Additional file 5: Health outcomes as presented by primary studies

Results are presented in the table below for health conditions where data was available from at least 3 studies. Reported results are rounded to 1 decimal point or 2 sf.

MENTAL HEALTH

Depression

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Abdelhai and Mosleh (2015)[23] #	IPV	Lifetime	Depression (only without anxiety)	HADS	Any	**OR 3.1 (1.1-8.3), p 0.03**
Al-Shdayfat (2017a)[34]	IPV	12m/lifetime?	Depression	Not documented	Emotional	**$X^2$22.2, p 0.001**
Al-Shdayfat (2017b)[35]	DV	Lifetime?	Depression	Not documented	Physical	**$X^2$4.5, p value 0.034**
Anes Jellali et al (2014)[37] #	IPV	Lifetime	Depression	HADS score 8	Any	**OR 3.5 (1.3-9.7), p 0.012**
Bakr and Ismail (2005)[41]	IPV	Lifetime	Depression	Participant reported	Control	**p <0.05**
Boufettal et al (2012)[43] #	IPV	Pregnancy	Depression	Not documented	Physical and/or sexual	**p < 0.0005**
Eldoseri et al (2014)[49] #	IPV	Lifetime	Antidepressant use in the last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	**Reported: OR 17.4 (2-152) Calculated: OR 12.4 (1.5-99.7) p= 0.01**
Haddad et al (2011)[51]	DV	Lifetime	Depression	'depression feelings' participant reported	Any: physical/sex/emot # Physical Sexual Emotional	**r= 0.42, p <0.001 r= 0.36, p<0.001 r=0.16, p<0.001 r=0.41, p<0.001**

Included in meta-analysis

Suicidal thoughts

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Al-Modallal (2012)[27]	IPV	12m	Suicidal thoughts	Participant reported	Any	Crude OR 11.94 (4.5-31.6) **Adjusted OR 0.04 (0.009-0.15)**
Al-Serkal et al (2014)[33]	IPV	Lifetime	Suicidal thoughts	Not documented	Physical ONLY Sexual ONLY Psychological ONLY	**OR 5.1 (3.2-8.1), p=0.001 OR 4.7 (2.9-7.5), p=0.001 OR 5.8 (3.3-10.2), p=0.001** [stepwise logistic regression]
Eldoseri et al (2014)[49]	IPV	Lifetime	Suicidal thoughts	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	**OR 6.6 (2.4-17.9) p<0.001**

Usta et al (2007)[62]	DV	Lifetime	Suicidal thoughts	Participant reported	Any	**ANOVA, p=0.000**

Suicide attempts

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Al-Modallal (2012)[27]	IPV	12m	Suicide attempts	Participant reported	Any	Crude OR 9.1 (2.6-31.5) **Adjusted OR 0.02 (0.002-0.19)**
Al-Serkal et al (2014)[33]	IPV	Lifetime	Suicide attempts	Not documented	Physical ONLY Sexual ONLY Psychological ONLY	**OR 8.8 (4.7-16.3), p=0.001** **OR 5.2 (2.8-9.4), p=0.001** **OR 5.1 (2.5-10.3), p=0.001** [stepwise logistic regression]
Boufettal et al (2012)[43]	IPV	Pregnancy	Suicide attempts	Not documented	Physical and/or sexual	**p<0.002**
Eldoseri et al (2014)[49]	IPV	Lifetime	Suicide attempts	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	OR 4 (1-16.1) p=0.06

Sleep

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Al-Modallal (2012)[27] #	IPV	12m	Sleep	Epworth Sleepiness Scale	Any	Crude OR 1.1 (0.7-1.8) Adjusted OR 0.64 (0.4-1.1) p=0.72
Al-Shdayfat (2017a)[34]	DV	Lifetime	Insomnia	Participant reported	Psych	**p=0.001**
Al-Shdayfat (2017b)[35]	DV	Lifetime	Insomnia	Participant reported	Physical	p= non-significant
Bakr and Ismail (2005)[41] #	IPV	Lifetime	Insomnia	Participant reported	Control	**p<0.05**
Boufettal et al (2012)[43] #	IPV	Pregnancy	Sleep problems	Not documented	Any: physical or sexual	**p<0.0005**
Eldoseri et al (2014)[49] #	IPV	Lifetime	Taken sleep or relaxing medication in the last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	Reported: OR 2.1 (0.7-6.6) Calculated: OR 1.7 (0.5-5.2) p=0.2
Haddad et al (2011)[51]	DV	Lifetime	Insomnia	Not documented	Any # Physical Emotional	**r=0.43, p<0.001** **r=0.37, p<0.001** **r=0.45, p<0.001** [correlation coefficient]
Usta et al (2007)[62] #	DV	Lifetime	Insomnia	Participant reported	Any	**ANOVA, p=0.000**

Included in meta-analysis

Memory

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Al-Serkal et al (2014)[33]	IPV	Lifetime	Some/many or extreme memory or concentration problems	Not documented	Physical ONLY	**OR 5.2 (3.3-8.8)**
Eldoseri et al (2014)[49]	IPV	Lifetime	Some/many or extreme memory or concentration problems in the last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	OR 1.8 (0.9-3.2) p=0.07
Usta et al (2007)[62]	DV	Lifetime	Forgetfulness	Participant reported	Any	**p=0.000 (ANOVA)**

Other mental problems with significant associations found by studies: anxiety,[37] anxiety and depression,[23,37] postnatal depression,[40] stress,[25,59] distress/anguish.[33,51]

Other mental health problems with no evidence of significant associations found by studies: anxiety,[23] postnatal depression.[40]

REPRODUCTIVE HEALTH

Vaginal bleeding

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25]	DV	Lifetime	Vaginal bleeding last 4w	Participant reported	Any	**OR 1.8 (1.3-2.5) p=0.000**
Bakr and Ismail (2005)[41]	IPV	Lifetime	Irregular period	?	Control	Non-significant
Usta et al (2007)[62]	DV	Lifetime	Menstrual irregularities	Participant reported	Any	**p=0.000 (ANOVA)**

Unplanned pregnancy

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Azm et al (2009)[40]	IPV	Lifetime	Unplanned pregnancy	Participant reported	Any Physical Sexual Emotional/psych	p= 0.095 p=0.032 **p=0.008** **p=0.007**

Hammoury and Khawaja (2007)[52]	DV	During pregnancy	Undesired pregnancy	Participant reported	Any: emotional or physical	OR 1.6 (0.66-3.8)
Ibrahim et al (2015)[54]	IPV	Pregnancy	Unwanted pregnancy	Not documented	Any	**OR 6.4 (4.9-8.4)**
Khawaja and Hammoury (2008)[55]	IPV	12m	Undesired pregnancy	Not documented	Sexual	AOR 1.23 (0.72-2.1)
Oweis et al (2010)[59]	IPV	Pregnancy	Unplanned pregnancy	Participant reported	Any	**OR 2.5 (1.4-4.4)** **p= 0.00**

Abortion

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25] #	DV	Lifetime	Abortion	Participant reported	Any	**OR 1.3 (1.1-1.6)** **p=0.006**
Anes Jellali et al (2015)[38]		Lifetime	Induced abortion	Not documented	Any Physical Sexual Psychological Economic	**p<0.0001** **p<0.001** **p<0.03** **p<0.0001** **p<0.0001**
Azm et al (2009)[40] #	IPV	Lifetime	No vs one vs multiple abortions	Participant reported	Any Physical Sexual Psychological	**p=0.003** **p=0.002** **p=0.003** p=0.245
Boufettal et al (2012)[43] #	IPV	Pregnancy	Abortion	Not documented	Any: physical or sexual	**p<0.0005**
Ibrahim et al (2015)[54] #	IPV	Pregnancy	Complete abortion	Medical records	Any Physical	**RR 5.4 (2.4-12.3)** **RR 10.9 (5.6-21.5)**
Spencer et al (2015)[60] #	DV	Since coming to Jordan/ Lebanon	Abortion	Not documented	Any	Absolute numbers and % only reported by paper. Calculated: OR 0.94 (0.17-6.3)
Usta et al (2007)[62] #	DV	Lifetime	Abortion	Participant reported	Any	**p=0.003 (ANOVA)**

Included in meta-analysis

Premature labour

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other

Azm et al (2009)[40]	IPV	Lifetime	Premature and LBW	Participant reported	Any	**p=0.0004** (for all postnatal complications)
					Physical	**p=0.006**
					Sexual	**p=0.004**
Abujilban et al (2015)[24]	IPV	Pregnancy	Preterm birth	Medical records	Physical	p=0.8
Ibrahim et al (2015)[54]	IPV	Pregnancy	Preterm labour	Medical records	Any	**RR 2.4 (1.5-3.8)**
					Physical	**RR 5.7 (37.-8.8)**

Other reproductive health problems with significant associations found by studies: vaginal discharge,[33,62] not using contraception,[40,44] stillbirth,[54] postpartum haemorrhage,[40] low birthweight,[24,54] neonatal death,[54] threatened abortion,[54] placental separation,[43] PROM,[54] fetal distress.[54]

Other reproductive health problems with no evidence of significant associations found by studies: not using contraception,[40] stillbirth,[43] antepartum haemorrhage,[54] postpartum haemorrhage,[40,54] PROM,[43] retroplacental haematoma,[43] assisted newborn ventilation,[24] caesarean delivery.[54]

MEDICAL

Dizziness

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25]	DV	Lifetime	Dizziness in last 4 weeks	Participant reported	Any	**OR 1.9 (1.6-2.3)** **p=0.000**
Al-Modallal (2016)[30]	IPV	12m	Recurrent dizziness last year	Participant reported	Physical ONLY Sexual ONLY Psychological ONLY	**P<0.01** **P<0.05** **P=0.009**
Al-Serkal et al (2014)[33]	IPV	Lifetime	Dizziness	Not documented	Physical ONLY	**OR 3.1 (2.1-4.5)**
Usta et al (2007)[62]	DV	Lifetime	Dizziness	Participant reported	Any	**p=0.000 (ANOVA)**

Pain

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25] #	DV	Lifetime	Pain in last 4 weeks by severity	Participant reported	Any	**Mild OR 1.8 (1.4-2.3)** **Moderate OR 3.9 (3-5.1)** **Severe OR 6.3 (4.0-9.7) #** **Very severe OR 8.9 (3.1-25)** **p=0.000**

Al-Modallal (2016)[30] #	IPV	12m	Back pain #	Participant reported	Physical ONLY # Sexual ONLY Psych ONLY	Non-significant Non-significant **p<0.01**
			Joint pain		Physical ONLY Sexual ONLY Psych ONLY	Non-significant Non-significant **p=0.004**
			Fibromyalgia		Physical ONLY Sexual ONLY Psych ONLY	Non-significant **p<0.05** **p=0.007**
Al-Serkal et al (2014)[33]	IPV	Lifetime	Mod/severe/ extreme pain	Not documented	Physical AND sexual # Physical ONLY	**OR 3.5 (1.9-6.2)** **OR 3.3 (1.9-5.9)**
Bakr and Ismail (2005)[41] #	IPV	Lifetime	Bone ache	Participant reported	Control	**p<0.5**
Eldoseri et al (2014)[49] #	IPV	Lifetime	Pain or discomfort last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	**OR 2.2 (1.2-3.9)** **p=0.007**
Usta et al (2007)[62] #	DV	Lifetime	Backache Arthralgia Abdo pain	Participant reported	Any	**p=0.000 (ANOVA)** **p=0.000 (ANOVA)** **p=0.000 (ANOVA)**

Included in meta-analysis

Hypertension

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25] #	DV	Lifetime	Hypertension	BP measurement	Any	OR 1.23 (0.92-1.7) p=0.144
Al-Modallal (2016)[30] #	IPV	12m	Hypertension	Participant reported	Physical ONLY # Sexual ONLY Psychological ONLY	Non-significant **p<0.05** Non-significant
Bakr and Ismail (2005)[41] #	IPV	Lifetime	Hypertension	Participant reported	Control	Non-significant
Barnawi (2017)[42] #	DV	12m	Hypertension	Not documented	Any	**p=0.01**
Usta et al (2007)[62] #	DV	Lifetime	Hypertension	Participant reported	Any	p=0.006 (ANOVA)

Included in meta-analysis

Diabetes

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Al-Modallal (2016)[30]	IPV	12m	Diabetes	Participant reported	Physical ONLY Sexual ONLY Psychological ONLY	Non-significant Non-significant Non-significant
Bakr and Ismail (2005)[41]	IPV	Lifetime	Diabetes	Participant reported	Control	Non-significant
Barnawi (2017)[42]	DV	12m	Diabetes	Not documented	Any	**p=0.027**

General health

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25]	DV	Lifetime	Perceived general health	Participant reported	Any	**Reasonable OR 0.36 (0.21-0.63)** **Good OR 0.23 (0.13-0.39)** **Excellent OR 0.15 (0.084-0.26)** **p=0.000**
Al-Modallal (2016)[30]	IPV	12m	General health	Participant reported	Physical ONLY	Non-significant
Al-Serkal et al (2014)[33]	IPV	Lifetime	Self reported poor or very poor health	Not documented	Physical AND sexual Physical ONLY	**OR 7.1 (2.3-21.9)** **OR 6.4 (1.9-21.2)**
Eldoseri et al (2014)[49]	IPV	Lifetime	Good/ excellent health status	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	**OR 0.5 (0.3-0.9)** **p=0.02**

Daily activities

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25]	DV	Lifetime	Problems in daily activities in the last 4 weeks	Participant reported	Any	**Few OR 1.8 (1.4-2.2)** **Some OR 2.6 (2.0-3.3)** **Many OR 3.7 (2.5-5.6)** **Unable to do it OR 4.1 (0.98-17.4)** **p=0.000**
Al-Serkal et al (2014)[33]	IPV	Lifetime	Some/many problems or unable to perform usual activities	Not documented	Physical AND sexual Physical ONLY	**OR 5.4 (2.8-10.5)** **OR 4.3 (2.1-8.7)**

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Eldoseri et al (2014)[49]	IPV	Lifetime	Problems with daily functions in the last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	OR 1.0 (0.5-2.0) p=0.9

Mobility

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25]	DV	Lifetime	Problems in movement last 4 weeks	Participant reported	Any	Few OR 1.3 (1.0-1.6) **Some OR 2.8 (2.1-3.6)** **Many OR 3.0 (1.7-5.2)** Unable to move OR 1 (0.1-11.1) **p=0.000**
Al-Serkal et al (2014)[33]	IPV	Lifetime	Many problems walking / unable to walk	Not documented	Physical AND sexual Physical ONLY	**OR 7 (2.5-19.7)** **OR 3.7 (1.2-11)**
Eldoseri et al (2014)[49]	IPV	Lifetime	Problems with movement in the last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	OR 1.4 (0.7-2.6) p=0.3

Medication use

Paper	Perp	Timescale	Outcomes	Diagnostic method/tool	Violence type	Statistics (significant in bold) OR, p value, other
Afifi et al (2011)[25]	DV	Lifetime	Took drugs in the last 4 weeks	Participant reported	Any	**OR 2.4 (2.0-2.9)** **p=0.000**
Al-Modallal (2012)[27]	IPV	12m	Use of prescribed tranquillizers	Participant reported	Any	**aOR 0.014 (0.00-0.86)**
Eldoseri et al (2014)[49]	IPV	Lifetime	Taken pain medication in the last 4 weeks	Participant reported. WHO Violence against Women questionnaire (version 10.0) – adapted version	Physical	OR 1.09 (0.6-2.1) p=0.8

Other general health problems with significant associations found by studies: headache,[62] heart problems,[30] movement problems,[25] problems walking,[33] epilepsy,[42] chronic disease,[42] gastrointestinal problems,[30,41,62] respiratory problems,[30,62] urinary problems,[30,62] liver problems,[30] smoking/addiction/alcohol.[54]

Other general health problems with no evidence of significant associations found by studies: headache,[41] arthritis,[30] heart problems,[30] movement,[49] gastrointestinal,[30] respiratory,[30] urinary,[30] kidney problems,[30] smoking.[27]