

Anxiety and Depression last one Month after Miscarriage at Jordan University Hospital

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ABSTRACT

Background: Miscarriage is associated with moderate to high risk of psychological problems. In Arab countries, the percentage of people who seek psychological help is low. The epidemiological mental studies for clinical and community samples are not frequently conducted in Jordan. The purpose is to study the rates of anxiety and depression one month after miscarriage and compare them to rates immediately after miscarriage.

Subjects and Methods: A cross-sectional sample of 200 women between June 2018 and December 2019 with early pregnancy loss up to 13 weeks of gestation was studied. Assessment for the severity of anxiety and depression was carried out within 12 hours after miscarriage and one month later, using translated and validated versions of the Generalized Anxiety Disorder-7 and the Patients Health Questionnaire 9.

Results: The mean age of women was 33.1 ± 6.3 years and the age ranged between 19-47 years. The number of miscarriages ranged from 1-12 with a mean of 1.9 ± 1.5 . Within 12 hours post evacuation; 19.5% of women had severe anxiety and 22.5% had moderately severe and severe depressive symptoms. One month later; 5.5% had severe anxiety and 7% had moderate to moderately severe depressive symptoms. Severe anxiety was transient in about 72% of women and moderate to severe depression was transient in 69%.

Conclusions: Understanding the type and frequency of emotional reactions to pregnancy loss is important. Screening is advised to target appropriate support to those who need, there-by minimizing psychological morbidity and its societal cost. Increasing medical staff awareness is needed.

Keywords: Miscarriage, Anxiety, Depression.

1. INTRODUCTION

Miscarriage is one of the most common complications during early pregnancy (1), and its management is

medically straight forward (2). Women are highly reactive to stress in early pregnancy (3). Early pregnancy loss (EPL) is usually a shocking and traumatic event for women and their families (4). At the time of miscarriage, most women experience a period of intense emotional distress (5) that leads to symptoms of grief such as sadness, yearning, social isolation and guilt (6). EPL is a risk factor

Received on 26/7/2020 and Accepted for Publication on 23/11/2020.

for mental illness (7). Its impact on a woman's life can erroneously be underestimated (7), as it is a significant source of psychiatric morbidity (4). Untreated anxiety after EPL is associated with an increased risk of developing depression (8), as well as a prior pregnancy loss is a risk factor for developing depression and anxiety during future pregnancies especially during their first trimester(9). Although controversial, the presence of anxiety or depression in a new pregnancy constitutes a risk factor for perinatal complications (4).

During the initial weeks following a loss, symptoms of grief may be impossible to distinguish from depression, and some women may continue to experience depressive symptoms for months (5). The psychological impact of miscarriage is sometimes overlooked (2). Expression of grief and depression may show cultural variations (10). Arab cultural traditions; values and beliefs towards mental illnesses are different from those of Westerners (11). Local studies has shown stigma toward mental illness (12-14). The percentage of Arab people who seek psychological help is much lower than those in Western countries (15). Hence, most studies on the psychological impact of miscarriage have been carried out in Western countries(10).Epidemiological mental studies for both clinical and community samples are not frequently conducted in Jordan (12), also there is paucity of studies conducted on mental illness stigma and professional psychological help-seeking (16).

Hence, we designed this study to look into the rate of anxiety and depression in women attending Jordan university Hospital with the diagnosis of EPL immediately and one month later.

We hope this study will attract the attention of health providers dealing with these women.

Subjects and Methods:

All women admitted to Jordan University Hospital for elective termination of previously diagnosed missed miscarriage or retained products of pregnancy on the basis of ultrasound scan, between June 2018 and December

2019 were eligible for inclusion in the study. Each woman had a structured clinical interview by obstetrics' residents within 12 hours after evacuation and before discharge. Those ladies were told that they will receive another phone call from the same residents one month later. They were asked the same questions to fill the same questionnaires. An informed consent was obtained from all participants; they were informed that their participation is voluntary, and that they are free to withdraw anytime during the interview. Women who declined to participate in the study, women who were discharged before the residents were able to interview them, those with multiple gestation and those with miscarriages where fetal measurements were more than 13 weeks by crown rump length were excluded from the study (they were 604 women). We had 100% response rate to the survey phone calls. Hospital records were reviewed to confirm the histopathology of the outcome. A structured clinical interview was conducted by an obstetrical resident using the translated and validated version of the Generalized Anxiety Disorder -7(GAD 7), to evaluate anxiety state and we use Patient Health questionnaire (PHQ 9) for depression evaluation. Respondents were asked to provide information for their age and obstetrical history. They were asked to rate the frequency of anxiety symptoms after evacuation, on a Likert scale which ranges from 0-3. Each item is scored from 0 -3. The 0 is (not at all sure), 1 for (several days), 2 (more than half the days), 3 (nearly every day). The total scores ranged from 0 (no anxiety symptoms) to 21 (all symptoms occurring daily). A total score of 0-4 represents minimal or no symptoms of anxiety, 5-9 mild, 10-14 moderate and 15-21 severe.

For depression symptoms using PHQ-9 questionnaire; there are 9 items for assessment. Each item is scored from 0 (not at all), to 3 (nearly every day). A total score from 0-4 represents the absence or minimal level of depression, 5-9 mild, 10-14 moderate, 15-19 moderately severe and 20-27 for severe depressive symptoms. Both questionnaires were completed during the interview with these women.

The study was approved by the Ethics Committee for Medical Research at the Jordan University Hospital and the University of Jordan. Data were analyzed using SPSS 23. We obtained the frequency and percentage of women suffering from mild, moderate and severe anxiety and depression.

We obtained the frequency and percentage of women suffering from mild, moderate and severe anxiety and

depression immediately after miscarriage and one month later.

Results: A total of 200 women were interviewed; their characteristics were as follows: their mean age was 33.1 ± 6.3 years, ranged from (19–47) years. Number of miscarriages ranged from (1-12) with a mean of 1.9 ± 1.5 ; their parity ranged from (0-7) with a mean of 2.3 ± 1.5 . Table 1

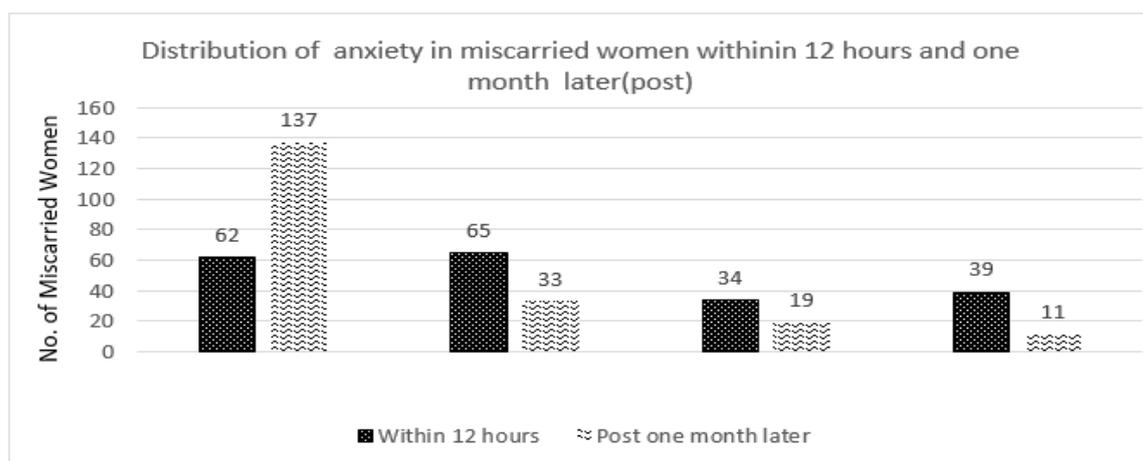
Table 1. Maternal characteristics of women with miscarriage included in the study, Jordan University Hospital, 2020

Maternal characteristics	Women with miscarriage n= 200	Women with \geq miscarriages n= 92	Women with no previous childbirth n= 27
Age years (mean)	33.1 ± 6.3	34.2 ± 6.4	29.0 ± 9.7
Age range (years)	19-47	19-45	19-47
Parity (mean)	2.3 ± 1.5	2.8 ± 1.5	0
Parity range	0-7	0-7	0-0
Number of miscarriages (mean)	2.3 ± 1.5	3.0 ± 1.5	1.6 ± 1.0
Miscarriage range	1-12	2-12	1-4

Our results for anxiety immediately post evacuation showed the following: 62(31.0%) of women had no or minimal symptoms, 65(32.5%) had mild symptoms, 34(17.0%) had moderate symptoms and 39(19.5%) had severe symptoms. Graph 1

Our results for anxiety one-month post evacuation showed that: 137 (68.5%) of women had no or minimal symptoms, 33 (16.5%) had mild symptoms, 19 (9.5%) had moderate symptoms and 11 (5.5%) had severe symptoms. Graph 1

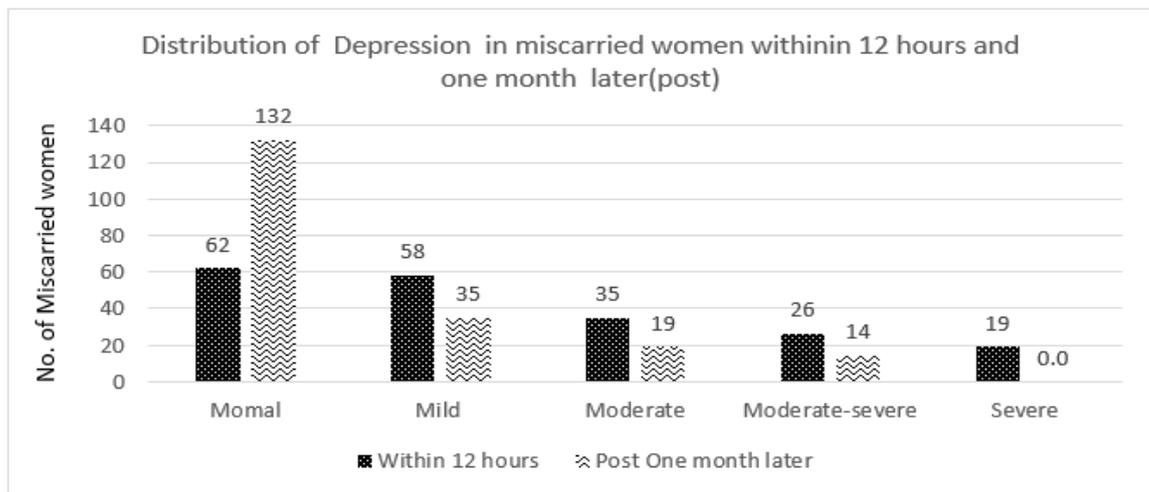
Graph 1



Regarding depression soon after miscarriage for the total group, there was 62 (31.0%) women with no or minimal symptoms, 58 (29.0%) with mild symptoms, 35(17.5%) had moderate symptoms, 26(13.0%) had moderately severe symptoms, and 19 (9.5%) had severe

symptoms. Graph 2, compared to one month later, where 132 (66.0%) showed minimal or no symptoms at all, 35 (17.5%) had mild symptoms, 19 (9.5%) had moderate symptoms, 14 (7.0%) suffer moderately severe depression and no women had severe symptoms. Graph 2

Graph 2



For women with no previous children, 10(37%) had moderate to severe anxiety soon after miscarriage, and 5 (18.5%) stay significantly anxious one month later, compared to 13 (8.1%) who had moderate to severe depressive symptoms soon after EPL and 4(14.8%) still with symptoms one month later.

For women with recurrent miscarriages, we found that 33 (35.8%) of them had moderate to severe anxiety, and 37 (40.3%) had moderate to severe depression soon after EPL. However, one month later 12(13%) suffered from moderate to severe anxiety and 15(16.3%) had moderate to severe depressive.

Discussion:

Miscarriage usually induces an intense period of emotional distress. This reaction tends to improve over the following several months, but some residual psychological concerns remain(1), as some will develop clinically significant anxiety or depression (1,2). There are many

studies that focused on anxiety and depression in women soon after EPL and for different periods that follow which ranges from weeks to several months.

Lok IH et al in his longitudinal observational study, showed that (55%) of the miscarrying women scored high immediately after miscarriage on General Health Questionnaire, and 26.8% of the patients scored high on the Beck Depression Inventory (14). However, Prettyman et al, reported clinically important levels of anxiety (41 %) and depression (22 % in the first week following miscarriage (17). Broen et al in their longitudinal study also showed that 10 days after the event, 47.5% of the women who had a miscarriage, had high Impact of Event Scale scores (18).

In another prospective study by Engelhard IM et al, 25% of the women with miscarriages met the criteria for post-traumatic stress disorder at 1 month (19). Jessica Farren et al found at 1 month screen, 32% of women in the EPL group met criteria for moderate-to-severe anxiety,

and the prevalence of moderate and severe depression symptoms 16% (16). Geller et al stated that miscarriage women are at increased risk for anxiety symptoms immediately following miscarriage and this continues until approximately 4 months post-loss (20).

Cumming GP et al found that 28.3% of women had scored at or above the clinical threshold for anxiety and 10% for depression in his prospective study, at 1, 6, and 13 months after miscarriage (5).

Mutiso SK in across-sectional study for depression, found the prevalence of positive depression screen, 34.1% two weeks after a miscarriage (21); however Klier CM et al found these women with significantly increased risk for minor depressive episodes, and majority of these symptoms developed within the first month after miscarriage (22).

Other studies showed the prevalence of depression reduces with time; 26.8 % of patients scored high on the Beck Depression immediately after miscarriage which reduced to 18.4 % at 3 months, 16.4 % at 6 months, and 9.3 % at 1 year after miscarriage (3, 23). In general, anxiety is more marked than depression (24, 25)

In our study, 73 (36.5%) women met the criteria for moderate to severe anxiety, and 80 (53%) of them had moderate to severe depressive symptoms soon after miscarriage, in comparison with 30(15%) of women for moderate to severe anxiety, and 23 (16.5%) of them for moderate to moderately -severe depressive symptoms one month later.

In our study, we noticed that most of women who stay anxious and depressed one month later were nulliparas, had recurrent losses, infertile, or and primigravida with advanced maternal age. Several factors have been identified that can predict which women may experience greater emotional distress, such as one prior miscarriage or recurrent miscarriages, and those with no living children (2, 7, 15, 26). In our study, we noticed that most of women who stay anxious and depressed one month later were

nulliparas, those with recurrent losses, infertility and advanced maternal age with IVF.

Mental health care is not integrated within the primary health care system in Jordan (11). Effective screening measures of psychological morbidity in the context of miscarriage have not been established. In 2003, The Scottish Audit of the Management of Early Pregnancy Loss highlighted the need to train healthcare professionals in the identification and management of the emotional and psychological impact of early pregnancy loss (27). The ability of healthcare professionals to detect those most at risk of psychopathology following miscarriage would be greatly enhanced by the availability of a brief screening instrument to be used in a clinical setting by non-mental health professionals (5). Failure to identify those women in need may leave them vulnerable to worsening symptomatology and significant psychosocial impairment (5). Screening for depression and anxiety (1), and initiating counseling within one week of miscarriage is advised (2), as part of routine care especially when symptoms and signs are present. The primary health care team and hospital staff need to take this into consideration when organizing follow up for women who have had a miscarriage (24).

We hope this study will attract the attention of different medical fields dealing with these women, paving the way for mental status screening after miscarriage and to be followed by proper intervention.

Conclusion:

Understanding the type and frequency of emotional reactions to pregnancy loss is important. Although anxiety and moderate to severe depression were transient in the majority of women (72% and 69%, respectively); still a significant proportion of women will continue to suffer for one month or probably more. Therefore, screening is advised to target appropriate support to those who are in need, there-by minimizing psychological morbidity and its societal cost. Increasing medical staff awareness is needed.

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القلق والاكتئاب يستمر حتى شهر بعد الإجهاض في مستشفى الجامعة الأردنية

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ملخص

الخلفية: يرتبط الإجهاض بخطر متوسط إلى مرتفع من المشاكل النفسية. في الدول العربية نسبة الأشخاص الذين يطلبون المساعدة النفسية منخفضة. لا يتم إجراء الدراسات النفسية الوبائية للعينات السريرية والمجتمعية بشكل متكرر في الأردن. الهدف: هو دراسة معدلات القلق والاكتئاب بعد شهر من الإجهاض ومقارنتها مع المعدلات المقابلة مباشرة بعد الإجهاض. المنهجية: تمت دراسة عينة مستعرضة من 200 امرأة مع فقدان الحمل المبكر حتى 13 أسبوعًا من الحمل. تم تطوع النساء بين يونيو 2018 وديسمبر 2019. تم إجراء تقييم لشدة القلق والاكتئاب في غضون 12 ساعة بعد الإجهاض وبعد شهر واحد ، باستخدام نسخ مترجمة ومصادق عليها من اضطراب القلق العام -7 واستبيان صحة المرضى 9.

النتائج: كان متوسط عمر المرأة المشمولة في هذه الدراسة 33 ± 1 سنة، وتراوح بين 19-47 سنة. تراوح عدد حالات الإجهاض من 1 إلى 12 بمتوسط 1.9 ± 1.5 ، وبعد الإجهاض مباشرة (وفي غضون 12 ساعة)، كان لدى 19.5% من النساء قلق شديد و 22.5% أعراض اكتئاب شديدة وحادة. بعد شهر واح ، كان 5.5% من النساء يعانون من القلق الشديد و 7% لديهم أعراض اكتئابية معتدلة إلى معتدلة الشدة. وبعبارة أخرى كان القلق عابراً في حوالي 72% من النساء، وكان الاكتئاب المتوسط إلى الشديد عابراً في 69% من النساء.

الاستنتاجات: من المهم فهم نوع وتواتر ردود الفعل العاطفية لفقدان الحمل. يُنصح بالفرز لاستهداف الدعم المناسب لأولئك الذين يحتاجون للتقليل من المراضة النفسية وتكلفتها المجتمعية. هناك حاجة لزيادة وعي الطاقم الطبي للحد من معاناة النساء بعد الإجهاض.

الكلمات الدالة: الإجهاض، القلق، الاكتئاب.

تاريخ استلام البحث 2020/7/26 وتاريخ قبوله للنشر 2020/11/23.