

# **Dedication**

## **To my parents**

The sun and moon which give light to my life  
so I can see the way.

## **To my sisters, brothers and Yasir**

The stars which make the world a beautiful  
place for living in the future and today.

# **Acknowledgment**

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**Ust. Malik Hassan Ibrahim Mustafa**

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## النتائج

هذه الدراسة أجريت في قبيلة البقاره في الفترة ما بين 15\5\2005 الي 15\9\2005 لتحديد نسبة النمط الظاهري لمستضدات الزمر الدموي الريصيه و (ABO) في هذه القبيله. و قد تم تجميع 100 عينه في 100 وعاء يحتوى كل منهم علي ماده مانعه لتجلط الدم. وتم فحص العينات باستخدام طريقه الشريجه الزجاجيه؛ الأنبوب؛ الكروت مانعت النفاذيه. حللت البيانات باستخدام الحاسوب عن طريق برنامج الرزمه الإحصائيه للعلوم الإجتماعيه.

تبين أن الفصيله الشائعه في نظام الزمره الدمويه (ABO) هي (O) والتي تمثل (50%) ثم تليها (A) بنسبة (26%)، (B) بنسبة (20%)، واخيرا (AB) بنسبة (4%). أما في نظام الزمره الدمويه الريصيه فقد وجد ان نسبة العامل الريصى السالب هو (10%)، والعامل الريصي الموجب (90%)، المستضد (c) و (e) بنسبة (100%)، (C) يمثل (31%) و (E) يمثل (15%).

أعلى نمط ظاهري لنظام الزمره الدمويه الريصيه هو (cDe) والذي يمثل (48%)، يليها (CcDe) والذي يمثل (27%)، ثم (cDEe) بنسبة (12%)، (cde) والذي يمثل (9%)، (CcDEe) بنسبة (3%) و اخيرا (Ccde) والذي يمثل (1%).

كتوصيه يمكن اجراء دراسات مستقبليه في عدد أكثر من العينات وفي قبائل اخرى لمعرفة أكثر نمط ظاهري لنظام الزمره الدمويه الريصيه في السودان.

## **Abstract**

This study was performed in Elbagara ethnic group in the period between 15/5/2005-15/9/2005. One hundred samples were collected in EDTA containers to determine the frequencies of ABO and Rhesus phenotypes and Rhesus gene complexes. Blood samples were tested by the slide method, tube method, and ID-card method. The results were analyzed using the SPSS software program.

In the ABO blood group system the highest frequency was group O (50%), then group A (26%), followed by group B (20%), and group AB (4%).

The most frequently occurring antigens of the Rhesus blood group system were found to be c and e (100%), followed by D (90%), C (31%), and finally E (15%).

The most frequently phenotype in the Rhesus system was found to be cDe (48%), followed by CcDe (27%), cDEe (12%), cde (9%), CcDEe (3%), and Ccde (1%) respectively.

Thirty samples were tested by both the slide and ID-card technique to make a comparison between the two methods and the same results were obtained.

The conclusion: Rh-E negative antigen was detected in 85% of Bagara individuals, Rh-C negative antigen in 69%, Rh-D negative in 10%.

The recommendation: Future studies should be done using a larger number of samples on other tribes in Sudan to determine the most common Sudanese genotypes.

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