

# Depression Amongst Cardiovascular Patients Living in the State of Qatar



# Acknowledgement

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**Approved**

- **Ethics approval from Hamad Medical Research Centre**

- **Ethical Approval**

**Process**

- **Ethics approval from The University of Calgary Conjoint Health Research Ethics Board – Canada**

**Approved**

# Background

- Similar to other countries in the world, cardiovascular diseases are the leading cause of mortality and morbidity in Qatar.
- Cardiovascular diseases accounted for 20% of the main causes of death in Qatar.
- Rapid growth, changing environmental and social conditions, and lifestyle changes may have affected the prevalence and patterns of cardiovascular diseases.

# Table 1: *Qatar Non Communicable diseases (NCD) Country Profiles*

<b>NCD mortality</b>		
<i>2008 estimates</i>	<i>males</i>	<i>females</i>
Total NCD deaths (000s)	0.9	0.4
NCD deaths under age 60 (percent of all NCD deaths)	60.8	34.4
<b><i>Age-standardized death rate per 100 000</i></b>		
All NCDs	367.5	433.7
Cancers	101.1	84.3
Chronic respiratory diseases	26.2	30.6
Cardiovascular diseases and diabetes	179.8	239.3

Source: WHO: *Non Communicable diseases (NCD) Country Profiles*

[http://www.who.int/nmh/countries/qat\\_en.pdf](http://www.who.int/nmh/countries/qat_en.pdf)

# Background

- Depression is associated with increased risk of coronary artery disease, and increased morbidity and mortality after myocardial infarction, CABG surgery, congestive heart failure, or mitral valve replacement .
- Studies have shown that 15 – 30% of cardiovascular patients experience depression after a cardiac event.
- Recognition of depression as a co-morbidity in patients with acute coronary syndrome (ACS) has the potential to improve patients' depression-related morbidity and benefits patients with underlying coronary disease.



# Research Goal

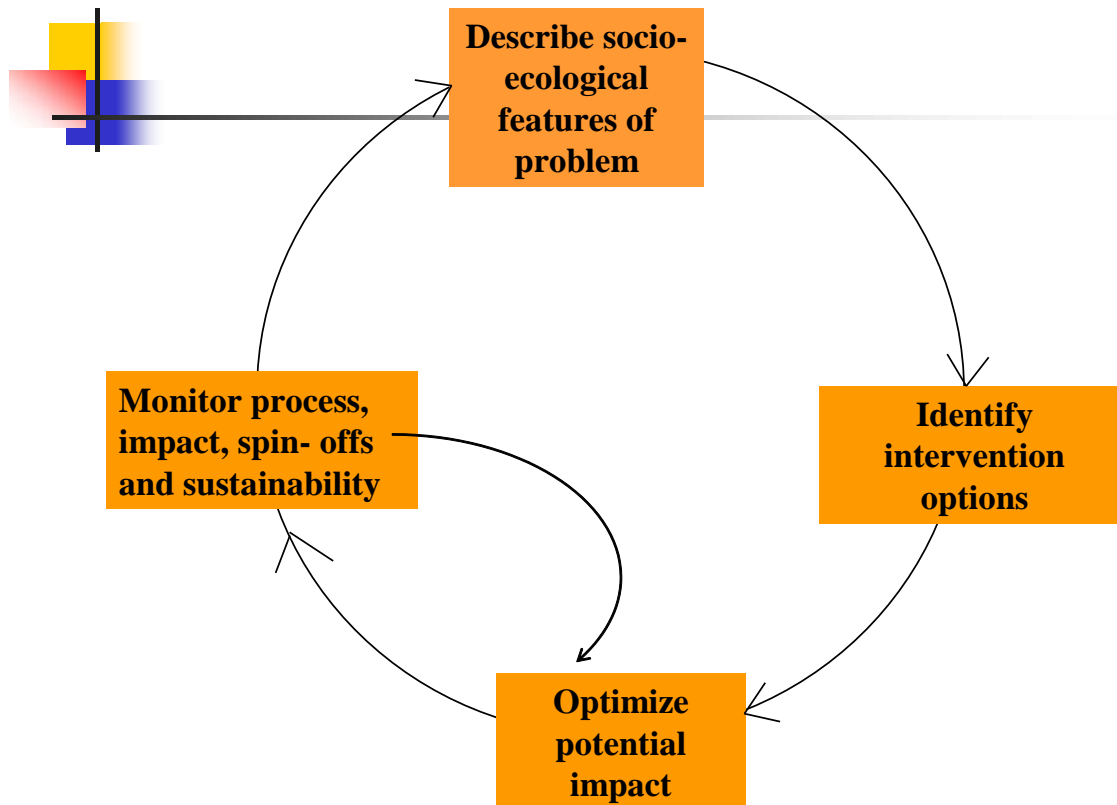
We will investigate :

- (1) the prevalence and severity of depression among patients who have confirmed diagnosis of cardiovascular diseases .
- (2) how social, cultural, and economic factors contribute to the risk of depression and its management among cardiovascular patients.
- (3) formulate effective intervention strategies that are expected to increase awareness, prevention of and treatment for depression among cardiovascular patients, thus reducing cardiovascular diseases morbidity and mortality in Qatar.



# Research Design

Multiple Intervention Framework  
(Edwards, Mill & Kothari, 2003)



# Ecological Conceptual Framework

- Individuals and their physical and socio-cultural environment of individuals.
- Health care behaviour and the physical environmental variables, intrapersonal, and other social determinants of health.
- Health promotion and interventions should occur at multiple social, cultural, and environmental levels.



# Kleinman's Explanatory Model

- Individuals' explanatory models are derived from their knowledge and values, which are informed by their specific socio-cultural backgrounds.
- Providing effective health care requires that providers be able to elicit and recognize clients' beliefs and values with respect to their understandings of illnesses and treatments, and to negotiate these differing perspectives.



# Mix-Methods Study (2012 – 2015)

## Study 1: Quantitative study

**Population-Based Survey of Depression  
Amongst Cardiovascular Patients Living in the  
State of Qatar**

## Study 2: Qualitative study

**Exploring Depression Amongst Cardiovascular  
Patients Living in the State of Qatar**



# Study 1:

## Population-Based Survey of Depression Amongst Cardiovascular Patients Living in the State of Qatar



# Research Questions

- (1) What is the prevalence and severity of depression among cardiovascular patients living in Qatar?
- (2) Is there a relationship between these patients' socio-demographic factors (such as income, occupation, employment status, education, nationality, marital status, age, gender, length of cardiovascular disease diagnosis, and spouse's educational level, employment status and occupation), and depression among these patients?



# Methodology Study 1

## **Sites: Doha, Heart Hospital**

4 cardiology units  
(Emergency Department,  
CCU, two (2) Cardiology  
Floor units), and  
Cardiovascular Out-patient  
Clinic

## **Sample: convenience**

Arabic women and men  
who are admitted to the  
Heart Hospital to one of the  
four (4) units: ED, CCU, and  
two (2) Cardiology Floor  
units, who meet the study's  
inclusion criteria, between  
January , 2013 and June,  
2013 will be invited to  
participate in the survey

## **Data collection:**

structured survey-face to  
face

Arabic

Female and male  
interviewers fluent in  
Arabic and English

3 days after admission

2 to 4 months after  
discharge

12 months after discharge?

*The Beck Depression  
Inventory Second Edition  
(BDI-II).*

*Demographic questionnaire*

## **Data analysis:**

Descriptive statistics

Inferential statistics

SPSS version 20



## ***Participants' inclusion criteria***

- 1) Are in-patient for ***at least three days*** in one of the 4 cardiology units (chest pain unit, CCU, two (2) Cardiology Floor);
- 2) have symptoms or confirmed diagnosis of CVD/coronary artery diseases;
- 3) age 20 or over;
- 4) self identified as Arabic and speak Arabic;
- 5) are in stable condition with no physical discomforts, ***are hemodynamically stable.***

# Study 2

## Exploring Depression Amongst Cardiovascular Patients Living in the State of Qatar



# Research Questions

- 1) How do Arabic men and women cardiovascular patients seek help for mental health problems?
- 2) What is the process by which the decision to seek help for mental illness/depression is reached?
- 3) What are barriers and facilitators for Arabic men and women cardiovascular patients to seek mental health care/services?
- 4) What would be culturally and socially appropriate and effective intervention strategies for increasing awareness, prevention of, and treatment for depression in Arabic cardiovascular patients in Qatar?



# Methodology Study 2

## **Sites:**

Heart Hospital

*Cardiovascular*

*Out-patient Clinic*

*Cardiovascular*

*Department and*

*Psychiatric*

*Department*

*(HMC)*

## **Sample:**

purposive

30 men,

30 women,

30 health care  
providers

Qualitative in-  
depth interviews

Qualitative data  
analysis

Nvivo 9

# *Participants' inclusion criteria*

## **Men and women who**

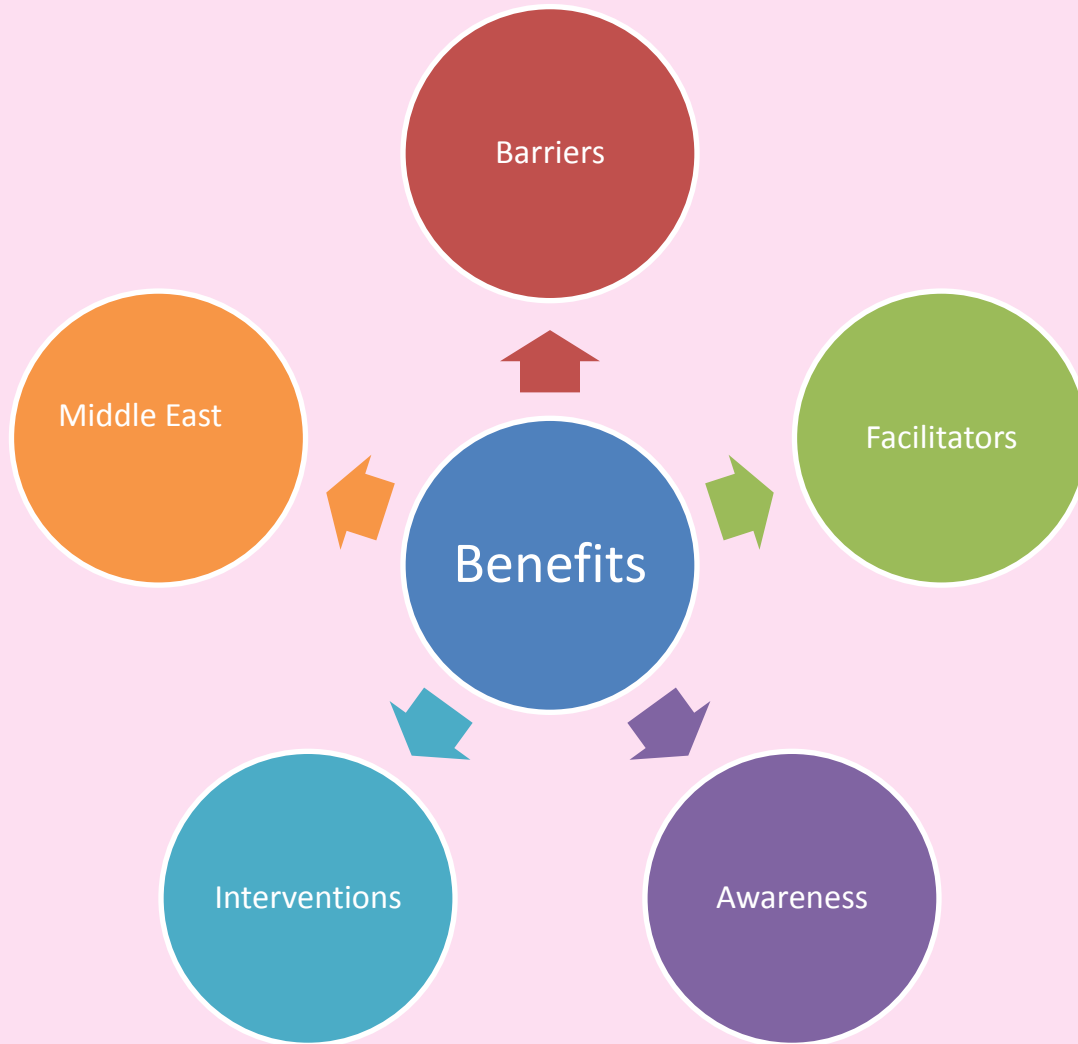
- 1) are out-patient at the Cardiovascular Out-patient clinic;
- 2) have confirmed diagnosis of CVD/coronary artery diseases;
- 3) ***have been identified as patients experiencing depression by this project survey (study 1);***
- 4) age 20 or over;
- 5) Speak Arabic;
- 6) Born, raised and/or live in Qatar ***for more than 10 years*** (so that they would be able to give more in-depth information on Qatar's social, cultural, and health care context);
- 7) are in stable condition with no physical discomforts;

# *Participants' inclusion criteria*

## **Health care providers who**

- (a) provide direct services to patients in the 5 mentioned data collection sites;
- (b) are health care policy maker, cardiologist, psychiatrist, psychologist, primary care/ family physician, a nurse, or a social worker.

# Anticipated Benefits



# What is important for you?

- Timeline
- How?
- Who?





# What are we asking from you?

- Specific time
- Room
- Staff informed
- Poster/brochures
- Encouragement



# Questions?

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*Your help is so much appreciated!*

*Thank you*

