

to create awareness and screen potential clients including; house hold visits, small group sessions, bus terminus, work places and other locations.

**Results:** Evaluations, involving population surveys and hypertension registers, have shown that population risk-factor levels have greatly reduced and consequently the disability adjusted years increased. The results showed that awareness among the general population increased and treatment was more effective than in the reference period. Prevalence of smoking and alcohol decreased in treated hypertensive patients and normotensives.

**Conclusion:** Ignorance of the general population as to the nature of elevated BP, its morbid effects and the methods of maintaining control is widespread and contributes to the large percentage of undetected and untreated subjects in a community. Utilization of CHVs to screen and refer hypertensive clients while providing health education messages is a proven intervention towards the control of hypertension. Additional regular program data review and supportive supervision is important to inform change of strategies, messaging and follow up modalities to ensure adoption and maintenance of best practices.

**Keywords:** Control, Chvs, follow ups.

#### A16819 PREVALENCE AND ASSOCIATED FACTORS OF MASKED HYPERTENSION IN OBESE PATIENTS IN YAOUNDE

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**Objectives:** The aim of this study was to investigate the prevalence and associated factors of masked hypertension in obese patients in Yaounde.

**Methods:** We carried out a cross-sectional study from January to September 2017 at the National Obesity Center of the Yaounde Central Hospital. High-normal office blood pressure was defined as systolic/diastolic blood pressure within the 130–139/85–89mmHg range. Masked hypertension was defined when the mean 24 hour Systolic Blood Pressure was greater than or equal to 130mmHg and/or the mean 24hour Diastolic Blood Pressure was greater than or equal to 80mmHg with normal office blood pressure. Logistic regression was used to examine the relationship of masked hypertension with associated factors.

**Results:** Among the 90 participants included, 67.8% were female. Mean age ( $\pm$ SD) was 46 ( $\pm$ 8) years. The mean clinical measurements were 120  $\pm$  9.4 mmHg and 75.5  $\pm$  7.9mmHg respectively for the systolic and the diastolic blood pressure. On 24 hour Ambulatory measurement, the mean was 123.9  $\pm$  14.4 / 74.7  $\pm$  8.9 mmHg respectively for the systolic/diastolic blood pressure. The prevalence of masked hypertension was 33.3%. Masked hypertension was significantly associated to high-normal office blood pressure [odds ratio (OR) = 2.90,  $p$  = 0.02] and to dyslipidemia [OR = 3.60,  $p$  = 0.01], but not to male sex, diabetes, physical activity, tobacco/alcohol.

**Conclusion:** Our findings suggest that the prevalence of masked hypertension is high and that physicians should consider ambulatory blood pressure monitoring for obese individuals with high-normal office blood pressure and/or dyslipidemia.

**Keywords:** Ambulatory blood pressure monitoring, masked hypertension, obesity

#### A17033 CARDIO-METABOLIC DISEASE RISK FACTORS AMONG SOUTH ASIAN LABOUR MIGRANTS TO MIDDLE EAST: A CALL FOR ACTION

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**Objectives:** This study explores the burgeoning cardiovascular (CV) and metabolic disease (MD) risk factor burden among South Asian labor migrants to the Middle East.

**Methods:** This study conducted a qualitative synthesis of literature using PubMed/Medline and grey literature searches. We reviewed the literatures on the burden of risk factors in migrants themselves, and subsequently among the sending and receiving countries. To make it policy relevant, we discussed it with policy documents from South Asian countries.

**Results:** We found a high burden of cardiometabolic risk factors among the migrants, as well as populations in the sending and receiving countries. Only Nepal, Bangladesh and Sri Lanka have some provisions related to screening of non-communicable diseases (NCDs) before labor migration. Further analysis of policy papers showed that none of the documents are specific for screening any

cardiometabolic diseases, but NCDs were used generically, failing to specify specific screening target.

**Conclusion:** Given the high burden of risk factors, migrants' health should become an urgent priority. It is also urgent from a human rights perspective, as these risk factors would increase the risk of CV, stroke and kidney related deaths. The lack of specific focus on screening during different stages of labor migration should receive attention. The International Labour Organization (ILO) and the International Office for Migration (IOM), through their country coordination teams should engage local stakeholders to create policies and plans to address this concern. Similarly, there is a need for the receiving country to become an equal partner in these efforts, as migrant's better cardiometabolic health is in the benefit of both receiving and sending countries.

**Keywords:** non-communicable diseases, diabetes, cardiovascular diseases, migrants, labour, migration, South Asia

#### A17044 COMMUNITY HEALTH WORKERS FOR NON-COMMUNICABLE DISEASE INTERVENTIONS IN THE DIGITAL AGE

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**Objectives:** In this study, we review the evidence and discuss how the digitalization affects the CHWs programs for tackling non-communicable diseases (NCDs) in low-and-middle income countries (LMICs).

**Methods:** We conducted a review of literature covering two databases: PubMed and Embase. A total of 97 articles were abstracted for full text review of which 21 are included in the analysis. Existing theories were used to construct a conceptual framework for understanding how digitalization affects the prospects of CHW programs for NCDs.

**Results:** We identified three benefits and three challenges of digitalization. Firstly, it will help improve the access and quality of services, notwithstanding its higher establishment and maintenance costs. Secondly, it will add efficiency in training and personnel management. Thirdly, it will leverage the use of data generated across grass-roots platforms to further research and evaluation. The challenges posed are related to funding, health literacy of CHWs, and systemic challenges related to motivating CHWs. More than 60 digital platforms were identified, including mobile based networking devices (used for behavioral change communication), Web-applications (used for contact tracking, reminder system, adherence tracing, data collection, and decision support), videoconference (used for decision support) and mobile applications (used for reminder system, supervision, patients' management, hearing screening, and tele-consultation).

**Conclusion:** The digitalization efforts of CHW programs are afflicted by many challenges, yet the rapid technological penetration and acceptability coupled with the gradual fall in costs constitute encouraging signals for the LMICs. Both CHWs interventions and digital technologies are not inexpensive, but they may provide better value for the money.

**Keywords:** community health workers, non-communicable diseases, low income countries, community health programs

#### A17062 EVALUATING HYPERTENSION PREVALENCE, TREATMENT AND MANAGEMENT IN NEPAL: PRELIMINARY FINDINGS FROM NEPAL-MMM17

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**Objectives:** The objective of Nepal May Measurement Month (MMM) 2017 Study was to raise awareness about hypertension while evaluating hypertension status and medicines access situation during healthcare-facility exit interviews.

**Methods:** Total 6,127 patients (mean age 38.7  $\pm$  21.0 years) participated in facility based blood pressure screening – conducted at mean temperature of 28.3  $\pm$  3.9°C) – at nine districts in Nepal.