

College Students' Perceptions and Awareness of H1N1: Views from the United States, Egypt and India

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Presenter Disclosures

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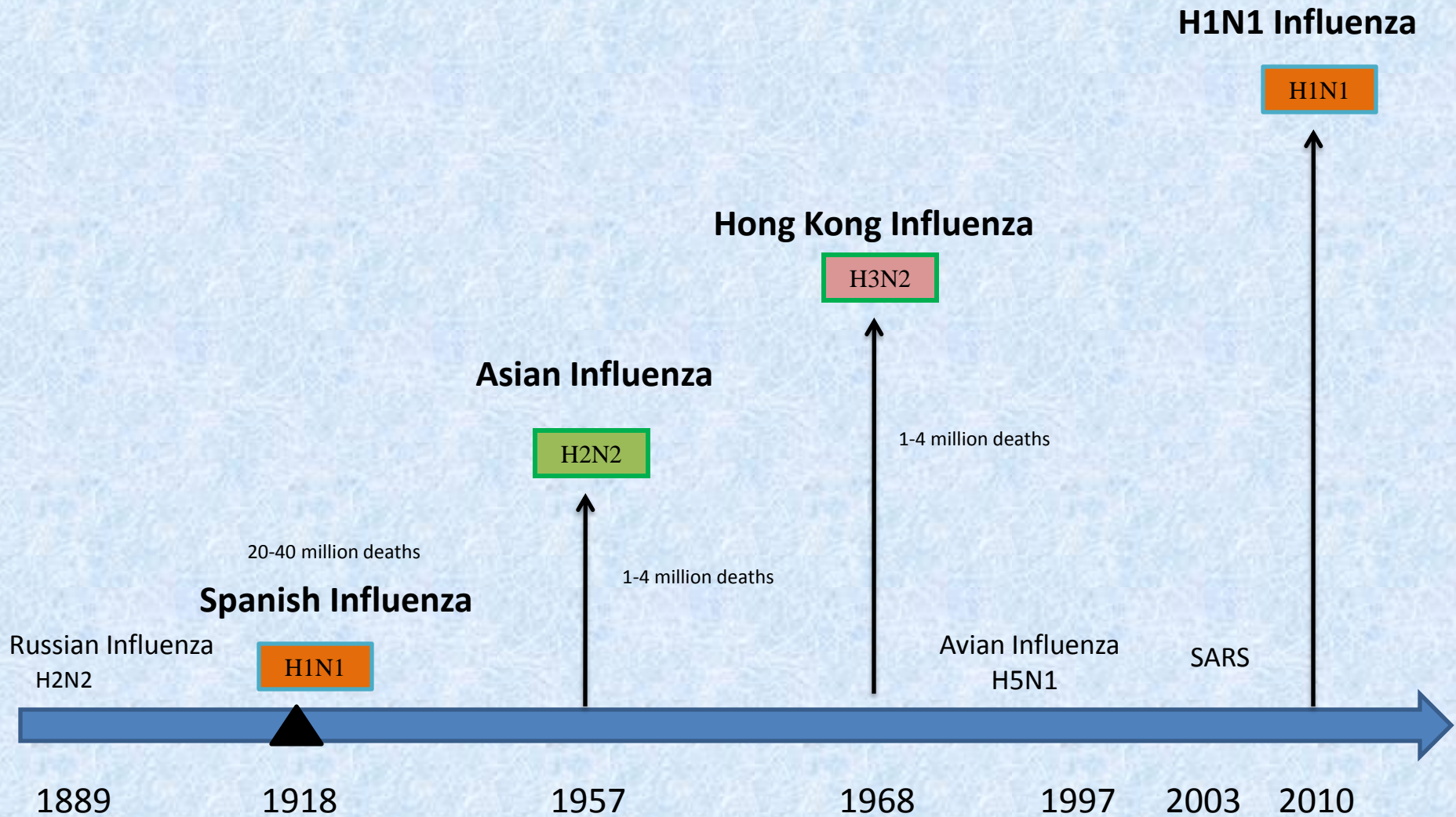
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Objectives

- Describe different perceptions and awareness issues about H1N1 among college students in United States, Egypt and India
- Identify college students' primary channels of information for H1N1
- Understand how multiple factors interact to explain H1N1 related behaviors and perceptions

History

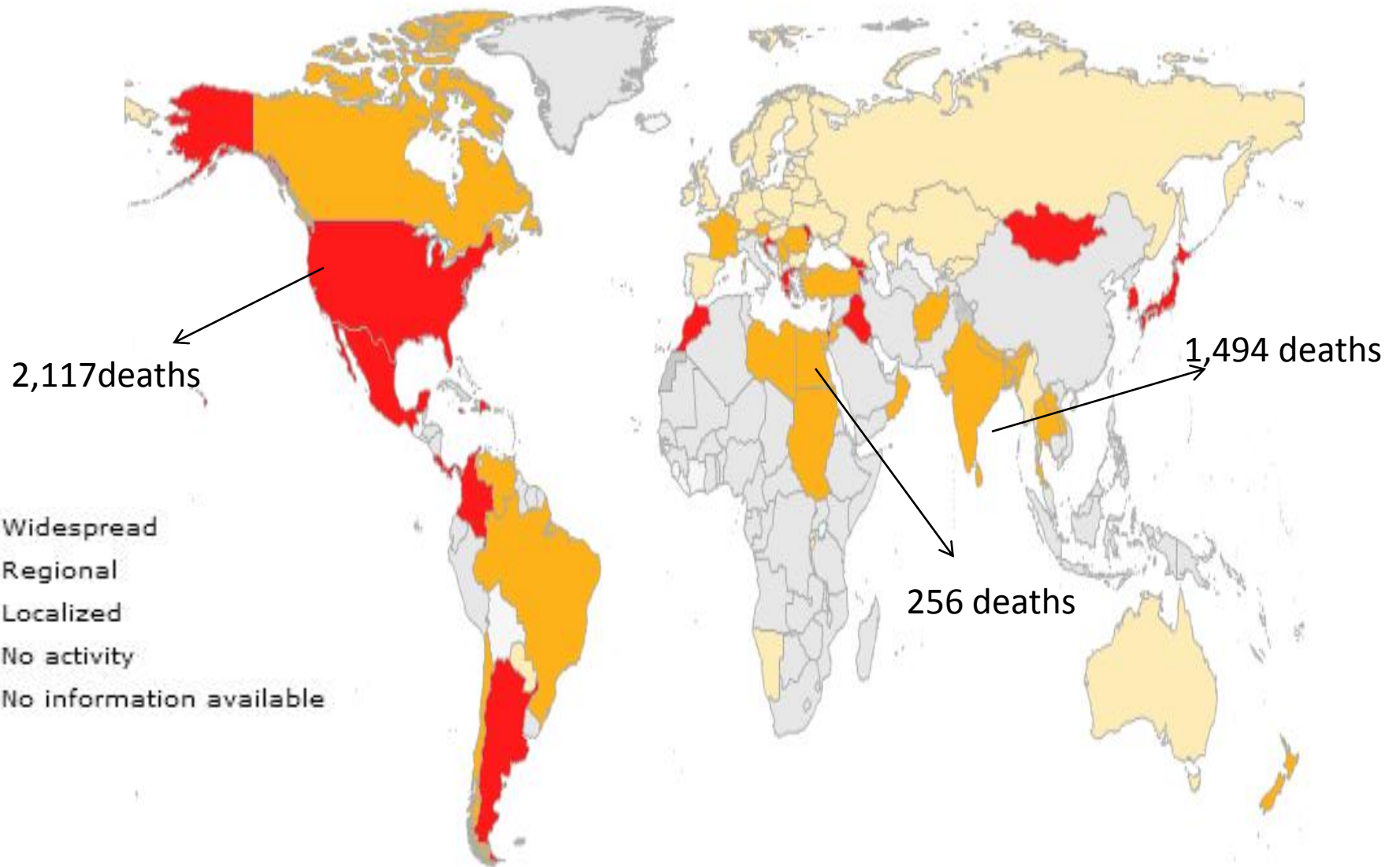


Introduction

- The outbreak of H1N1 started in Mexico
- In United States the earliest reported cases of human infection were from Texas and California in March 2009
- In Egypt – Cairo in June 2009
- In India – Hyderabad in May
- H1N1 emerged as a global threat around September 2009



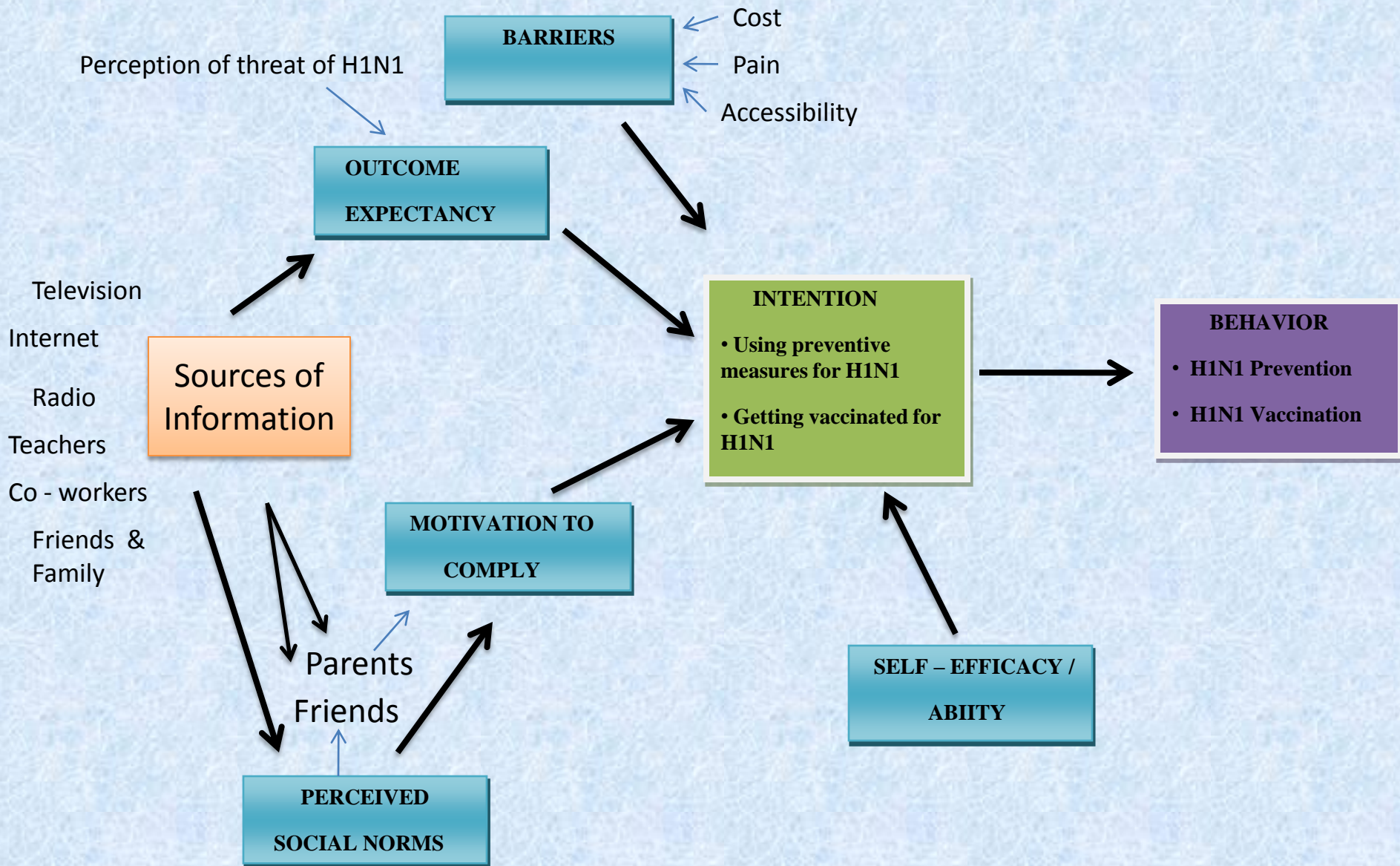
Global spread of H1N1 January 2010



Theoretical Framework

- Beliefs and perceptions of students about H1N1 preventive measures and vaccine
- Disease control measures such as hand hygiene, social distancing, avoiding crowded places
- Threat perceptions, self efficacy, intention
- Vaccination -- barriers, social norms, influence of friends and family, and awareness

Theoretical Framework



Methods

- **STUDY DESIGN**

- Cross sectional prospective study
- Non random sample

- **POPULATION**

- Undergraduate students aged 18 years and older (N = 1405)

- **DATA COLLECTION**

- Self report survey in English and Arabic
- United States

Distributed before the administration of H1N1 vaccination on campus in
November 2009

- India and Egypt

Data were collected in the months of November and December 2009

Demographic Variables (N = 1405)

TRAITS		UNITED STATES	EGYPT	INDIA
		(N= 503)	(N= 494)	(N= 408)
		%	%	%
Age	≤ 20 years	65.7	30	58.4
	> 20 years	34.3	70	41.6
Gender	Male	32.5	13.8	57.9
	Female	67.5	84.2	42.1
Education/employment status	Full time student	61.2	75.7	73.6
	Full student / part time employee	34.9	15.2	16.7
Living with	Friends	53.4	0.8	26.1
	Parents	26.3	88.7	56.5
	Others	19.4	10.5	17.2

Results

Variables		United States	India	Egypt
		(%)	(%)	(%)
Been vaccinated for H1N1	No	96.8	91.5	97.5
	Yes	2.4	7.0	0.2
Intend to get H1N1 vaccination	Disagree	41.4	22.4	17.4
	Neutral	33.2	15.6	12.7
	Agree	25.4	62.0	69.9
H1N1 vaccination will prevent from getting infected	Disagree	17.6	18	17.3
	Neutral	36	11.7	18.4
	Agree	46.4	70.3	64.3
I am at risk of getting infected from H1N1	Disagree	27.7	45.6	29.6
	Neutral	35.1	18.4	25.4
	Agree	37.1	36.0	44.9
The threat of H1N1 makes me anxious/ tense	Disagree	30.4	38.1	27.8
	Neutral	31.6	26.3	8.5
	Agree	38.0	35.6	63.7

Cronbach's alpha of the Constructs

CONSTRUCTS	UNITED STATES	INDIA	EGYPT
Outcome Expectancy 8 items	0.638	0.789	0.736
Perceived Social Norms 6 items	0.438	0.641	0.784
Motivation to Comply 3 items	0.847	0.767	0.878
Barriers 3 items	0.566	0.513	0.699
Self Efficacy 5 items	0.651	0.810	0.682
Behaviors 3 items	0.598	0.286	0.491

Country Comparisons

CONSTRUCTS	UNITED STATES (N= 503) Mean	INDIA (N= 408) Mean	EGYPT (N= 494) Mean
OUTCOME EXPECTANCY (scale range 0-32)	19.16 US /Egypt* US /India*	21.54	25.36 Egypt /India*
PERCEIVED SOCIAL NORM (scale range 0-24)	12.05 NS	12.55 NS	12.09 NS
MOTIVATION TO COMPLY (scale range 0-12)	6.05 US /Egypt* US /India*	7.05	8.89 Egypt /India*

P= 0.001 at 95% C.I

Country Comparisons

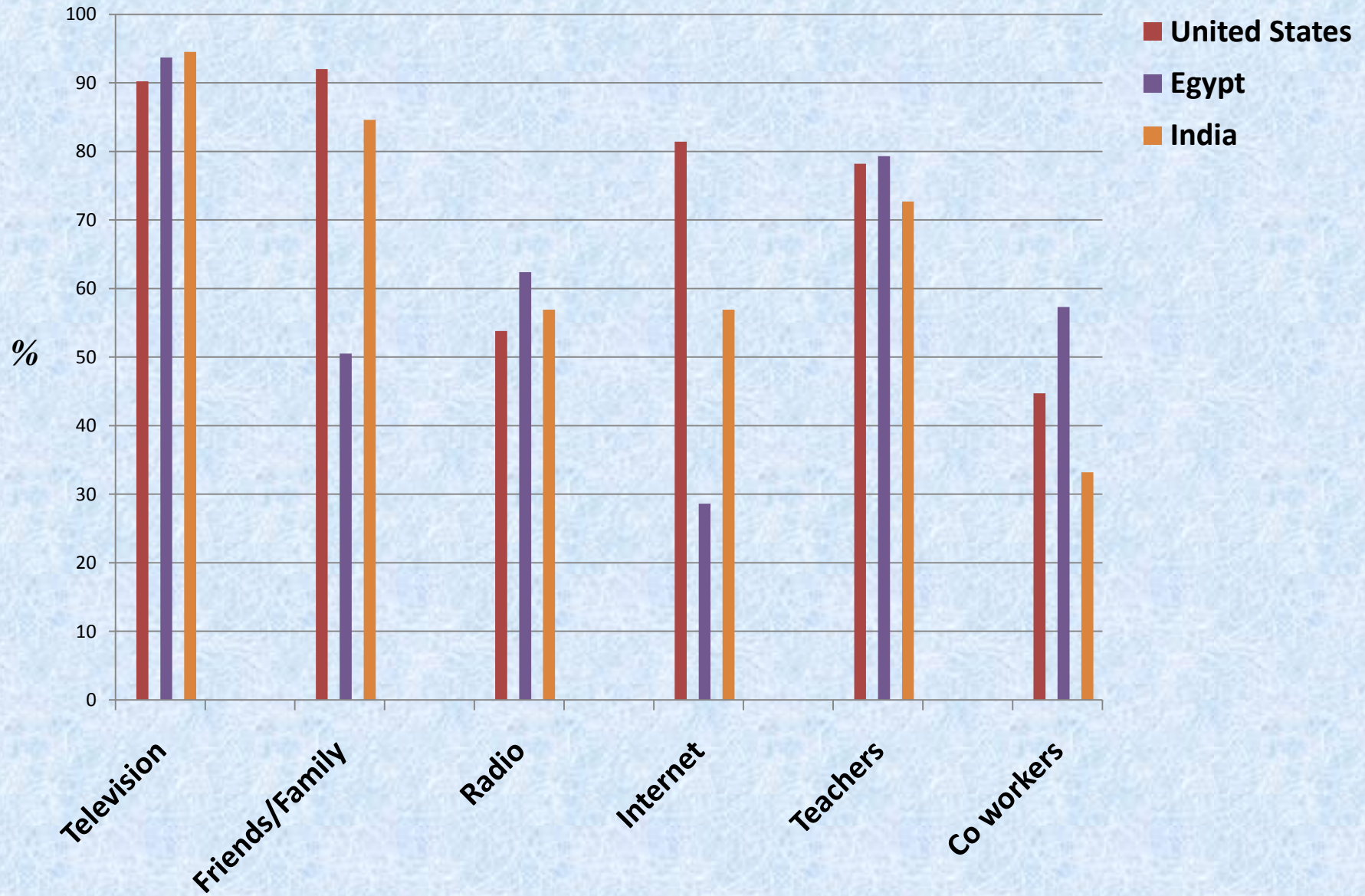
CONSTRUCTS	UNITED STATES (N= 503) Mean	INDIA (N= 408) Mean	EGYPT (N= 494) Mean
BARRIERS (scale range 0-12)	3.66 US /Egypt* US /India*	5.15	4.48 Egypt /India*
SELF EFFICACY (scale range 0-20)	13.73 US /Egypt* US /India*	13.30 NS	14.44 NS
BEHAVIOR (scale range 0-12) hand washing, distancing, vaccination	5.01 US /Egypt* US /India*	5.70	6.47 Egypt /India*

P= 0.001 at 95% C.I

Results

- More than 50% were aware of preventive methods
- Only 46.4% reported avoiding crowded places in United States as compared to Egypt (87%) and India (63%)
- Few saw parents or friends (18%) as influences to get vaccinated in United States
- Few barriers prevented respondents from getting vaccinated

Sources of information for H1N1



Insights from Sources of Info

(using a 10% differential)

- Similar sources across cultures include television, radio and teachers
- Countries have considerable differences when it comes to using co-workers as information sources and substantial differences when it comes to family/friends and the internet

Implications for Practice

- Most constructs differ among the countries
- WHO recommends a standard approach to develop interventions
- Given the insights from our constructs, each country needs a tailored approach for their culture
- Television, radio and teachers are delivery channels for messages about vaccinations (H1N1)

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Thank you