## Supplementary Tables

Table S1: Search Strategy

Database	Search strategy
Embase	1 drown*.mp.
	2 submers*.mp.
	3 immers*.mp.
	4 2 or 3
	5 injury.mp or injury/
	6 4 and 5
	7 swim*.mp.
	8 education/ or education.mp.
	9 7 and 8
	10 1 o 6 or 9
	11 Afghan*.mp.
	12 Bahrain*.mp.
	13 Djibouti*.mp.
	14 Egypt*.mp.
	15 Iran*.mp.
	16 Iraq*.mp.
	17 Jordan*.mp.

Result

260

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18 Kuwait*.mp.
19 Leban*.mp.
20 Libya*.mp.
21 Moroc*.mp.
22 Palestin*.mp.
23 Oman*.mp.
24 Pakistan*.mp.
25 Qatar*.mp.
26 Saudi Arabia.mp. or Saudi Arabia/
27 Somalia*.mp.
28 Sudan*.mp.
29 Syria*.mp.
30 Tunisia*.mp.
31 United Arab Emirates*.mp.
32Yemen*.mp.
33Middle East*.mp.
34 Mediterranean*.mp.
35 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or
34
36 10 and 35
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PubMed	#1 Search: drown*								
	#2 Search: immers* OR submers* AND injury								
	#3 Search: swim* AND education								
	#4 Search: Afghan* OR Bahrain* OR Djibouti* OR Egypt* OR Iran* OR Iraq* OR Jordan* OR Kuwait* OR Leban* OR Libya* OR Moroc* OR Palestin* OR Oman* OR Pakistan* OR Qatar* OR "Saudi Arabia*" OR Somalia* OR Sudan* OR "Syrian Arab Republic*" OR Tunisia* OR "United Arab Emirates*" OR Yemen* OR Middle East [Mesh]" OR Mediterranean*								
	#5 Search: (#1 OR #2 OR #3 AND #4)								
Scopus	TITLE-ABS-KEY(Drown* OR ((immers* OR submers*) AND injury) AND ("Middle East*" OR Afghan* OR Bahrain* OR Djibouti* OR Egypt* OR Iraq* OR Iran* OR Jordan* OR Kuwait* OR Leban* OR Libya* OR Moroc* OR Palestin* OR Oman* OR Pakistan* OR Qatar* OR "Saudi Arabia*" OR Somalia* OR Sudan* OR Syria* OR Tunisia* OR "United Arab Emirates*" OR Yemen* OR Mediterranean*)) AND ( LIMIT-TO ( LANGUAGE, "English" ) ) AND ( LIMIT-TO ( DOCTYPE, "ar" ) OR LIMIT-TO ( DOCTYPE, "re" ) OR LIMIT-TO ( DOCTYPE, "ch" ) )	536							
SportsDiscus	drown* OR ((immers* OR submers*) AND injury) OR (swim* AND education)	120							
	AND								
	Afghan* OR Bahrain* OR Djibouti* OR Egypt* OR Iran* OR Iraq* OR Jordan* OR Kuwait* OR Leban* OR Libya* OR Moroc* OR Palestin* OR Oman* OR Pakistan* OR Qatar* OR "Saudi Arabia*" OR Somalia* OR Sudan* OR Syria* OR Tunisia* OR "United Arab Emirates*" OR Yemen* OR "Middle East*" OR Mediterranean*								
Web of	Drown* OR ((immers* OR submers*) AND injury) OR (swim* and education)	470							
Science	AND								
	"Middle East*" OR Mediterranean* OR Afghan* OR Bahrain* OR Djibouti* OR Egypt* OR Iraq* OR Iran* OR Jordan* OR Kuwait* OR Leban* OR Libya* OR Moroc* OR Palestin* OR Oman* OR Pakistan* OR Qatar* OR "Saudi Arabia*" OR Somalia* OR Sudan* OR Syria* OR Tunisia* OR "United Arab Emirates*" OR Yemen*								
Google Scholar	drown* OR ((immers* OR submers*) AND injury) OR (swim* AND education) AND Afghan* OR Bahrain* OR Djibouti* OR Egypt* OR Iran* OR Iraq* OR Jordan* OR Kuwait* OR Leban* OR Libya* OR Moroc* OR Palestin* OR Oman* OR Pakistan* OR Qatar* OR "Saudi Arabia*" OR Somalia* OR Sudan* OR Syria* OR Tunisia* OR "United Arab Emirates*" OR Yemen* OR "Middle East*" OR Mediterranean*	4 (24 pages of results)							

Table S2: Description of risk/protective factors, their measure of significance and coding methodology

Author, year, reference	Country	Study population	Description of risk/protective factor	Measure of significance	Coded risk/protective factor
Al Fifi et al, 2011	Saudi Arabia	0-13 years	Winter and Autumn	Survival significantly worse (p=0.02)	Seasonality
(1)			Washing containers	Outcome worse than for those who drowned in pools (p=0.04)	Washing containers
			Absence of adult supervision	All fatal drownings were unsupervised by adults (p=0.013)	Adult supervision
			Longer submersion duration	12 minutes median submersion time for fatal vs 3 minutes for non-fatal) (p=0.001)	Submersion time
Alkhalaf et al, 2021 (2)	Saudi Arabia	0-14 years	Delay in initiating resuscitation	A significant association was found between delay in initiating resuscitation and an unfavourable outcome (p<0.01)	Delay in initiating resuscitation
			Submersion time *	A shorter submersion time was significantly associated with a favourable outcome (non-fatal drowning with no neurological damage) (3.5 minutes vs 12.5 minutes) (p<0.01)	Submersion time
			High GCS upon admission *	Complete recovery was associated with high GCS upon admission (p<0.01)	GCS
			Decreased length of stay *	Complete recovery was associated with decreased length of hospital stay (p<0.01)	Length of hospital stay
			High GCS upon end of care *	Complete recovery was associated with high GCS upon the end of care (p<0.01)	GCS

Al-Mofadda et al, 2001 (3)	Saudi Arabia	1-13 years of age	Submersion time	Submersion time >5 minutes predicted fatal outcome (p=0.003)	Submersion time
			Emergency room documentation of absence of vital signs	Emergency room documentation of absence of vital signs significantly associated with brain death or severe neurological disease (p=0.006)	Absence of vital signs
			GCS ≤4	GCS ≤4 associated with brain death or severe neurological disease in 94.1% of cases (p=0.006)	GCS
			Arterial pH of ≤7	Arterial pH of ≤7 associated with brain death or severe neurological disease in 94.1% of cases (p=0.006)	pH level
			Blood sugar of ≥10mmol/L	Blood sugar of ≥10mmol/L associated with brain death or severe neurological disease in 80.0%% of cases (p=0.001)	Blood sugar level
Almuneef et al, 2021 (4)	Saudi Arabia	Children 0-17 years	Age <5 years	Significantly more drowning deaths among children ≤5 years than children >5 years (p<0.01)	Age
			Male gender	Significantly more drowning deaths among children of male gender (p<0.01)	Sex
Al-Thani et al, 2018 (5)	Qatar	Children 1-5 years	Male gender	Males drowned at a rate 2.75 times higher than females (RR=2.75 [95%CI: 1.16-6.50]) (p=0.02)	Sex
Davoudi- Kiakalayeh et al, 2011 (6)	Iran	All age	Male gender	Males were 3.28 times more likely to drown than females	Sex
Davoudi- Kiakalayeh et al, 2013 (7)	Iran	All age	Male gender	Males were 10.9 times more likely to drown than females in the resident population in 2008-09	Sex

Jan et al, 2000 (8)	Saudi Arabia	Parents of infants	Mother with helper or older children leaving infant unattended in bath	Mothers with a helper or older children were more likely to report leaving their infant unattended in the bathtub when compared to those who never left their infant unattended at home (p=0.002)	Mother with helper or older children
Liu et al, 2021 (9)	Bahrain	Children 0-13 years	Age 1-4 years	Drowning cases were significantly more likely to occur among the 1-4 years age group (p<0.001)	Age
Mosayebi et al, 2011 (10)	Iran	Children 0-15 years	Male	Males had a 3.5 times higher odds ratio of fatal drowning than non-fatal drowning when compared to females (OR=3.5 [95%CI:0.38-31.5])	Sex
		Absent vital sig		Significantly associated with mortality (p<0.001)	Absence of vital signs
			GCS<5	Signficantly associated with mortality (p<0.001)	GCS
			Temperature ≥36 degrees *	Positively correlated with recovery (p=0.003)	Body temperature
			pH <7.2	Acidosis associated with unfavourable outcome	pH level
Shahbazi et al, 2020 (11)	Iran	All age	Male sex	Males were more likely to drown than females (p=0.03)	Sex
Vahhab et al,	Iran	Children and	Age	Children aged 1-4 years more at risk of drowning	Age
2019 (12)		adolescents up to 18 years of age	Male sex	Males significantly more at risk than females (p<0.001)	Sex
			Accidental intent	Drowning was more likely to be of accidental intent than due to suicide or homicide (p<0.001)	Accidental intent
			Death at the scene of the incident	Location of death was significantly more likely to be at the scene for drowning, than during transfer to	Death at scene

				hospital, at hospital or after discharge from hospital (p<0.001)	
Zolala et al, 2012 Ira (13)	Iran	All age	Females aged 14 years or	Females aged 14 years or less were significantly	Sex
			less	more likely to drown than males of the same age (p=0.03)	Age
			Tourists	Tourists were significantly more likely to drown than local residents (p<0.001)	Resident status
			Local residents	Drowning among local residents was more likely to be fatal than drowning in tourists (p<0.001)	Resident status
			Tourist drowning in the sea	Tourists were significantly more likely than residents to drown in the Caspian Sea (p<0.001)	Resident status
			Non-designated areas (un-lifeguarded)	Drowning was more likely to be fatal in non-designated areas (p<0.001)	Non-lifeguarded areas

<sup>\*</sup> denotes protective factor; GCS-Glasgow Coma Scale

Table S3: Prevention strategies as described in included studies and coding methodology used, Eastern Mediterranean Region

Author, Year, Reference	Study location	Description of prevention strategy	Coded prevention strategy
Abdullah et al, 2013 (14)	Jordan	Establishing a mobile health station on the beach to deal with emergency cases promptly and effectively	CPR and first aid
		Advising people to swim in safe places and only where lifeguards are available (health messages were delivered via signs/signals placed on beach);	Signage
		Assess the safety of beaches and the possibility and efficacy of employing lifeguards	Beach safety assessment
AlAwadhi et al, 2018 (15)	Bahrain	Developing a national water safety strategy is necessary to decrease age-standardized unintentional drowning mortality rate in Bahrain.	Developing a national water safety plan
Al-Fifi et al, 2011 (1)	Saudi Arabia	The media as well as the authority should play a major role in increasing the public awareness to minimize or prevent such a problem.	Public education
		To raise awareness of basic life-support measures (first aid) and the support of emergency medical services.	CPR and first aid
Alkhalaf et al, 2021 (2)	Saudi Arabia	Prevention measures should focus on ensuring that children do not swim unsupervised.	Child supervision
		There is a need to ensure early resuscitation of drowning victims by promoting life support courses and enforcing regulations around water.	CPR and first aid
Davoudi-Kiakalayeh et al, 2011 (6)	Iran	The high-risk population should be trained in basic swimming and rescue skills	Swimming and water safety training

		Many more rescue stations are needed in areas where swimming occurs.	Lifeguard supervision
		Educational campaigns such as integrating public health messages into local television can be employed	Public education
Davoudi-Kiakalayeh et al, 2013 (7)	Iran	Modification of environmental change through, for example, the elimination of certain water reservoirs	Restrict access to water
		Raising community awareness via information programmes for health care workers who employed to educate clients	Public education
		Training high risk populations in basic resuscitation techniques	CPR and first aid
		Integration of public health messages into local television and radio news during the summer season	Public education
		Extension of lifeguard services throughout the beach regions of the Caspian Sea	Lifeguard supervision
		Expansion of the number and scale of rescue service stations in beach areas	Lifeguard supervision
Davoudi-Kiakalayeh et	Iran	Basic swimming skills should be trained to children	Swimming and water safety training
al, 2014 (16)		Additional rescue stations and lifeguarding are needed along the Caspian Sea Coastline (one lifeguard for every 500 meters)	Lifeguard supervision
		Integration of public health messages into local television such as the Darya program is necessary	Public education
		Lake and water canal fencing may help to prevent drowning events in rural settings. The majority of the participants expected that some measures, especially the fencing of rivers and canal water way should be done by governmental organizations	Restrict access to water

Habeeb et al, 2020 (17)	Saudi Arabia	First Aid – describes parental knowledge of first aid for a non-responsive but breathing victim – 64.3% knew to lay the victim in a left lateral position. In a nonresponsive not breathing drowning victim, 90.5% knew to start chest compressions and mouth to mouth ventilation. 65.6% knew not to slap a victim on the back	CPR and first aid
Hammett et al, 2007 (18)	Afghanistan and Iraq	Modifications to vehicles including restraint systems, battle lock modification to vehicle for passengers and rescuers,	Vehicle modification
		Changes to operating procedures when on road near water	Vehicle operation procedures
		Water egress procedure training	Vehicle-related water safety training
Kiakalayeh et al, 2008	Iran	Should be trained in basic swimming and rescue skills	Swimming and water safety training
(19)		Many more rescue stations are needed in areas where swimming occurs.	Lifeguard supervision
Liu et al, 2021 (9)	Bahrain	Constant adult supervision	Child supervision
		Personal flotation devices	Personal flotation devices
		Swimming education for children over the age of 4	Swimming and water safety training
		Pool isolation fencing	Restrict access to water
Mal et al, 2020 (20)	Pakistan	Strict surveillance and employment of lifeguards at Karachi beaches during Summer	Lifeguard supervision
Mavridou et al, 2014	Egypt,	Spa regulations	Spa regulations
(21)	Lebanon, Palestine and Tunisia	Multi-lingual lifeguards	Lifeguard supervision (multi-lingual lifeguards)
Mlayeh et al, 2021 (22)	Tunisia	Provision of supervision while walking to school for school aged children	Child supervision

Razzak et al, 2013 (23)	Pakistan	Reduce access to water storage systems	Restrict access to water
Ruehsen et al, 1989 (24)	Bahrain	Resuscitation and first aid training should be compulsory for licensed boat owners	CPR and first aid
		All hotels and public swimming areas which are presently unattended should be staffed with a lifeguard	Lifeguard supervision
Shaheen and Edwards, 2008 (25)	Palestine	Health education campaign that targeted parents, using media to highlight problem	Public education
Shaikh, 2014 (26)	Pakistan	Female lifeguards to rescue drowning women	Lifeguard supervision (female lifeguards)
		Police presence at beaches	Lifeguard supervision (police presence at beaches)
Shaikh, 2016 (27)	Pakistan	Need to targeted health education campaigns, especially during summer months	Public education

CPR-Cardio Pulmonary Resuscitation

Table S4: Characteristics of included studies

Author(s), Year,	Country	, , , , , , , , , , , , , , , , , , , ,	Location	Urban/	Study	Dro	wning					Study Design	NHMRC
Reference		study		Rural/ Both	population	Outcome Intent			nt			Level of Evidence	
						F	N-F	Un	U	1	Unk		
Abdullah et al, 2013 (14)	Jordan	2010	S	Urban	No age restrictions	✓			✓			Retrospective cross- sectional study	IV
Aghajani et al, 2019 (28)	Iran	2009-2014	N	Both	No age restrictions	✓			✓	✓		Retrospective cross- sectional study	IV
Aghamohamadi et al, 2018 (29)	Iran	2006-2035	N	Both	No age restrictions	✓			✓			Retrospective cross- sectional study	IV
AlAwadhi et al, 2018 (15)	Bahrain	2003-2015	N	Both	No age restrictions	✓			✓			Retrospective descriptive study	IV
Al-Fifi et al, 2011 (1)	Saudi Arabia	1999-2009	S	Urban	Pediatric (0- 13 years)	✓	✓				✓	Retrospective cohort study	III-3
Alghnam et al, 2014 (30)	Saudi Arabia	2001-2010	S	Urban	No age restrictions	✓	✓				✓	Retrospective cross- sectional study	IV
Alghnam et al, 2019 (31)	Saudi Arabia	2001-2018	S	Rural	Pediatric (0- 18 years)		✓				✓	Retrospective cross- sectional study	IV
Alkhalaf et al, 2021 (2)	Saudi Arabia	2015-2020	N	Both	Child (0-14 years)	✓	✓		✓	✓		Retrospective chart review	IV
Al-Mannai et al, 2014 (32)	Qatar	2010	S	Rural	Child (1-4 years)		✓		✓			Cross-sectional study	IV

Al-Mofadda et al, 2001 (3)	Saudi Arabia	1988-1998	S	Rural	Pediatric (1-13 years)		✓		✓	Retrospective cross- sectional study	IV
Almuneef et al, 2021 (4)	Saudi Arabia	2010-2016	S	Rural	Pediatric (0-18 years)	✓			✓	Retrospective chart review	IV
Al-Qurashi et al, 2019 (33)	Saudi Arabia	2005-2015	S	Rural	Pediatric (0-14 years)		✓		✓	Retrospective cross- sectional study	IV
Alsaif et al, 2018 (34)	Saudi Arabia	1999-2015	S	Rural	Child and adolescent (0-18 years)	✓			✓	Retrospective cross- sectional study	IV
Al-Sammak, 2020 (35)	Iraq	2008-2009 and 2018- 2019	S	Rural	No age restrictions	✓		✓		Retrospective cross- sectional study	IV
Al-Talafieh, 1999 (36)	Jordan	1996-1998	S	Both	No age restrictions	✓	✓		V	Retrospective cross- sectional study	IV
Al-Thani et al, 2018 (5)	Qatar	2004-2016	N	Both	Child (1-4 years)	✓		✓		Retrospective cross- sectional study	IV
Anary et al, 2010 (37)	Iran	2002-2006	S	Rural	No age restrictions	✓			✓	Retrospective cross- sectional study	IV
Astaraki et al, 2016 (38)	Iran	2007-2014	S	Rural	Child and adolescent (<18 years)	✓			✓	A descriptive cross-sectional study	IV
Atallah et al, 2008 (39)	Jordan	2014	S	Rural	No age restrictions	✓	✓		✓	Retrospective cross- sectional study	IV

Barss et al, 2009 (40)	UAE	1998-2002	N	Both	No age restrictions	✓				✓	Retrospective cross- sectional study	IV
Barzegar et al, 2019 (41)	Iran	2011-2015	N	Both	No age restrictions	✓			✓		Retrospective cross- sectional study	IV
Bazeli et al, 2017 (42)	Iran	2014-2015	N	Both	No age restrictions	✓	✓	✓			Retrospective cross- sectional study	IV
Bener et al, 1998 (43)	UAE	1995	S	Rural	Child (0-14 years)	✓				✓	Retrospective cross- sectional study	IV
Bener et al, 2011 (44)	Qatar	1993-2007	N	Both	Child (0-18 years)	✓		✓			Retrospective cross- sectional study	IV
Bilukha et al, 2016 (45)	Iraq	2010-2013	N	Both	No age restrictions	✓		✓			Retrospective cross- sectional study	IV
Bozorgi et al, 2016 (46)	Iran	2008-2013	S	Rural	No age restrictions	✓		✓			Retrospective cross- sectional study	IV
Davoudi- Kiakalayeh et al, 2011 (6)	Iran	2007-2008	S	Urban	No age restrictions	✓	✓	✓			Retrospective cross- sectional study	IV
Davoudi- Kiakalayeh et al, 2012 (47)	Iran	2005-2009	S	Urban	No age restrictions	✓		✓			Interventional design (pre- and post-intervention observations)	III-2
Davoudi- Kiakalayeh et al, 2013 (7)	Iran	2005-2008	S	Urban	No age restrictions	✓		✓			A quasi-experimental design	III-2

Davoudi- Kiakalayeh et al, 2014 (16)	Iran	2005-2009	S	Urban	No age restrictions	✓		✓			Register-based cohort study and household survey	III-2
Derakhshan et al, 2020 (48)	Iran	1990-2015	N	Both	No age restrictions	✓				✓	Retrospective cross- sectional study	IV
Elhak et al, 2009 (49)	Egypt	1998-2004	S	Rural	No age restrictions	✓			✓		Retrospective cross- sectional study	IV
Franklin et al, 2020 (50)	EMR	1990-2017	М	Both	No age restrictions	✓		✓			Retrospective cross- sectional study	IV
Ghodsi et al, 2020 (51)	Iran	2015-2016	N	Both	No age restrictions	✓				✓	Retrospective cross- sectional study	IV
Habeeb et al, 2020 (17)	Saudi Arabia	2015	S	Urban	Parents (no age specified <30, 30-40, >40 years)	✓	✓	✓			Cross-sectional survey analysis	IV
Hajebi et al, 2016 (52)	Iran	2009-2012	N	Both	No age restrictions	✓	✓		✓		Retrospective descriptive study	IV
Halawa et al, 2015 (53)	Egypt	2011	N	Both	Child (0-18 years)		✓			✓	Community-based, cross- sectional survey	IV
Hammett et al, 2007 (18)	Afghanistan and Iraq	2003-2005	N	Both	Adult (active duty service members) ages 19-40)	✓		✓			Retrospective descriptive epidemiological study	IV
He et al, 2015 (54)	Pakistan	2010-2011	N	Urban	No age restriction		✓	✓	✓		Retrospective cross- sectional study	IV

Hijazi et al, 2007 (55)	Saudia Arabia	1999-2004	S	Urban	Child (<12 years)		✓				✓	Prospective observational study	III-3
Hooshangi et al, 2020 (56)	Iran	2010-2015	S	Urban	Child (< 5 years)	✓					✓	Cross-sectional secondary alysis of data	IV
Jan et al, 2013 (8)	Saudi Arabia	1999-2000	S	Urban	Parents of infants (infant mean age 4.7 months)	✓	✓		<b>√</b>			Interviews using a semistructured questionnaire	IV
Khalil et al, 2013 (57)	Pakistan	2009-2012	S	Urban	No age restrictions	✓					✓	Retrospective cross- sectional study	IV
Khazaei et al,	Iran	2009-2015	S	Urban	Child (1-5			✓			✓	Retrospective cross-	IV
2020 (58)					years)							sectional study	
Kiakalayeh et al, 2008 (19)	Iran	2005-2006	S	Both	No age restrictions	✓			✓			Retrospective, population- based study	III-3
Kiakalayeh et al, 2011 (59)	Iran	2005-2006	S	Both	No age restrictions	✓			✓	✓		Retrospective cross- sectional study	IV
Lin et al, 2019	Egypt and	2004-2005	М	Both	No age restrictions	✓			✓			Retrospective, total population study	IV
(60)	Morocco	&											
		2014-2015											
Liu et al, 2021 (9)	Bahrain	2018 (Sept-Dec)	N	Both	Child (<14 years)	✓	✓				✓	Multicentre observational cross-sectional study	IV
Malik, 1975 (61)	Sudan	1970	N	Both	No age restrictions	✓			✓	✓		Retrospective cross- sectional study	IV

Mal et al, 2020 (20)	Pakistan	2013-2018	S	Both	No age restrictions	✓					✓	Descriptive cross-sectional study	IV
Mavridou et al, 2014 (21)	Lebanon, Palestine, Egypt, Tunisia	Not specified	M	Both	No age restrictions			✓			✓	Cross-sectional survey	IV
Mlayeh et al, 2021 (22)	Tunisia	2008-2015	S	Rural	No age restrictions	✓			✓	✓		Retrospective cross- sectional study	IV
Mokdad et al, 2018 (62)	EMR	1990-2015	М	Both	Adolescents (10-24 years)	✓	✓		✓			Retrospective, total population study	IV
Mosayebi et al, 2011 (10)	Iran	1995-2005	S	Both	Child (0-17 years)	✓	✓				✓	Retrospective cross- sectional study	IV
Naghavi et al, 2010 (63)	Iran	2005	N	Both	Child (0-14 years)	✓	✓		✓			Retrospective cross- sectional study	IV
Pal et al, 2018 (64)	Pakistan	2007-2016	S	Urban	No age restrictions	✓					✓	Retrospective cross- sectional study	IV
Razzak et al, 2013 (23)	Pakistan	2006-2007	N	Both	Child (<5 years)	✓					✓	Retrospective cross- sectional study	IV
Razzak et al, 2004 (65)	Pakistan	1993-1996	S	Rural	Child (≤15 years)	✓	✓				✓	Retrospective, descriptive study	IV
Roudsari et al, 2006 (66)	Iran	1999-2000	S	Both	Child (0-15 years)	✓			✓			Retrospective cross- sectional study	IV
Ruehsen et al, 1989 (24)	Bahrain	1984-1985	S	Both	No age restrictions		✓				✓	Retrospective cross- sectional study	IV

Samaneh et al, 2012 (67)	Iran	2008-2009	S	Urban	No age restrictions	✓			✓	✓		Retrospective cross- sectional study	IV
Shahbazi et al, 2020 (11)	Iran	2013-2018	N	Both	No age restrictions	✓					✓	Descriptive, cross-sectional study	IV
Shaheen and Edwards, 2008 (25)	Palestinian Territory	2001-2003	N	Both	Child (0-19 years)	✓			✓	✓		Retrospective cross- sectional study	IV
Shaikh, 2014 (26)	Pakistan	Not specified	S	Urban	No age restrictions	✓	✓				✓	Cross-sectional survey	IV
Shaikh, 2016 (27)	Pakistan	2012-2014	S	Rural	No age restrictions	✓	✓				✓	Retrospective cross- sectional study	IV
Sheikhazadi et al, 2009 (68)	Iran	2002-2006	S	Rural	No age restrictions	✓			✓	✓		Retrospective cross- sectional study	IV
Siddiqui et al, 2012 (69)	Pakistan	2005-2007	S	Semi- rural	Child (0-14 years)		✓		✓			Retrospective descriptive study	IV
Soori et al, 1999 (70)	Iran	1993-1994	N	Rural	No age restrictions	✓			✓			Retrospective cross- sectional study	IV
Soori et al, 2016 (71)	EMR	2004	N	Both	Child (< 20 years)	✓			✓			Secondary analysis of data	IV
Vahhab et al, 2019 (12)	Iran	2011-2016	S	Urban	Child and adolescent (0-18 years)	✓			✓	✓		Retrospective cross- sectional study	IV
Waseem et al, 2011 (72)	Pakistan	6 months (not specified)	S	Both	No age restrictions			✓			✓	Retrospective case review	IV

Zolala et al, Iran 2007-2011 S Both No age  $\checkmark$   $\checkmark$  Retrospective cross- IV 2012 (13) restrictions

NHMRC – National Health and Medical Research Council; UAE – United Arab Emirates; EMR-Eastern Mediterranean Region; M-Multi-national, N-National, S-Subnational, N-F- Non-Fatal, U-Unspecified, Un-Unintentional, I-Intentional, U-Unspecified

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