

# Gastroschisis management in a low resource setting

## AIM

- To create an evidenced based protocol on the management of gastroschisis undergoing secondary silo staged repair using hand sewn custom-made silo in low resource settings

## DEFINITION

- Gastroschisis (GS) is the most common congenital anterior abdominal wall defect. It is the extrusion of abdominal viscera (usually the intestines) into the amniotic space without amniotic membrane coverage<sup>1</sup>.

## BACKGROUND

- Global discrepancy in the outcome of infants born with gastroschisis exist<sup>2</sup>.
- Low-Income countries report 60-100% mortality rate while high income countries report < 5%<sup>2</sup>.
- Low income countries associate the following factors with high mortality rates:
  - Lack of antenatal diagnosis
  - Scarce neonatal intensive care (NICU) facilities
  - Difficulty with intravenous accesses
  - Ineffective neonatal resuscitation and
  - Unavailability of parenteral nutrition (PN)<sup>3</sup>.

## SEARCH STRATEGY

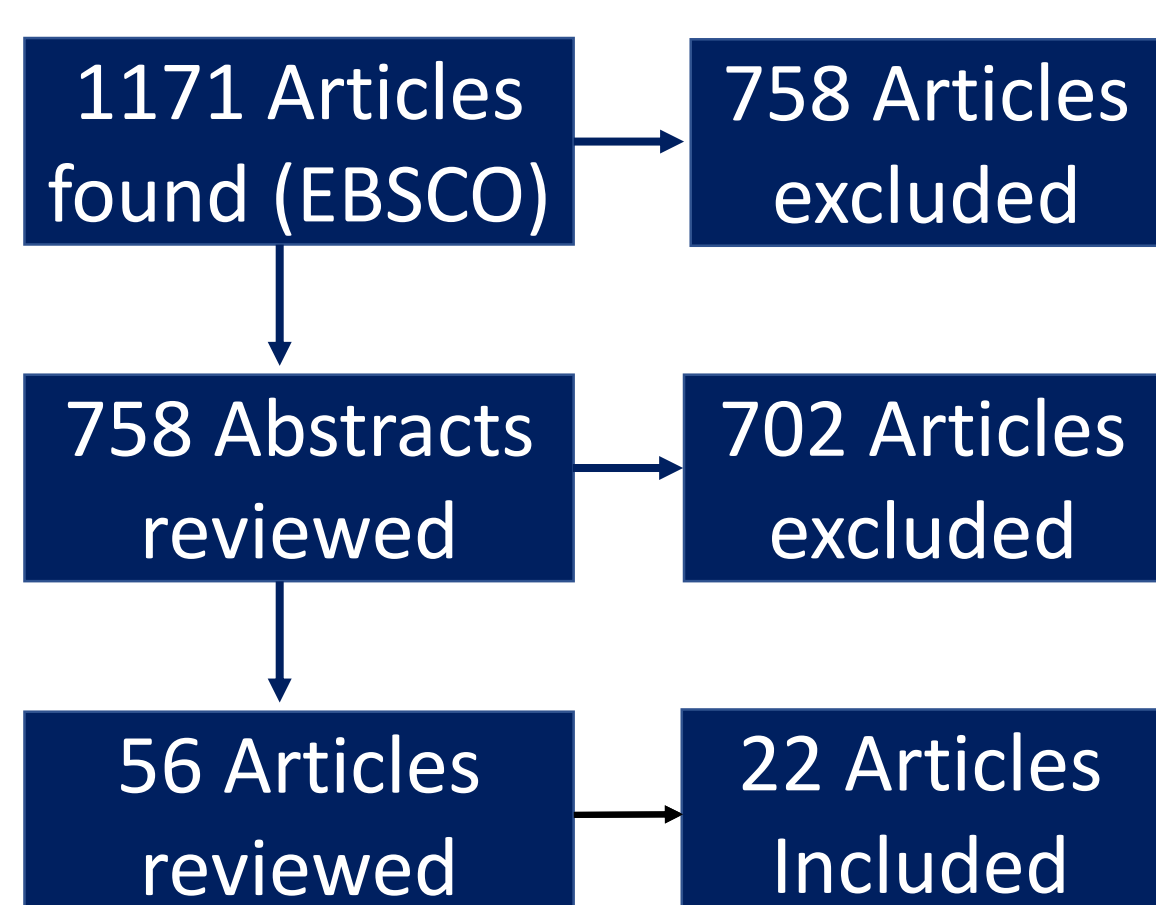


Fig 1: PRISMA Search Strategy

## RESULTS

- Management was classified into 4 stages for easier description of the care pathway of GS from admission to discharge. Each stage considers its care components:

## KEY RECOMMENDATIONS

- Multidisciplinary collaboration is crucial in management of gastroschisis
- In production of high-quality guideline there need to use a credible grading process i.e. AGREE II format as well as involvement of the necessary stake holders

## PROTOCOL

### Stage 1 – Immediate Intervention

Thermo-, airway and respiratory management  
 Fluids and electrolytes  
 Gastric decompression  
 Exposed bowel care  
 Routine preoperative Immediate care

### Stage 2 – Post Silo Placement Care

Thermo-, airway and respiratory management  
 Fluids, electrolytes, analgesia, antibiotics  
 Gastric decompression  
 Daily Silo care  
 Parenteral nutrition

## Staged Management

### Stage 3 – Post Closure Care

Thermo-, airway and respiratory management  
 Fluids, electrolytes, analgesia, antibiotics  
 Gastric function monitoring  
 Wound management  
 Parenteral nutrition, introduce enteral nutrition

### Stage 4 – Discharge Planning

Immediate home care and long-term follow-up  
 Multidisciplinary Team involvement  
 (Surgical, Gastroenterology, Neonatology, Dietician, Developmental Screening)