

WOMEN'S HEALTH IN TIMES OF GLOBAL AND PLANETARY CHANGES

Abstracts

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**The effect of Cognitive Behavioral Therapy integrated with Activity Pacing (CBT-AP) on cancer related fatigue among breast cancer patients undergoing chemotherapy:
A Randomized clinical trial**

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Introduction: Cancer related fatigue is a common symptom experienced by 80% of individuals who receive chemotherapy and it is one of the major factors that affect Quality of Life (QoL) of breast cancer patients. Psychosocial interventions specifically designed to treat fatigue was significantly effective to reduce fatigue among cancer patients during cancer treatment. There is insufficient high-quality evidence to recommend combination psychosocial interventions and activity pacing for breast cancer patients undergoing chemotherapy. The aim of this study was to assess the effect of Cognitive Behavioral Therapy integrated with Activity Pacing (CBT-AP) on cancer related fatigue among breast cancer patients undergoing chemotherapy.

Methods: A parallel group randomized controlled trial was conducted. Severely fatigued breast cancer patients who were undergoing chemotherapy from Tikur Anbessa Specialized Hospital were included. Participants (n=62) were randomly assigned into CBT-AP (n = 31), and usual care (UC) (n=31) group using computer generated random sequence. A new CBT-AP intervention was developed. The intervention group had received seven sessions of CBT-AP during chemotherapy, with three face to face and four telephone sessions. The primary outcome of fatigue severity was assessed at baseline, at the end of intervention, and after 3 months follow-up, as were the secondary outcomes of depression, and quality of life. Data were analysed by repeated measures of analyses of covariance (RM-ANCOVA) by intention to treat basis.

Results: Analysis was done based on 30 patients in the CBT-AP and 28 patients in the UC group. CBT-AP group was found to have lower fatigue score ($F(2,108) = 13.96, p < 0.001, \eta^2 = .206$), lower depression score ($F(1, 54) = 41.75, p < .001, \eta^2 = .436$), and higher global health status/ quality of life score ($F(1, 54) = 104.44, p < .001, \eta^2 = .659$) compared to UC group. The group*time interaction also revealed significant reduction of fatigue and depression in the CBT-AP group than UC group ($F(2,108) = 6.92, p = 0.001, \eta^2 = .114$), ($F(2, 108) = 8.85, p < .001, \eta^2 = .141$) respectively.

Discussion: CBT-AP appears to be effective in reducing fatigue, depression and in improving QoL of breast cancer patients undergoing chemotherapy. The finding suggested that the integration of CBT with AP has more significant effect than CBT only study. It is highly recommended to integrate CBT-AP intervention in routine cancer care.

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Fighting cervical cancer:

A community-wide, HPV-, home-based screening program for women in Ethiopia

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Introduction: Cervical cancer is the most common cause of cancer death among women in Sub-Saharan Africa, although it is highly preventable through vaccination and screening. This project has the overall aim to study the feasibility of a community-wide cervical cancer screening strategy based on home-based self-sampling for HPV testing, and to compare molecular (dual stain cytology) and visual (Visual Inspection with Acetic acid enhanced by digital cervicography (VIA-DC) and colposcopy) screening tests to triage HPV positive women.

Materials and Methods: A cervical cancer screening awareness campaign is conducted in 4 communities (kebele) of the Dabat district. In a subsequent household-based cervical cancer screening survey all eligible 25+ year old women will be offered HPV self-sampling. HPV-testing of self-sample devices will be performed at Ethiopian Public Health Institute (EPHI) laboratory using Cobas4800. All HPV-positive women will be invited for triage testing at the local health center where trained nurses and gynecologists will perform dual stain cytology, and back-to-back VIA assisted by digital cervicography and colposcopy. Positive cases will be treated by thermocoagulation or LEEP surgery after biopsy taking for case ascertainment. The complete screening process will be assisted by an electronic information system where data from all screening points will be captured and stored centrally to allow seamless flow of information. The project is done in collaboration with the Health Bureau of the Amharic region, the University of Gondar (UoG) and the Dabat Research Center (DRC).

Results: 3200 targeted women are included in the study so far, HPV results are ongoing.

Discussion: We present a cervical cancer screening program in Ethiopia with HPV self testing, and triage of HPV positive women using both molecular and visual screening tools. Documentation and data management will be performed by an App-based digital data system linking household, clinic, lab and hospital (ETICCS, emerging technology in cervical cancer screening program, University of Heidelberg). Treatment of women with CIN2+ will be performed with LEEP surgery or thermocoagulation.

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**Burden of cancer death among adult population:
The case in women; findings from verbal autopsy mortality surveillance data**

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Introduction: Cancer is one of the leading causes of death; worldwide, there were 10.0 million cancer deaths in 2020. In Ethiopia, 51,865 people died from the disease in the same year. We aimed to describe the burden of cancer mortality, the socio-demographic and other characteristics of deceased female adults in Addis Ababa from 2007 to 2017.

Methods: Addis Ababa Mortality Surveillance program, registers death since 2001. For this analysis, data collected from 2007-2017 was used. There were 133,170 deaths registered. After excluding deceased with no family/caregiver, 10% of the deaths were randomly selected for verbal autopsy. For the current analysis deaths that occurred because of cancer in the age group of 15 years and above were selected. There were 8952 complete adult deaths with the assigned cause of death by physicians. Further analysed and focused on identifying the causes of deaths related to cancer. To extract this, we used the VA title along with the international classification of disease-10 (ICD 10) code.

Results: Of the total 8952 deaths, with complete physicians' review, 11% were due to any form of cancer. The data shows that females contribute to 61% of the total deaths and the median age of death in years was 56 (range; 46, 69). Breast cancer remained the leading cause of death 18.77% (95%, CI 15.81-22.15), followed by cervical cancer and stomach accounted for 12.63% (95%, CI 10.17-15.58), and 10.92% (95%, CI 8.64-13.72) respectively. One hundred six (18%) had a history of alcohol consumption, the most common comorbidities were hypertension 70 (12%), diabetes 35 (6%), followed by mental illness 31 (5%). Deceased were bed ridden for a median of 2 months IQR (0.7-5.6), almost three fourth of them died at their home, 162 (28 %) of them ever didn't visit a health facility for their illness that caused death, from the total deceased 63 (11%) of them went to traditional healers while they were sick.

Conclusion: Cancer death contributed a significant proportion of death. The majority of these deaths were premature deaths and females were disproportionately affected. Breast, cervical and stomach cancer were the common causes of cancer death in women. We recommend, a strengthened action to prevent, control, and treat the common female cancers in Ethiopia.

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Trends in the Incidence of Ovarian Cancer in sub-Saharan Africa

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Introduction: Ovarian cancer (OC) is one of the commonest cancers of women in sub-Saharan Africa (SSA), although to date no data have been available on time trends in incidence to better understand the disease pattern in the region.

Methods: We estimate time trends by histological subtype from 12 population-based cancer registries in 11 countries: Kenya (Nairobi), Mauritius, Seychelles, Uganda (Kampala), Congo (Brazzaville), Zimbabwe (Bulawayo and Harare), Cote d'Ivoire (Abidjan), The Gambia, Mali (Bamako), Nigeria (Ibadan), and South Africa (Eastern Cape). The selected registries were those that could provide consistent estimates of the incidence of ovarian cancer and with quality assessment for periods of 10 or more years.

Results: A total of 5,423 cases of OC were included. Incidence rates have been increasing in all registries except Brazzaville, Congo, where a non-significant decline of 1% per year was seen. Statistically significant average annual increases were seen in Mauritius (2.5%), Bamako (5.3%), Ibadan (3.9%) and Eastern Cape (8%). Epithelial Ovarian Cancer was responsible for the increases observed in all registries. Statistically significant average annual percentage changes (AAPC) for epithelial OC were present in Bamako (AAPC=5.9%), Ibadan (AAPC=4.7%) and Eastern Cape (AAPC=11.0%).

Discussion: Awareness should be created among all actors on the current incidence of the disease so as to take steps to improve the access for diagnosis and treatment of the OC in SSA. Support must be given to the cancer registries to improve the availability of good quality data on this important cancer.

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Determinants of Chemotherapy Discontinuation in Ethiopia, a nested case control design

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Background: Women are more likely to die of breast cancer than from any other type of cancer. Survival can be significantly improved through systemic treatment. Many African countries, however, have issues with access and availability of breast cancer treatment, and patients often do not complete the recommended chemotherapy regimen. This study aimed to determine the magnitude and determinants of chemotherapy discontinuation at selected hospitals.

Methods: In four Ethiopian referral hospitals, a nested case-control study was conducted. Using two-year data (2019-2020), the magnitude of chemotherapy discontinuation was assessed. In total, 400 patients were included (200 cases, 200 controls) to identify the determinants. Cases and controls were interviewed by phone. Multivariate logistic regression was used to assess the determinate factors. P-values less than 0.05 were considered significant.

Results: We reviewed 1740 non-metastatic breast cancer patients' charts, and 329 (18.9%) discontinued chemotherapy. Respondents' mean age was 45.14 (\pm 13.6) among cases and 45.65 (\pm 12.6) among controls. It was found that stage of the disease (AOR =2.6, CI: 1.47-4.66), financial constraint (AOR = 2.01, CI: 1.10-3.66), thought of wellness (AOR =6.9, CI: 3.95-12.00), expected side effects (AOR = 4.2, CI: 1.62-10.85), intolerability of the side effects (AOR = 2.15, CI: 1.24-3.73) and fear of dependency (AOR =2.1, CI: 1.25-3.28) were the independent predictors of chemotherapy discontinuation.

Discussion: There was a nearly one-fifth discontinuation rate of chemotherapy. Health workers can address modifiable reasons for discontinuation. There is a need to adequately manage side effects efficiently. To ensure long-term benefit, physicians should closely monitor patients to explain the necessity of completing all chemotherapy cycles and to avoid ineffective attempts to stop the treatment. Additionally, more efforts should be made to subsidize the therapy so that it is more accessible and affordable.

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Barrier analysis for continuity of palliative care from health facility to household among adult cancer patients in Addis Ababa, Ethiopia

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Background: Annually 57 million people across the globe require palliative care, 76% are from low- and-middle income countries. Continuity of care in palliative setting is associated with lower rates of emergency department visits, decreased hospital deaths, improved patient satisfaction, better utilization of services, and cost savings. Despite efforts made to develop the palliative care guideline in Ethiopia, the service is not yet organized and linked to primary health care.

Aim: This study aimed to explore barriers to the continuum of palliative care from facility to household for cancer patients in Addis Ababa.

Methods: Qualitative exploratory study using face-to-face interviews with adult cancer patients, primary caregivers, healthcare providers, volunteers, and nationwide advocates. Thematic analysis was guided by Tanahashi's framework.

Results: The key barriers to continuity of palliative care included opioid scarcity and turnover and shortage of healthcare workers. Shortfall of diagnostic materials, cost of medications, lack of government backing, and home-based center's enrollment capacity hampered accessibility. Family caregivers and professionals defied culturally in providing end-of-life care, patients preference conventional medicine hindered acceptability. Lack of community volunteers, failure of health extension workers to link patients, and spatial limits fraught utilization. Lack of defined roles and services at several levels, workload on healthcare professionals reduces the effectiveness of the nexus.

Conclusion: Palliative care service in Ethiopia is yet at its infancy compromised by factors related to availability, accessibility, acceptability, utilization and effectiveness. Further research is required to delineate the roles of various actors; the health sector should smudge out the continuum of palliative to cope with the growing need for palliative care.

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The Family Care Centers Approach to Perinatal Mental Health in Italy

A Qualitative Study on the Barriers and Enabling Factors to the Integrated Care Model

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Background: integrated care approach to perinatal mental health (PMH) has been demonstrated to be beneficial. Italian Family Care Centers (FCCs) focus on woman and maternity care and represent the ideal environment where to approach PMH because they are a universal care service. However, there are significant challenges to the implementation of activities.

Objective: to investigate barriers and enabling factors for the implementation process of PMH activities in Italian FCCs and new pathways to strengthen the uptake of activities to facilitate an equitable access to care and prevention of perinatal mental health disorders (PMHDs).

Methodology: The qualitative data was collected through semi-structured in-depth interviews with experts from different professional backgrounds relevant to the FCCs to allow for a broad investigation of the topic. Thematic qualitative text analysis was chosen to analyze the data.

Results: The study highlighted the following barriers and enabling factors. Political will is central as it influences the other aspects. Leadership gives direction and support from a cultural and administrative perspective. Written protocols could ensure the standardization of activities availability so that every person has access to the same opportunities of care. Human resources are pivotal as they guarantee the capacity to have activities in place and a multidisciplinary approach to health. Funding would give the monetary capacity to hire professionals and structure activities. Inter-institutional networks could supplement the FCCs shortage and further expand the holistic approach to health through an integrated model. Active offer, through the promotion of the FCC in the community, would guarantee higher access to care lowering the level of health inequalities.

Conclusion: To accelerate the uptake of PMH activities in FCCs, political long-term commitment to the projects and a paradigm shift from curative to preventive care should be applied. FCCs are the ideal environment where to take care of PMH, as they are pathology- and stigma-free environments. Therefore, more investments should be directed toward them to continue activities in the field of prevention and promotion. Investments should then guarantee the hiring of more professional figures to ensure a holistic approach to health to tackle the problem from a biopsychosocial perspective.

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The challenges for women's health in sub-Saharan Africa: Lessons learned from an integrative multistakeholder workshop in Gabon

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Introduction: The sub-Saharan African (SSA) region is home to more than 230 million females of reproductive age who face multiple intersecting health, social and economic challenges. Neglected tropical diseases (NTDs) are a group of chronic, disabling and stigmatizing diseases that disproportionately affect women and girls especially in sub-Saharan African (SSA). In recent decades, there has been a global shift from communicable toward non-communicable diseases (NCDs) and a disproportionately high burden of NCD-related deaths among women is expected in SSA. It is also estimated that almost half of the women in SSA do not have access to essential health care during pregnancy and childbirth. Hence, it is evident that many, if not most, women and girls in SSA carry a triple burden of vulnerability to NTDs, NCDs and poor reproductive health outcomes.

Objective: To undertake a collaborative scientific exercise within the HelmVit§ project to develop an integrated and comprehensive health care approach for tackling major obstacles for women's health within the context of NTDs, NCDs and reproductive health; and helping to interlink management for individual disease-conditions. Female genital schistosomiasis (FGS), cesarean section (CS) and cervical cancer (CC) were identified as tracer disease-conditions for the key themes of NTDs, NCDs and reproductive health respectively because they constitute major women's health challenges in the SSA that demand collaborative solutions.

Methods: An integrative, multistakeholder workshop was undertaken in Gabon (Central Africa) to (i) explore the level of knowledge among health care providers and assess the care systems in Gabon for combating the local burden of FGS and CC; (ii) exchange comparative experiences and good practice for CS management between Europe and Gabon; (iii) Identify opportunities for operational research collaboration between European and Gabonese partners to ultimately enhance a systems-thinking approach for women's health.

Results The workshop achieved three distinct outcomes: (i) understand barriers and enablers for diagnosis, management and care of NCDs, NTDs and reproductive health conditions in the context of Gabon; (ii) developed a conceptual and interventional framework for synergistic, sustainable and gender- and context-appropriate interventions to manage the NTD-NCD complex and additionally reproductive health; (iiI) instigated stakeholder engagement to explore potential mutual collaboration which has since resulted in a research consortium.

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Preeclampsia in Bangladesh – Bridging the gaps in access to preventive healthcare at Primary Health Care (PHC)

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Background: There is a rising concern in parts of coastal Bangladesh as the salinity is overwhelming drinking water sources leading to consumption of 5–16 g sodium per day which is hypothesized to be associated with the risk of preeclampsia (PE/E). To prevent PE/E, World Health Organization recommended standard protocols which are not followed up to the par at PHC centres. This study aims to identify and map the barriers to access to care for PE/E at PHC centres in Bangladesh.

Methodology: Initially, a scoping review was conducted in PubMed and Scopus databases. Grey literature was accessed from virtual platforms, such as endingeclampsia.org, share-netbangladesh.org, and so on. Studies published in English between 2005 and 2020 focusing on maternal health, PE/E, management, and community perceptions were included. Later, key informant interviews with three experts and practitioners of Bangladesh’s healthcare system helped clarify the results.

Results: The review included 19 studies, including eight quantitative, seven qualitative, one scoping review, and three mixed methods. Findings from review and interviews illustrated barriers in 1. Policy – Lack of specific policy for PE/E and government financing for drugs; 2. Healthcare system – Lack of staff, supplies, expertise, improper services, and weak referral system; 3. Community - lack of awareness and accessibility, difficulties in acceptability and affordability.

Discussion: The barriers identified are interconnected and directly impact the pregnant woman’s access to care for PE/E at PHC facilities. Efforts should be made to structure a tailored policy that takes into consideration issues at individual, community, healthcare system, and policy levels and at the same time strives to achieve quality treatment in line with universal standard protocols for prevention of PE/E.

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Levels of adherence to treatment and follow-up recommendations after positive VIA screening in selected clinics in Ethiopia - A retrospective observational study

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Introduction: Although cervical cancer can be prevented with HPV vaccination and screening, incidences in sub-Saharan African countries remain high. In Ethiopia, visual inspection with acetic acid (VIA) screening is offered free of charge. Women with a VIA-positive screening should receive treatment with cryotherapy/thermal ablation or LEEP and a follow-up examination is recommended 1 year after treatment. While current studies are primarily investigating the reasons for the low use of screening, it is not yet known whether the women who are screened VIA positive receive treatment for (pre)cancerous lesions and follow-up care.

Methods: In our retrospective observational study, data from all women screened positive with VIA between 2017 and 2020 in 10 randomly selected health centers in the capital Addis Ababa and 4 hospitals in rural Oromia were collected. Reviewing the screening logbooks and patient files, we were able to gather information on screening result, therapy, and follow-up as well as the patient's phone number for 701 women. The levels of adherence to treatment and follow-up were calculated and multivariate analysis was performed to search for influencing factors. In addition, 30 in-depths interviews were conducted with staff from different levels of the healthcare system to gain insights into reporting and organizational structures for the care of positively screened women as well as possible obstacles in implementation. Ethical reviews were obtained from Addis Ababa University and regional health offices.

Results: We found that 90% of all detected lesions were treated. Of those patients treated with cryotherapy 88% received their treatment at the day of screening – adhering to the single-visit-approach. Of all 670 women who received treatment 300 received a rescreen based on the logbook entries and phone interviews. The analysis of factors influencing the adherence to follow-up has not yet been completed.

Discussion: Most patients received treatment for the detected lesion, but only a minority came back for subsequent follow-up after one year. Therefore, adherence to follow-up should be addressed by health professionals and policy makers from the beginning on. In our further analysis we hope to identify key factors and develop interventions that could improve adherence to follow-up.

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"Cervical cancer screening: awareness is not enough" – Results of a qualitative study exploring barriers to screening among women in West Cameroon-a qualitative study using focus groups

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Background: Cervical cancer is the second leading cause of cancer-related death among women in sub-Saharan countries, constituting a major public health concern. In Cameroon, cervical cancer ranks as the second most common type of cancer among women and the leading cause of cancer-related deaths, mainly due to the lack of prevention.

Objectives: The main objective was to understand the barriers affecting cervical cancer screening from the users (female participants and male partners) and providers (health care providers) perspective in a program in the Dschang district (West Cameroon).

Methods: A qualitative study using focus groups (FGs) was conducted in between August 2019 until March 2020. Thematic analysis was used, and barriers were classified according to the three-delay model of Thaddeus and Maine.

Results: In total, four FGs with 16 health care providers and six FGs with 43 participants (31 women and 12 men) were conducted. The most important barriers were lack of health literacy, low accessibility of the program (in respect to cost and distance), and disrespectful treatment by healthcare workers.

Conclusions: Our study identified three needs: (1) enhancing health literacy; (2) improving the delivery of cervical cancer screening in rural areas; and (3) providing training for healthcare providers and community healthcare workers to improve patient-provider-communication.

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Trial registration Ethical Cantonal Board of Geneva, Switzerland (CCER, N°2017-0110 and CER-amendment n°3) and Cameroonian National Ethics Committee for Human Health Research (N°2018/07/1083/CE/CNERSH/SP). NCT: 03757299.

Time to pathologic diagnosis of suspicious breast lesions – a cross-sectional study in six Ethiopian hospitals

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Introduction: Addressing the rising incidences of breast cancer, particularly in sub-Saharan Africa and other regions of the world where lifestyles and reproductive patterns are changing and public health systems are already overstrained, the World Health Organization launched the Global Breast Cancer Initiative. This initiative aims to reduce the global breast cancer mortality by 2.5% each year until 2040, thereby preventing 2.5 million breast cancer deaths. One of the initiative's three central pillars is the reduction of time to diagnosis and treatment initiation to prevent progress of the disease and the need for more complex and cost intensive treatment. The WHO specifies a period of 3 months from the first recognition of symptoms to achieve pathologically confirmed diagnosis of the suspicious breast lesion. Past studies in Ethiopia have shown that the majority of breast cancer patients exceed the time limit of 3 months and are diagnosed in advanced stages of the disease.

Methods: We currently interview women who undergo Fine Needle Aspiration Cytology, Core Needle Biopsy or Incisional Biopsy of a suspicious breast lesion at the pathology departments of six hospitals on socio-demographic data, milestones and barriers on their pathway to diagnosis. The questionnaire we use is based on a data collection tool developed by the International Agency for Research on Cancer for the African Breast Cancer – Disparities in Outcome study that was adapted to the Ethiopian setting and translated into Amharic. The pathway to diagnosis is subdivided into two major intervals: the pre-contact interval from first recognition of breast symptoms to the presentation to a health care professional and the post-contact interval from the first contact to a health care professional to the day when the sample for the pathologic examination is taken.

Results: The data collection is still ongoing. We have interviewed 215 women so far. The median age was 32 years, 69% live in urban areas and 54% completed secondary education or a degree. In the preliminary data we found a median pre-contact interval of 2.5 months and a median post-contact interval of 1.4 months. Most women are able to recall the year and month and specify whether milestones happened towards the beginning, middle or end of the month.

Prospects: We hope to conclude the data collection by the end of September 2022. By then, we hope to be able to provide an overview on the time intervals women need to receive a pathologically secured diagnosis of a suspicious breast lesion in Ethiopia and identify common obstacles on the pathway to diagnosis. So far this study design proves to be a feasible method to assess the time intervals on the pathway to breast cancer diagnosis.

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Gynecologic oncology in Malawi – report from the Doctors-Without-Borders (MSF) Cervical-Cancer-project in Blantyre

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Introduction: 2018 WHO called on the eradication of cervical cancer. 90% of deaths of this disease occur in low and middle income countries. Malawi has the second highest incidence and mortality worldwide. With 34.8% it is the most common cancer in women. There are 4,200 new cases and 2,900 deaths per year. In 2017 MSF (Médecins Sans Frontières) France in partnership with QECH (Ministry of Health) Blantyre has set up a multidisciplinary cancer center for primary and secondary prevention as well as multimodal curative and palliative therapy of cervical cancer.

Methods: The presentation will report on the structures and preliminary oncologic results of the project as well as on the experiences of a German gynecologic oncologist during a two months mission from February through April 2022 in Malawi.

Results: 19,294 women were screened by VIA in 2021. In OPD 3267 gynecologic and 1,930 palliative consultations took place. 545 patients were newly diagnosed with cervical cancer and 165 radical hysterectomies were performed. 265 patients received chemotherapy (neoadjuvant and adjuvant) in cooperation with the dept. of oncology of QECH. 411 patients were palliatively treated. There is currently no radiotherapy available in Malawi. Patients receive social support, psychoncologic counseling and structured patient education. Two very skilled Malawian onco-surgeons are supported by expat MSF-gyn-oncologists, one anesthetist with oncological experience, gynecologists and general practitioners, numerous nurses and logistic staff.

Discussion: MSF-CC-project in Blantyre is an effective interdisciplinary initiative for detection and treatment of cervical cancer in Southern Malawi. Future challenges remain the implementation of radiation therapy and the extension to other tumor entities (ovary, vulva). There is still a constant need of expat gyn-onco surgeons to support the team in terms of open surgery as well as implementation of laparoscopic procedures.

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Modern pill scares: How (social) media influences attitudes and decision-making of Austrian women about the contraceptive pill

**Nora Jöchlinger*

Introduction: Pill scares are the reaction of people to sudden, muddled, and/or decontextualized information about the contraceptive pill. Two of the latest pill scares include publicly discussed lawsuits against manufacturers of pill preparations and comparisons of thrombosis risk levels between coronavirus vaccines and birth control pills. The objective of the study was to examine the extent of influence that recent negative media reports about the contraceptive pill in different types of media had on Austrian women's attitudes and decision-making about the pharmaceutical.

Methods: The study followed a quantitative approach. A survey amongst Austrian women between 18 and 35 years (n=141) was conducted to investigate awareness of pill scares amongst the target group, tendencies as to attitudes and decision-making about the contraceptive pill in general as well as specifically in regard to the two recent pill scares.

Results: 77% of participants have seen negative reports about the contraceptive pill in general, 12% have seen reports about lawsuits, and 74% have seen comparisons of thrombosis risk levels with coronavirus vaccines. On average, a small to moderate influence of these kinds of reports on Austrian women could be found. However, the influence on women's attitudes is significantly higher than on their behavior. While no difference between the influence of traditional media compared to social media could be found, the key role of Instagram within social media stood out. Most women reasoned their doubts about the contraceptive pill with a fear of side effects (82%).

Discussion: Although recent pill scares were less prominent than earlier ones, Austrian women still feel influenced by negative media reports about the contraceptive pill. However, the change in attitude towards the contraceptive pill seems to be not profound enough for many women to actually change their contraceptive behavior. To reduce uncertainties for individual women, on a public health level, as well as for pharmaceutical companies, it is advisable to educate women and to present guidelines for journalists as well as doctors to enable evidence-based contraceptive decision-making and positive developments in this field.

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Women's health in Germany - status, trends, inequalities, international comparison

**Franziska Prittz; Birte Hintzpeter; Laura Krause, and Anke-Christine Saß*

Introduction: There are more than 35 million women living in Germany. The German Women's Health Report being published in December 2020 by Federal Health Reporting at the Robert Koch Institute describes their health status. Currently, a brochure is being prepared to accompany the report.

Methods: The report uses a comprehensive data basis. It presents differences and similarities in the health of women and men ("differences between") as well as within the group of women ("differences within"). The first part of the report provides an overview on women's health status, health behaviour and health care. The second part consists of focus chapters devoted to health over the life course, specific groups of women, e.g. women with disabilities, and specific health topics, e.g. sexual and reproductive health, and a European comparison of women's health.

Results: The average life expectancy of women has been increasing for many decades. Two thirds of women assess their health as good or very good. Cardiovascular diseases are the most common cause of death among women, accounting for about 40% of women's deaths. However, they are still considered "male" diseases, and women often underestimate their morbidity risk. Women often behave more health-consciously than men, e.g. they consume healthy foods such as fruit and vegetables more often. Generally, women make greater use of prevention, health promotion and health care services than men. Care is feminine in a double sense: two thirds of the persons in need of care are women and it is mainly women who are responsible for the care of others.

Discussion: Overall, health and health care for women in Germany are at a high level. Nevertheless, there are inequalities in the opportunities for a healthy life: socio-economic factors such as age, education, occupation, family type and migration background have an important impact on women's health. The report provides current data and information for policymakers, science and practice. It raises the awareness for sex- and gender-appropriate health promotion, prevention and care and allows for comparisons with women's health in other countries. Data gaps exist for certain conditions such as benign gynaecological diseases and for certain groups of women, e.g. migrant women. Furthermore, women and men are affected differently by the COVID-19 pandemic, e.g. men are more likely to become severely ill and die from COVID-19, women are more affected by the burden of care work during the pandemic and represent a larger proportion of the health workforce.

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Decision space as a determinant of women's health

**Sylvia Sax and Lila Sax dos Santos Gomes*

Introduction: The 1990's Global Health saw a major move to decentralize health systems with the intent to improve equity, efficiency, quality, and financial soundness. Mechanisms focused on broadening the decision-making powers at subnational levels of government. One of the most influential theories for decentralization was Bossert's 1998 approach of 'decision space' where decision-making bodies are key to improving health system performance. In 2008, a Commission on Social Determinants of Health (SDH) report examined how global and local leaders could promote and foster equity within a generation., also focusing on decision-making structures and processes and equity. We are more than half-way to the Commission's goals for 2033; how are we doing?

Methods: We use Bossert's concept of decision space and the results of the 2022 report on Global Health 50/50 to explore progress of global and local leaders towards promoting and fostering Global Health equity. We use the 2008 recommendations of the SDH Commission and current research to discuss current progress towards global health equity.

Results: Bosset (1998) describes decentralization as transferring and making choices and what effect these choices have on performance of the health system. Decision-making capacity is a vital part of the structural determinants of health, Marmot et al. (2008) proposes these structural determinants lead to much of the health inequity between and within counties. Much of the language about structural determinants and decision-making or decision space is gender neutral as if gender has no role in decisions. In addition, little gender-specific data is collected and analyzed on decision-making bodies. The 2022 Global Health 50/50 Report demonstrates the high-income country and male bias that exists in many global health organizations. The report authors describe their findings as alarming.

Discussion: Meaningful partnerships are key to strengthening and decolonizing Global Health actions, but if decision-making structures lack equality this becomes an additional condition leading to health inequity between and within counties. We propose it is time to change the narrative, women are key to improvements in global health rests and should be valued as change agents and not only for their biological roles. Policies have attempted to fix inequality by fitting women into inequitable systems, this is particularly true for women from low-and middle-income countries. We now need to fix the systems globally and locally, to do so means bringing equity in boards and other decision-making positions with practical training to strengthen leadership skills of women in Global Health.

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Practices and challenges of community engagement in health research in Ethiopia: a qualitative study

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Objective: The role of the community in the research process in Ethiopia has not been documented. This study aims to explore the existing practices and challenges of community engagement in health research in Ethiopia.

Method: A qualitative study with a narrative approach was conducted. Data were audio-recorded, transcribed, inductively coded and analysed thematically. Setting Participants were recruited from members of institutional review boards, academic and research staff of Addis Ababa and Jimma universities, research institutions and key development partners. Participants Thirty-six participants were involved in the study. They were purposively selected on the basis of their diverse research experiences and disciplinary profiles with clinical, biomedical and public health representation. Data collection Twenty-two key informant interviews were conducted with members of the institutional review board, community representatives in the institutional review board, community engagement officers, and research focal persons of the universities, research intuitions and key development partners. Fourteen participants who were senior PhD students or senior researchers in academic and research institutions were involved in the in-depth interviews.

Results: Despite differences of justification, all participants believed in the importance of the participating research community not only to own the research outcome but also contribute to the research planning, sharing of evidence, managing the research process and dissemination of findings. However, it was argued that lack of guidance, skills and experience on how to engage the community at different levels of the research process and limitation of resources affect community engagement in research.

Conclusion: As an important component of the research process, community engagement facilitates the research process and ensures community ownership of the outcome. Nevertheless, lack of experience and limitation of resources affect operationalization of community engagement in health research. This calls for building capacity and advocacy to consider community engagement as an integral component of the research process.

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Materno-fetal outcomes and associated factors among referred laboring mothers in University of Gondar comprehensive specialized hospital, North-West Ethiopia

**Mequanint Bicha¹, Terefe Derso², Kiros Gashaye¹ and Assefa Tadesse²*

Introduction: Ethiopia is one of the countries in Sub-Saharan Africa with high maternal and perinatal mortality. Providing optimal ante-partum, intra-partum and post-partum care is the key agenda taken by different stakeholders in the country to reduce the maternal mortality ratio (MMR) and perinatal mortality rate (PMR). One of the best interventions to improve the devastating materno-fetal outcomes of laboring women is early detection of problems and immediate referral to a better health care service provider. However, the status of the referral system and the materno-fetal outcome is unknown in the study area. Therefore, the objective of the study was to assess the materno-fetal outcomes and associated factors among referred laboring mothers in University of Gondar comprehensive specialized hospital, North-West Ethiopia.

Methods: Hospital based cross sectional study was conducted to determine the materno-fetal outcome and associated factors among 422 laboring mothers who came referred to University of Gondar comprehensive specialized hospital from April 1-June 30/2020. Data was collected using a pretested structured interviewer administered questionnaire and all referred laboring mothers fulfilling the inclusion criteria were included in the study. The data was coded, entered and cleaned using EPI-DATA VERSION 4.3 and analyzed using SPSS version 23. Both Bi-variable and Multivariable logistic regression model was fitted to identify the statistically associated variables by using P-value less than 0.25 and 0.05 as cut point 95% confidence level.

Results: The proportion of referrals among whole deliveries in the study period is found to be 17.16%. Adverse maternal outcome and adverse fetal outcome happened in 17.3% and 30.6% of referred laboring mothers, respectively. Maternal outcome was affected by maternal literacy (AOR: 4.03, 95%CI (1.04-15.58)), diagnosis at arrival (AOR: 0.03, 95%CI(0.01-0.24)) and number of ANC contacts (AOR: 0.22 (0.8-0.55)). Factors associated with adverse fetal outcome were maternal employment status (AOR: 2.79, 95%CI (1.10-7.11)), diagnosis at arrival to the tertiary center (AOR: 0.02, 95%CI (0.01-0.07)), gestational age (AOR: 0.06, 95%CI (0.01-0.33)) and duration of labor (AOR: 0.06, 95%CI (0.01-0.52)).

Discussion: Adverse maternal and fetal outcome is found to be high in referred laboring mothers of University of Gondar Comprehensive Specialized Hospital because of the delay in referral and the absence of complete facility in the hospital to provide optimal maternal health care. As compared to the studies done in other developing countries, in our study, we found a significant gap in the referral system which resulted in high maternal and neonatal mortality. To avert this, the referral system of the country should be revised and implementation of the available referral pathway must be strengthened.

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PARIR, La danza de la vida. Perú - Entre la ciencia y la magia
PARIR-Giving Birth, the dance of life. Peru – between science and miracle

**Angela Bröcker*

Angela Bröcker leads a birth clinic and is a recognized advocate for natural birth in Peru. She will be presenting her latest book on that subject (German edition with 340 pages, 4 sections with 13 chapters, 13 Peruvian Clay Pots from the Moche Culture, 13 newspaper excerpts).

The book describes the author's experience as a medical doctor, midwife and as mother, combining diverse situations, especially from Peru and Germany. Contemporary and historic aspects are combined to build the basis for an outlook of a better future. Birth as an inherently human experience is the central focus of the chronicle. However, the text develops also on the subjects of conception, pregnancy, early infancy, fathering, family, community and the professionals involved in the process of giving birth. The Peruvian Amerindian tradition, especially regarding its extensive knowledge and connection to nature, is part of the conversation and accompanies the narrative.

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Understanding the intersection between climate change, migration, and mental health outcomes among women

**Maureen McGowan¹, Jessica Nieder¹, Priscilla Owusu¹ and Sabine Ludwig²*

Introduction: Climate Change (CC) causes frequent extreme weather events such as increased and prolonged periods of droughts and heatwaves, wildfires, and floods. In addition to the well-established direct health impacts of extreme weather events, climate change-caused weather variability also shapes human mobility. Both in low-income countries where adaptive capacities are limited- such as Bangladesh- but also in high-income countries such as the USA, millions of people are forced to leave their homes due to an unstable food supply or because their homes have been destroyed following floods or hurricanes. Forced migration has significant and long-term effects on migrants' mental health caused by the distress of leaving their homes as well as the trauma experienced during the migration process, stigmatization, sexual and labor exploitation, and challenges integrating into the host society. Whilst research has witnessed an increased interest in this field over recent years, sex and gender differences and thus the specific effects experienced by women are frequently neglected. In this presentation, we aim to discuss and focus on the impact on mental health of women who have experienced migration as a result of climate change, why they are a particularly vulnerable population in this context, and present some of the most current research available, including research from the global south and invite some of these experts to present their work.

Methods: We will prepare this presentation by conducting a short literature review to understand the most current and relevant research surrounding the linkage between mental health outcomes of women, migration, and climate change. We will then summarize these findings and develop an interactive presentation for the audience- which will include a few short activities and questions posed to the group to spark discussion. Secondly, we will invite 1-2 research experts in the field to speak about their ongoing research on this topic. Our aim is to have at least one of these researchers stem from the global south.

Results & Discussion: The ultimate aim of this presentation will be to spark interest and discussion around the intersection between women's health outcomes (mental health), migration, and climate change. The presentation will answer questions about the major mental health outcomes of women and will aim to discuss how negative mental health outcomes can be mitigated (i.e., which interventions are necessary and feasible). We hope that the audience leaves with a better understanding of this topic and is inspired to pursue interventions and research to mitigate poor mental health outcomes and increase the overall wellbeing of women who have experienced migration as a result of climate change.

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Climate Change and Women Health in Bangladesh: What we know is just the “Tip of the Iceberg”!

**Mohammed Mofizur Rahman*

Introduction: The socio-economic implications of climate change in most parts of the global South and especially in Bangladesh are not gender-neutral. The lives of Impoverished/marginalized rural women and girls are at the forefront of climate change and its adverse effects. Women disproportionately suffer from the consequences of climate change due to conservative sociocultural practices and subservient gender positioning in the distribution of resources, roles, and power, especially in developing countries such as Bangladesh. Climate Change affects women health through multiple pathways such as direct (temperature, precipitation effects), indirect or mediating ways. Indirect effects of climate change through water and food insecurity, loss of biodiversity and ecosystem services are becoming more relevant concerns within academia, but yet to be acknowledged by policy makers.

Methods: Critical review of scientific literature related to

1) climate change, 2) women health and 3) Bangladesh.

Results & Discussion: Bangladesh has a long history of being in the forefront of global climate change and its calamities. The East Bengal Cyclone of 1970, Caused more deaths among the vulnerable women, elderly and children in comparison to able bodied males. Similarly, during the 1991 cyclone in Bangladesh, the rate of female deaths were far higher than those of men. Furthermore, in recent times the cyclone *Sidr* of 2007 caused a death ratio of 5:1 between female and male members of the society. Restriction on women’s spatial movement (social restrictions, gender specific clothes, gendered role of caring for the young), fewer opportunities to access information on the risk and the ways to minimize the risk, and the lack of agency in crucial decision making, such as evacuation, has been attributed as a leading cause behind such gender disparities in mortality. In terms of mortality ratio from temperature related climate change, gender and age-based differences are significant. In comparison to girls, boys are more likely to receive preferential treatment in rescue efforts after the disaster. Natural disasters also have indirect consequences on the health and well-being of women and girls. Violation of women’s rights, sexual violence, child marriage and trafficking are being observed more during and post disasters. Slower effects of climate change, such as salinity in water and soil are having serious consequences on women’s health such as hypertension, pre-eclampsia, reproductive health, skin diseases and others. While health threats related to climate change remain, their role in the gendered division of labor, causes them to face higher health risks than men. For example, women are more likely to suffer from respiratory problems caused by indoor pollution due to their direct contact with traditional fuels. Vulnerability of women to other diseases may also be higher compared to men. Existing knowledge from literature suggests that the problems are far reaching, thus what we know so far, is just the “tip of the iceberg”.

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Climate-sensitive health counselling (CSHC): addressing climate change in doctor-patient interaction - a HeReCa online-panel survey

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Introduction: The harmful impacts of climate change (CC) on public health have been the subject of a growing body of research in the last few years. However, apart from being a global threat, combatting CC is also considered a decisive opportunity for improving individuals' health: Awareness about health co-benefits (lifestyle change synergies between climate protection and individual health) of climate-friendly behavior may motivate individuals towards a more sustainable behaviour. Hence, it is necessary to sensitize the population with respect to specific health impacts of CC, promising adaptation measures and health cobenefits of climate action (e.g. regarding nutrition, mobility or mental health). Furthermore, it is essential to learn more about the willingness of patients to discuss potential climate anxiety and possible ways of climate protection engagement.

Methods: Through the population-based HeReCa panel, with roughly 1500 voluntary participants from 5 federal districts, a cross-sectional online-based questionnaire was administered (survey 04-05/2022). It entails 46 items sorted into 7 sections. Two sections serve as dependent variables for the association analysis: 18 items on preferences for themes in CSHC (impacts of CC, adaptations to CC, health co-benefits, climate anxiety, climate protection engagement, individual/global focus of counselling) and 13 items about the acceptability of different communicative approaches of CSHC. Three sections serve as independent variables: attitudes on CC, level of engagement, and sociodemographic data. Two sections assess experiences with CSHC and preferred information channels to serve as descriptive results.

Results: The questionnaire uncovers the general public's preferences regarding topics and communication methods of CSHC and characterize how socioeconomic characteristics and attitudes on CC are associated with these preferences. We defined the following study objectives: (1) Quantify participants' prior experiences in discussing CC in health counselling; (2) Identify participants' preferences in CSHC regarding themes and communication methods; (3) Identify relevant socioeconomic characteristics and attitudes towards CC, which are associated with individual preferences for CSHC. First descriptive results will be provided.

Discussion: This study is part of a comprehensive research project which aims to specify the concept of CSHC, and to establish practical patient-oriented recommendations for its application. Our results will integrate the perspective of the public concerning interests and needs related to CSHC, to provide improved representativity and broader applicability for clinical guidelines. In triangulation with qualitative data, results will help physicians to deliver CSHC tailored to the preferences of different sociodemographic groups.

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