

**Deanship of Graduate Studies**

**AL-Quds University**



**Assessment of the prevalence of depression and death  
anxiety among adolescents and husbands of women with  
cancer in Palestine**

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**M.Sc. Thesis**

**Jerusalem – Palestine**

**2019/1440**

Prevalence of Depression and Death Anxiety among  
Adolescents and Husbands of Women with Cancer in Palestine

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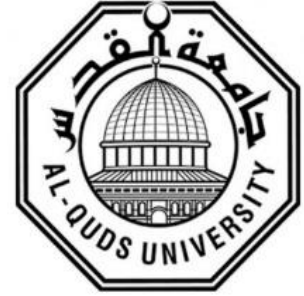
Thesis Submitted in Partial Fulfillment of the Requirements for  
the Degree of Master of Science in Psychotherapy and Mental  
Health, Faculty of Public Health /Al-Quds University

**Jerusalem – Palestine**

2019/1440

Deanship of Graduate Studies

Psychotherapy and Mental Health, Faculty of Public Health



### Thesis Approval

Prevalence of Depression and Death Anxiety among Adolescents and Husbands of Women with Cancer in Palestine

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Master thesis submitted and accepted, Date: 4/5/2019

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Jerusalem – Palestine

2019/1440

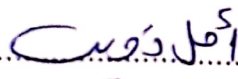
## **Dedication**

This thesis is dedicated to my husband and children, without their patience and support nothing would be done.

Amal Dweib

**Declaration:**

I Certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, and that this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signed .......

Amal Isa Ali Dweib

Date: May 11<sup>th</sup> 2019

## Acknowledgments

I would like to express my deep thanks and gratitude to all people who were involved in helping me undertake my study, without that cooperation this would not have been possible.

- My high appreciation is due to Dr. Muna Ahmead my supervisor for her support, encouragement and assistance.
- Thanks are due to my internal and external examiners who did not retain any effort to review this thesis and guide me to the best outputs.
- Sincere appreciation and gratitude to my colleague Dr Mohamad Khleif for his continuous support, assistance, and encouragement in all phases of this research.
- Special thanks go to my uncle Mohamad Dweib and his wife Tamam for their endless support and encouragement all my life.
- Special thanks go to my best friends and dedicated palliative care social workers for their appreciated support in the data collection process; Ms. Amira Lahasa and Ms. Jihad Alawi.
- Many particular thanks to professionals at Beit Jala and Augusta Victoria hospitals for their cooperation.
- My gratefulness extends to AL-Quds University and the faculty of Public Health and their academic staff for their important role and help over the past years in providing the needed circumstances for me to fulfill this master program.
- Last but not least, my deepest gratitude, appreciation and love are owed to my husband Mohamad and my four children; Ahmad, Sadeel, Ayham and Rayyan for their patience, support, understanding and encouragement through the years of my graduate work.

## **Abstract**

**Background:** Diagnosis of cancer carries a large burden not only on the patients, but on their families as well. This is most influential when considering the critical stage of adolescent children, as well as the partners of the cancer patients while supporting their children through this experience. This study was conducted to assess the prevalence of death anxiety and depression among adolescent children and husbands of women with cancer who were treated in two main cancer centers in Palestine.

**Methodology:** A cross-sectional study included 285 participants (response rate =89%), using a self-reported questionnaire to assess death anxiety, by Templer Death Anxiety Scale (DAS), and depression, by Beck Depression Inventory (BDI). Target population included adolescents (n=101 boys and 99 girls), aged 12 to 20 years old, and husbands (n=85) of women with cancer who were treated at Beit Jala Governmental Hospital in Bethlehem and Augusta Victoria private Hospital in Jerusalem.

**Results:** The analyzed families were mainly living in cities (63.6%), with income under 2000 NIS (45.4%), and of women with breast cancer (72.7%) on chemotherapy treatment (47.7%). Majority of the adolescents were 18 to 20 years old (45.8%), with secondary education (40.7%), and not working (86.9%). On the other hand, 45.5% of husbands were less than 50 years old, were less than 12 years of education (55.6 %), and were working (87.5%).

The overall mean score of depression among all participants was 8.7 scale points, with significantly higher ( $p= 0.03$ ) scores of depression in adolescents than husbands (mean= 9.5 and 6.8; respectively). The worst depression mean scores were in daughters. Also, the mean score of death anxiety in all participants were 5.4 points, with significant difference between adolescents and husbands, and having the highest anxiety mean scores in daughters.

Also, depression severity levels revealed that 75.7% of all participants had no or minimal depression, and 13.7% had mild depression symptoms, while 10.6% had moderate to severe depression. Moreover, up to 20% of the whole sample had scores indicating severe depression.

The anxiety three categories analysis showed that 39.9% of all participants had concerns or high concern of death, and 48.4% of daughters had concern or high concern of death, while sons and husbands had lower percentages (32.3% and 32.2%; respectively). For the five major themes of

death anxiety results revealed that the highest mean scores were for the fear of patience and pain in general.

For depression: high scores were seen in sons of age group (>15-18) years, monthly income group of (>4000) NIS), and not working son and mother. The daughters had higher depression mean scores in age groups >15 years, monthly income groups of 2000-4000 NIS, working, as well as, those living in village, less educated mother, widow mother, and not working mother. On the other hand, husbands had no statistically significant relationships between BDI scores and the demographic variables. Further, higher depression scores were seen in sons of mothers with late stage cancer. Also, higher depression scores were seen in daughters of mothers with palliative and other treatments, and had been treated from 3-6 months. As well, higher depression scores were seen in husbands whose wives had radiotherapy treatment.

For death anxiety: high mean scores were seen in sons who were living in village, of income group >4000 NIS, not working, and less educated mothers. While higher death anxiety mean scores were seen in daughters of age group 12-15 years and in income group 2000-3000 NIS. Further, the result in the current study showed that higher death anxiety was seen in husbands who were living in village, income groups >4000 NIS, not working, and having a working wife. Moreover, higher significant death anxiety scores were seen in sons of mothers who are treated by radiotherapy and were on treatment for 3-6 months. As well, higher death anxiety scores were seen in daughters of mothers who are in early stage of cancer. However, there were no statistically significant relationships between DAS scores and all other health variables in husbands.

The multivariate analysis shows that coping and work were significantly predicting depression among sons of women with cancer, while coping, mothers' education, residence and monthly income of the family significantly predicted sons' death anxiety. However, age, coping, type and duration of treatment and care provider were significantly predict depression among daughters of those women, while age, care provider, monthly income and mothers stage of her cancer significantly predicted daughters' death anxiety. Nevertheless, coping was a significant predictor for depression and death anxiety in husbands in addition to work.



**Conclusion:** This study revealed a considerable level of depression and death anxiety among family members of women with cancer, with special attention needed for adolescent daughters. This emphasizes the need for national policy initiation and counseling programs implementation for families with cancer patients, at both the community and hospital levels. Moreover, assessment of mental disorders, such as depression and death anxiety among family members with cancer, is needed.

## دراسة انتشار الاكتئاب وقلق الموت لدى الابناء المراهقين والازواج للنساء مريضات السرطان في فلسطين

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اشراف : د. منى حميد

### ملخص

**خلفية:** التشخيص بمرض السرطان يشكل عبئا كبيرا على كل من المرضى وعائلاتهم على حد سواء، وهذا العبء يكون الاكثر شدة في فترة المراهقة للابناء وبالنسبة لشريك الحياة ضمن تجربة النساء اللواتي يعانين من الاصابة بالسرطان. وعليه فان هذه الدراسة قامت بفحص حدوث انتشار قلق الموت والاكتئاب لدى الابناء المراهقين والازواج للنساء اللواتي يعانين من السرطان ويخضعن للعلاج في المستشفيات الرئيسية لعلاج السرطان في فلسطين.

**المنهج:** قامت هذه الدراسة المقطعية باستخدام عينة بحث ملائمة من 285 مشارك في الدراسة (بمعدل نسبة استجابة 89%) بواسطة استبيانات ذاتية التعبئة، حيث تم قياس درجات قلق الموت (حسب مقياس تمبلر لقياس قلق الموت DAS) وقياس درجات الاكتئاب (حسب مقياس بك للاكتئاب BDI). استهدف جمهور الدراسة الابناء المراهقين (101 اولاد و99 بنات) بين عمر 12 و 20 عام والازواج (85 شخص) للنساء اللواتي يعانين من السرطان ويتلقين العلاج في مستشفيات بيت جالا الحكومي في بيت لحم والمطلع الخاص في القدس.

**النتائج:** كانت معظم العائلات المشتركة في الدراسة تسكن في المدن (63.6%) وذات دخل اقل من 2000 شيقل (45.4%) ولنساء مشخصات بسرطان الثدي (72.7%) ويتلقين العلاج الكيماوي (47.7%). وكان معظم الابناء بين 18 و 20 عام من العمر (45.8%) وذووا تعليم ثانوي (40.7%) ولا يعملون (86.9%). أما الازواج فكان 45.5% منهم اصغر من 50 عام ولم يتجاوزوا 12 عام من التعليم (55.6%) ومن الذين لديهم عمل (87.5%).

جاء المعدل العام لمقياس درجات الاكتئاب بين جميع المشتركين يساوي 8.7 نقطة، حيث لوحظ وجود درجات اكتئاب اعلى لدى الابناء (mean= 9.5) من الازواج (mean= 6.8) وذات دلالة احصائية ( $p= 0.03$ )، وعند مقارنة الفئات الفرعية الثلاث جاءت اسوأ درجات قياس الاكتئاب عند البنات (mean= 11.4;  $p= 0.01$ ). كذلك جاء المعدل العام لمقياس درجات قلق الموت بين جميع المشتركين يساوي 5.4 نقطة، حيث لوحظ وجود درجات قلق اعلى لدى الابناء من الازواج وذات دلالة احصائية، ووجود الدرجات الاسوأ للقلق عند البنات.

وعند قياس مستويات شدة الاكتئاب تبين ان 75.7% من المشاركين لديهم اكتئاب طفيف و13.7% لديهم اكتئاب قليل و 10.6% لديهم اكتئاب متوسط الى عالي. بالاضافة الى ذلك، فان 20% من العينة كان لديها اكتئاب سرسري.

وعند تحليل فئات قلق الموت الثلاث تبين ان 39.9% من المشاركين لديهم توتر او توتر عالي من الموت، حيث اظهرت النتائج ان وجود التوتر و التوتر العالي من الموت لدى البنات (48.4%) كان اعلى منه لدى الابناء (32.3%) او الازواج (32.2%). وعند تحليل القطاعات الخمسة لمقياس قلق الموت تبين ان الدرجات الاعلى جاءت بالمعدل لقطاعات "الخوف من المراضة" و "الالم" بشكل عام.

بالنسبة للاكتئاب: جاءت القياسات المرتفعة في الابناء من الفئة العمرية (<15-18) سنة، فئة الدخل الشهري العليا (<4000 شيقل)، والذين لا يعملون هم وامهاتهم. بينما جاءت قياسات الاكتئاب في البنات مرتفعة في الفئة العمرية (<15) سنة، فئة الدخل الشهري العليا (2000-4000 شيقل)، والذين يعملن، وساكنات القرى، وامهاتهن اقل تعليما وارامل ولا يعملن. من جهة اخرى فان الاكتئاب عند الازواج لم تكن له علاقات ذات دلالة احصائية مع اي من العوامل الديموغرافية لهم. اضافة فان قياسات الاكتئاب جاءت مرتفعة في ابناء مريضات السرطان في المرحلة المتأخرة. ايضا فان قياسات الاكتئاب جاءت مرتفعة في بنات مريضات السرطان اللواتي تحت العلاج التلطيفي وغيره، واللواتي فترة علاجهن ما بين 3 و 6 شهور. كما كان الاكتئاب عند الازواج مرتفعا لؤلئك الذين تتلقى زوجاتهم العلاج الاشعاع.

بالنسبة لقلق الموت: جاءت القياسات المرتفعة في الابناء الذين يسكنون في الارياف، فئة الدخل الشهري العليا (<4000 شيقل)، والذين لا يعملون، وامهاتهم اقل تعليما. بينما جاءت قياسات القلق في البنات مرتفعة في الفئة العمرية (12-15) سنة، وفئة الدخل الشهري المتوسطة (2000-3000 شيقل). من جهة اخرى فان قلق الموت عند الازواج من فئة الدخل الشهري العليا (<4000 شيقل)، لا يعملون، وزوجاتهم من العاملات. اضافة الى ذلك فان قياسات القلق جاءت مرتفعة في ابناء مريضات السرطان اللواتي فترة علاجهن ما بين 3 و 6 شهور، ويتلقين العلاج الاشعاعي. ايضا فان قياسات القلق جاءت مرتفعة في بنات مريضات السرطان اللواتي في مراحل اولية للسرطان. كما كان الاكتئاب عند الازواج مرتفعا لؤلئك الذين تتلقى زوجاتهم العلاج الاشعاع. من جهة اخرى فان قلق الموت عند الازواج لم تكن له علاقات ذات دلالة احصائية مع اي من العوامل المرتبطة بصحة الزوجة.

أظهر التحليل متعدد العوامل ان عوامل التأقلم والعمل كانت هي المتنبئات ذات الدلالة الاحصائية للاكتئاب بين الابناء، بينما كان تعليم الام ووالسكن والدخل الشهري للعائلة كانت العوامل المحددة للقلق عندهم. من جهة اخرى كانت عوامل العمر والتأقلم ومدة العلاج ومقدم الرعاية هي العوامل المحددة للاكتئاب في البنات، بينما حدد القلق عندهن عوامل العمر ومقدم الرعاية والدخل الشهري للعائلة ومرحلة السرطان عند الام. اما في الازواج فكان عامل التأقلم هو المحدد للاكتئاب والقلق بالاضافة لعامل العمل.

**الخلاصة:** كشفت هذه الدراسة وجود مستوى لا بأس به من الاكتئاب وقلق الموت بين افراد العائلة للنساء المصابات بالسرطان وبشكل لافت للانتباه عند بناتهن المراهقات. خلصت هذه الدراسة الى ضرورة التأكيد على الحاجة الى انشاء سياسات وتطبيق برامج ارشاد وطنية لعائلات مرضى السرطان على مستوى كل من المستشفى والمجتمع.

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