2020	43	8	3	3	39	0	207	303
August 2020	59	3	3	6	21	1	108	201
September 2020	64	3	2	6	25	1	66	167
October 2020	86	8	2	6	29	1	41	173
November 2020	62	6	4	8	21	5	49	155
December 2020	88	16	5	5	17	3	100	234
January 2021	94	14	28	20	21	6	0	89
February 2021	131	12	27	14	17	2	0	59
March 2021	18	2	3	4	3	0	0	5
Sum	**863**	**84**	**86**	**89**	**309**	**23**	**2104**	**3295**

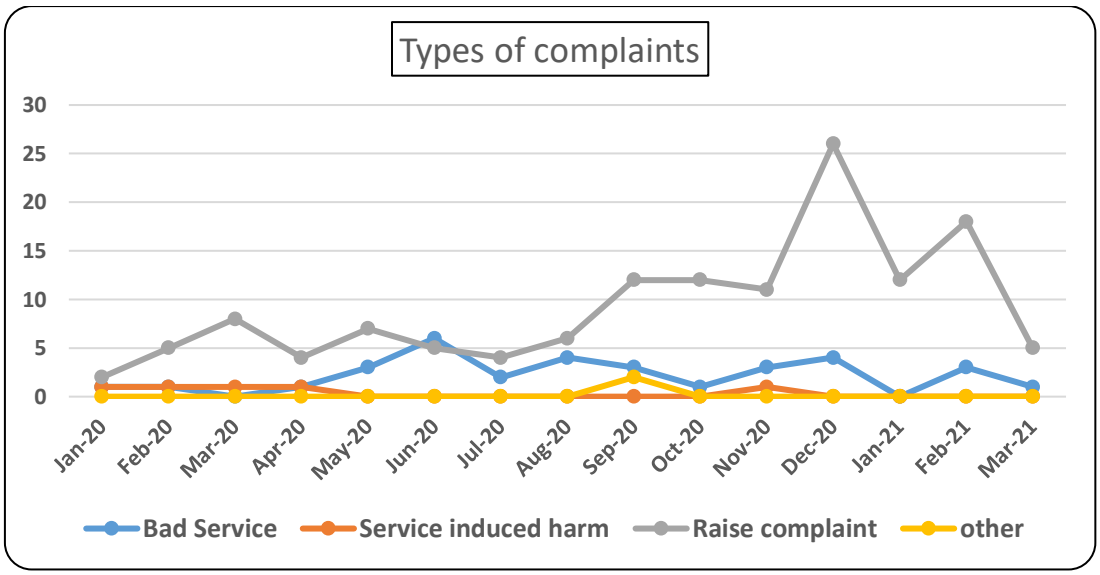


Graph (8): Description of services received by the hotline overtime (January 2020 - March 2021)

The received calls to the hotline showed an increase in the need for psychological support of the community members at the time of crisis and may reflect the awareness of the service during the service promotion. (Table 3) (Graph 8)

Table (4): Description of type of complaints for the services provided by the GSMHAT received by the hotline overtime (January 2020 - March 2021)

Month	Bad Service	Service induced harm	Raise complaint	other	Sum
January 2020	1	1	2	0	4
February 2020	1	1	5	0	7
March 2020	0	1	8	0	9
April 2020	1	1	4	0	6
May 2020	3	0	7	0	10
June 2020	6	0	5	0	11
July 2020	2	0	4	0	6
August 2020	4	0	6	0	10
September 2020	3	0	12	2	17
October 2020	1	0	12	0	13
November 2020	3	1	11	0	15
December 2020	4	0	26	0	30
January 2021	0	0	12	0	12
February 2021	3	0	18	0	21
March 2021	4	0	20	0	24
Sum	**33**	**5**	**125**	**2**	**177**

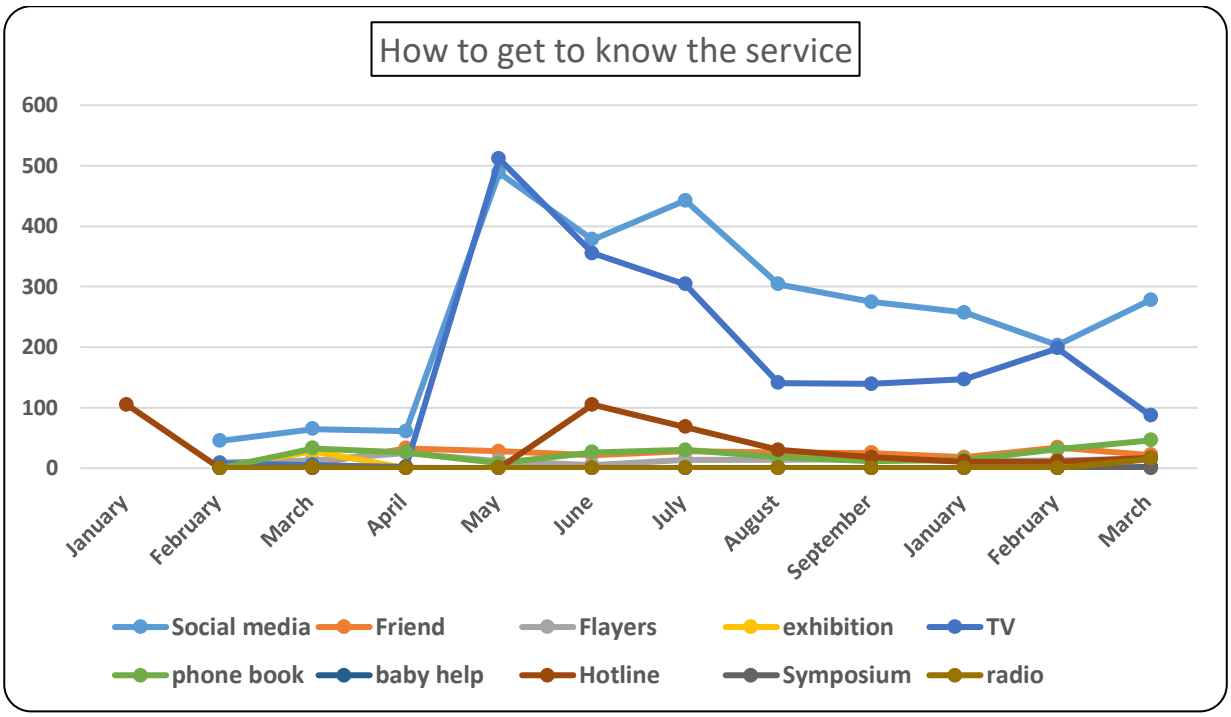


Graph (9): Description of type of complaints for the services provided by the GSMHAT received by the hotline overtime (January 2020 - March 2021)

The type of complaints received to the hotline about services provided by the General Secretariat for Mental Health and Addiction Treatment shows an increase in claims relative to complaints about the service provided. (Table 4) (Graph 9)

Table (5): Description of type of referral to the hotline service overtime (January 2020 - March 2021)

Month	Social media	Friend	Flayers	exhibition	TV	phone book	baby help	Hotline 105	Symposium	radio	sum
January	45	8	9	2	8	0	0	0	0	0	72
February	65	7	13	28	5	33	0	0	1	1	153
March	61	33	25	0	2	26	1	0	0	0	148
April	488	28	12	0	511	8	0	0	0	0	1047
May	378	22	5	0	355	26	0	105	0	0	891
June	442	28	14	0	304	30	0	68	0	0	886
July	304	26	14	0	141	18	0	30	0	0	533
August	275	25	15	0	139	12	0	18	0	0	484
September	257	18	12	0	147	14	0	11	0	0	459
January	203	34	13	0	198	31	0	11	0	0	490
February	278	22	16	0	87	46	2	17	0	15	483
March	381	64	24	0	109	76	0	47	0	14	715
Sum	**3177**	**315**	**172**	**30**	**2006**	**320**	**3**	**307**	**1**	**30**	**6361**

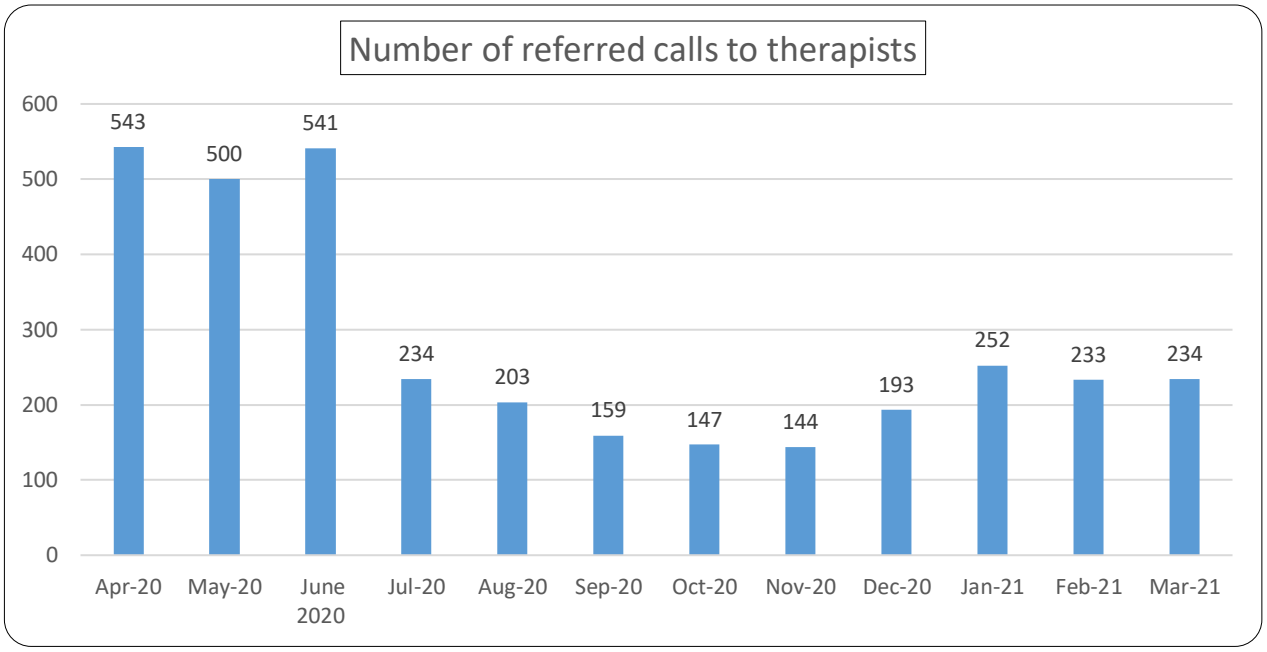


Graph (10): Description of type of referral to the hotline service overtime (January 2020 - March 2021)

An increase in the number of calls as a result of getting to know the service through social media and television was observed, which shows the need for intensifying of advertising in these two channels as they are an easy access to the service seekers. (Table 5) (Graph 10)

Table (6): Number of referred calls to therapists' overtime (April 2020–March 2021)

		N	%
Number of calls	**April 2020**	543	16.1%
	May 2020	500	14.8%
	June 2020	541	16.0%
	July 2020	234	6.9%
	August 2020	203	6.0%
	September 2020	159	4.7%
	October 2020	147	4.4%
	November 2020	144	4.3%
	December 2020	193	5.7%
	January 2021	252	7.4%
	February 2021	233	6.9%
	March 2021	234	6.9%



Graph (11): Number of referred calls to therapists' overtime (April 2020 - April 2021)

The service was developed to become for 24 hours, seven days a week (24/7) and the psychological counseling service was carried out by one individual of the specialists before April 2020 and with the pandemic, there was a structure for the counseling and psychological support team (see the definitions chapter) starting from April 2020.

The referred calls overtime April 2020-March 2021 noticed increase in number during April, May and June 2020 then gradually decrease in calls number of July 2020 – April 2021, which revealed the importance of hotline as the first line of mental health services support during COVID-19 Pandemic. (Graph11).

N.B

There was a difference between the number of calls referred to the therapists and the number of calls made by the therapists for several reasons may be:

1 The number is wrong

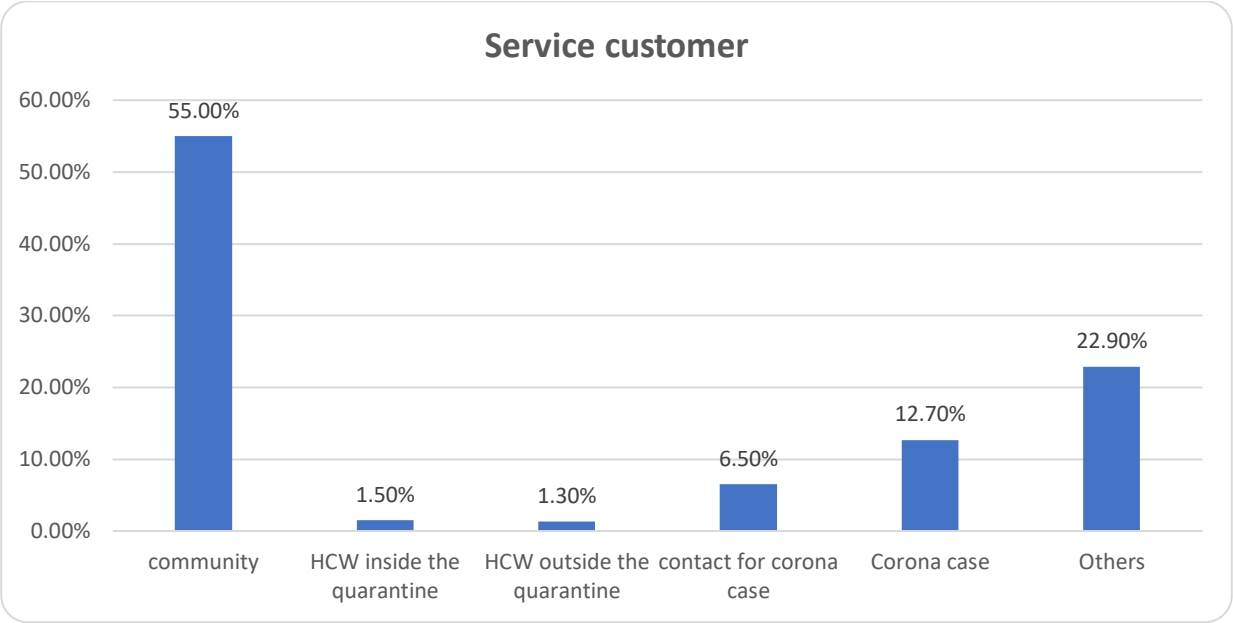
2The phone is off

3The therapists did not record the form after the calls

4 other reasons

Table (7): service customer type (referred calls)

		N	%
Service customer	**Community**	1862	55.0%
	HCW inside the quarantine	52	1.5%
	HCW outside the quarantine	43	1.3%
	contact for corona case	221	6.5%
	Corona case	431	12.7%
	Others	774	22.9%

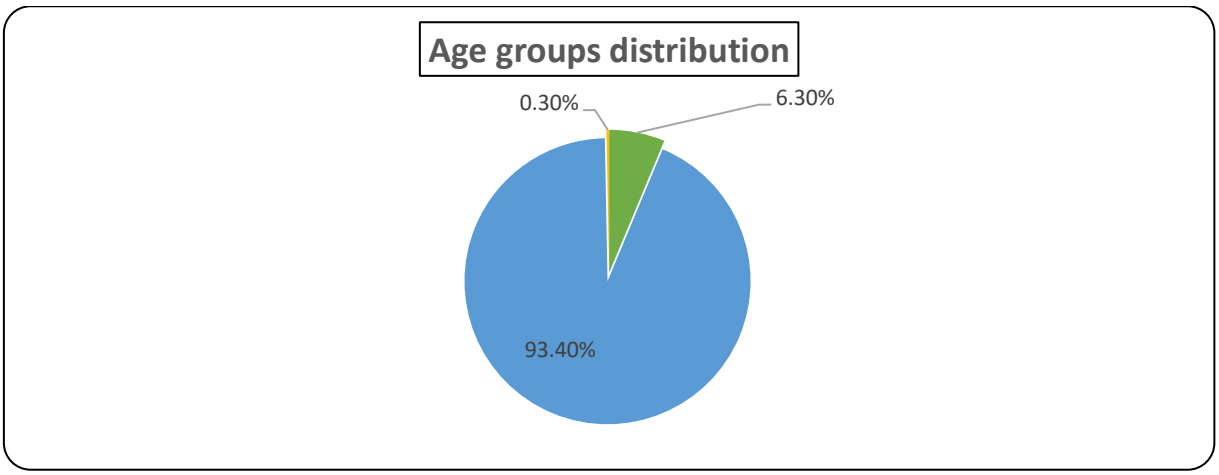


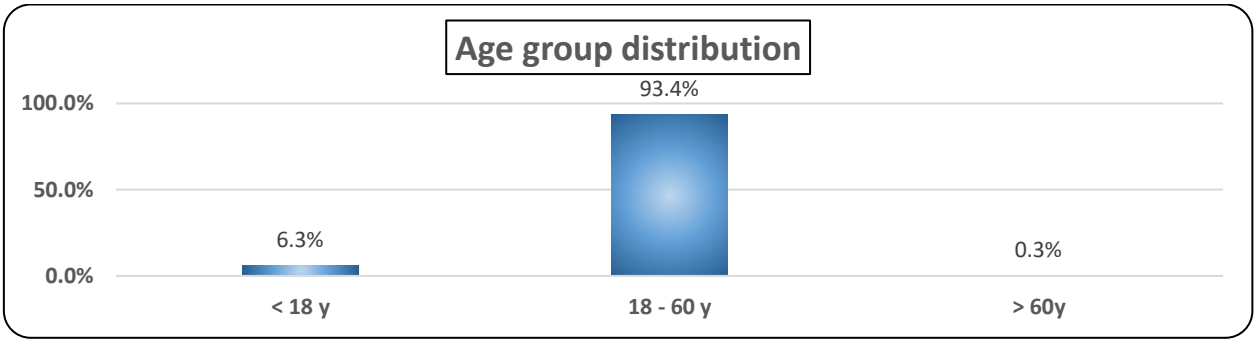
Graph (12): service customer type (referred calls)

The referred calls vary between corona cases, quarantine and community cases, and the study revealed the majority of calls from community, which reflect the importance of hotline services to different categories of population**.** (Graph 12).

Table (8): Age groups distribution for the referred calls

Age groups distribution		N	%
Age groups	**< 18 y**	211	6.3%
	18 - 60 y	3132	93.4%
	> 60y	11	0.3%



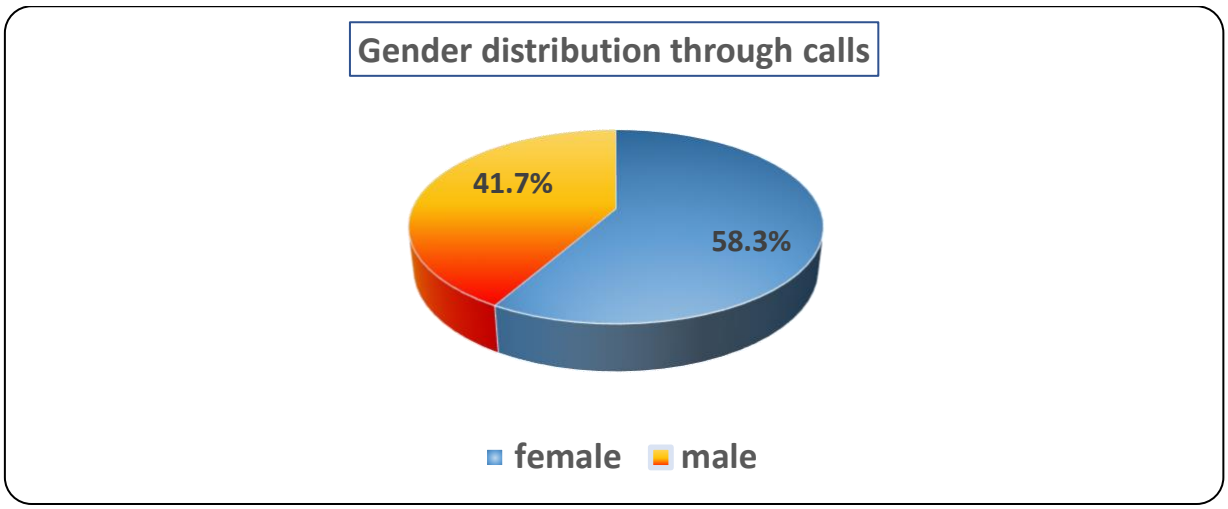


Graph (13): Age groups distribution for the referred calls

The sample age group of the study was wide range; the majority of the calls between (18-60) years old, minor calls below 18 years old and no calls above 60 years old, which revealed that facility of mental health services linked to cognitive abilities and competences of users .table (8,10,11) (Graph 13,15,17).

Table (9): Gender distribution of the referred calls

		N	%
Sex	**Female**	1973	58.3%
	Male	1410	41.7%

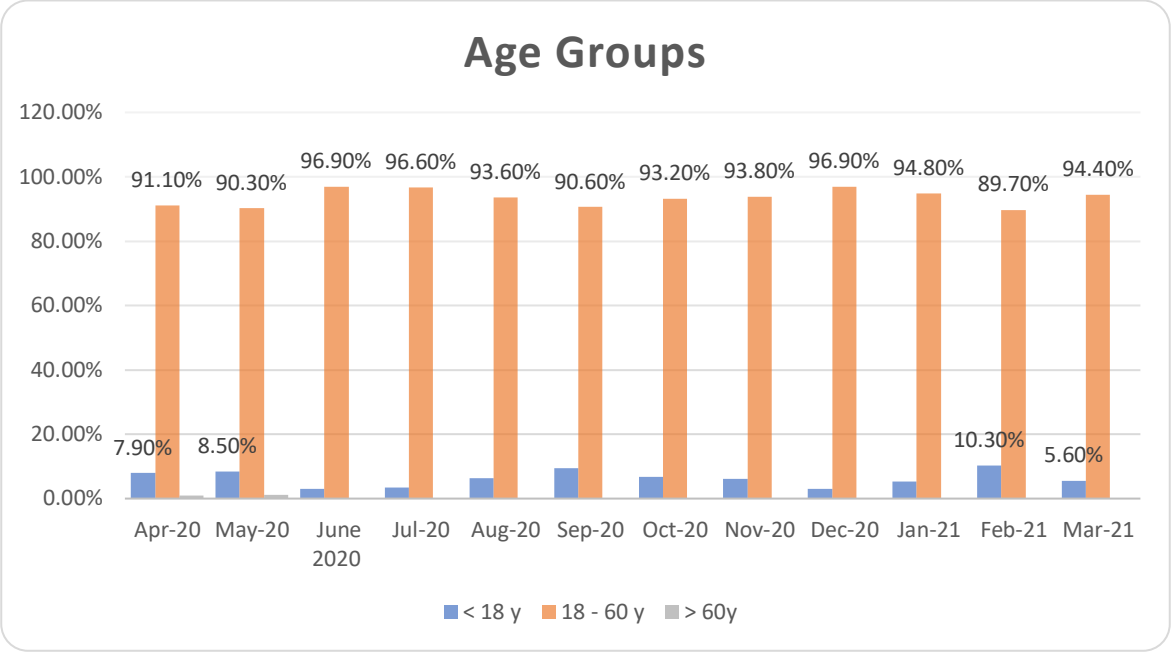


Graph (14): Gender distribution through referred calls

The distribution difference between male and female through the hotline calls overtime April 2020-March 2021 reflect the special needs of women to psychological support in Egyptian community, and how the hotline is an accessible mental health services for female in Arabic countries and eastern cultures. (Table 9 ,11) (Graph 14 , 16).

Table (10): Number of referred calls to therapists' overtime according to the age distribution

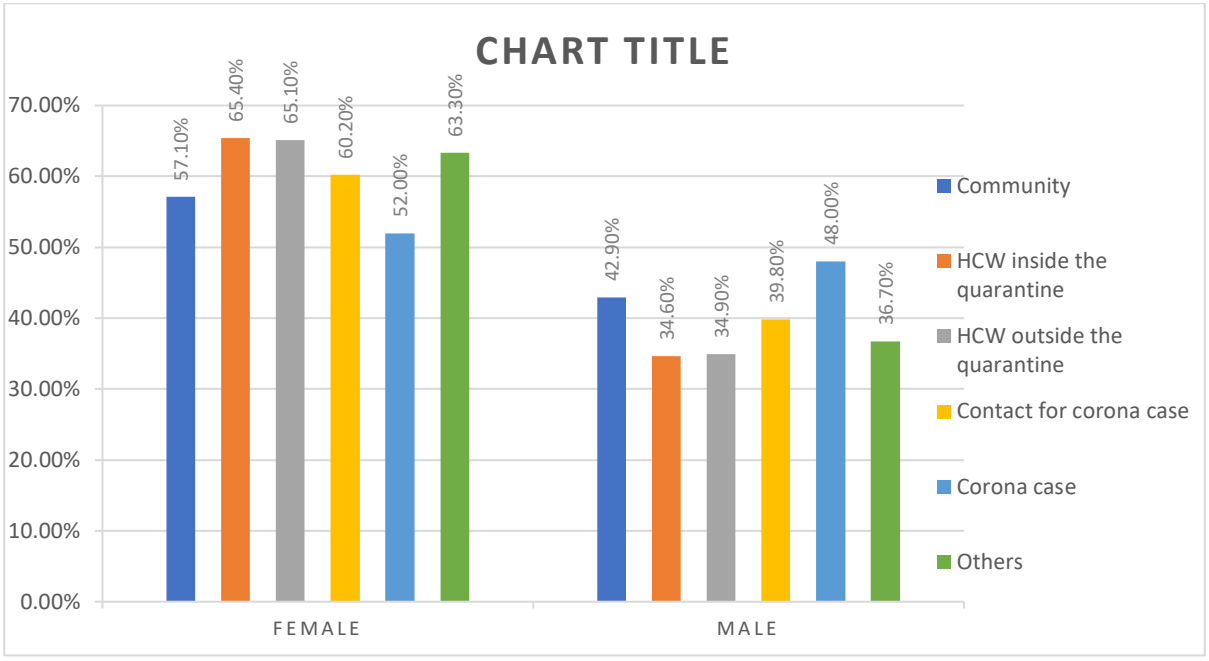
Month and year							P
	< 18 y		18 - 60 y		> 60y		
	N	Row %	N	Row %	N	Row %	
April 2020	42	7.9%	482	91.1%	5	0.9%	.000*
May 2020	41	8.5%	438	90.3%	6	1.2%	
June 2020	17	3.1%	524	96.9%	0	0.0%	
July 2020	8	3.4%	226	96.6%	0	0.0%	
August 2020	13	6.4%	190	93.6%	0	0.0%	
September 2020	15	9.4%	144	90.6%	0	0.0%	
October 2020	10	6.8%	137	93.2%	0	0.0%	
November 2020	9	6.2%	135	93.8%	0	0.0%	
December 2020	6	3.1%	187	96.9%	0	0.0%	
January 2021	13	5.2%	239	94.8%	0	0.0%	
February 2021	24	10.3%	209	89.7%	0	0.0%	
March 2021	13	5.6%	221	94.4%	0	0.0%	



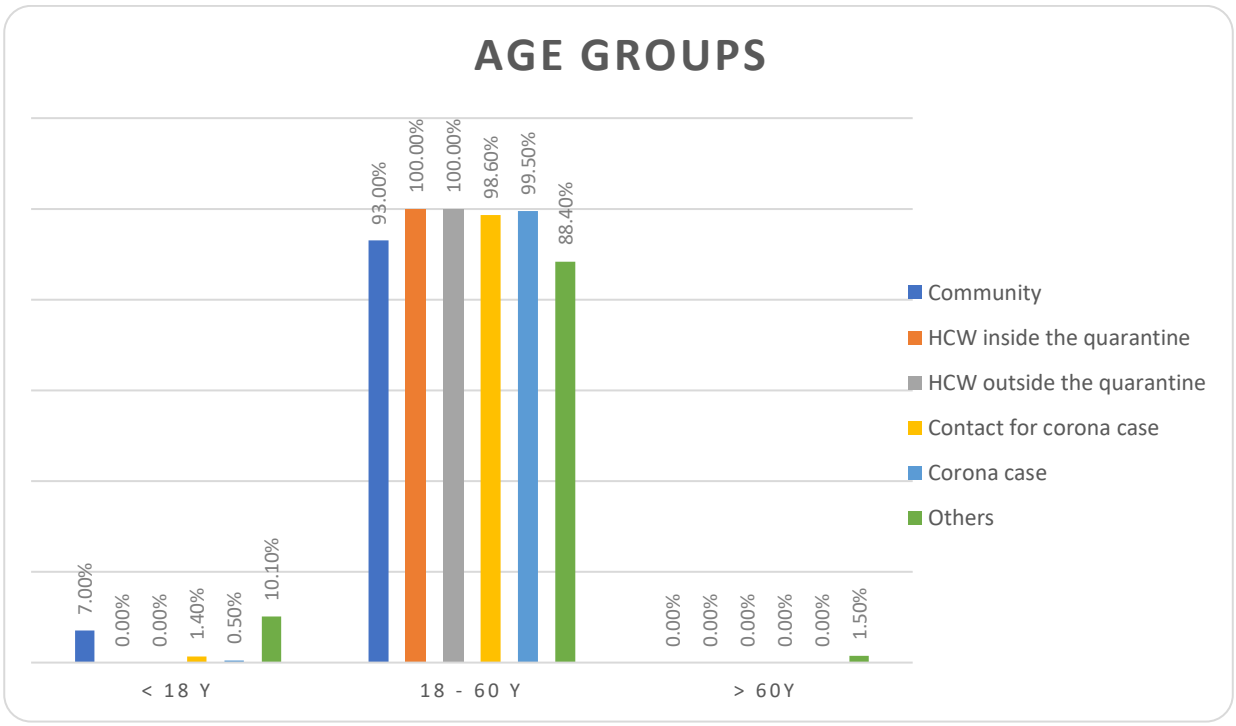
Graph (15): Number of referred calls to therapists' overtime according to the age distribution

Table (11): Number of referred calls to therapists according to the customer type, the age distribution and gender distribution

		Therapists												P
		Community		HCW inside the quarantine		HCW outside the quarantine		Contact for corona case		Corona case		Others		
		N	%	N	%	N	%	N	%	N	%	N	%	
Sex	Female	1064	57.1%	34	65.4%	28	65.1%	133	60.2%	224	52.0%	490	63.3%	.002*
	Male	798	42.9%	18	34.6%	15	34.9%	88	39.8%	207	48.0%	284	36.7%	
Age groups	< 18 y	130	7.0%	0	0.0%	0	0.0%	3	1.4%	2	0.5%	76	10.1%	.000*
	18-60 y	1732	93.0%	51	100.0%	43	100.0%	216	98.6%	425	99.5%	665	88.4%	
	> 60y	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	11	1.5%	



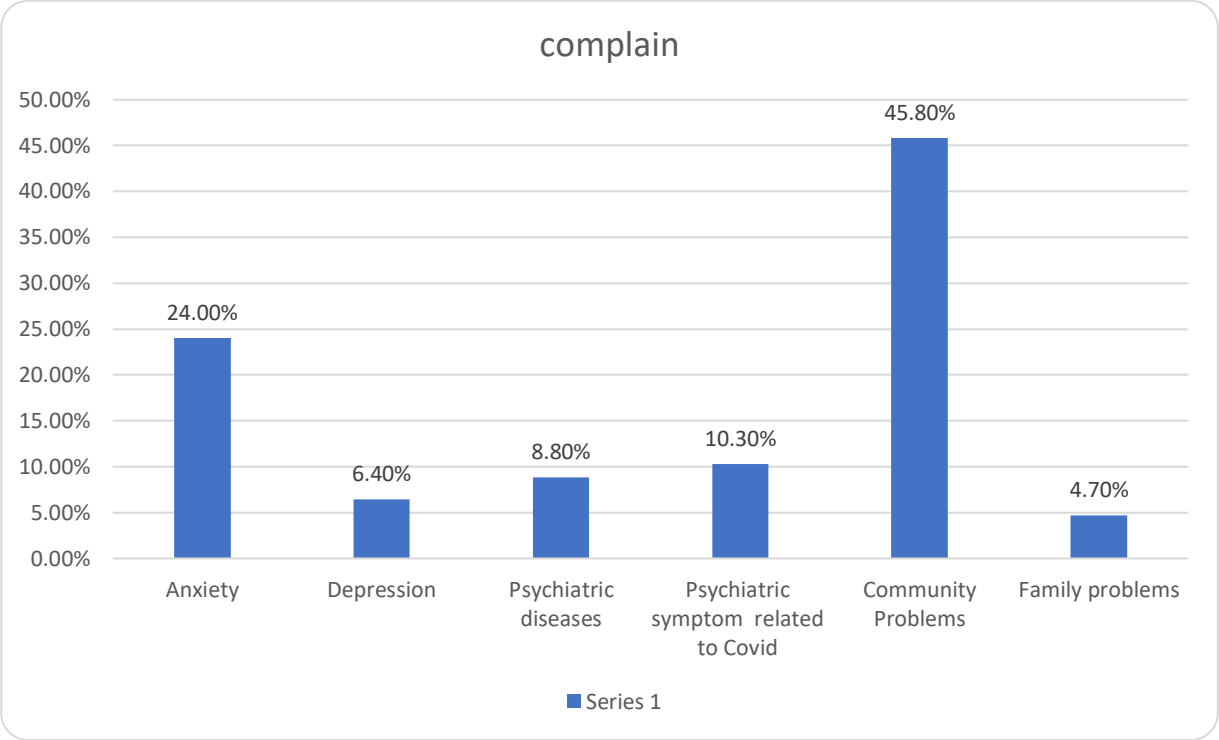
Graph (16): Number of referred calls to therapists according to the customer gender



Graph (17): Number of referred calls to therapists' overtime according to the customer type and the age distribution

Table (12): distribution of calls according to the complaints

		N	%
complain	**Anxiety**	172	24.0%
	Depression	46	6.4%
	Psychiatric diseases	63	8.8%
	Psychiatric symptom related to Covid-19	74	10.3%
	Community Problems	329	45.8%
	Family problems	34	4.7%

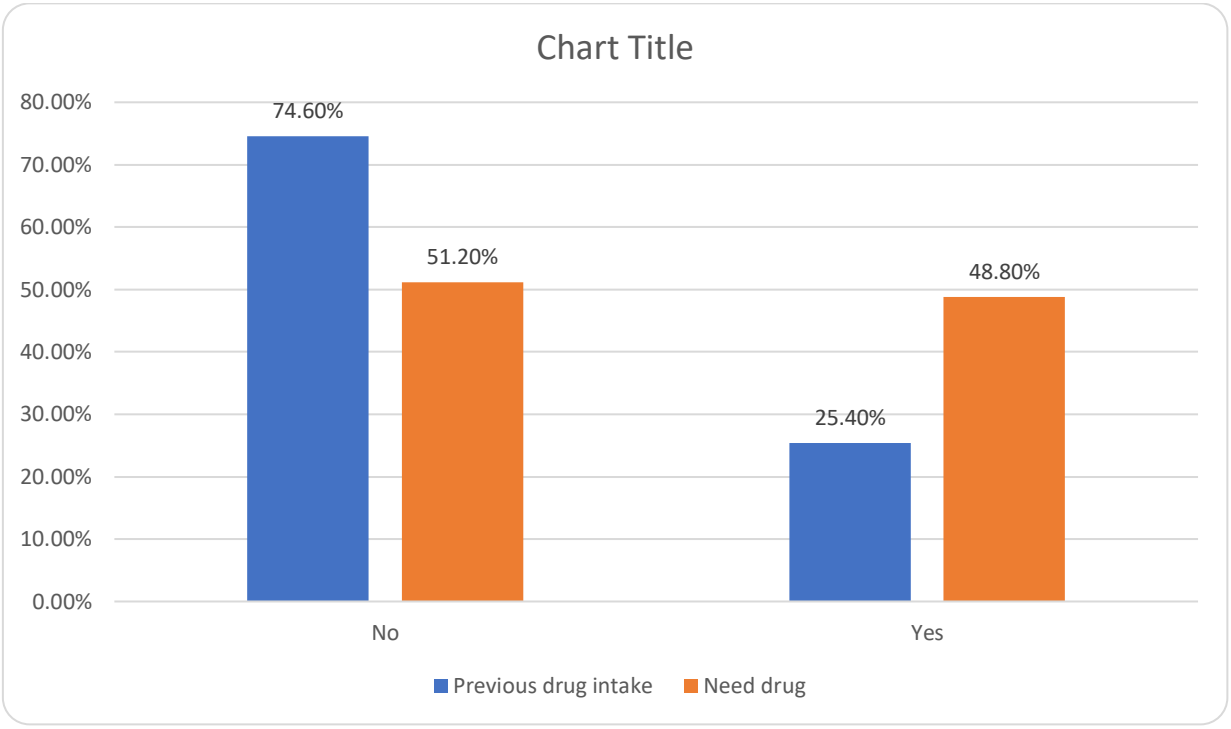


Graph (18): Distribution of calls according to the complaints

It appears in the available data that the most common complaint in the hotline service is the societal problems, followed by anxiety. (Table 12) (Chart 18)

Table (13): Number of referred calls with previous drug intake

		N	%
Previous drug intake	**No**	2523	74.6%
	Yes	860	25.4%
Need drug	**No**	1733	51.2%
	Yes	1650	48.8%

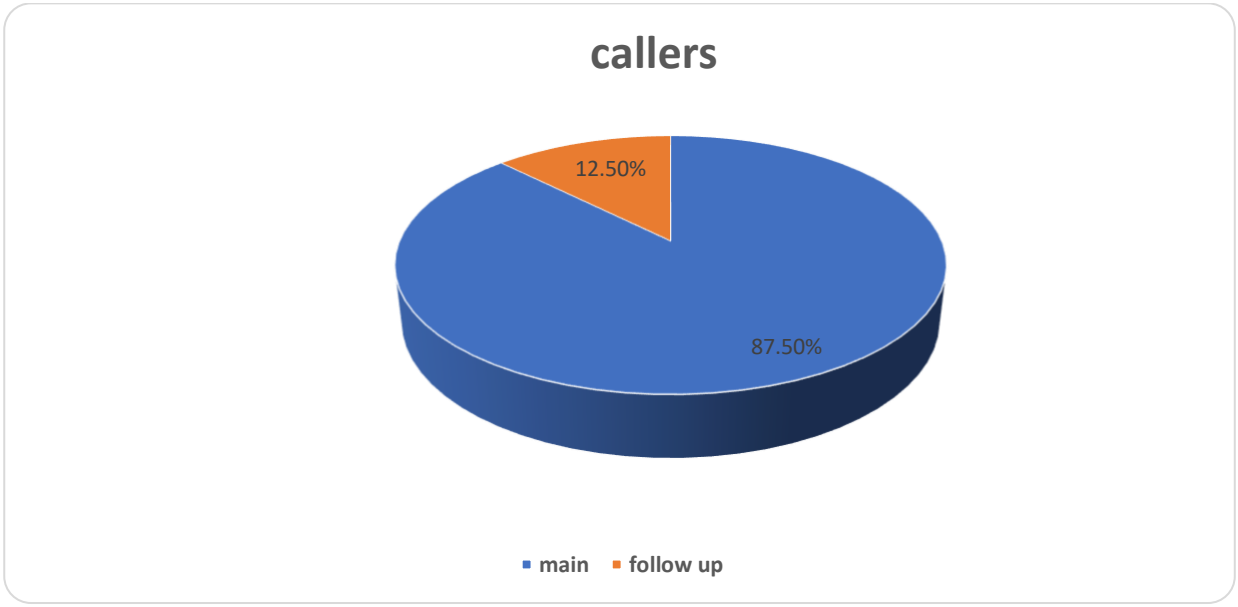


Graph (19): Number of referred calls with previous drug intake

It was noted that three quarters of the referred callers had no previous history of taking psychiatric medications, while an approximately equal percentage revealed the need to prescribe medications at the end of the evaluation, which shows the strong need for referral to a nearby psychiatric clinic, as well as a future plan to develop hotline services to include the presence of a specialized clinic to the service provided. (The hotline does not prescribe psychiatric medications). (Table 13) (Graph 19)

Table (14): Description of referred calls according to repetition

		N	%
Callers	**New**	2206	87.5%
	follow up	316	12.5%

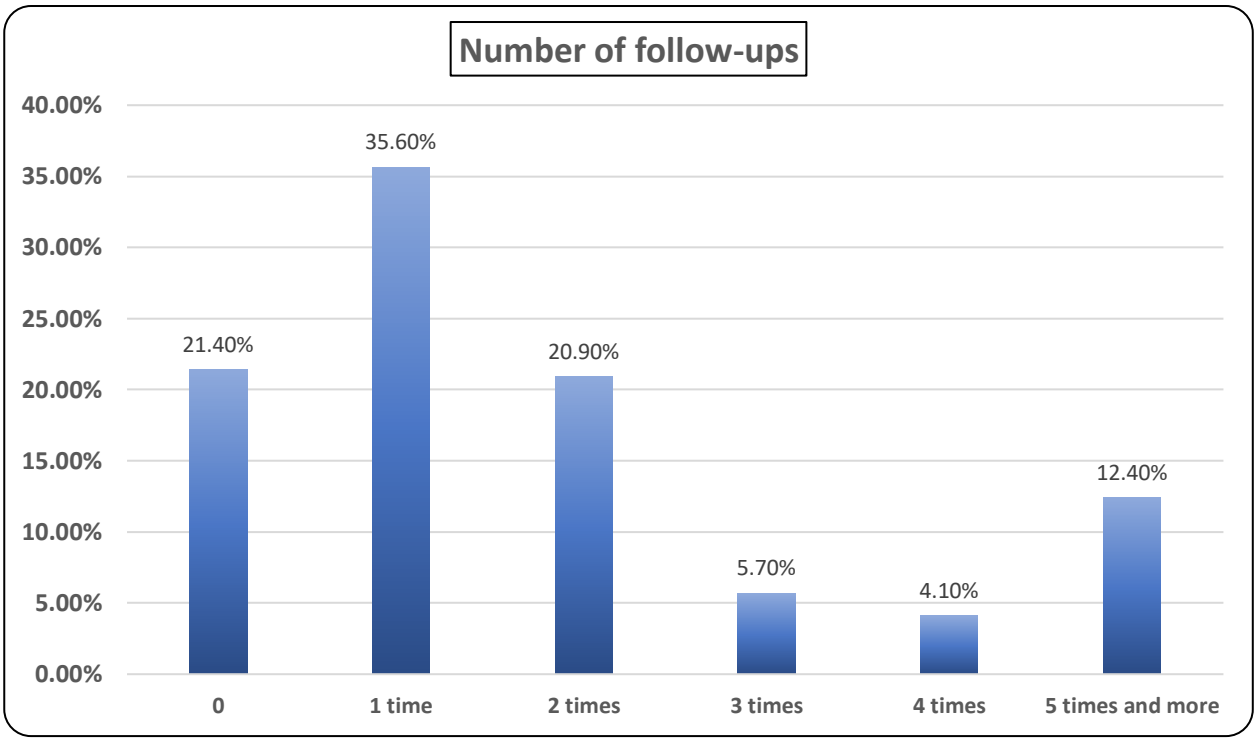


Graph (20): Description of referred calls according to repetition

Noticed from the referred calls, 87% were new customers and 12% follow up calls revealed the intense training of the therapists providing the service satisfying the need of the callers and also the decreased need of the follow ups. (Table 14) (Graph 20)

Table (15): Number of follow ups of the referred calls

`		N	%
Number of follow-ups	**0**	83	21.4%
	1 time	138	35.6%
	2 times	81	20.9%
	3 times	22	5.7%
	4 times	16	4.1%
	5 times and more	48	12.4%

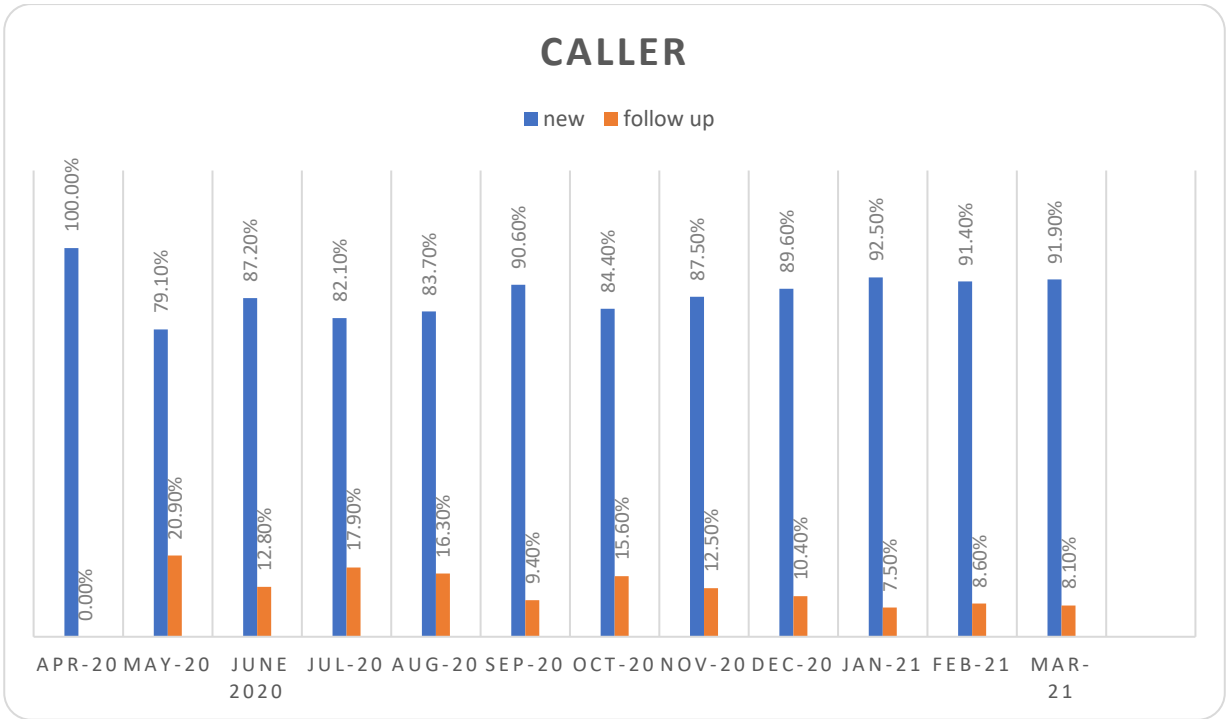


Graph (21): Number of follow ups of the referred calls

The majority of referred calls were a one-time call, and based on the customers' need for additional calls in light of the pandemic and the difficulty of communicating with services provided in hospitals, there were multiple times for additional calls, even if it was less than the first time. (Table 15,16,17) (Graph 21,22,23)

Table (16): Description of referred calls according to repetition overtime from April 2020 to March 2021

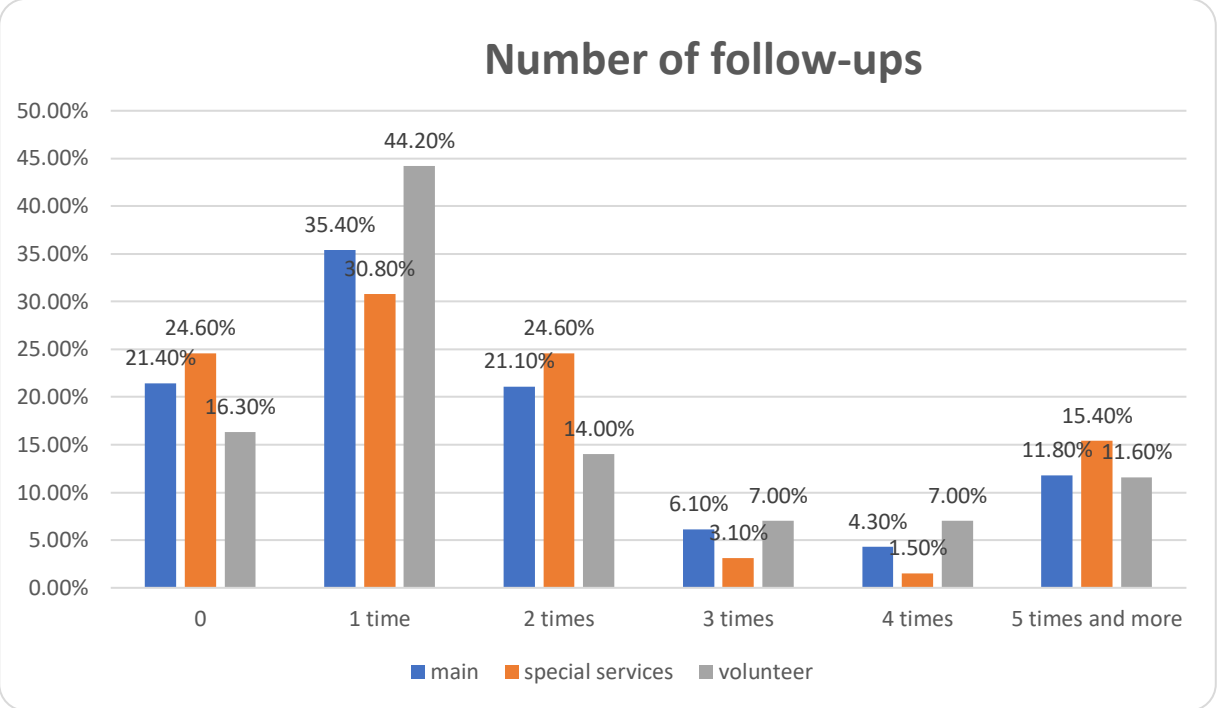
Month and year	Therapist				P
	new		follow up		
	N	Row %	N	Row %	
April 2020	543	100.0%	0	0.0%	.000*
May 2020	144	79.1%	38	20.9%	
June 2020	472	87.2%	69	12.8%	
July 2020	192	82.1%	42	17.9%	
August 2020	170	83.7%	33	16.3%	
September 2020	144	90.6%	15	9.4%	
October 2020	124	84.4%	23	15.6%	
November 2020	126	87.5%	18	12.5%	
December 2020	173	89.6%	20	10.4%	
January 2021	233	92.5%	19	7.5%	
February 2021	213	91.4%	20	8.6%	
March 2021	215	91.9%	19	8.1%	



Graph (22): Description of referred calls according to repetition overtime from April 2020 to March 2021

Table (17): Number of follow-ups according to the different therapists group (main-special services-volunteers)

		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Number of follow-ups	0	60	21.4%	16	24.6%	7	16.3%	.688
	1 time	99	35.4%	20	30.8%	19	44.2%	
	2 times	59	21.1%	16	24.6%	6	14.0%	
	3 times	17	6.1%	2	3.1%	3	7.0%	
	4 times	12	4.3%	1	1.5%	3	7.0%	
	5 times and more	33	11.8%	10	15.4%	5	11.6%	

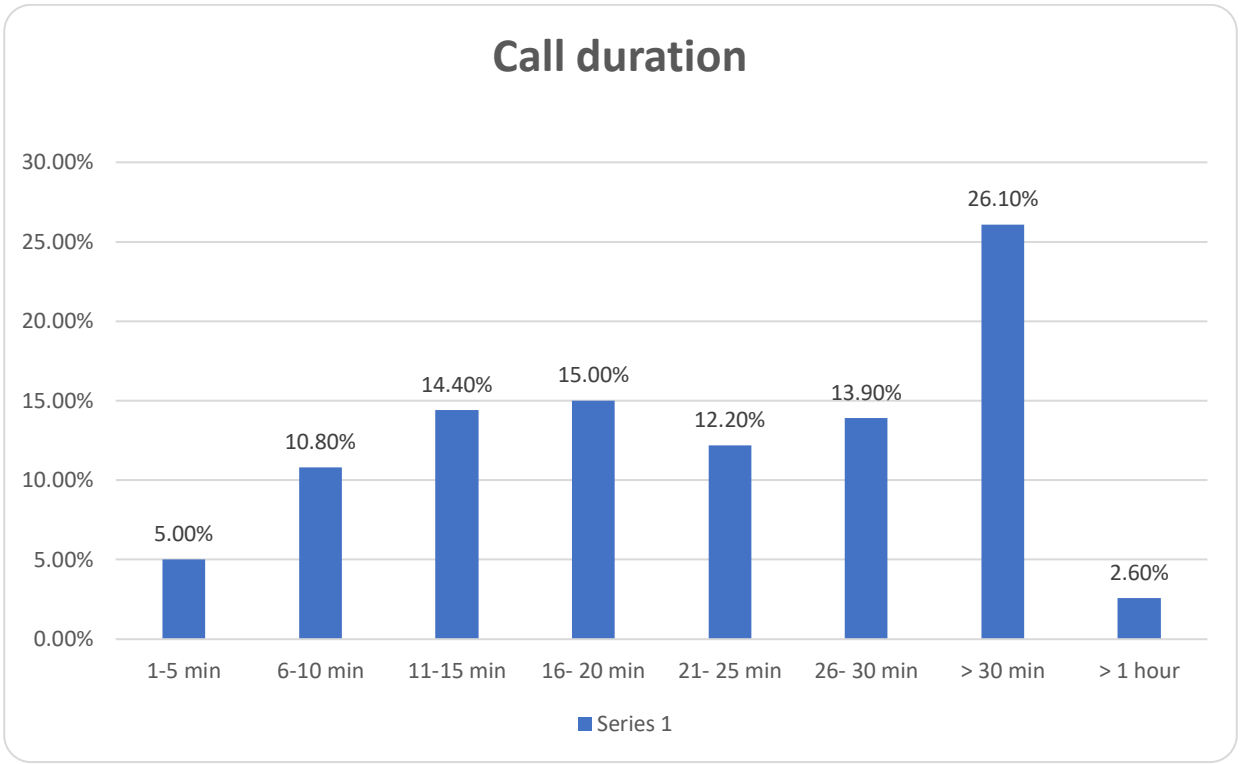


Graph (23): Number of follow-ups according to the different therapists' group (main-special services-volunteers)

As the hotline services provided mainly by the main therapist group, and taking into account the number of hours spent by the main group, there was an increased number of calls and also in the follow ups along the main group compared with the volunteer group. In addition, the special services with extended interventions didn't show much increase that may indicate (Table 17), (Graph 23).

Table (18): Distribution of referred calls' duration

		N	%
Call duration	**1-5 min**	168	5.0%
	6-10 min	367	10.8%
	11-15 min	483	14.4%
	16- 20 min	509	15.0%
	21- 25 min	413	12.2%
	26- 30 min	471	13.9%
	> 30 min	883	26.1%
	> 1 hour	89	2.6%



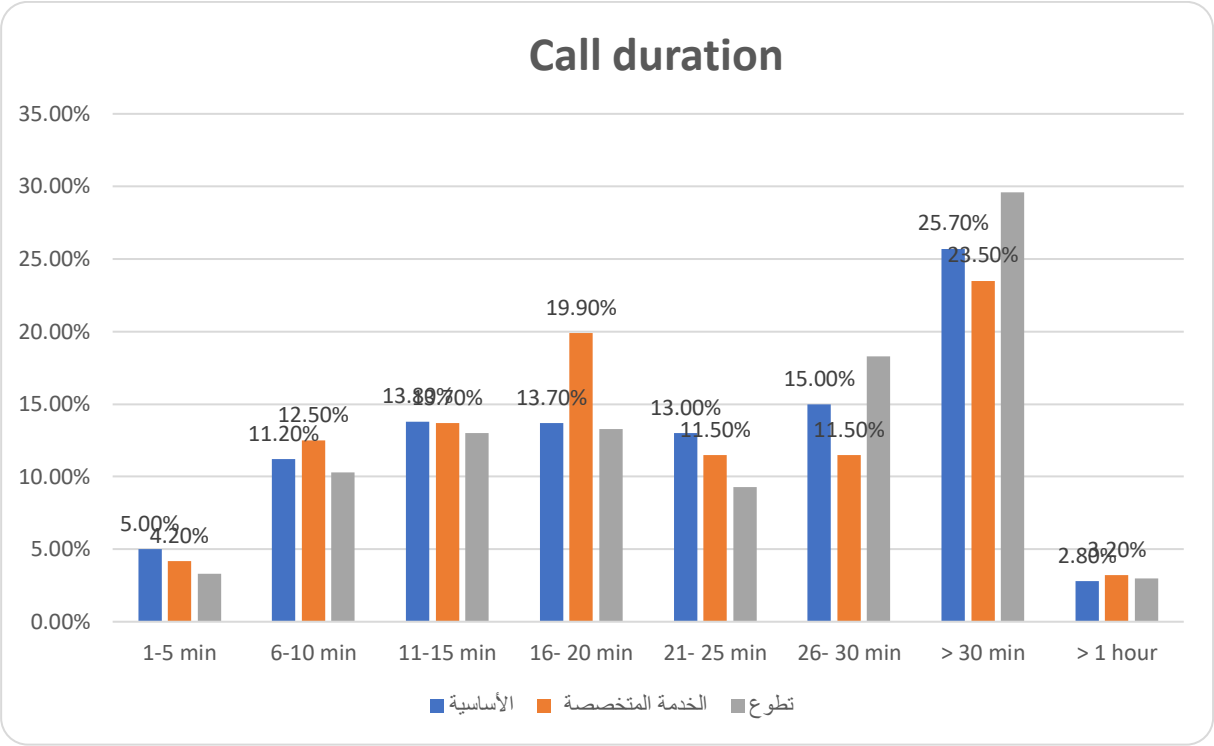
Graph (24): Distribution of referred calls' duration

The call duration ranged between 1 hour and 5 min, but most of calls duration consume more than 30 min (480), and that's reflect how hotline useful as service provided line.

Table (18), Graph (24)

Table (19): Distribution of referred calls' duration and the different therapists' group (main-special services-volunteers)

		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Call duration	1-5 min	91	5.0%	17	4.2%	10	3.3%	.189
	6-10 min	204	11.2%	51	12.5%	31	10.3%	
	11-15 min	250	13.8%	56	13.7%	39	13.0%	
	16- 20 min	249	13.7%	81	19.9%	40	13.3%	
	21- 25 min	236	13.0%	47	11.5%	28	9.3%	
	26- 30 min	273	15.0%	47	11.5%	55	18.3%	
	> 30 min	468	25.7%	96	23.5%	89	29.6%	
	> 1 hour	51	2.8%	13	3.2%	9	3.0%	

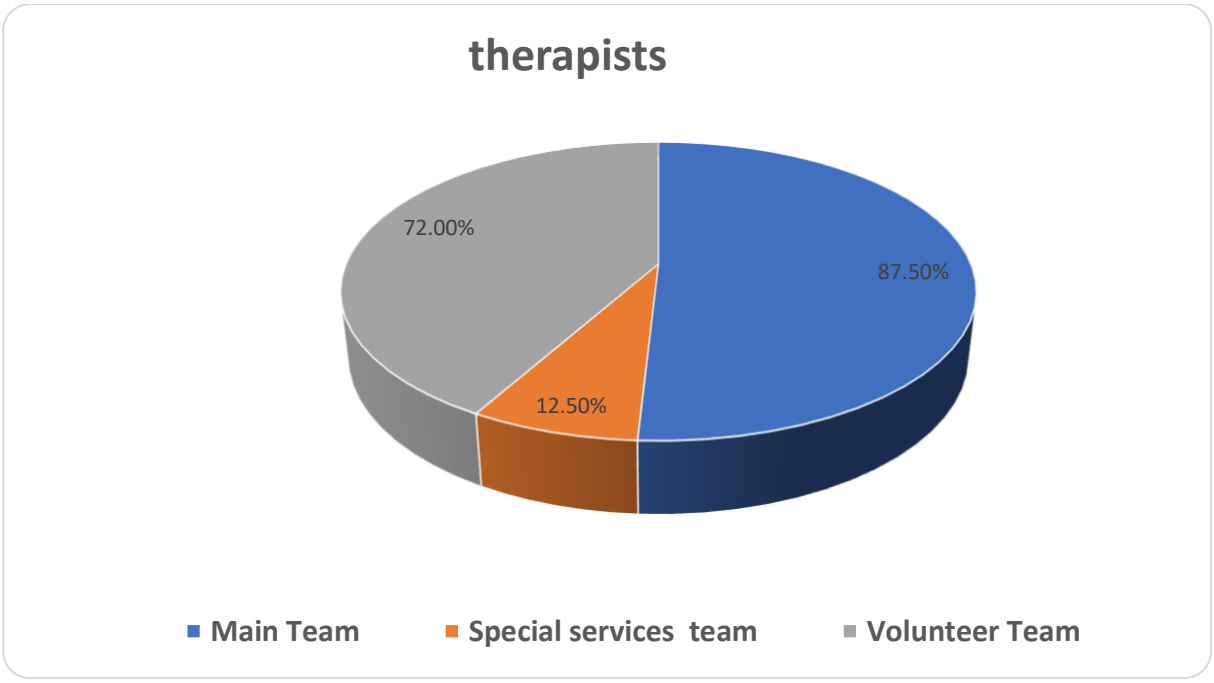


Graph (25): Distribution of referred calls' duration and the different therapists' groups (main-special services-volunteers)

The service provided mainly by main therapists group spending more working hours weekly, the service is provided to a majority of calls (25%) in more than 30 minutes call, and this is for the same groups providing the service either special providers or volunteers.

Table (20): Distribution of different therapists' groups (main-special services-volunteers)

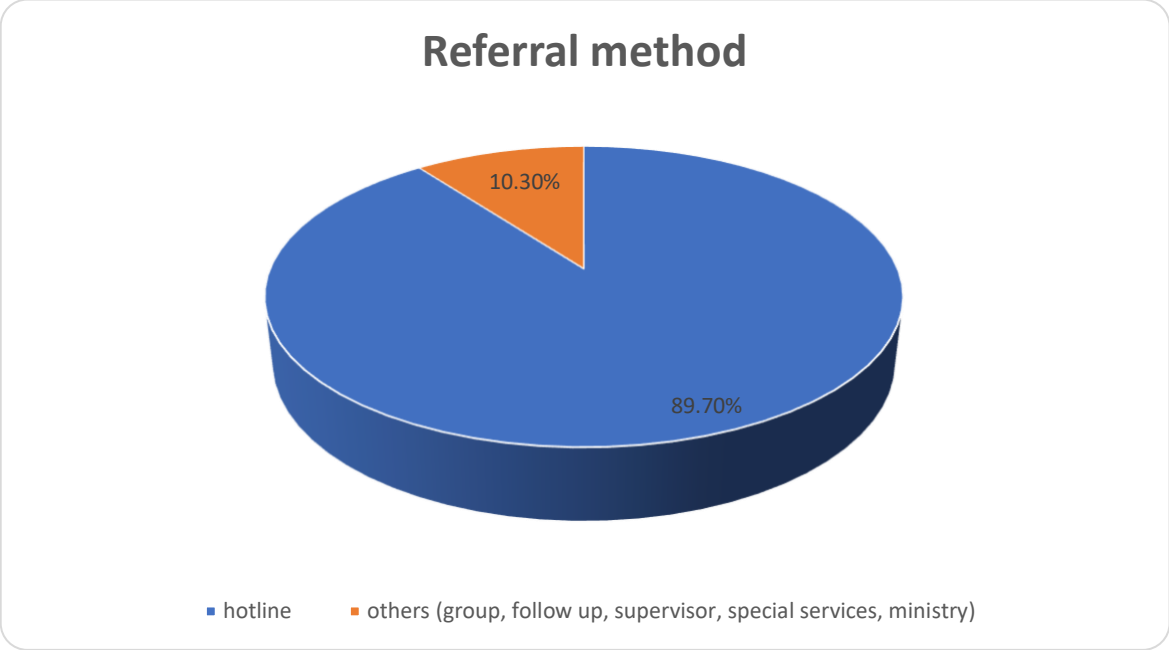
		N	%
Therapists	**Main Team**	2206	87.5%
	Special services Team	316	12.5%
	Volunteer Team	1822	72.0%



Graph (26): Distribution of different therapists' groups (main-special services-volunteers)

Table (21): Number of Referral calls to the therapists

		N	%
Referral method to the Therapists	**hotline**	3033	89.7%
	others (group, follow up, supervisor, special services, ministry)	350	10.3%

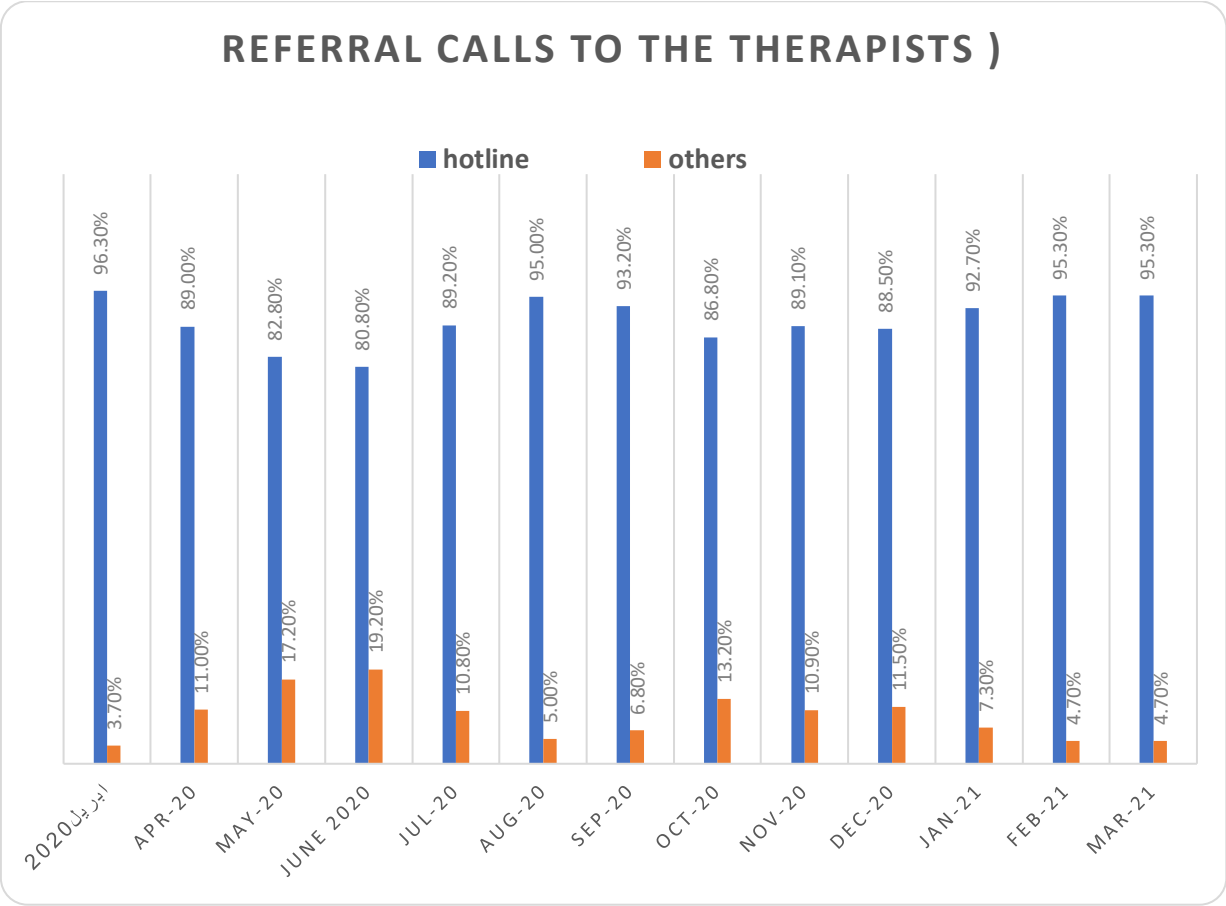


Graph (27): Number of Referral method to the therapists for the referred calls

Noticed from the referred calls, 89% referred calls from the hotline service provider rather than other methods of referral, which most probably reflect the commitment of hotline service providers and their well training in handling the calls and triaging them. (Table 21 & 22), (Graphs 27 & 28).

Table (22): Distribution of Referral method for the referred calls overtime from April 2020 to March 2021

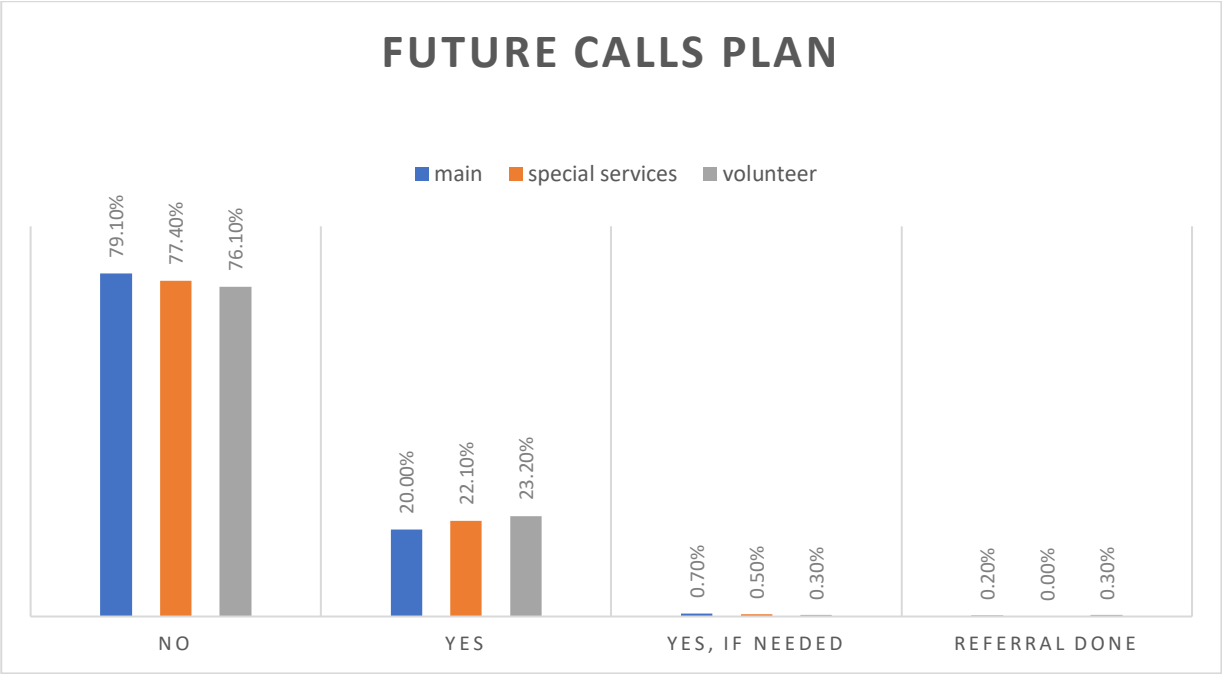
Month and year	Referral calls to the therapists				P
	Hotline		Others (Group, follow up, supervisor, special services, ministry)		
	N	Row %	N	Row %	
April 2020	523	96.3%	20	3.7%	.000*
May 2020	445	89.0%	55	11.0%	
June 2020	448	82.8%	93	17.2%	
July 2020	189	80.8%	45	19.2%	
August 2020	181	89.2%	22	10.8%	
September 2020	151	95.0%	8	5.0%	
October 2020	137	93.2%	10	6.8%	
November 2020	125	86.8%	19	13.2%	
December 2020	172	89.1%	21	10.9%	
January 2021	223	88.5%	29	11.5%	
February 2021	216	92.7%	17	7.3%	
March 2021	223	95.3%	11	4.7%	



Graph (28): Distribution of Referral method for the referred calls overtime from April 2020 to March 2021

Table (23): Distribution of future calls plan and the different therapists group (main-special services-volunteers)

		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Future calls plan	No	1498	79.1%	329	77.4%	236	76.1%	.631
	Yes	378	20.0%	94	22.1%	72	23.2%	
	Yes, if needed	14	0.7%	2	0.5%	1	0.3%	
	Referral done	4	0.2%	0	0.0%	1	0.3%	

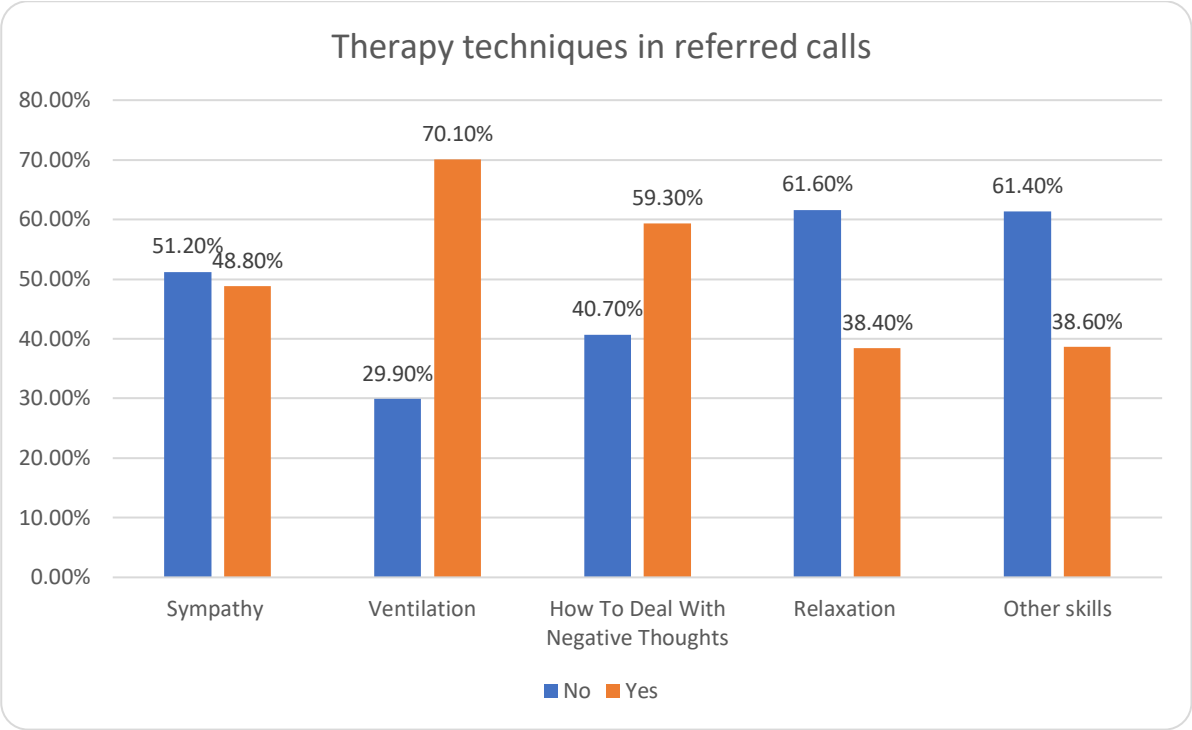


Graph (29): Distribution of future calls plan and the different therapists' group (main-special services-volunteers)

The future calls around 21% which were related to the quality of services, training of the team members and needs of customers. (Table 23) (Graph 29)

Table (24): Therapy techniques used in the referred calls to the therapists

Skills during calls		**N**	**%**
Sympathy	**No**	1733	51.2%
	Yes	1650	48.8%
Ventilation	**No**	1012	29.9%
	Yes	2371	70.1%
How to Deal with Negative Thoughts	**No**	1377	40.7%
	Yes	2006	59.3%
Relaxation	**No**	2085	61.6%
	Yes	1298	38.4%
Other skills	**No**	2076	61.4%
	Yes	1307	38.6%

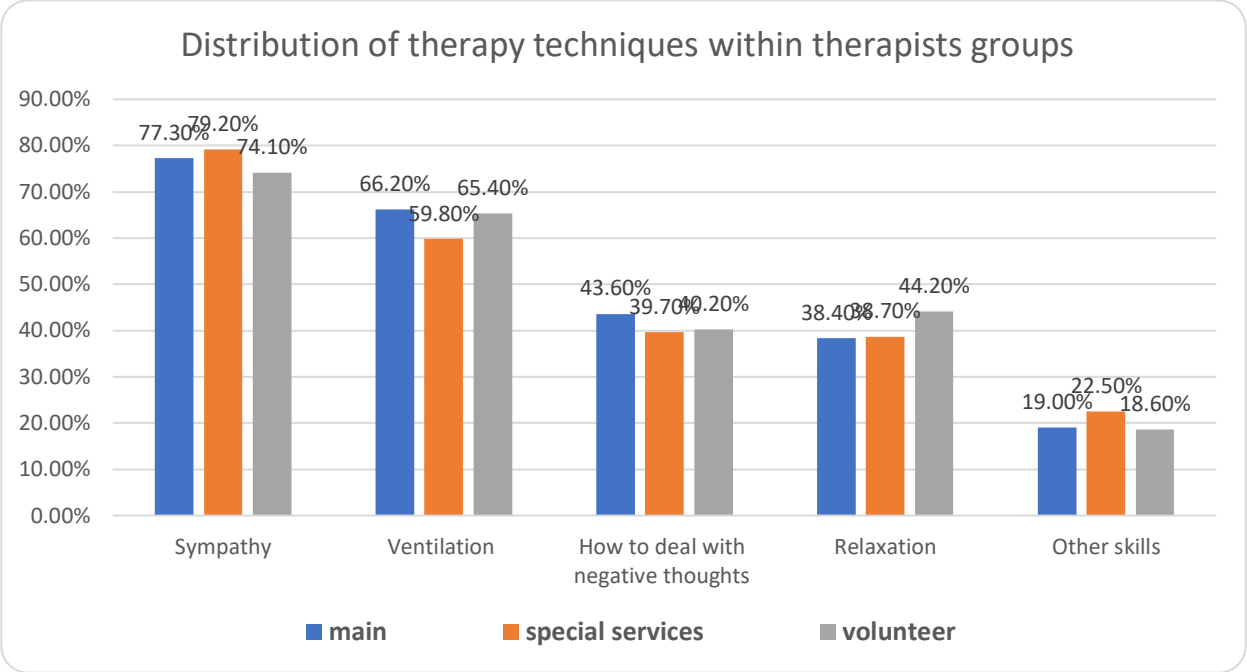


Graph (30): Frequency of calls and therapy techniques used in referred calls

Many therapeutic techniques used to support the clients, the most one used to be the sympathy followed by the ventilation, revealing the need of the clients to the sharing of their psychological problems with specialized personnel. (Table 24 & 25) (Graph 30 & 31)

Table (25): Distribution of therapy techniques used in referred calls with the different therapists' group (main-special services-volunteers)

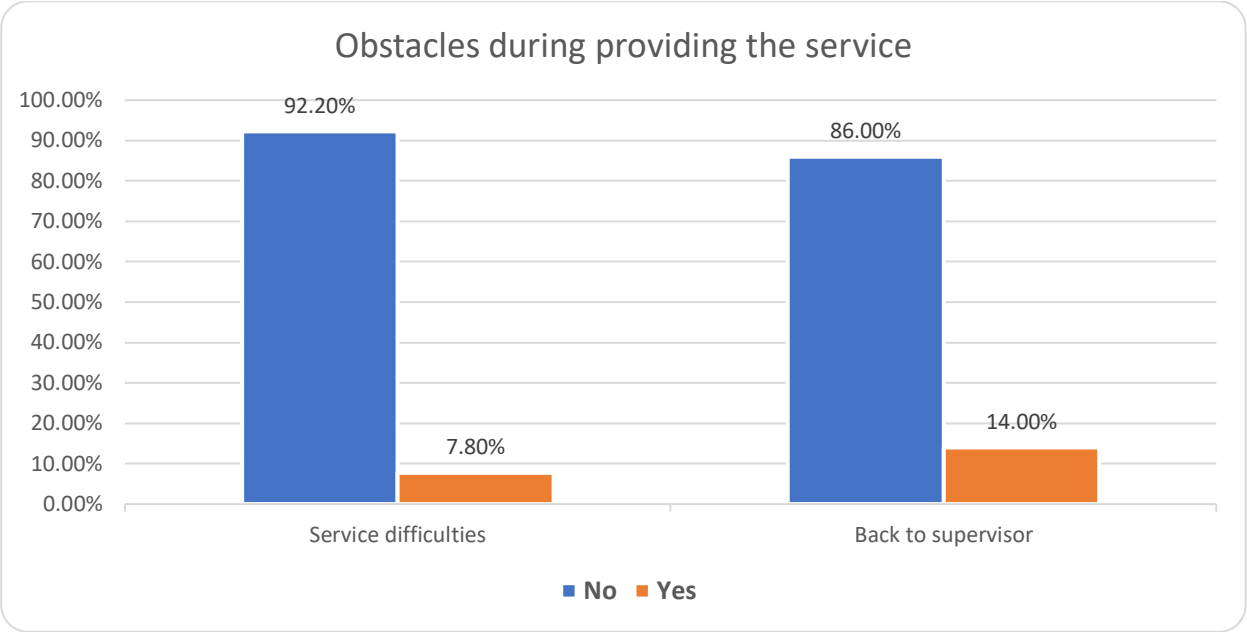
Skills during calls		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Sympathy	**No**	413	22.7%	85	20.8%	78	25.9%	.321
	Yes	1409	77.3%	323	79.2%	223	74.1%	
Ventilation	**No**	615	33.8%	164	40.2%	104	34.6%	.658
	Yes	1207	66.2%	244	59.8%	197	65.4%	
How to deal with negative thoughts	**No**	1028	56.4%	246	60.3%	180	59.8%	.354
	Yes	794	43.6%	162	39.7%	121	40.2%	
Relaxation	**No**	1122	61.6%	250	61.3%	168	55.8%	.105
	Yes	700	38.4%	158	38.7%	133	44.2%	
Other skills	**No**	1475	81.0%	316	77.5%	245	81.4%	.260
	Yes	347	19.0%	92	22.5%	56	18.6%	



Graph (31): Distribution of therapy techniques used in referred calls and the different therapists' group (main-special services-volunteers)

Table (26): Obstacles during providing the service

Supervision		**N**	**%**
Service difficulties	**No**	3118	92.2%
	Yes	265	7.8%
Back to supervisor	**No**	2911	86.0%
	Yes	472	14.0%



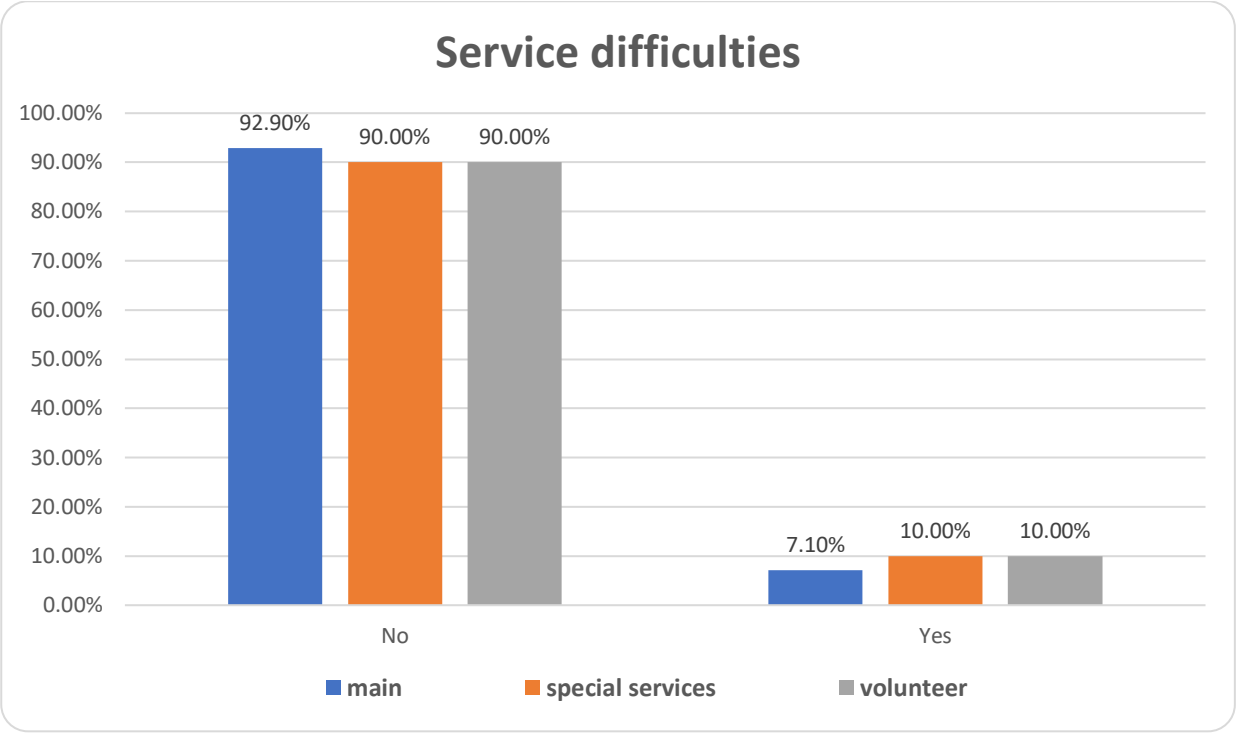
Graph (32): Obstacles during providing the service

The obstacles related to service provided around 9% which means the customers not facing a lot of difficulties through the hotline service, and the service providers well trained on their job.

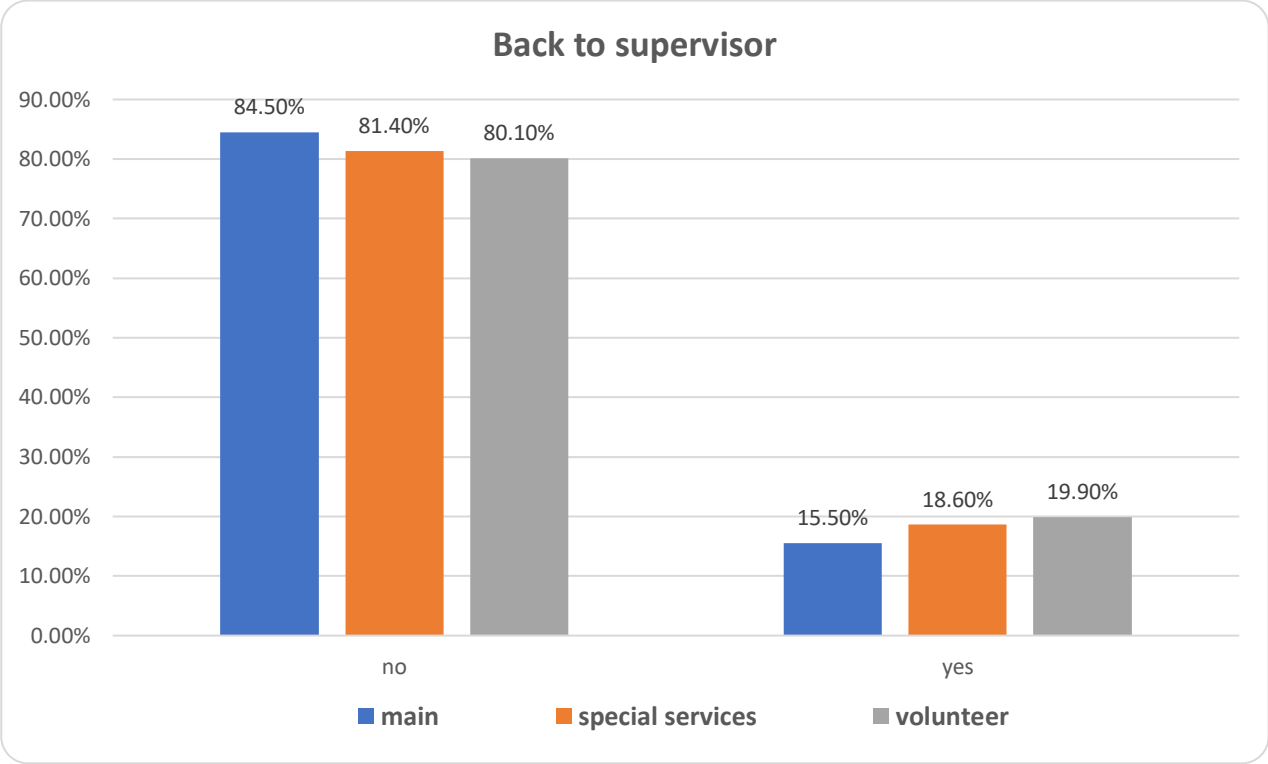
Most of cases investigated through the hotline not need back supervisor. (Table 26 & 27) graph (32, 33, & 34))

Table (27): Distribution of obstacles during providing the service in referred calls with the different therapists group (main-special services-volunteers)

Supervision		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Service difficulties	No	1692	92.9%	367	90.0%	271	90.0%	.072
	Yes	130	7.1%	41	10.0%	30	10.0%	
Back to supervisor	No	1540	84.5%	332	81.4%	241	80.1%	.091
	Yes	282	15.5%	76	18.6%	60	19.9%	



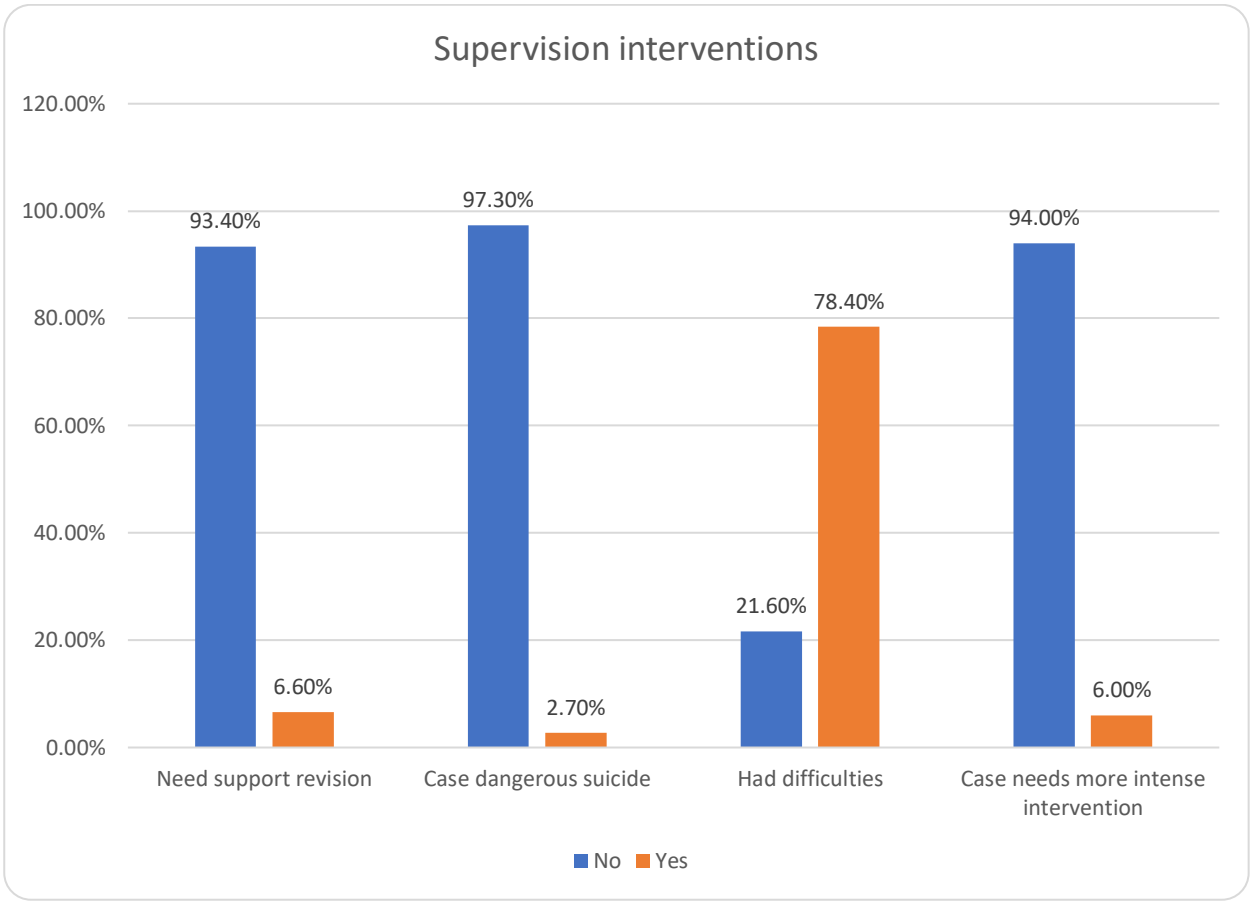
Graph (33): Distribution of service difficulties during providing the service in referred calls with the different therapists group (main-special services-volunteers)



Graph (34): Distribution of seeking a supervisor during providing the service in referred calls with the different therapists group (main-special services-volunteers)

Table (28): Distribution for each supervision intervention

Supervision		N	%
Need support revision	**No**	3161	93.4%
	Yes	222	6.6%
Case dangerous suicide	**No**	3292	97.3%
	Yes	91	2.7%
Had difficulties	**No**	731	21.6%
	Yes	2652	78.4%
Case needs more intense intervention	**No**	3181	94.0%
	Yes	202	6.0%

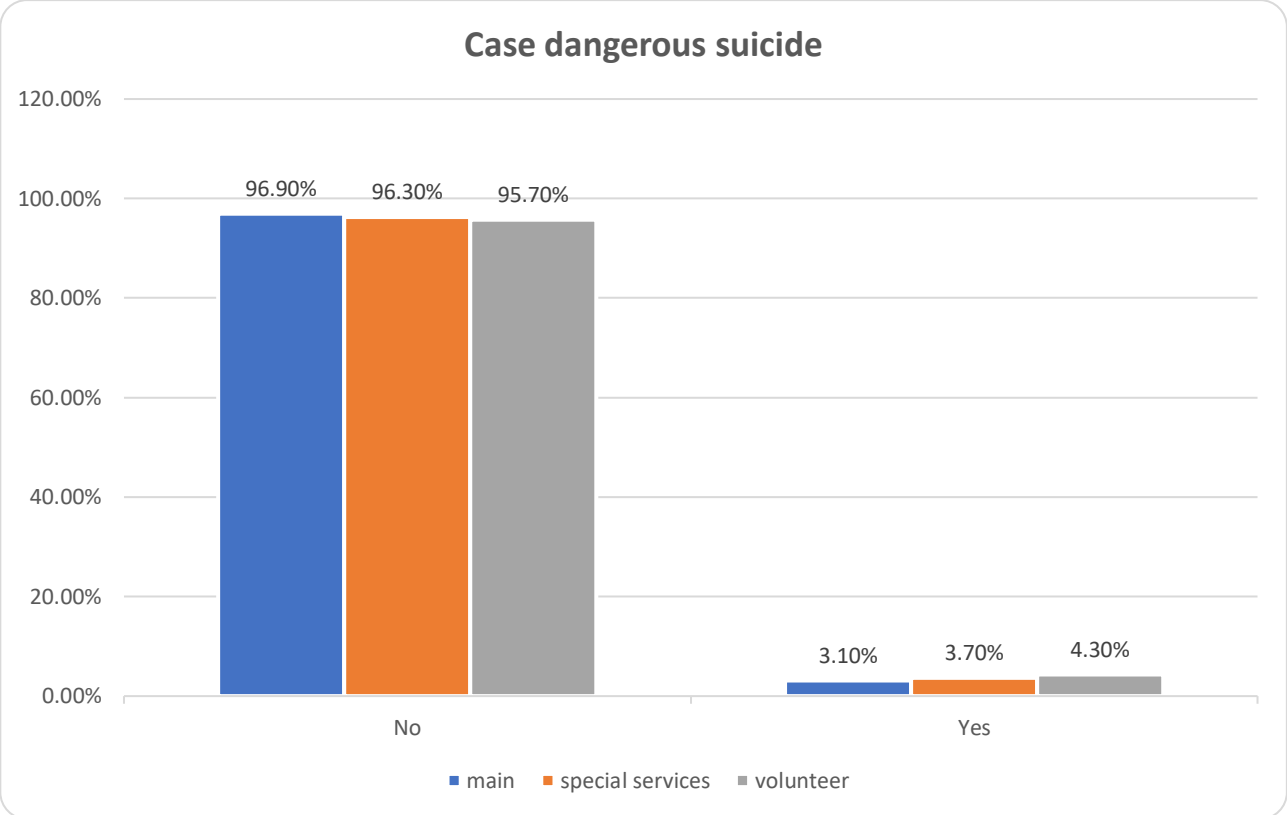


Graph (35): Distribution for each supervision intervention

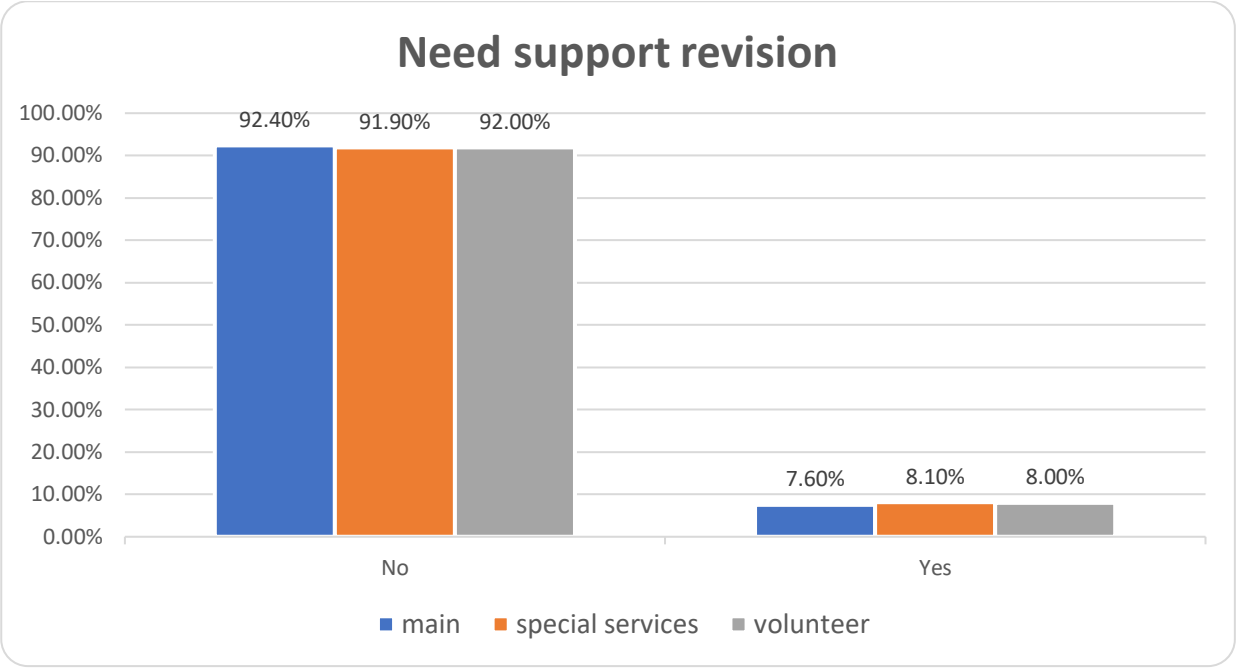
Most of cases don't have dangerous tendencies (2.8%), but clients showed were having difficulties (78%) indicating the need for further investigation and research for the reasons. The therapists provided were well prepared on various interventions or referral procedures to more specialized services institutes. Table (28 & 29) Graph (35, 36, 37, 38, & 39)

Table (29): Distribution for each supervision intervention with the different therapists' group (main-special services-volunteers)

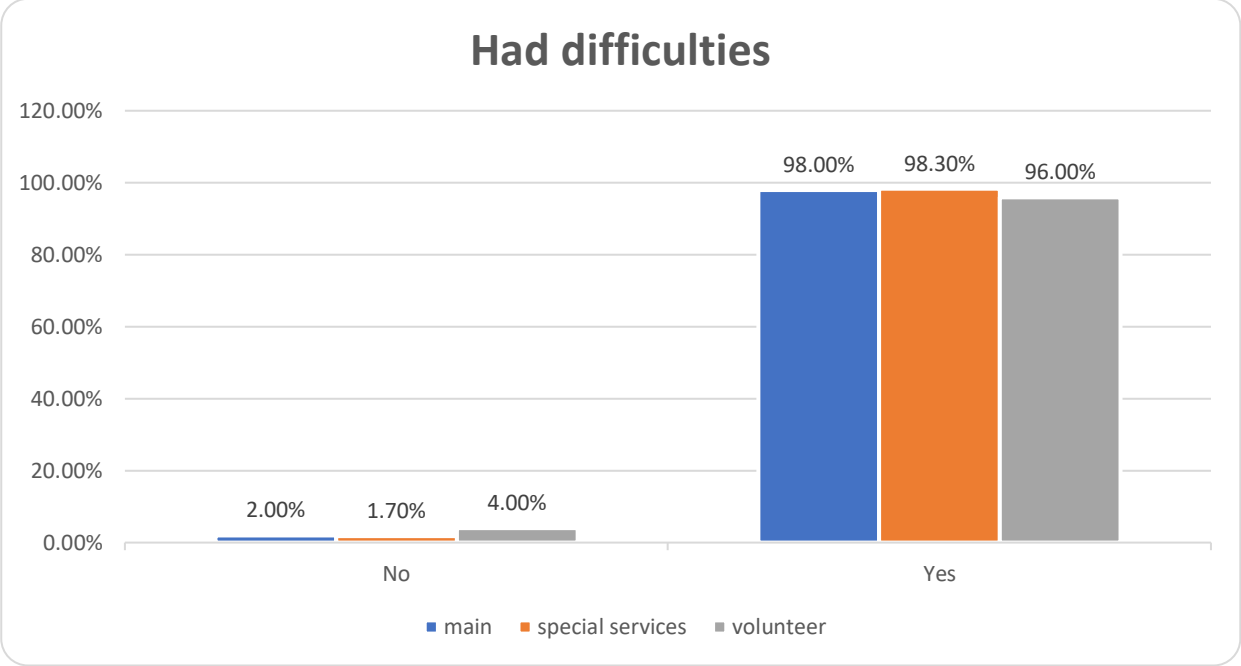
Supervision		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Need support revision	No	1683	92.4%	375	91.9%	277	92.0%	.386
	Yes	139	7.6%	33	8.1%	24	8.0%	
Case dangerous, suicidal attempt	No	1765	96.9%	393	96.3%	288	95.7%	.983
	Yes	57	3.1%	15	3.7%	13	4.3%	
Had difficulties	No	36	2.0%	7	1.7%	12	4.0%	.220
	Yes	1786	98.0%	401	98.3%	289	96.0%	
Cases need more intense intervention	No	1704	93.5%	377	92.4%	271	90.0%	.495
	No	118	6.5%	31	7.6%	30	10.0%	
	Yes	1683	92.4%	375	91.9%	277	92.0%	



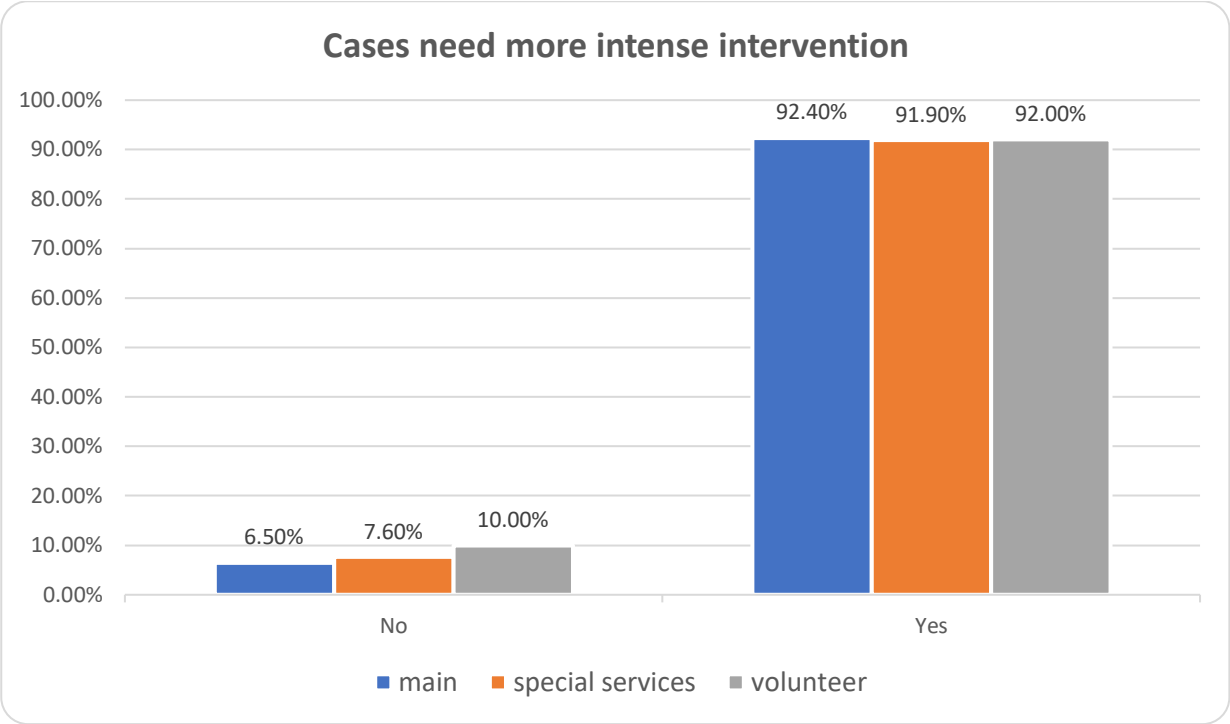
Graph (36): Distribution of supervision intervention for case dangerousness with the different therapists' group (main-special services-volunteers)



Graph (37): Distribution of supervision intervention for therapists who need support revision with the different therapists' group (main-special services-volunteers)



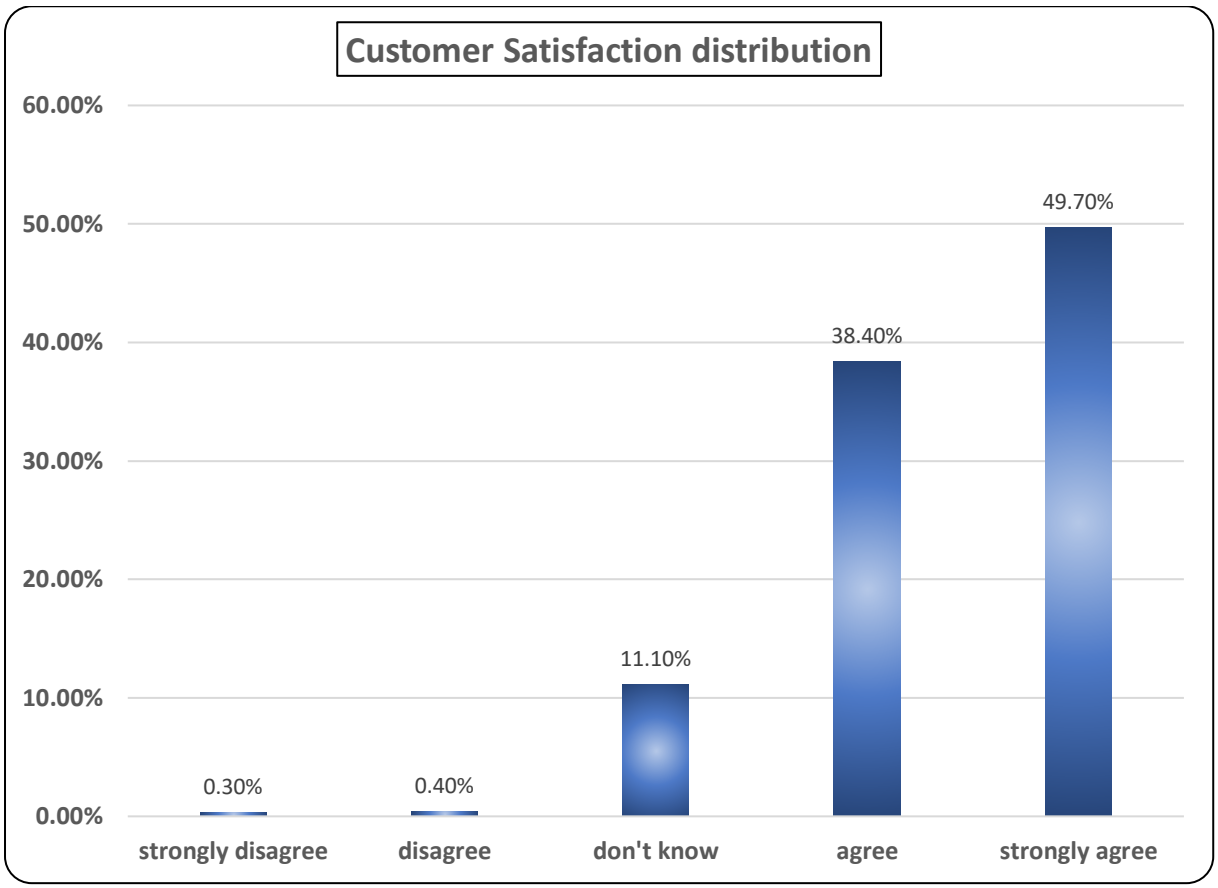
Graph (38): Distribution of supervision intervention for having difficulties with the callers with the different therapists' group (main-special services-volunteers)



Graph (39): Distribution of supervision intervention for cases needing more intense intervention with the different therapists' group (main-special services-volunteers)

Table (30): Customer Satisfaction distribution

Customer satisfaction		**N**	**%**
Customer satisfaction	**Strongly disagree**	10	0.3%
	Disagree	14	0.4%
	Don't know	377	11.1%
	Agree	1299	38.4%
	Strongly agree	1683	49.7%

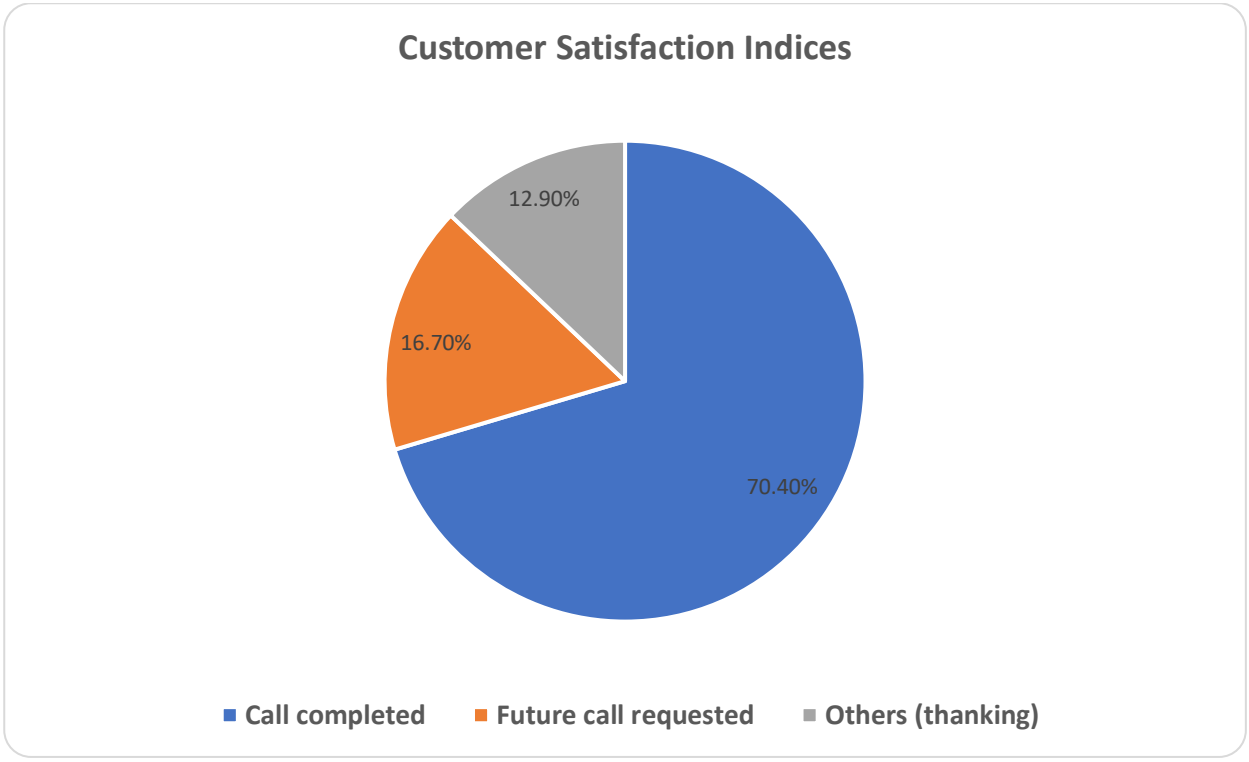


Graph (40): Customer Satisfaction distribution

Most of customers satisfied with services provided to them (89%), and satisfaction indices measured to prove satisfaction were call completed (70%), future call requested (16%), thanking (13%). (Table 30,31,32, & 33) (Graphs 41, 42, & 43)

Table (31): Customer Satisfaction Indices

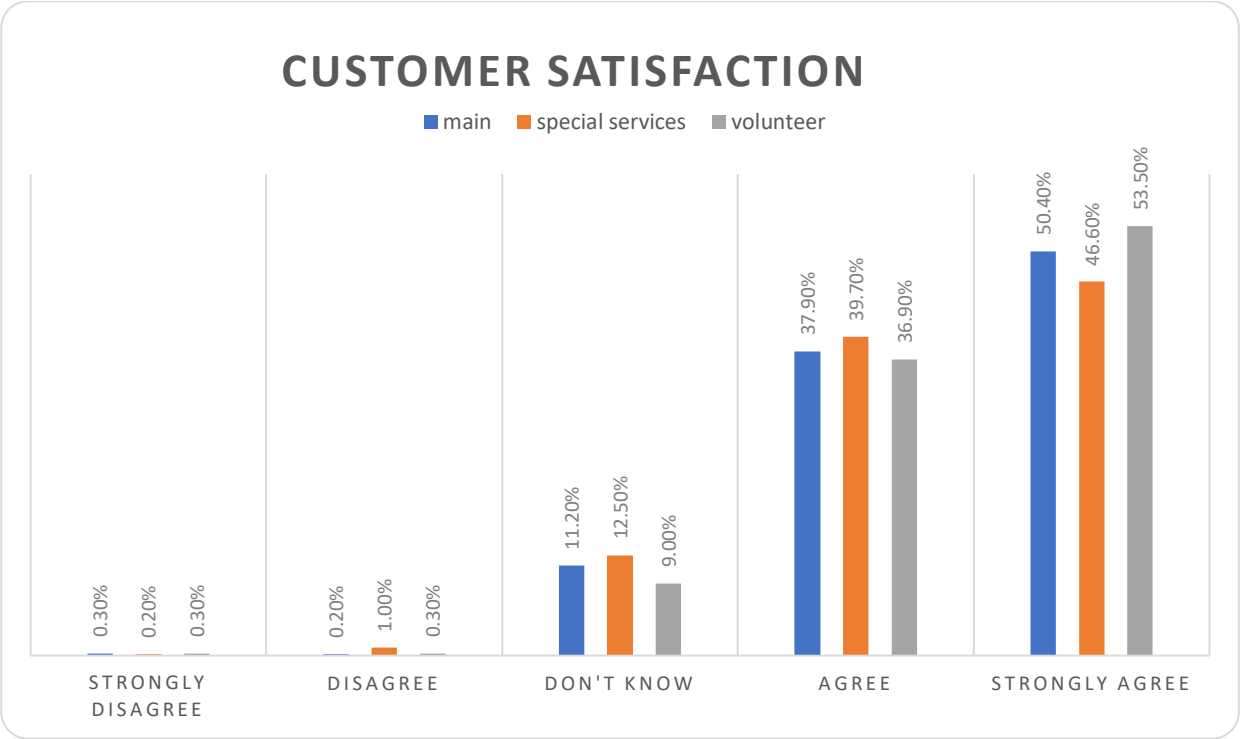
		N	%
Customer satisfaction indices	**Call completed**	2382	70.4%
	Future call requested	564	16.7%
	Others (thanking)	437	12.9%



Graph (41): Customer Satisfaction Indices

Table (32): Distribution for customer satisfaction with the different therapists' group (main-special services-volunteers)

		Therapists						P
		main		special services		volunteer		
		N	%	N	%	N	%	
Customer satisfaction	strongly disagree	5	0.3%	1	0.2%	1	0.3%	.248
	disagree	4	0.2%	4	1.0%	1	0.3%	
	don't know	204	11.2%	51	12.5%	27	9.0%	
	agree	690	37.9%	162	39.7%	111	36.9%	
	strongly agree	919	50.4%	190	46.6%	161	53.5%	
Customer satisfaction indices	call completed	1341	73.6%	298	73.0%	210	69.8%	.634
	future call requested	285	15.6%	60	14.7%	57	18.9%	
	others (thanking)	196	10.8%	50	12.3%	34	11.3%	



Graph (42): Distribution for customer satisfaction with the different therapists' group (main-special services-volunteers)

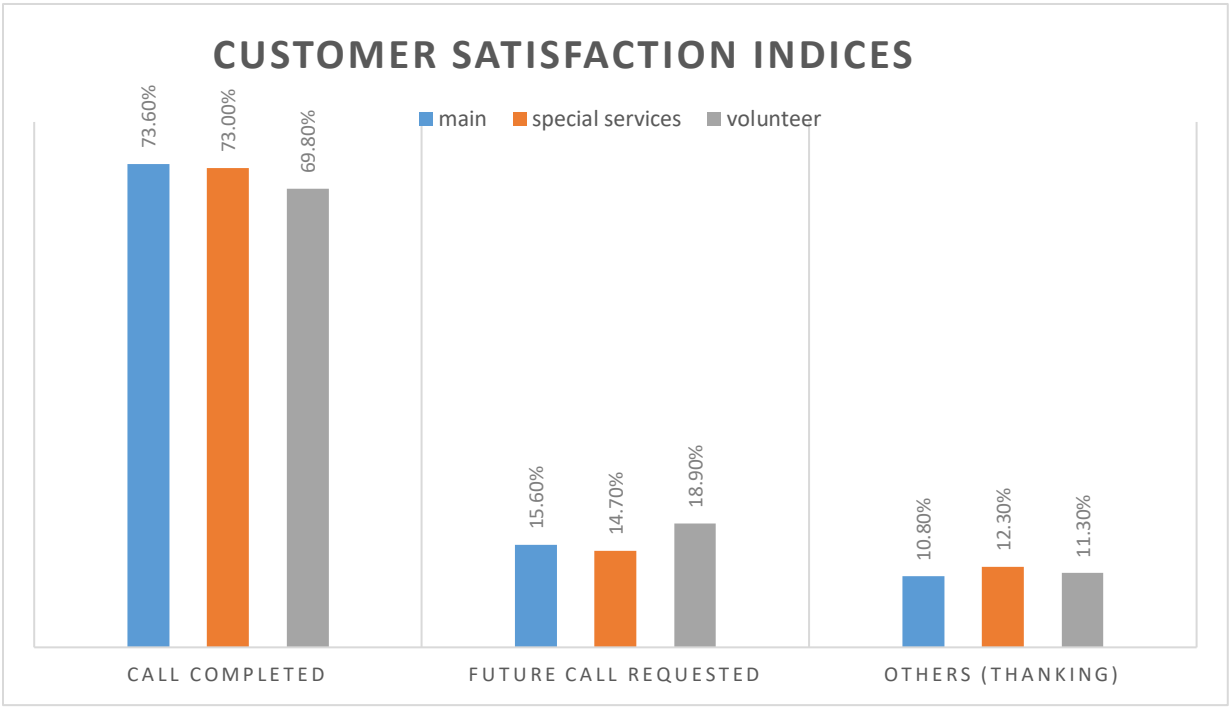
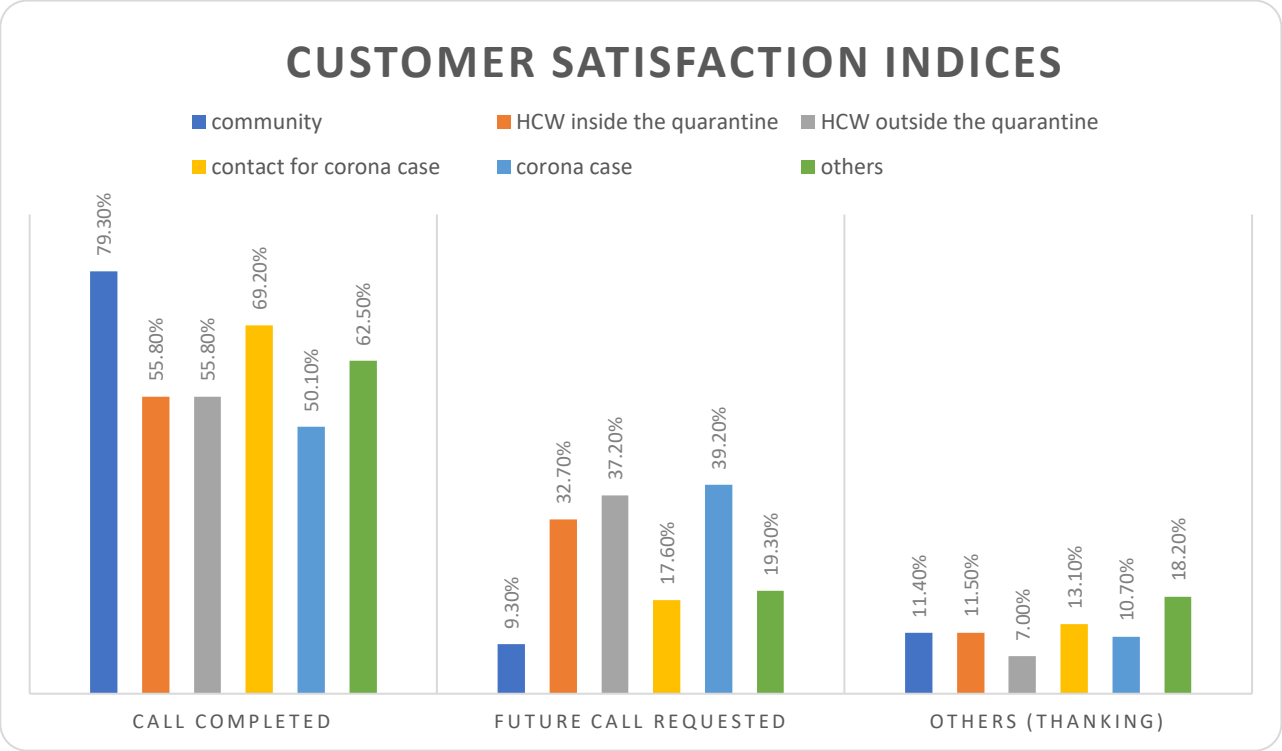


Table (33): Customer Satisfaction Indices in relation to the callers' type

		Therapists												P
		Community		HCW inside the quarantine		HCW outside the quarantine		contact for corona case		corona case		others		
		N	%	N	%	N	%	N	%	N	%	N	%	
Customer satisfaction indices	call completed	1476	79.3%	29	55.8%	24	55.8%	153	69.2%	216	50.1%	484	62.5%	.000*
	future call requested	174	9.3%	17	32.7%	16	37.2%	39	17.6%	169	39.2%	149	19.3%	
	others (thanking)	212	11.4%	6	11.5%	3	7.0%	29	13.1%	46	10.7%	141	18.2%	



Graph (43): Customer Satisfaction Indices in relation to the callers' type

Conclusions

1. The hotline has played an active role in community psychological support during the pandemic, which is a direct way for communication available to any member of the community who suffers from any psychological symptoms or inquiries in the field of mental health.
2. The hotline of the GSMHAT is a qualitative and pivotal move in the means of providing psychological services, as the hotline is one of the main pillars of community psychiatry, and it is the most promising international and local future of psychiatry in providing mental health services.
3. The GSMHAT, through the hotline, has provided services to the public represented by a number of calls ranging from April 2020 to March 2021 (8618) calls , and the GSMHAT hope that the hotline service to continue providing psychological counseling and support to those who wish, while continuing providing the service in hotline with the corresponding technical development and community needs.

Recommendations

1. Developing the service by adding hotline clinics, which follow up on cases transferred from the hotline, in order to provide more specialized services for emergency cases and cases that need psychological sessions directly with therapists.
2. We hope to increase the volume of services provided represented in increasing service sources (hardware - human resources) in order to cover the expansion of the services and community needs.
3. Work to increase the financial resources allocated to the hotline
4. The hotline is a reflection of the society's needs for a different form of mental health services represented in providing remote service, which is a rich research nucleus for documenting and developing the service in the future