



Gender disparity & By-stander CPR in PAROS countries

Name: Dr. Fahad J. Siddiqui

*Designation/Department: Assistant Professor / Pre-hospital & Emergency
Research Centre (PERC)*

Country: Singapore

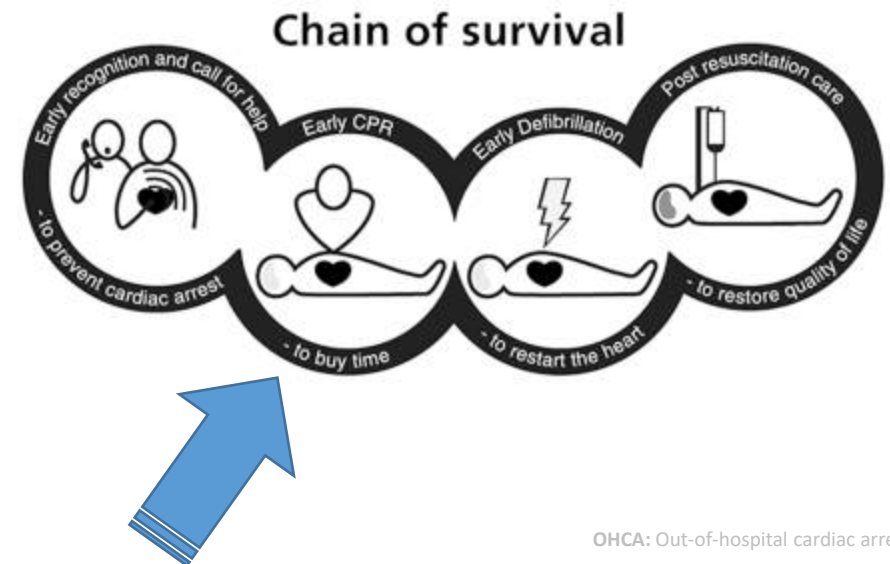


Outline of Proposal

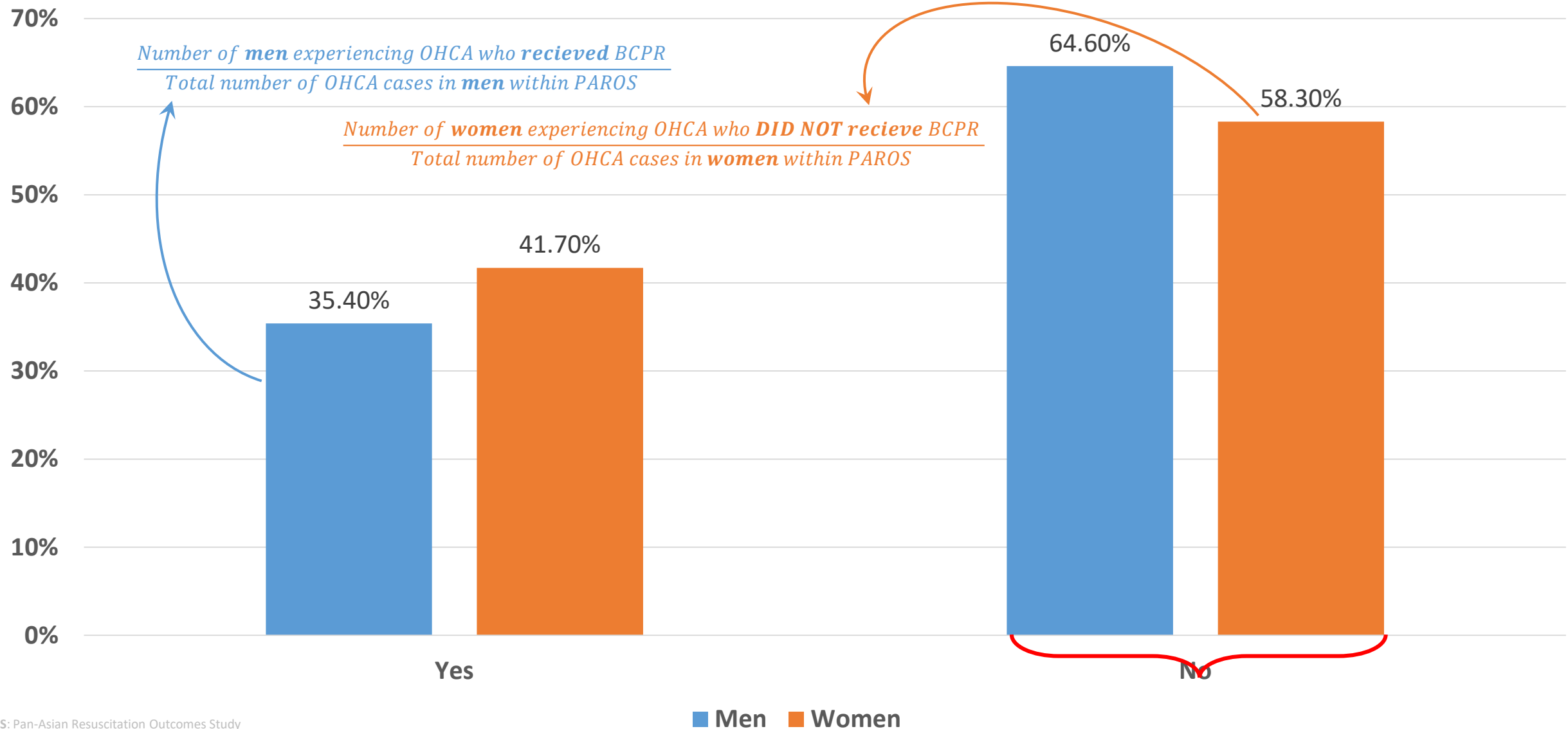
- ▶ Introduction
- ▶ Aims/Hypotheses
- ▶ Methods
- ▶ Significance

Introduction

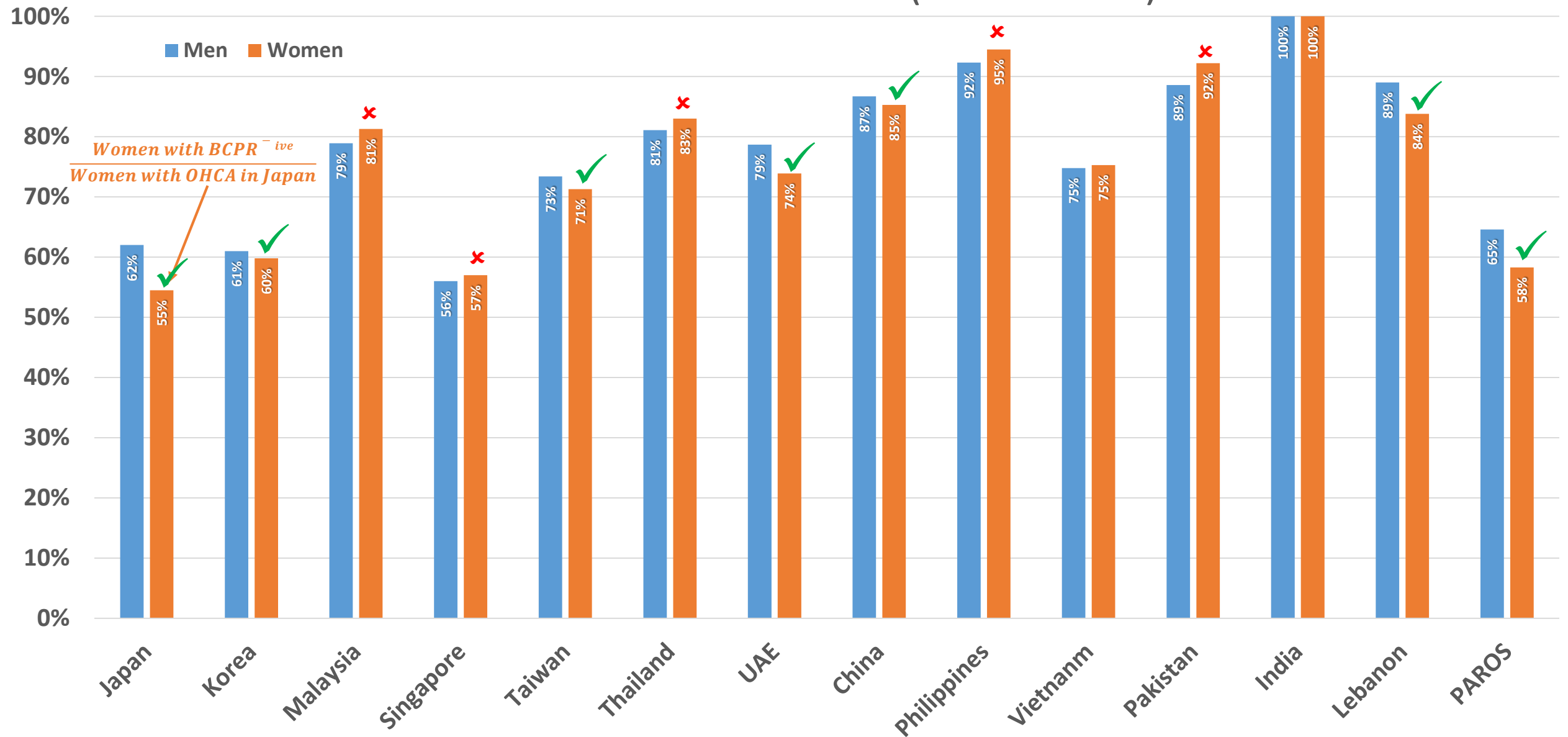
- Out-of-hospital cardiac arrest (OHCA)
 - Rising
- Survival
 - Overall – Low
 - Good functional capacity – lower
- Interventions
 - Help by a by-stander
 - Chest compression
 - Vary by community
 - Increase the rate



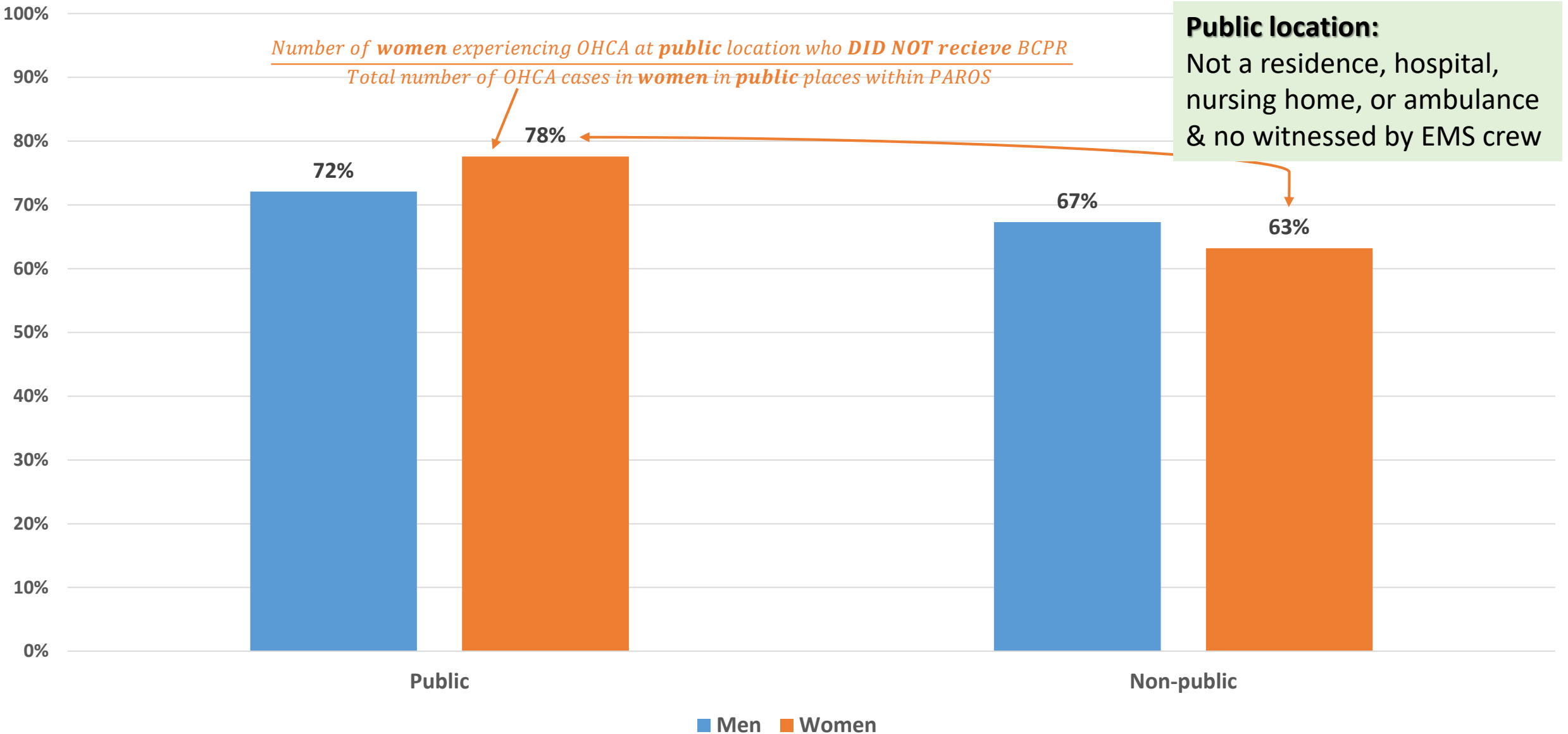
Distribution of by-stander CPR by gender among OHCA cases in PAROS countries (2009 - 2018)



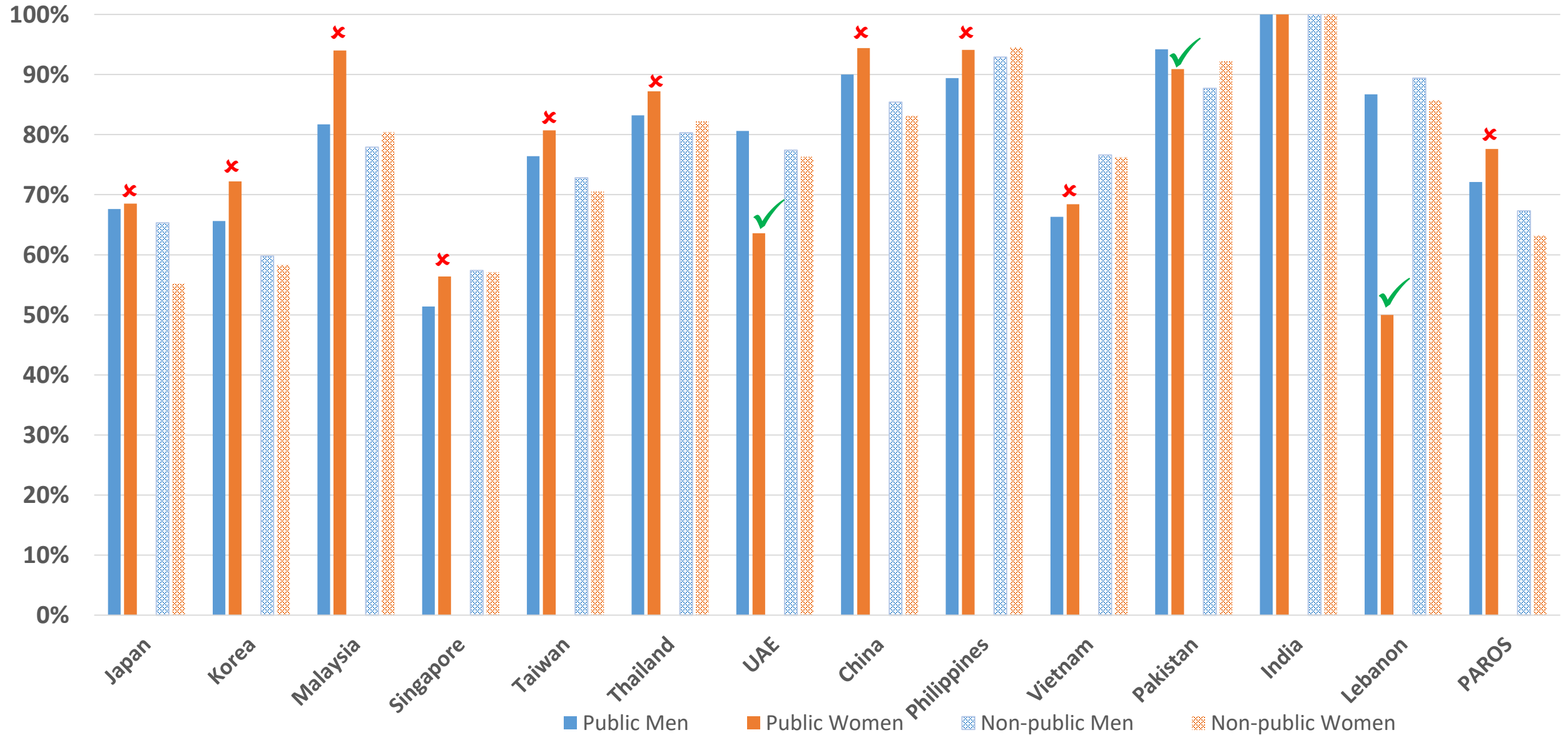
Distribution of absence of by-stander CPR by gender among OHCA cases in PAROS countries (2009 - 2018)



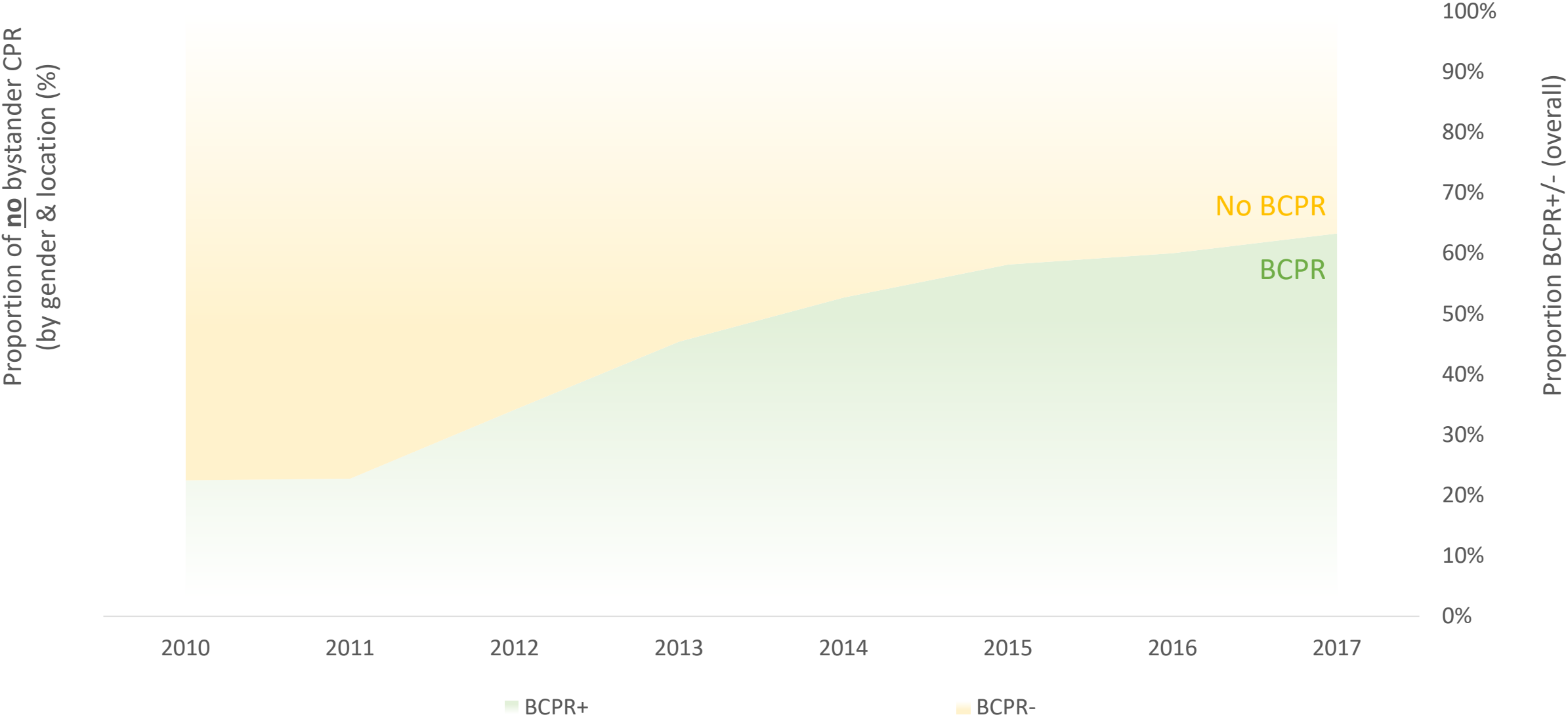
Distribution of **absence of by-stander** CPR by gender & location among OHCA cases in PAROS countries (2009 - 2018)



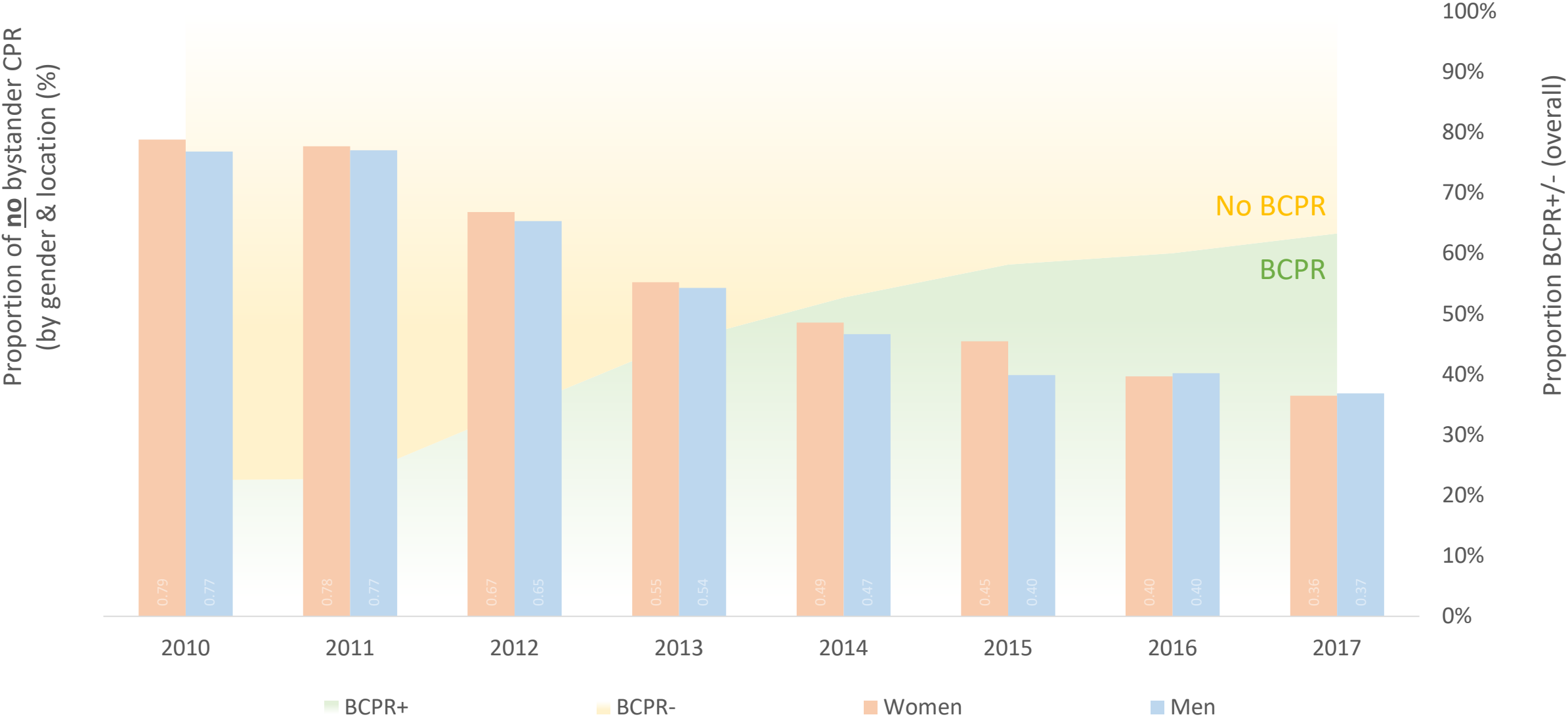
Distribution of **absence of by-stander CPR** by gender & location among OHCA cases in PAROS countries (2009 - 2018)



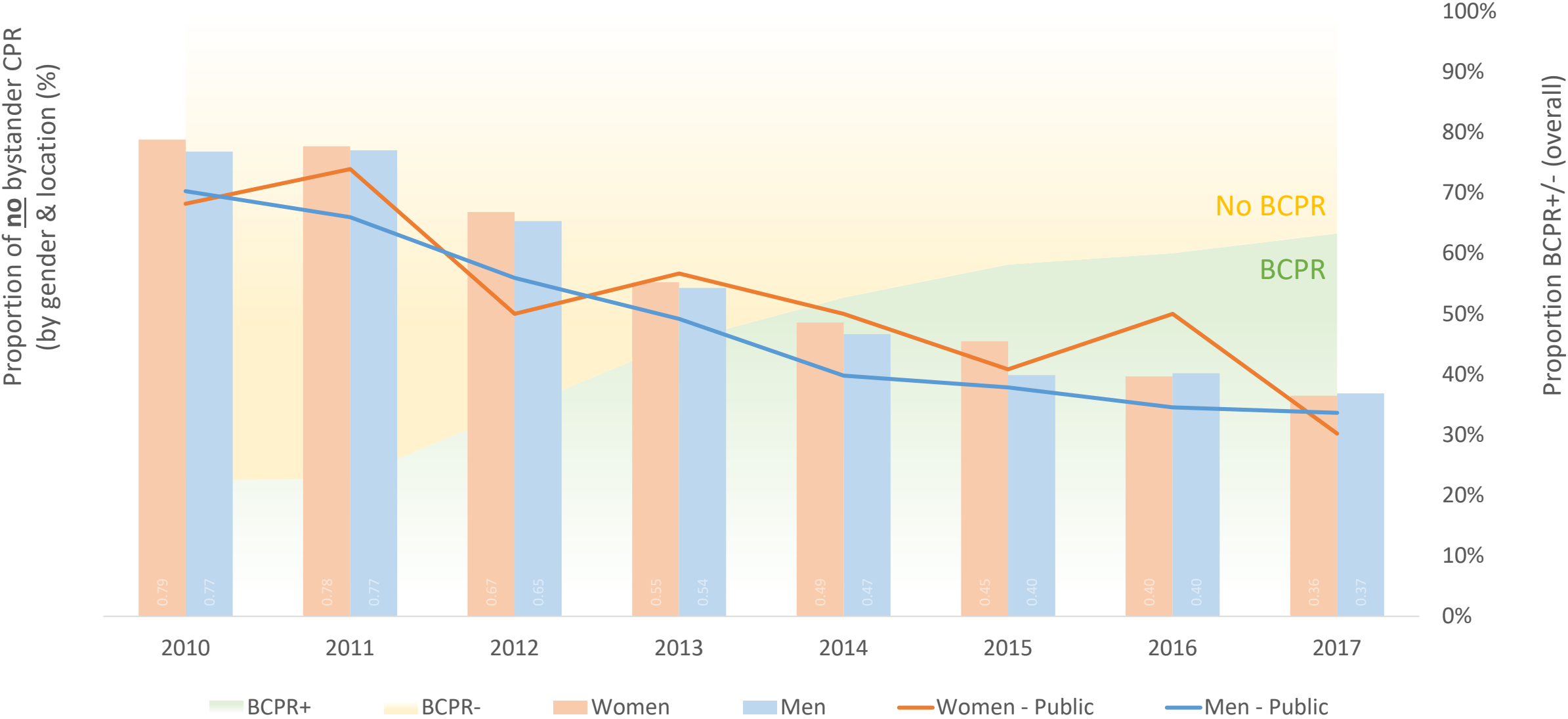
Distribution of **absence of by-stander CPR** by gender & location among OHCA cases in Singapore (2009 - 2017)



Distribution of **absence of by-stander CPR** by gender & location among OHCA cases in Singapore (2009 - 2017)



Distribution of **absence of by-stander CPR** by gender & location among OHCA cases in Singapore (2009 - 2017)





Introduction

- Published evidence
 - Reasons for gender disparity
 - No study in PAROS region
 - Beyond PAROS/Asia
 - One study
 - United states
 - Heavily Caucasians
 - Western culture

ORIGINAL RESEARCH ARTICLE

Public Perceptions on Why Women Receive Less Bystander Cardiopulmonary Resuscitation Than Men in Out-of-Hospital Cardiac Arrest

BACKGROUND: Women who suffer an out-of-hospital cardiac arrest receive bystander cardiopulmonary resuscitation (CPR) less often than men. Understanding public perceptions of why this occurs is a necessary first step toward equitable application of this potentially life-saving intervention.

METHODS: We conducted a national survey of members of the public using Mechanical Turk, Amazon's crowdsourcing platform, to determine reasons why women might receive bystander CPR less often than men. Eligible participants were adults (≥ 18 years) located in the United States. Responses were excluded if the participant was not able to define CPR correctly. Participants were asked to answer the following free-text question: "Do you have any ideas on why women may be less likely to receive CPR than men when they collapse in public?" Descriptive statistics were used to define the cohort. The free-text response was coded using open coding, and major themes were identified via classical content analysis.

RESULTS: In total, 548 subjects were surveyed. Mean age was 38.8 years, and 49.8% were female. Participants were geographically distributed as follows: 18.5% West, 9.2% Southwest, 22.0% Midwest, 27.5% Southeast, and 22.9% Northeast. After analysis, 3 major themes were detected for why the public perceives that women receive less bystander CPR. They include the following: (1) sexualization of women's bodies; (2) women are weak and frail and therefore prone to injury; and (3) misperceptions about women in acute medical distress. Overall, 41.9% (227) were trained in CPR while 4.4% reported having provided CPR in a medical emergency.

CONCLUSIONS: Members of the general public perceive fears about inappropriate touching, accusations of sexual assault, and fear of causing injury as inhibiting bystander CPR for women. Educational and policy efforts to address these perceptions may reduce the sex differences in the application of bystander CPR.

Sarah M. Perman, MD, MSCE
Shelby K. Shelton, MPH
Christopher Knoepke, PhD, MSW
Kathryn Rappaport, MD
Daniel D. Matlock, MD, MPH
Kathleen Adelgais, MD, MPH
Edward P. Havranek, MD
Stacie L. Daugherty, MD, MSPH

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Key Words: cardiopulmonary resuscitation ■ heart arrest ■ sex

Sources of Funding, see page 1067

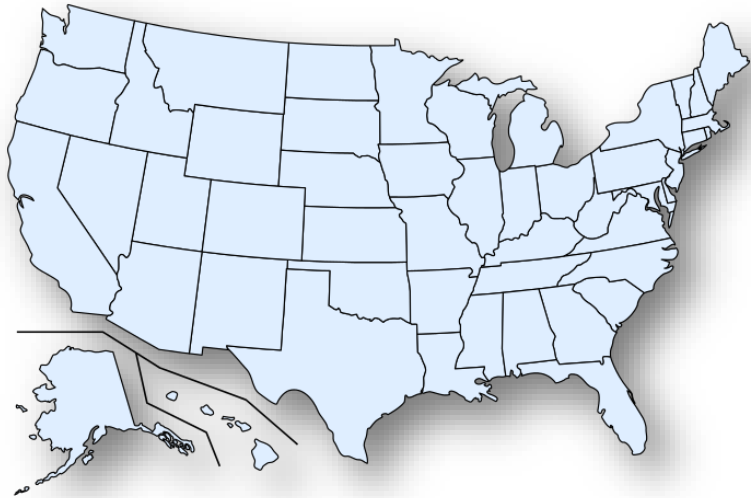
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Table 5. Utilizing Thematic Analysis, 3 Major Themes and 8 Subthemes Were Identified From the Cohort of 542 Responses That Explain Public Perceptions on Why Women Receive Less Bystander Cardiopulmonary Resuscitation Than Men

Major Theme	Subtheme	Representative Quote
Women's bodies are sexualized (510)	Fear of being accused of inappropriate touch (183)	Worried about stepping over the line in terms of harassment and groping People are less likely to touch the chests of women because it's been ingrained in our culture that doing so is always wrong Society has pretty strict standards about making contact with a woman, even if it is to provide medical attention
	Fear of being accused of sexual assault (188)	"Cuz [sic] a man doesn't want a lawsuit for touching a woman" "Because people don't want to be accused of sexual harassment or rape" "People are afraid that the woman or other bystanders might react negatively, thinking that you are attempting to sexually assault the woman"
	Breasts/exposure (124)	Reluctance because of female breasts being on the chest "Perhaps people are worried about appearing to fondle the breasts of women"
	Mouth to mouth (15)	"People are worried about... appearing to kiss women" "Maybe because it would seem like kissing them"
Women are perceived as physically weak or fragile and prone to injury (84)	Afraid to injure (76)	"They are afraid of hurting them by breaking a rib" "Because people are afraid to hurt women" "They might be scared to injure them during the process since females usually have smaller frames"
	Afraid to be accused of nonsexual assault (8)	"Men are afraid to damage them, or be sued later for abuse/pain" "Men don't want to worry about assault charges."
Misperceptions about women in acute medical distress (68)	Women don't have cardiac arrest/ cardiac disease (42)	"People would assume that women are weak and faint often" "People don't expect women to have heart attacks"
	Women are emotional, overdramatic, faking (26)	"People tend to not take women as seriously as they take men" "Men are conditioned to not believe women and generally think they are hysterical or over-reacting people think the woman is faking it"

Aims/Hypotheses:

Does any question arise in our minds?





Aim/Hypothesis

Rationale

- PAROS
 - Culturally diverse region
 - Languages
 - Religions
 - Development
 - Single set of reasons may not be representative of all PAROS countries
 - Uniform survey from all PAROS countries



Aim/Hypothesis

- Gender disparity exists
 - Receiving the BCPR in public locations
- Reasons unknown
 - Anecdotal
 - Non-systematically recorded
- Knowledge of the reasons will help make progress to resolve the problem



Methods

- Study design
 - Cross-sectional survey
- Participants
 - Adults of 21 years or older
 - PAROS country resident
 - Ability to respond to an electronically administered online questionnaire
 - Know the meaning of CPR (judged by some questions in the survey)
- Instrument
 - Hybrid questionnaire (structured and unstructured questions)



Methods

Questionnaire structure

- 1. Knowledge and attitudes towards OHCA bystander CPR**, asking their knowledge of CPR, willingness to learn CPR, history of training in bystander CPR and for those with none, reasons for not receiving in CPR training, confidence in performing OHCA bystander CPR;
- 2. Willingness to act on OHCA bystander CPR** in two hypothetical scenarios involving cardiac arrest in a male and a female of similar age and situation and the reasons if respondents are reluctant to perform CPR (e.g. a complete male [female] stranger who is around 40 years old has suffered cardiac arrest in a public space and needs immediate CPR. You're the first witness without any helpers);
- 3. An open-ended question** stating "from our data, we found that women receive bystander CPR less often than men in Singapore (or in XX country). Why do you think women are less likely to receive CPR when they collapse in public?"; and
- 4. Socio-demographic variables** including age, gender, race, education, employment status, personal health condition, medical history of family members.



Significance

Advantage of this knowledge

- Knowing the reasons
 - Identify targets for intervention
 - Design interventions
 - Effective
 - Efficient



Invitation

- Participate in this survey as country lead
- For further details, discussion & suggestions
 - Dr. Fahad J. Siddiqui (fahad.siddiqui@duke-nus.edu.sg)
 - Ms. Nur Shahidah (nur.shahidah@sgh.com.sg)
 - Prof. Marcus Ong (marcus.ong@duke-nus.edu.sg)