

ABSTRACTS

2018 International Women and Children's Health Conference

IDENTIFYING NOVEL THERAPIES FOR ENDOMETRIOSIS: THE EFFECT OF MELATONIN ON ENDOMETRIAL EPITHELIAL CELL PROLIFERATION

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Endometriosis is a debilitating disease affecting 10-15% of women of reproductive age and is characterized by the growth of endometrial epithelium and stromal cells outside the uterine cavity. The condition is believed to be estrogen-dependent: the growth of lesions depends on the proliferation of endometrial cells due to increased synthesis of estrogen. Melatonin, a hormone involved in the maintenance of circadian rhythms, may be therapeutically effective. Previous research discovered the expression of melatonin receptors (MR1 and MR2) in endometrial epithelial cells and also suggested that melatonin has the ability to reduce lesion size by suppressing cell proliferation. This investigation studied the effects of melatonin on human endometrium epithelial carcinoma cell (RL95-2) proliferation in vitro. Cells were treated with varying concentrations of melatonin (10^{-10} , 10^{-9} , 10^{-8} , 10^{-7} , and 10^{-6} M). As a positive control, cells were treated with 10^{-9} M estradiol to emulate endometriotic conditions on the cellular level. The cultures were

either incubated for 24 or 48 hours. Cell viability was measured using a colorimetric assay (MTT). Results indicated that estradiol had little effect on cell viability after 24 hours. The effect of melatonin treatment alone was also negligible at this time point. However, at 48 hours, estradiol treatment significantly induced cell proliferation. While melatonin alone had no effect, cell proliferation was attenuated after co-incubation with melatonin and estradiol. These preliminary analyses suggested that melatonin shows promise as a prospective therapy for endometriosis due to its ability to attenuate estrogen-induced proliferation. However, the exact mechanisms of melatonin action have yet to be elucidated. Future avenues of research include studying the effects of these treatments using other endometrial epithelial cell lines and examining the effects of melatonin on estrogen receptor expression.

Acknowledgements: Research supported by CIHR.

WHAT WOMEN WANT: A QUALITATIVE ASSESSMENT OF REPRODUCTIVE HEALTH IN UGANDA

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Women living in Uganda face barriers to accessing consistent, high-quality reproductive healthcare services. The infant and maternal mortality rates in Uganda are among the top 20 and 40 worldwide, respectively. Two-thirds of married Ugandan women do not utilize contraceptives, and more than half of pregnancies are unintended.

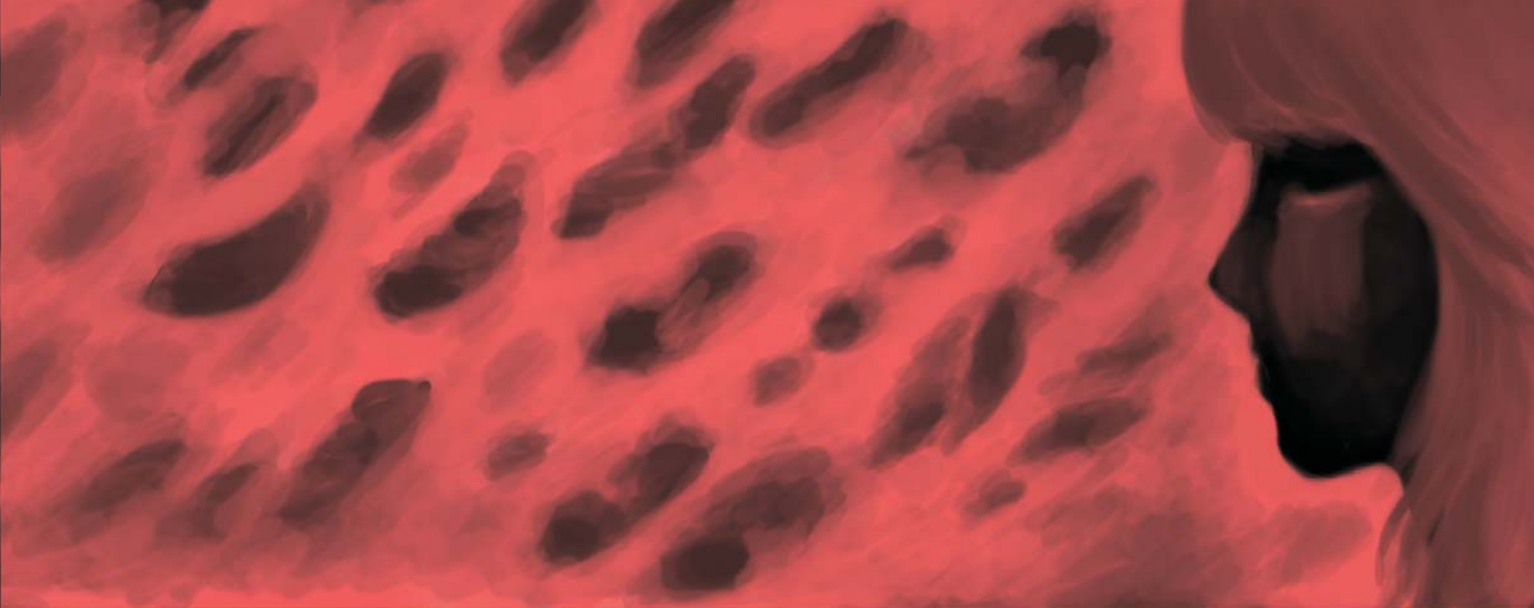
Wakiso District is a Ugandan region encircling the capital city, Kampala. To assess specific barriers limiting access to appropriate reproductive healthcare in this region, 41 women between the ages of 14 and 80 were interviewed about their experiences utilizing local healthcare services. With the aid of a translator, responses were coded and sorted into three categories: resources, male involvement, and healthcare delivery.

The results showed that 51% of respondents reported a need for more resources at health centres, specifically basic supplies (e.g. water, beds, and plumbing) and medical supplies (e.g. sutures, gloves, and medications). 32% reported a need for improved healthcare

delivery, including more empathetic care, health education, and informed consent. Furthermore, 19% of women felt that their experiences would be improved by receiving more care, support, and cooperation from their male partners during pregnancy, family planning, and family care.

Interviewees had thematically similar suggestions on how access to and delivery of local reproductive and gynecological healthcare could be improved. Further investigations should focus on understanding the complex intersection of healthcare funding, family structure, and cultural context in order to provide a framework for tangible improvement.

Acknowledgements: Research supported by Enoch Magala, Centre for Youth Driven Development Initiatives, Ndazabazadde, Uganda.



CHALLENGES IN MENTAL HEALTH CARE SERVICES: INTERGENERATIONAL CONFLICTS IN IMMIGRANT AND REFUGEE FAMILIES

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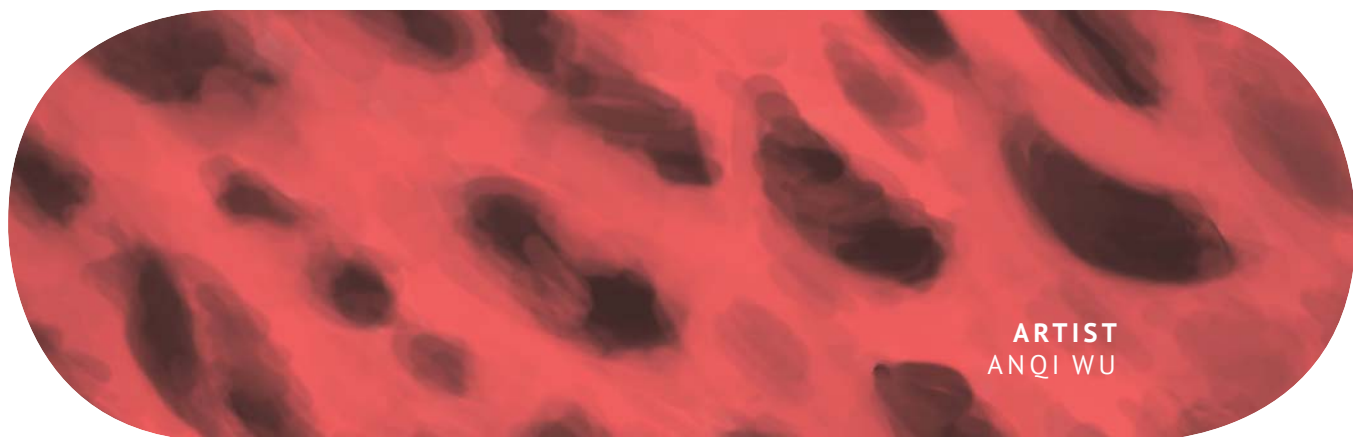
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Various challenges have emerged for mental health care workers with the increasing number of immigrant and refugee populations settling in Canada. Newcomers of all ages arrive with complex mental health histories, traumas, and strenuous migration journeys. Therefore, the resettlement process comes with a multitude of challenges regarding adequate access to mental health care services. Research has shown that these barriers distinctly impact the mental health and wellness of children and families. This study considered the factors that influence intergenerational challenges among immigrant and refugee populations, and explored how these issues could be addressed by mental health care service providers and routine practices.

The study was part of a larger research project on immigrant and refugee health led by Dr. Lloy Wylie. This investigation involved 21 semi-structured interviews and two focus groups conducted

by mental health care providers in London, Ontario. The findings revealed key elements that contribute to intergenerational conflicts regarding mental health within immigrant and refugee families. In particular, the experiences of cultural conflict, lack of communication between family members, and stigma surrounding mental health influence the intergenerational challenges that newcomer families face. The results suggested that mental health issues arising from intergenerational conflicts must be addressed through alternate methods, such as a family-based approach. The study merits further investigation into the development of practice- and policy-level strategies to better support the mental health of immigrant and refugee families in Canada.



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