Abstract:

This study is based on the fact that, Malaria is a major public health problem in Sudan, and especially in Khartoum State, the field of study. Almost about 300,305 infections being reported yearly in a population of about 7 million. This amounts to about 4.3%. This disease constitutes the first highest cause of hospital admission in the country. Beside this, much as two-thirds of the entire national public health budget is spent on controlling it.

To try to control malaria disease and to reduce its effects in Khartoum State, we used a capable system that accepts various kinds of data - the Geographic Information System (GIS). The GIS provided to be an important tool for controlling malaria.

- Using GIS, areas covered by mosquitoes and area of breeding can be adequately determined, and hence fighted.
- The output data points to the risk area and is helpful for the administrative bodies to plan for controlling malaria as well as for the policy and decision makers to take actions.

مستخلص البحث

تنبني هذه الدراسة على حقيقة أن مرض الملاريا يعد أحد المعضلات الأساسية في السودان، خاصة في ولاية الخرطوم موقع الدراسة، والتي بها حوالي 300,305 مصاب حسب التقارير السنوية لإدارة مكافحة الملاريا بالولاية، وتمثل هذا العدد نسبة 4.3% من جملة السكان البالغ عددهم 7 مليون نسمة حسب آخر احصائية.

يعتبر مرض الملاريا من أعلى الأمراض نسبة في الدخول إلى المستشفيات في الولاية، إضافة إلى ذلك فإن ثلثي ميزانية وزارة الصحه الاتحادية تنفق في مكافحتها وعلاجها.

لمحاولة السيطرة على داء الملاريا بولاية الخرطوم، يجب وضع خطط محكمة بإستخدام نظام متكامل يمكن من عبرها التعامل مع بيانات كبيرة ومختلفة، عليه تم إختيار نظم المعلومات الجغرافية (GIS) كأحد الآليات المهمة التي تساعد في الحد والسيطرة على مرض الملاريا.

- بإستخدام نظم المعلومات الجغرافية يمكن تحديد مناطق توالد وإنتشار الباعوض بدقة عالية كما يساعد في تحديد الإتجاهات التي يمكن أن ينتشر فيها مرض الملاريا.
- النتائج المتحصل عليها بعد التحليل عبر هذه البرامج تحدد المناطق المتأثرة مما يساعد العاملين في الحقل الصحي من وضع الخطط والبرامج المناسبة للمكافحة، والتي بدورها تساعد الساسة من إتخاذ القرارات الداعمة في الوقت المناسب.

Dedication

To whom

Truly I find my self with (my wife and little kids)

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