

ABSTRAK

A MEDICAL GEOGRAPHY OF ENDEMIC GOITER IN CENTRAL JAVA

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Conventional public health efforts for the eradication of endemic goiter focus on iodine supplementation. However, the growing literature on active goitrogenic chemicals in vegetables and the awareness for their diet suggest that actively goitrogenic diets must be considered early in the goiter survey stage. Yet few surveys of goiter include even a diet survey. The objective of this research is to re-examine the etiology of endemic goiter in a particular place as a basis for public health intervention. The approach is novel in that it examines dietary sources of iodine and goitrogens for a single goitrous community in Central Java. The medical geographic approach to the case study highlights the relationship of people to environment as a factor in disease causation.

The result of the investigation are novel as its approach. The goitrous case study village has a moderate continuous supply of iodine via a longstanding food exchange system with the coast of Java. Three preserved seafoods bear iodine into the region. Yet the goiter prevalence is 62 percent. Among the vegetables in the diet, 35 have been found to be goitrogenic in other contexts. An analysis patterns of consumption indicate that the most commonly eaten vegetables are those grown in the village. The poor majority village eat large quantities of cassava, cassava leaves, papaya leaves and various legumens. The better-off minority purchase equally goitrogenic vegetables, such as cabbage or carrots and have largely abandoned the dried seafood. A previously unknown symptom of community-wide deficiency in taste ability for salt and bitter goitrogen solutions is affecting the total eating pattern of the community.

In short, the case study village, already a recipient of iodine supplement efforts is clearly one where the endemic goiter has a large component of active goitrogens in the diet. Prophylaxis based entirely on the hypothesis of absolute iodine deficiency can be overridden by excess iodine.

A recommendation is made for government health planners and agencies to carefully investigate the possibility of goitrogens in the diet at the time of the initial goiter survey. A goiter prevention policy should then be developed for each community which includes an appropriate emphasis on iodine supplements and diet modification.

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Komentar-komentar:

1. Nilai S^2 (varians populasi) y (rerata populasi) secara teknis tidak diketahui sehingga kita perlu membuat perkiraan yang masuk akal.
2. Dianjurkan untuk membuat perkiraan $S^2 Y$ sedemikian sehingga besar cuplikan yang diperoleh adalah konservatif yaitu cuplikannya cukup besar.
3. Besar cuplikan berperanan penting pada presisi dibanding fraksi cuplikan atau "rate" (misal besar cuplikan dalam persen dari besar populasi)
4. Besar cuplikan untuk suatu presisi yang ditetapkan hanya berlaku pada populasi tersebut. Boleh jadi presisinya akan berbeda bagi subpopulasi.

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