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# The use of Antidepressants among Lebanese Population in Bekaa Valley: Knowledge and Perspective

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Results: Results showed that 61.1% of respondents took antidepressants in the 3 past months, 30.4% were university students (p = 0.048), among of which32.5% reported using social media many times per day. 83.2% of medications were prescribed by a physician, while 9.8% were prescribed by a pharmacist, among of which 48% didn't interrupt the treatment course on their own (p=0.001). Furthermore, 54.77% of respondents got scores of more than 4/6 when asked about their knowledge concerning antidepressants.

Keywords: antidepressants, depression, Lebanese, community pharmacy, Lebanon.

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# The use of Antidepressants among Lebanese Population in Bekaa Valley: Knowledge and Perspective

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Conclusion: High percentage of interviewed population were using or had already used antidepressants; social media and educational level may have significant relation. Despite the counseling provided mainly by physicians, a large percentage of users still had doubts about the use of antidepressants. especially in relation to compliance and interruption of therapy. Keywords: antidepressants, depression, community pharmacy, Lebanon.

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## Introduction

ajor depressive disorder is a common and serious medical illness characterized by a period of at least two weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities, and had a majority of specified symptoms, such as problems with sleep, eating, energy, concentration, or self-worth. Depression is a common and serious medical condition. It can be minor causing minor functional impairment or major leading to suicide [1], causing an impact on one's social and economic status [2]. The treatment of depression varies in duration and type, usually a minimum of six months is needed for treatment. It consists of psychological interventions such as cognitive behavioral therapy (CBT) and interpersonal therapy [2], or psychotherapy using medications such as tricyclic antidepressants (TCAs) and selective reuptake inhibitors (SSRIs) [3]. In some instances, a combination of psychological interventions psychotherapy is adopted [4]. In Lebanon drugs are easily accessible and some rely on family and friends for medical advice and thus are prone to maltreatment and misuse of their medication. The purpose of this study is to evaluate the use of antidepressants among a sample of the Lebanese population, focusing on factors that may contribute to their use, and to assess the knowledge of antidepressants in patients recruited for this study.

#### **Methods** П.

The study was conducted in pharmacies located in Bekaa region- Lebanon. Ethical approval was obtained from the School of Pharmacy at the Lebanese International University. The study was carried within one month (June 2019). This observational cross-sectional study was conducted using a questionnaire prepared by the research team of the Lebanese International University School of Pharmacy. The questionnaire was divided into 3 main sets: the first set included socioeconomic information, while participants' second set included questions about the use and perspective towards antidepressants and instructions

provided. The third set included an assessment about their knowledge of antidepressants through a graded scale out of 6, presenting 6 questions that reflect facts about the course of treatment and medications. To ensure validity, the questionnaire was evaluated by academics possessing previous experience in clinical studies. Survey random sampling was used; the researcher approached random residents entering pharmacies in the Bekaa area. Responders were offered to participate in the study, and an information leaflet was provided upon acceptance. Verbal consent was taken from each participant before completing the survey.

Fourth vear pharmacy student interns approached residents randomly community pharmacies during their internship. To negate any bias, the pharmacy students didn't introduce themselves as pharmacy interns that can make decisions or changes. The community pharmacist was present upon interviewing. Participants provided informed oral consent after agreement. Collected data were gathered and then returned for data entry and analysis. A quantitative approach was used in this study; collected data were encoded and then analyzed using Statistical Package for the Social Sciences (SPSS, version 22). Descriptive analysis was carried out, and Chi square test was used to identify significant correlations between different variables, with significance defined as p value < 0.05.

#### III. RESULTS

During the four-week study, 283participants completed the questionnaire. Average age was 36.9  $\pm$ 13.5 (range between 18 and 85 years), 36.7% were less than 30 years old, and 61.5% were females. The participants' socioeconomic data are presented in 1].Among participants, [Table 61.1% took antidepressant in the past 4 weeks (61.27% were females and 38.7% were males), and among them, 79.1% received instructions and enough counseling about the medication use. 54.1% of the participants were university students or having a university degree, and 35% were married.

The majority of prescribers were physicians, accounting for 83.2%, while pharmacists account for only 9.8%; the rest of prescribers were relatives and friends 7% [Figure 1]. Among patients who received instructions from physicians, 19.7% stated that they interrupted the treatment without referring to their physician, while 43.4% didn't (p = 0.026). Almost half of the patients believed that the instructions provided were beneficial (54.4%), and among them, 39.2% didn't change the treatment course without referral.

A high percentage of patients who took antidepressants had doubts about the treatment (54.8%), while 44.2% didn't (p<0.001). A high percentage of patients (48.0%) reported no interruption of the treatment course on their own, while 23.7% did (p<0.001).

There was a significant association between patients who received antidepressants and used social media, where 32.5% of patients reported using social media many times per day (p =0.034), 10.6% reported using it once per day, and 14.5% rarely used it. Another significant association was noted in patients who received antidepressants and their educational level, where 30.4% of them had at least a university degree, 13.8% had a secondary degree, 10.2% had a primary degree, and 6.7% were illiterate (p = 0.048). Knowledge regarding antidepressants use was also assessed: only 37 patients (13.0%) got a score of 6/6, 61 patients (21.5%) got a score of 5/6, and 57 (20.1%) got a score of 4/6. The rest of patients got scores of 3/6 and below [Table 2].

#### Discussion IV.

The results shown in this study were similar to other studies in terms of gender difference receiving antidepressant. Our study reveals that 61.27% of patients receiving antidepressants were females, and this was consistent with the American Psychological Association statistics, which revealed that women are more likely than men to take antidepressants in every age group (16.5% for women compared with 8.6% for men) [15].

The patient's cultural background and own beliefs are always thought to be an unprecedented factor in the treatment plan, and hence the overall outcome [5]. The World Organization of Family Doctors (WONCA) culturally sensitive depression guideline notes that 'The primary care physician needs to understand the cultural, religious and gender paradigm that the individual brings to the consultation in order to increase the chance of establishing a therapeutic alliance that reduces the personal distance between physician and patient. This will maximize the chance of therapeutic success" [7,8]. Many studies revealed that physicians must be aware of the cultural differences especially in countries with diverse ethnic and religious groups, which may affect the treatment plan, in order to minimize any therapeutic failure [6,8]. In Lebanon, the use of medications without prior prescription is customary. Our study showed that the majority of patients in the Lebanese community who are currently antidepressants referred to physicians and had received instructions on how to use the medication, which is consistent with the fact that drugs acting on the psychology and mental health are taken with caution, where discussion between patients and physicians may help clarify mutual expectations and opinions [16]. Although depression and antidepressants in our community are often thought to be taboo and patients might not adhere to the dosage regimen due to the fear side effects, our findings show the contrary [9].

None

The majority of antidepressant prescriptions in this study were prescribed by physicians, while pharmacists account to a minimal percentage. This implies that patients prefer to be examined by a specialized physician when it comes to their mental health, unlike other conditions that in their opinion seem to be minor and need no intervention by physicians. This study also showed that healthcare professionals play a critical role in influencing patients to adhere to their treatment regimen, where the majority antidepressants users didn't interrupt the treatment on their own and stating that the instructions were very beneficial. This reveals the trust the patients have in their treatment plan and in their health team, particularly pharmacists in assuring and reinforcing adherence [8,10].

Online social networking has changed the way people communicate and interact. However, it remains unclear, whether some of these changes can affect behaviors and mental health or not [11]. Many publications have shown that online social networking can be classified as a potential addiction disorder [12,13,14]. One observational study reported that sudden cessation of online social networking may cause signs and symptoms that at least resemble the ones seen during drug/alcohol/nicotine abstinence syndrome [11]. Our observational findings suggest that the use of antidepressants may be linked to the use of social media, and may be consistent with the previous studies in terms of relation between social networking and mental disorders.

This study has certain limitations in which was conducted for patients or customers presenting at community pharmacies located at Bekaa Valley, which is one of the Lebanese governorates, and thus this population may not be not reflect the whole Lebanese community perspective. Also, it is a descriptive crosssectional study, and thus less significant correlations may be drawn. A large-scale nationwide study is needed to assess the whole population perspectives.

### Conclusion

In total, 61% of the interviewed population were using or had already used antidepressants; social media and educational level may have significant relation. Prescribers were mostly physicians, with most of the antidepressant users believed that the instruction provided were beneficial. Despite the counseling provided, a large percentage of users still had doubts about the use of antidepressants, especially in relation to compliance and interruption of therapy. Future actions with a view to improve the knowledge and perspective seem to be particularly needed and relevant.

Conflicts of interest The authors have no conflicts of interest to disclose **Funding** 

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Table 1: Participants' socioeconomic data

Demographic	N=283	Percentage
Gender		
Female	174	61.5%
Male	109	38.5%
Marital status	103	00.070
Married	99	35%
Single	146	31.6%
Widowed/divorced/	21	7.4%
In a relationship	·	6%
Education	17	0%
	00	0.00/
Illiterate	28	9.9%
Primary school	39	13.8%
Secondary school	63	22.3%
University and above	153	54.1%
Occupation		.=
Students	49	17.3%
Healthcare	34	12%
Nonhealthcare	99	35%
Unemployed	92	32.5%
retired	5	3.2%
Home		
Private	221	78.1%
Shared	17	6%
Rented	45	15.9%
Alcohol		
Yes	28	9.9%
No	255	90.1%
Nationality		
Lebanese	243	85.8
Non-Lebanese	20	7.1
Syrian Refugee	20	7.1
Smoker		
Yes	143	50.5
No	140	49.5
Income per month		
<500 \$	30	10.6%
500-1500 \$	158	55.8%
>=1500\$	95	33.6%
Health Insurance		
NSSF	67	23.7%
COOP	25	8.8%
Private	67	23.7%
None	124	43.8%
TNOTIC	14	+0.0 /0

Use of social media		
Many times per day	164	58%
Once per day	46	16.25%
Every other day	16	5.7%
Rarely	57	20.1%

Table 2: Knowledge related questions and scoring

# Questions related to knowledge (Yes, no, I don't know)

- 1. Do all antidepressants need prescription?
- 2. Do you know that antidepressants may cause side-effects?
- 3. Do you know that antidepressants may cause dependency?
- 4. Do you know that antidepressants may cause tolerance?
- Do you know that the interruption at the end of treatment should be gradual?
- Do you know that antidepressants can be used for other indications

Number of patients	Score	Percentage
37	6/6	21.55477
61	5/6	13.0742
57	4/6	20.14134
50	3/6	17.66784
28	2/6	9.893993
40	1/6	14.13428
10	0/6	3.533569

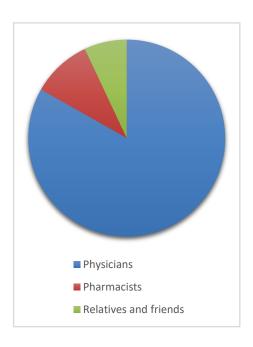


Figure 1: Prescribers