S1 Table. Availability and comparability of variables from each respective dataset.

| **Desired variable**  | **United Kingdom (UKOSS)** | **Australia (AMOSS)** | **Italy (ItOSS)** | **the Netherlands (TeMpOH-1)** | **France (EPIMOMS)** | **Denmark** | **Included in analysis** | **Comment** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *Sociodemographic characteristics* |   |
| Age | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | Yes | Yes |  |
| Height | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | Yes | Yes |  |
| Weight | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | Yes | Yes |  |
| BMI at booking | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | Yes | Yes |  |
| Smoking status | *Yes* | *Yes* | *No* | *No*  | *Yes* | No | No | *Not considered important for research question* |
| Ethnicity | *Yes* | *No*  | *No* | *Yes* | *No* | No | No |  |
| Country of birth | *No* | *No* | *Yes* | *No*  | *Yes* | No | No |  |
| Socioeconomic status | *No* | *Yes* | *No* | *No*  | *No* | No | No |  |
| Employment status  | *Yes* | *No* | *No* | *No*  | *No* | No | No |  |
| Drug use | *No* | *No* | *No* | *No*  | *Yes* | No | No |  |
| *Previous medical history* |  |  |  |  |  |  |  |  |
| Parity | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | Yes | Yes |  |
| Previous caesarean section | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | Yes | Yes |  |
| Number of previous caesareans | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | No | Yes |  |
| Previous pregnancy problems | *Yes* | *Yes* | *No* | *Yes* | *Yes* | No | No |  |
| Previous postpartum haemorrhage | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | No | Yes |  |
| Inherited bleeding disorders | *Yes* | *Yes* | *No* | *Yes* | *Yes* | No | Yes |  |
| Thrombocytopenia | *Yes* | *Yes* | *No* | *No*  | *Yes* | No | No |  |
| Pre-existing medical problems | *Yes*  | *See comment* | *No* | *Yes* | *Yes* | No | No | *Used a singular code on previous medical problems* |
| Anaemia before pregnancy/ before bleeding event | *Yes* | Yes | *No* | *No*  | *Yes* | No | No | *Not comparable between countries*  |
| Known infection | *Yes* | Yes | *No* | *Yes*  | *Yes* | No | Yes |  |
| Known hypertension | *Yes* | Yes | *No* | *Yes* | *Yes* | No | Yes |  |
| *Current pregnancy characteristics* |  |  |  |  |  |  |  |  |
| Multiple pregnancy  | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Induction of labour | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  | *Yes* |  |
| Use of uterotonics in vaginal deliveries | *No* | *Yes* | *No* | *Yes (not complete)* | *Yes* | *No* | *No* | *Was not comparable between countries* |
| Caesarean delivery | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Abnormal placentation during pregnancy  | *Yes* | *Yes (from coding)* | *Yes* | *No*  | *Yes* | *No* | *No* | *Was not included as it was captured in the primary cause*  |
| When did the haemorrhage occur? | *Yes* | *Yes* | *No* |  | *Yes* | *No* | *No* |  |
| Primary cause of the bleed | *Yes* | *Yes* | *Yes* | *Yes* | *Yes see comment* | *No* | *Yes* | *Did not include a primary cause so women had multiple causes* |
| *Blood products given* |   |   |   |   |   |  |   |  |
| Number of units of RBC | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Fresh Frozen Plasma | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Platelets | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Cryoprecipitate | *Yes* | *Yes* | *Yes* | *Not used* | *Not used* | *No* | *Yes* | *Included as interesting difference between countries* |
| Fibrinogen | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |
| Cell Saver | *Yes* | *Yes* | *No* | *No* | *No* | *No* | *Yes* | *Included as interesting difference between countries* |
| Factor VIIa | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |
| Tranexamic acid | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |
|  |  |  |  |  |  |  |  |  |
| Colloid (ml) | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |
| Crystalloid (ml) | *Yes* | *No* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |
| Time of first unit | *No* | *Yes* | *No* | *Yes* | *No* | *No* | *No* |  |
| Time of eighth unit | *No* | *Yes* | *No* | *Yes* | *No* | *No* | *No* |
| *Medical Management*  |  |  |  |  |  |  |  |  |
| Oxytocin | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *Italian data limited to vaginal births*  |
| Ergometerine | *Yes* | *Yes* | *No* | *Yes* | *No* | *No* | *Yes* |  |
| Prostaglandin | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |
| Misoprostol | *Yes* | *Yes* | *No* | *Yes* | *Yes* | *No* | *Yes* |  |
| *Management surgical*  |  |  |  |  |  |  |  |  |
| Suturing  | *Yes* | *No* | *No* | *No* | *No* | *No* | *No* |  |
| Placenta removal | *Yes* | *No* | *No* | *No* | *Yes*  | *No* | *No* |  |
| Intra-abdominal packing | *Yes* | *Yes* | *No* | *Yes (not comparable)* | *Yes* | *No* | *Yes* |  |
| Balloons | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Embolisation and ligation | *Yes* | *Yes* | *Yes see comment* | *Yes* | *Yes* | *Yes* | *Yes* | *Embolisation and ligation combined due to the UK data* |
| Intra-arterial balloons | *Yes* | *Yes* | *No* | *No* | *No* | *Yes* | *No* |  |
| Uterine compression sutures | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Hysterectomy | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| *Maternal morbidity* |   |   |   |   |   |  |   |  |
| Death | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* |  |
| Serious maternal morbidity  | *Yes* | *Yes* | *Yes* | *No* | *See comment* | *No* | *No* | *Excluded outcomes were as a result of a lack of validity and case ascertainment* |
| Respiratory distress syndrome | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *No* | *No* |
| Coagulopathy  | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *No* | *No* |
| Kidney failure | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *Yes* | *Yes* |
| Cardiac arrest | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *Yes* | *Yes* |  |
| Pulmonary oedema | *No* | *Yes* | *Yes* | *No* | *Yes* | *No* | *No* |  |
| Thrombotic event  | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *Yes* | *Yes* |  |
| Multiple organ failure | *Yes* | *Yes* | *Yes* | *No* | *See comment* | *No* | *No* | *French data not comparable*  |
| Septicaemia | *Yes* | *Yes* | *Yes* | *No* | *Yes* | *No* | *Yes* |  |
| Required ventilation | *No* | *Yes* | *Yes* | *No* | *Yes* | *No* | *No* |  |
| Pelvic injury | *No* | *Yes* | *No* | *No* | *Yes*  | *No* | *No* | *Not relevant or valid outcomes* |
| Reaction to transfusion | *No* | *Yes* | *No* | *No* | *Yes* | *No* | *No* |
| Other morbidity | *No* | *Yes* | *No* | *No* | *No* | *No* | *No* |  |
| ITU admission | *Yes* | *Yes* | *Yes* | *Yes* | *Yes* | *No* | *Yes* |  |

S2 Table. Aetiology of the massive obstetric haemorrhage by country

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **UK n=162** | **AMOSS n=62** | **Italy n=99** | **the Netherlands n=179** | **France n=126** |
| Atony | 64 | (39.5) | 25 | (40.3) | 56 | (56.6) | 112 | (62.6) | 46 | (36.5) |
| Placenta Praevia | 12 | (7.4) | 4 | (6.5) | 0 | (0) | 4 | (2.2) | 3 | (2.4) |
| Abnormally invasive placenta | 27 | (16.7) | 12 | (19.4) | 20 | (20.2) | 17 | (9.5) | 11 | (8.7) |
| Placenta abruption | 15 | (9.3) | 4 | (6.5) | 3 | (3) | 5 | (2.8) | 10 | (7.9) |
| Uterine rupture | 5 | (3.1) | 2 | (3.2) | 3 | (3) | 0 | (0) | 3 | (2.4) |
| Retained placenta | 1 | (0.6) | 4 | (6.5) | 2 | (2) | 18 | (10.1) | 12 | (9.5) |
| Laceration | 22 | (13.6) | 7 | (11.3) | 6 | (6.1) | 21 | (11.7) | 19 | (15.1) |
| Other | 15 | (9.3) | 3 | (4.8) | 8 | (8.1) | 2 | (1.1) | 11 | (8.7) |
| Missing | 1 | (0.6) | 1 | (1.6) | 1 | (1) | 0 | (0) | 11 | (8.7) |
|   |   |   |   |   |   |   |   |   |   |   |   |
| Atony | 64 | (39.5) | 25 | (40.3) | 56 | (56.6) | 112 | (62.6) | 52 | (41.3) |
| Abnormal placentation | 40 | (24.7) | 20 | (32.3) | 22 | (22.2) | 39 | (21.8) | 31 | (24.6) |
| Trauma  | 27 | (16.7) | 9 | (14.5) | 9 | (9.1) | 21 | (11.7) | 20 | (15.9) |
| Abruption | 15 | (9.3) | 4 | (6.5) | 3 | (3) | 5 | (2.8) | 8 | (6.3) |
| Other | 15 | (9.3) | 3 | (4.8) | 8 | (8.1) | 2 | (1.1) | 4 | (3.2) |
| Missing | 1 | (0.6) | 1 | (1.6) | 1 | (1) | 0 | (0) | 11 | (8.7) |

France had a hierarchy of primary cause of PPH and were coded using this system 1st Abnormal placentation 2nd Abruption 3rd Trauma 4th was Atony. Denmark did not have data on cause of haemorrhage.