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Psychiatrists' Attitudes Toward Psychopharmacologic Treatments During Pregnancy and Lactation Periods: A Survey Study

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ABSTRACT:

Psychiatrists' attitudes toward psychopharmacologic treatments during pregnancy and lactation periods: a survey study

Objective: Pregnancy and lactation are risk periods when women are susceptible to psychiatric illnesses. As well as side effects and teratogenic effects of drug utilization, negative effects of untreated psychiatric illnesses on the fetus and mother may be issues of concern. Management of pregnancy and lactation periods may become complicated by a relapse of a psychiatric illness or by using a drug with unexpected harm effecting mother or baby. Mental health professionals are commonly confronted with patients who ask for advice during such times. In determining the course of treatment, the attitudes of mental health professionals are as important as the attitudes of patients. This study was conducted to evaluate attitudes and personal opinions of psychiatrists.

Methods: An Internet survey was designed to ask questions about the tendency to use pharmacotherapy, electroconvulsive therapy (ECT), or psychotherapy, or to stop or lower the dosage of medicines, and the personal principles of psychiatrists during pregnancy and lactation. The relationship between academic degrees and professed knowledge levels of psychiatrists about management of treatments of pregnant and lactating women and personal comments were also evaluated. Of those asked, 246 psychiatrists replied and 213 online-surveys were completed.

Results: Of the respondents, 22.2% were psychiatry residents, 50.9% were attending psychiatrists, 6.6% were assistant professors, 9% were associate professors, and 11.3% were full professors. The results showed that avoidance of starting drug therapy, terminating an ongoing drug treatment, seeking alternatives to drug treatment, transitioning to ECT treatment and consulting a higher center were significantly more common in pregnancy than during the lactation period ($p<0.05$). Low, dosage-safe medicine use was preferred in both periods. In cases where drug utilization was deemed necessary, higher scores were obtained regarding the opinion that it was necessary to 'avoid pregnancy' than to 'avoid lactation'. The attitudes of psychiatrists did not change according to the level of their knowledge that they professed. Of psychiatrists, 85% stated that they know and successfully apply drug utilization principles in pregnancy and lactation (always and generally), and 81% stated that during examination, they were able to provide their patients needed information and training. Psychiatrists did not prefer to terminate a pregnancy if medicine was needed for treatment with a response rate of 61.1% for 'never'.

Conclusions: The present study showed that the psychiatrists were reluctant in prescribing psychotropic drugs during pregnancy, but they were more comfortable doing so in the lactation period. The attitudes of the psychiatrists seemed independent from their generally stated knowledge levels. The present study is valuable because it shows the differences in attitudes of the psychiatrists regarding their treatment approaches in the periods of pregnancy and lactation. More understandable messages from the leading researchers in this area and guidelines are needed for outlining clearer principles.

Keywords: attitudes, psychiatrists, physicians, pregnancy, lactation, psychotropic agents

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INTRODUCTION

Pregnancy and lactation often occur during ongoing treatment of psychiatric diseases[1]. Information in both classical medical training and the literature warns physicians of the side effects of drugs, which can effect both the mother and the baby.

Many studies have made claims with regard to the side effects of drugs used for treatments during pregnancy. However, the potentially negative side effects of psychiatric diseases that are not treated during pregnancy on the lives of the baby, the mother, and the people around them should not be ignored[2].

The negative effects experienced by women with untreated psychiatric diseases have been included in the literature and discussed in the media[3]. There is a risk that a woman whose psychiatric disease persists may be unable to provide the care needed during pregnancy and post-pregnancy, and she may even harm herself, the baby or the people around her. Recent studies have indicated that in cases with untreated psychiatric diseases, mainly depression, adverse effects on the fetus may lead to developmental and psychological impairments in the baby[4,5].

During these periods, when treatment, drug utilization and management of pregnancy and lactation are urgent issues, women often make their own decisions, seek treatment, determine their treatment themselves, or continue ongoing treatment. Of significance here are the responses made to women who seek treatment and ask for advice regarding their current state. Approaches and referrals by physicians are important in determining behaviors that can control psychiatric diseases in the pregnancy and post-pregnancy periods. Even though the individual preferences of the patient are considered more important now than they were in the past, physicians still have the responsibility of making decisions regarding referrals. Therefore, the attitude of the physician substantially influences the fate of the mother and the baby[6,7]. In the management of the pregnancy period, the patient needs to answer challenging questions when they seek medical treatment. Psychiatrists must make various decisions when examining a mentally ill woman. When the practitioner comes face to face with a pregnant woman, he or she has to decide whether to start the patient on drug therapy or continue an ongoing pharmacotherapy. Patients commonly ask psychiatrists what to do about their pregnancy, whether to terminate or continue an existing pregnancy, or, in cases where the woman is not yet pregnant, they may be worried about planning a pregnancy under an ongoing psychiatric treatment. In these situations, the practitioner has to consider many options before deciding on one; prescribing medicine, cessation of medicine, lowering dosages, ECT, making appropriate suggestions about pregnancy, and asking a supervisor. The same process is valid during the lactation period. Breastfeeding has been shown to provide the infant with natural immunity and nutritional support, and a longer duration of breastfeeding has been shown to have positive effects on mother–infant interaction as well as on the infant's growth and development[8]. Thus, in the light of current data and researchers' suggestions about the benefits of lactation, the decision to cease lactation must be based on sound reasoning.

Because pregnancy and lactation are critical periods, they are likely to effect not only the baby but also the patient and her family. Personal opinions and attitudes are important in managing such critical and difficult conditions. This is a descriptive study based on a survey among psychiatrists. The aim of this study is to examine the approaches psychiatrists take to the challenging aspects of treating mentally ill patients during pregnancy and lactation. The personal opinions of the practitioners are used to determine their approach.

METHODS

This study was conducted in 2013 through an online link of a survey that was sent to the email addresses of a group of psychiatrists in Turkey. The group is an closed e-mail group which includes only

psychiatrists recommended by existing members. The survey consisted of one section asking questions about personal data and other sections asking about practitioners' attitudes, approaches and opinions about pregnancy and lactation.

The first part asked for personal data, such as the practitioner's age, gender, marital status, proficiency, etc. The second part asked questions about the psychiatrists' approaches to the management of treatment and follow-up of patients during pregnancy (seven questions). The third part asked questions about the psychiatrists' approaches to the management of treatment and follow-up of patients during the lactation period (seven questions). The fourth part asked for the personal opinions of the psychiatrists about the pregnancy and lactation periods of their patients (six questions). The fifth part asked for the personal opinions of the psychiatrists about themselves with regard to knowledge, following the current literature and the didactic education of patients (three questions).

The answers were classified according to a four-point scale: never: 1; sometimes: 2; generally: 3; always: 4.

SPSS15.0 was used for the statistical analysis. A t-test and a paired samples t-test were used to compare the means with independent samples. The mean scores of the multiple groups were compared using a one-way ANOVA, and an additional post-hoc analysis was conducted.

RESULTS

General Data

The number of members in the e-mail group of psychiatrists was 2857. From these, 246 responses were received, 213 of which were complete. The evaluation survey was based on the 213 completed surveys. Because some questions were left unanswered, the number of participants was defined for each response.

The average age of the psychiatrists participating in the survey was 37.58 years, 58.1% (n=122) were female, and 75.7% (n=159) were married.

Of the respondents, 22.2% were psychiatry resident, 50.9% were specialist psychiatrists, 6.6% were assistant professors, 9% were associate professors, and 11.3% were full professors.

Psychiatrists' Attitudes

The percentages of questions asking about the follow-up and treatment approaches of the psychiatrists in the pregnancy and lactation periods and their responses to these questions are shown in Tables 1 and 2.

The follow-up and treatment approaches of the psychiatrists in the pregnancy period and lactation period were compared. The results showed that avoidance of starting drug utilization, terminating an ongoing drug treatment, seeking

Table 1: Follow-up and arrangement approaches of psychiatrists with regards to the pregnancy period

	Always % (n)	Generally % (n)	Sometimes % (n)	Never % (n)
I recommend avoidance of starting drug utilization if not utilizing now.	18.0% (37)	54.9% (113)	23.8% (49)	3.4% (7)
I recommend discontinuing the psychiatric drugs if she is utilizing any.	6.4% (13)	40.7% (83)	46.6% (95)	6.4% (13)
I recommend terminating the pregnancy if she is utilizing any psychiatric drugs.	0.0% (0)	2.0% (4)	36.9% (75)	61.1% (124)
I recommend using low-dosage, safe drugs if she has to utilize drugs.	36.9% (76)	45.6% (94)	14.1% (29)	3.4% (7)
I recommend ECT.	4.9% (10)	19.9% (41)	69.9% (144)	5.3% (11)
I recommend to discontinue the drug, use of interventions such as outpatient clinic control, family support, and psychotherapy.	8.8% (18)	40.0% (82)	48.3% (99)	2.9% (6)
I refer to a higher center for consultation.	5.4% (11)	18.2% (37)	57.6% (117)	18.7% (38)

alternatives to drug treatment, transition to ECT treatment and consulting a higher center scored significantly higher during pregnancy compared to the lactation period. The psychiatrists gave the highest scores to low-dosage safe drug utilization in both periods, and there was no significant difference between the scores of the pregnancy and lactation periods in the responses to this question (see Table 3).

Personal Opinions of the Psychiatrists

The questions asking for the personal opinions of the psychiatrists with regard to the patients'

Table 2: Follow-up and arrangement approaches of the psychiatrists with regard to the lactation period

	Always % (n)	Generally % (n)	Sometimes % (n)	Never % (n)
I recommend avoidance of starting drug utilization if not utilizing now.	12.3% (25)	52.9% (108)	29.9% (61)	4.9% (10)
I recommend discontinuing the psychiatric drugs if she is utilizing any.	3.9% (8)	23.2% (47)	56.7% (115)	16.3% (33)
I recommend terminating the pregnancy if she is utilizing any psychiatric drugs.	30.7% (62)	50.5% (102)	15.8% (32)	3.0% (6)
I recommend using low-dosage, safe drugs if she has to utilize drugs.	9.3% (19)	30.4% (62)	48.5% (99)	11.8% (24)
I recommend ECT.	6.8% (14)	27.8% (57)	59.5% (122)	5.9% (12)
I recommend to discontinue the drug, use of interventions such as outpatient clinic control, family support, and psychotherapy.	2.5% (5)	5.4% (11)	71.6% (146)	20.6% (42)
I refer to a higher center for consultation.	3.5% (7)	15.2% (30)	56.1% (111)	25.3% (50)

Table 3: Comparing the follow-up and treatment approaches of the psychiatrists with regard to the pregnancy period and the lactation period

	Pregnancy Period	Lactation Period	t	p
Avoid starting drugs	2.88	2.73	2.92	0.004
Discontinue drugs	2.47	2.15	7.25	0.000
Low-dosage safe drug	3.16	3.08	1.31	0.19
Terminate pregnancy/lactation	1.41	2.36	-15.09	0.000
Alternative treatments instead of drugs	2.56	2.36	4.83	0.000
ECT recommendation	2.24	1.90	8.49	0.000
Consulting a supervisor at a higher center	2.09	1.97	4.43	0.000

Table 4: General opinions of the psychiatrists with regard to the pregnancy period and lactation period of psychiatric patients

	Always % (n)	Generally % (n)	Sometimes % (n)	Never % (n)
They should avoid becoming pregnant if they need to utilize drugs in the pregnancy period.	14.5% (30)	37.7% (78)	42.0% (87)	5.8% (12)
They should be able to become pregnant even if they utilize drugs in the pregnancy period.	4.9% (10)	19.5% (40)	64.4% (132)	11.2% (23)
They can experience a safe pregnancy with low-dosage safe drugs.	6.8% (14)	45.9% (95)	45.4% (94)	1.9% (4)
They should avoid lactation if they need to utilize drugs in the post-pregnancy period.	8.3% (17)	35.1% (72)	47.8% (98)	8.8% (18)
They should breastfeed as much as other mothers do even if they need to utilize drugs post-pregnancy.	8.3% (17)	22.3% (46)	51.5% (106)	18.0% (37)
They can experience a safe lactation period for the baby and themselves with low-dosage safe drugs.	15.5% (32)	45.1% (93)	34.5% (71)	4.9% (10)

Table 5: Comparing the general opinions of the psychiatrists with regard to the pregnancy and lactation periods of psychiatric patients

	Pregnancy	Lactation	t	p
Avoid pregnany/breastfeeding if drug utilization is necessary	2.59	2.42	-2.73	0.007
Continue pregnancy/breastfeeding even if drug utilization is necessary	2.18	2.20	0.28	0.777
Pregnancy/breastfeeding possible with low-dosage safe drug	2.57	2.70	2.59	0.01

Table 6: Questions asking for the opinions of the psychiatrists with regard to their knowledge level, awareness of current research, and informing patients

	Always % (n)	Generally % (n)	Sometimes % (n)	Never % (n)
I know and successfully apply drug utilization principles during pregnancy and lactation period.	15.9% (33)	69.1% (143)	15.0% (31)	0.0% (0)
I follow current research and information in relation to drug utilization in pregnancy and lactation period.	15.9% (33)	51.4% (107)	31.3% (65)	1.4% (3)
I can provide my patients with information and training in relation to drug utilization during pregnancy and lactation period during examination.	28.1% (59)	52.9% (111)	19.0% (40)	0.0% (0)

pregnancy and lactation processes and their responses are shown in Table 4.

The psychiatrists' opinions regarding the pregnancy period were compared to their opinions in relation to the lactation period. Higher scores were obtained regarding the opinion that it was necessary to 'avoid pregnancy' than 'avoid lactation' if drug utilization was necessary. While no difference could be determined between the scores of terminating pregnancy and scores of ending lactation when drug utilization was necessary, the opinion that it was possible to follow up the process with low-dosage safe drugs obtained higher scores for the lactation period (see Table 5).

Factors Relating to the Attitudes and Personal Opinions of the Psychiatrists

Knowledge Level, Academic Degree

The psychiatrists were asked to comment on their own positions (see Table 6). Accordingly, the participants responded to the question 'I know and successfully apply drug utilization principles in pregnancy and lactation period' as follows: 33 (15.9%), 'always'; 143 (69.1%), 'generally'; 31 (15.0%), 'sometimes'; none responded 'never.' To understand if there was a difference between the attitudes of those who gave themselves the highest scores (n=33) and those who gave themselves the lowest scores (n=31), these scores were compared to the average scores of the responses given to the questions in the survey. When all survey responses that contained approaches and opinions were evaluated, there was no significant difference between the groups except for the responses to 'psychiatry patients should be able to become pregnant even if they need drug utilization', and 'consulting a higher center' in the personal opinions in both pregnancy and lactation periods. The scores of those who responded 'sometimes' with regard to consulting a higher center were higher, and the opinion that 'psychiatry patients should be able to become pregnant even if they need drug utilization' were supported by those who professed their knowledge level was higher ($p<0.05$).

The last part, which contained questions related to the working conditions and academic positions of the psychiatrists (i.e., psychiatry

Table 7: Evaluation of the differences between groups when the groups' scores were compared based on professional title

	Pregnancy period		Lactation period	
	F	p	F	p
Avoid starting drugs	3.748	0.006	2.811	0.027
Discontinuance of drugs	1.193	0.315	2.411	0.051
Low-dosage safe drugs	0.604	0.660	0.903	0.463
Termination of pregnancy/breastfeeding	2.033	0.091	1.308	0.268
Alternative treatments instead of drugs	2.417	0.050	2.909	0.023
ECT recommendation	1.654	0.162	2.272	0.063
Consulting a supervisor (center)	14.564	0.000	11.949	0.000
Avoiding pregnancy/breastfeeding if drug utilization is necessary	1.249	0.291	0.659	0.621
Continuation of the ongoing pregnancy/breastfeeding even if drug utilization is necessary	1.693	0.153	1.110	0.353
Pregnancy/breastfeeding possible with low-dosage safe drug	1.486	0.208	2.572	0.039

residents, attending psychiatrists, assistant professor, associate professor and full professor), was excluded. The responses that created a significant difference were found when direct attitudes and opinion scores (survey parts 2, 3 and 4) were evaluated with a one-way ANOVA test, as shown in Table 7. In the post-hoc analyses; on the other hand, it was observed that the group that had different responses to attitudes and opinions was mainly that of assistant professors, while the other groups shared similar responses. The full professors' scores were significantly lower with regard to consulting a higher center.

DISCUSSION

General Data

This present study investigates psychiatrists with different titles (academic degrees), from many institutions, and of varying ages. To the best of our knowledge, this study is the first of its kind and content in Turkey and in the relevant literature. The survey was sent to an email group of 2857 psychiatrists; only 246 responded to the email. There could be many reasons for the low response rate; however, it could be interpreted that those who did not respond were not interested in the topic or did not want to participate in the study.

Psychiatrists' Attitudes

The first part of the study was related to the pregnancy period of female psychiatric patients and focused on follow-up and treatment. Based on the results, 73% of the psychiatrists responded 'always' or 'generally' to the question about "avoiding drug utilization in pregnant patients"; 47% declared that they would 'always' or 'generally' recommend the discontinuance of drug utilization. In a study comparing the attitudes of neurologists and psychiatrists about utilizing anticonvulsants during the perinatal period, neurologists were more likely to encourage pregnancy and nursing during anticonvulsant use than psychiatrists and psychiatrists were more cautious regarding perinatal safety, citing potential neurobehavioral risks[9].

In planning the treatment of the pregnant patient, the ratio of recommendation of low-dosage safe drug utilization (always and generally) was 83%; 25% recommended ECT, and 49% (always and generally) recommended family support, frequent follow-ups, and policlinic control instead of drugs. These approaches are generally supported by established data in the literature. It is interesting that 61.1% of the psychiatrists responded 'never' to the question "will you recommend to a pregnant woman who utilizes psychiatric drugs to terminate her

pregnancy?" In a survey study conducted with medical students in Ireland, 28.8% of participants stated that they would decline to terminate pregnancies even if legally permitted[10]. In another survey study among medical students in South Africa, 87.2% of participants stated that they would perform or refer a woman for abortion under certain circumstances[11]. Studies indicate that the cause of abortion, religious beliefs, profession, and legal and educational experiences influence the attitudes towards terminating pregnancy[12,13].

When the pregnancy and lactation periods were compared, it was concluded that psychiatrists were more cautious during pregnancy than in the lactation period. A previously conducted survey study found that the first trimester of pregnancy was judged to be the most critical by 96% of psychiatrists as to when they would avoid certain medications, followed by the periconceptional period (38%) and lactation (30%). The second and third trimesters were considered safe by 90% and 80% participants respectively[7]. In this study, another significant result was that up to 40% of the psychiatrists (always and generally) recommended discontinuing lactation in psychiatric patients who need to utilize drugs. In the study comparing neurologists and psychiatrist regarding their attitudes to anticonvulsant use in the perinatal period, psychiatrists were more cautious regarding perinatal safety and complications of breastfeeding than neurologists[9]. Despite increasing knowledge about the benefits of breastfeeding, breastfeeding rates remain relatively static[14] or are decreasing[15]. In previous studies, lack of guidance and conflicting advice by medical staff have been shown to be responsible for inadequate breastfeeding[14].

Personal Opinions of the Psychiatrists: Pregnancy / Lactation

The study asked questions regarding psychiatrist's personal opinions and their daily application. Psychiatrists tended to recommend the avoidance of pregnancy if their patients needed to utilize psychiatric drugs. Only 4.9% of the psychiatrists responded 'always' to the question whether patients should become pregnant even if they needed to utilize drugs. The ratio increased by 24% when the response of 'generally' was made to the same question. Based on these results, it is thought that psychiatrists prefer their patients not to become pregnant while taking psychiatric drugs. Only 2% of the psychiatrists responded 'never' to the question about the safety of pregnancy with low-dosage safe drugs; 52.7% responded 'always' and 'generally'. In other words, the psychiatrists who avoided drug utilization in pregnancy in the previous questions leaned towards the utilization of low-dosage safe drugs. However, it seems that although 52.7% of the psychiatrists responded 'generally' and 'always' to the possibility of experiencing a safe pregnancy with low-dosage safe drugs, 52.3% recommended avoidance of drug utilization, and only 24% recommended reserving the patient's right to become pregnant even if drugs were utilized. The results indicate that the concept of safe pregnancy with safe drugs has not been fully adopted by the psychiatrists who responded to the survey. In a previous study, the participants were asked to comment on their views about treating a psychiatric disorder during pregnancy and/or lactation; 60% of the participants commented that they faced certain difficulties while treating pregnant or lactating women with psychotropic drugs[7].

The psychiatrists' personal opinions indicated that they were more comfortable in the lactation period than during pregnancy. The percentage of psychiatrists who thought that drug-utilizing mothers should avoid lactation (always or generally) was 44%; 30.6% thought that lactation of drug-utilizing mothers was as important as that of other mothers (always and generally). Similarly, the psychiatrists considered that safety of drug utilization was greater in the lactation period. Eighteen percent of psychiatrists were against breastfeeding in psychiatric patients who needed to utilize drugs or the same duration as other

mothers; 11.2% of psychiatrists were against pregnancy in patients who needed to utilize drugs. It can be concluded that psychiatrists are reluctant to condone psychotropic medication use during pregnancy. They are more inclined to accept breastfeeding in these patients. However, higher scores indicated psychiatrists' willingness to prescribe low-dosage safe drugs in the lactation period.

Factors Regarding Attitudes and Opinions: Knowledge and Titles (Academic degree)

In this study, 85% of the psychiatrists stated that they know and successfully apply drug utilization principles in pregnancy and lactation periods (always and generally), and 81% stated that during examination, they were able to provide their patients the needed psychoeducation in relation to drug utilization during pregnancy and lactation. In a study conducted with pediatricians in a training program, only 14% of the total sample described themselves as "confident" or "very confident" to manage common breastfeeding problems[16]. In another study conducted with gynecologist/obstetricians, 56% of the participants had confidence in their ability to meet needs of breastfeeding women and only 16% stated that they have received 'at least training' how to support breastfeeding women[17]. It seems that psychiatrists in Turkey have high confidence in their ability to manage perinatal periods.

In the relationship between the personal opinions and knowledge levels expressed by the psychiatrists in follow-up and treatment approaches, no significant difference was determined in attitudes except for those in favor of consulting a higher center and those who said psychiatric patients should be able to become pregnant even if they utilize drugs. When the results were compared according to professional titles, assistant professors gave different responses to questions about attitudes and opinions. Psychiatry residents, attending psychiatrists, associate professors and full professors did not differ in their responses to the questions except with regard to personal position, such as consulting a higher center. A survey study was conducted to show the relationship between knowledge and personal attitudes of medical staff towards mentally ill patients, and it was shown that greater knowledge was related with negative attitudes[18]. No significant relationship between knowledge level and attitudes was seen in this study.

This study is significant on several levels. Even though it could be assumed that knowledge levels did not alter the attitudes of the psychiatrists, these levels were not measured quantitatively in this survey. Moreover, since no fixed drugs from a fixed disease group were referred to and working conditions and the patient profile of each psychiatrist differed greatly, more specific comments with regard to the results of the survey could not be made.

CONCLUSION

This present study showed that the psychiatrists were reluctant in prescribing psychotropic drugs during pregnancy, but they were more comfortable doing so in the lactation period. The attitudes of the psychiatrists seemed independent from their generally stated knowledge levels. This study is valuable because it shows the differences in attitudes of psychiatrists regarding their treatment approaches during pregnancy and lactation. The results of the study suggest that studies that examine drug utilization principles in pregnancy and lactation could provide clearer information.

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