# بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

قَالُوا سُبْحَانَكَ لا عِلْمَ لَنَا إِلاَّ مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ } { الْحَكِيمُ

صدق الله العظيم

سورة البقرة الآية 32

# Dedication

To my father ... ...

who work hardly for us.

To my mother .....

who taught me

every thing in this life

To my husband who truly supported me

To my beloved brothers and sister...

To the people whom I love, respect and appreciate ...

I dedicate this research...

Ghada Ahmed

### Acknowledgement

All praise and thanks to "Allah "the Almighty, who blessed me with the courage for preparation and completion of this study.

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#### **Abstract**

A preliminary study was conducted during the period of March 2007 to March 2008 to detect *S. paratyphi C* directly in blood. Forty seven blood specimens were collected from patients suffering from enteric fever in Khartoum State.

DNA of each specimen was extracted using phenol chloroform method. *S. paratyphi C* was detected by the aid of real time PCR using Quantica thermocycler. Only 1 (2.1%) of specimens was found positive and the rest 46 (97.9%) were negative.

The study concluded that the real time PCR facilitates detection of *S*. *paratyphi C* without bacteriological culture and identification.

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أجريت هذه الدراسة الأولية في الفترة من مارس 2007م إلى مارس 2008م الدم.لذلك 2008م للكشف عن السالمونيلة نظير التايفية ج في عينات الدم.لذلك تم أخذ عينات دم من المرضي الذين يعانون من حمي التايفوئيد في ولايه الخرطوم.

تم استخلاص الحمض النووی من عینات الدم باستخدام طریقه الفینول کلوروفورم واستخدمت تقنیة البلمره المتسلسلة الزمنیة وبمساعدة جهاز الـ Quantica thermocycler للکشف عن سالمونیلا الباراتیفیه واظهرت النتائج عن وجود عینة واحدة (2.1%) موجبة و بقیة النتائج الستة واربعون عینة (97.9%) سالبة.

خلصت الدراسة الى ان تقنية البلمرة الزمنية المتسلسلة تسهل اكتشاف باكتيريا السالمونيلة الباراتيفية بدون تقنيات الاستزراع البكتيري.

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