Kaapstad, 20 Junie 1964 Deel 38 No. 21 Volume 38 Cape Town, 20 June 1964

VAN DIE REDAKSIE : EDITORIAL

# BEVOLKINGSBEHEER AS UITGESPROKE BELEID

Die verskyning van die belangrike werk *The Population Crisis and the Use of World Resources*[1] in die begin van hierdie jaar is 'n gebeurtenis wat nie onopgemerk behoort verby te gaan nie. Die boek is eintlik die handelinge van die Wêreld Akademie vir Kuns en Wetenskap en dit is saamgestel uit bydraes deur deskundiges van oral oor die wêreld. Sulke bekende persone soos mnr. Adlai Stevenson, Bertrand Russell, Sir Julian Huxley en baie andere neem aan die besprekings deel wat saamgevat word onder die twee hoofafdelings: Die Bevolkingskrisis, en Die Gebruik van Wêreldbronne.

Die tema wat hier behandel word, is 'n bekende tema en een waaroor ons al meermale geskryf het: 'n oorweging van die implikasies van 'n vinnig-toenemende wêreldbevolking vir die welvaart en geluk van die mensdom in die toekoms, gesien teen die agtergrond van beskikbare lewensruimte en bestaansmiddele.

Dit is interessant om te let op hoe hierdie probleem deur Westerse denkers vermy of omseil word. In die meeste van die Westerse lande en veral in sommige van die ontwikkelende lande is die begrip van bevolkingsbeheer nog taboe. Bevolkingsaanwas, afgesien van die moontlike implikasies daarvan, word nog gelyk gestel aan nasionale status, en oorwegings van bevolkingsbeheer word as verwerplik en verderflik beskou. Dit is verder interessant om daarop te let dat die Ooste, op hierdie gebied, die Weste ver vooruit is. Lande soos Indië, Japan, Sjina en Rusland het lankal gesien dat 'n eksplosiewe bevolkingsgroei op nasionale en internasionale selfmoord afstuur—dat dit selfs nog gevaarliker is as die bedreiginge van 'n kernoorlog. Trouens, onbelemmerde bevolkingsgroei moet onvermydelik op 'n uitwissingsoorlog afstuur, eenvoudig omdat die stryd om oorlewing en bestaan te hewig sal word.

Die feite van die saak is dat die bewoonbare en bewerkbare gedeeltes van die aarde beperk is—dit maak ongeveer een-kwart van die totale oppervlakte van die wêreld uit.[2] Die res van die wêreld is betreklik onherbergsaam vir die mens. Die bevolking van die wêreld, aan die ander kant, neem met 'n verhewigde gang toe en het alreeds die gevaarpunt bereik.

Gedurende al die lang tydvakke van die eerste ontluiking van die menslike lewe af tot vandag toe, het die bevolking van die wêreld toegeneem tot 'n syfer van ongeveer 3,000 miljoen mense. Op grond van die huidige bevolkingsaanwas sal hierdie syfer verdubbel word gedurende die volgende 40 jaar. En as die gangbare tendense van 'n dalende sterftesyfer en 'n onveranderde of stygende geboortesyfer van krag bly, sal hierdie soort duplikasie in al korter tydperke voorkom.

In die lig van al dié feite tot ons beskikking, is daar maar net een verstandige beleid—dié van bevolkingsbeheer op nasionale en internasionale vlak. En die soort beheer waarna ons verwys moet nie 'n toevallige saak wees nie, dit moet die uitdrukking van 'n definitiewe bevolkingsbeleid wees.

Op die oomblik ontwikkel sake op hierdie gebied nie op 'n gesonde manier in die Westerse wêreld nie. Daar is hier geen beplande beleid nie en beheer word aan individue oorgelaat. Die gevolg is dat die beter-ontwikkelde en meer vermoënde klasse (verstandelik, liggaamlik en ekonomies) hulle aanwas beheer, terwyl die laere klasse onbeheersd vermeerder. Die gevolg van hierdie toestand van sake is nie net dat die bevolking van die wêreld vinnig vermeerder nie, maar ook dat die kwaliteit en kaliber daarvan agteruitgaan. Ons het hier dus met die verkeerde soort beheer te doen.

Indien ons sukses verwag, moet beheer op die basis van verstandige beplanning geskied en op almal van toepassing wees. Dat dit 'n moeilike en ingewikkelde taak is, val nie te betwyfel nie. Sulke sake soos godsdienstige vooroordele, maatskaplike gebruike, menslike willekeur, vryheid van optrede, nasionale aspirasies, ens. sal in hierdie verband in gedagte gehou moet word. Nogtans moet die probleem aktief benader word.

Ongelukkig was die metodes van bevolkingsbeheer wat tot onlangs toe beskikbaar was, nie geskik vir toepassing op globale basis nie. Sterilisasie en aborsie sal altyd sterk teenstanders hê; ook is dié metodes nie geskik vir toepassing op miljoene van mense nie. Meganiese metodes van beheer pas net nie in by die gebruike van die meeste mense nie. Die beste vooruitsigte op hierdie gebied is miskien geleë in die endokrinologiese onderdrukking van die vrugbaarheidskringlope by mans en vroue. Pille wat ovulasie by vrouens onderdruk, word betreklik algemeen onder bevoorregte groepe van mense gebruik, maar om praktiese en ekonomiese redes kan hulle nog nie 'n belangrike faktor vorm wat betref bevolkingsbeheer op groot skaal nie. Ondersoeke, wat redelike sukses beloof, is tans aan die gang ten opsigte van hormonepille wat die vorming van spermatosoa by mans onderdruk. Die uitslag van proewe op dié gebied word nog afgewag.

Dit wil vir ons voorkom asof opvoeding vir beplande ouerskap en die toepassing van 'n uitgesproke bevolkingsbeleid in hierdie opsig die beste metodes van benadering is wat vandag beskikbaar is.

'n Studie van die boek waarna ons hierbo verwys het, word sterk vir alle geneeshere, opvoeders en politici aangeraai: Dit is tyd dat ons ons in hierdie opsig besin. Dit is tyd dat ons as verantwoordelike en volwasse mense begin optree, nie net ten opsigte van onsself nie, maar ook ten opsigte van ons ongebore nakomelinge. Dit is nodig dat ons ons eie toekoms met grootmoedigheid en verbeeldingskrag tegemoet gaan. Want dan wag daar 'n groot toekoms vir die mensdom. As ons dit nie doen nie, wag daar niks anders nie as 'n stelselmatige agteruitgang van ons lewensstandaarde en die uiteindelike vernietiging van die mens deur homself.

1. Mudd, S., red. (1964): *The Population Crisis and the Use of World Resources*. Die Haag: W. Junk.
2. White, C. L. *in* Mudd, S., red. (1964): *Ibid.*

## ARE TABLETS FOR DIABETES JUST DRUGS OF CONVENIENCE?

The two groups of oral drugs used by diabetics at present are the *sulphonylureas* (tolbutamide—'rastinon, artosin'; chlorpropamide—'diabinese'; and acetohexamide—'dimelor'), which stimulate the pancreatic beta cells to put out insulin, and the *diguanides* (phenformin—'insoral' and metformin—'glucophage'), which increase the peripheral utilization of glucose. It is frequently remarked that these drugs are of no real value in diabetes, but are merely 'drugs of convenience' for lazy patients who do not want to bother with insulin. To our mind this is not so.

Admittedly, the oral drugs are not essential in the sense that they do not save life as insulin does, nor are they likely to prevent diabetic vascular disease. Even if they only obviate the use of injections for a longer or shorter period, most patients would be very grateful. By avoiding injections one may also avoid occasional insulin allergies, bumps, fat atrophies and infections at the injection site. More important is the greater freedom from hypoglycaemic attacks, which may be particularly beneficial to patients with coronary or peripheral artery disease. In patients with poor vision, parkinsonism, hemiplegia or other conditions that render injection difficult or hazardous, the oral agents may be a real boon.

It is possible that both the sulphonylureas and the diguanides have a minor rejuvenating effect on the beta cells when used in young, mild, or pre-diabetics. Fajans[1] has presented fairly convincing evidence that tolbutamide can induce improvement in glucose tolerance in some juvenile diabetics in their early, non-insulin-requiring phase. This improved tolerance was found after the tolbutamide had been taken for several months and then stopped for several days. Whether tolbutamide really delays the onset of more severe diabetes in these young people is uncertain.

The diguanides, acting by a non-pancreatic mechanism, might theoretically also be able to 'rest' the beta cells. I have not seen any report of their producing remission in diabetes, but their occasional ability to reduce insulin-resistance[2] is another example of the value of these drugs.

Finally, and not uncommonly, an oral drug or combination may produce far better control of the diabetes than has been attained with insulin, as is shown by the following cases:

1. A 29-year-old physically and mentally handicapped girl with diabetes of 2 years' duration was moderately unstable on 80 units of lente insulin daily, much to the discomfiture of her almost obsessionally particular mother. Any lesser dose resulted in severe glycosuria. She had never been in ketosis and was a little overweight. It was gratifying to all parties concerned when she became perfectly controlled on a single tablet (250 mg.) of chlorpropamide daily plus a half tablet (250 mg.) of metformin (dimethyldiguanide) taken 3 times a day. Blood-sugar levels have remained within the normal range for a year now.
2. A thin, unintelligent White man, aged 34 at onset o diabetes. In 1952 diabetes started with classical symptoms including lassitude, loss of 10 pounds in 2 months polyuria, polydipsia and polyphagia, and some ketosis For the next 10 years he took variable doses of insulin which he manipulated himself quite unsuccessfully. O less than 60 units daily he developed polyuria, but h frequently omitted meals and passed into hypoglycaemic coma. He was in prison for 2 months, durin which period he went into coma 5 times.

   In November 1962 the diguanide metformin (glucophage), 1 tablet twice daily, was added to 40 units o insulin. Insulin was reduced to 20 units and then to nil urine has remained virtually sugar-free for 6 month and his weight has increased from 145 to 157 pound Furthermore, he is now holding down a job, which h could not do before.

Here we saw a great and unexpected success of ora diguanide in an unintelligent man, for whom insulin wa very unsatisfactory. Incidentally this case might easily hav been considered as a success for reduced-insulin-dosage plus-diguanide, had an attempt not been made to stop th insulin altogether.

3. A White man, aged 63, intelligent and extremely cor scientious, has been diabetic for 15 years. He ha conscientiously maintained his correct weight, and ha never been in ketosis despite severe symptoms at th onset of his diabetes. Insulin had been used *ab initi* and in high dosage for some years—130 units a day a the time of admission. Smaller doses resulted in gros glycosuria, hypoglycaemic attacks occurred only ver rarely after missed meals, and blood-sugar reading were consistently high. In the hospital ward constan glycosuria and hyperglycaemia were confirmed. Ora treatment was then tried, together with soluble insuli as necessary using 2 capsules of 'insoral TD' and 50 mg. of chlorpropamide daily. Within 2 days the urin became sugar-free and has remained so for 2 month without any further insulin being taken. Glucose tolerance test on oral therapy (half-hourly figures): 8 (fasting), 156, 181 (at 1 hour), 201, 133 (at 2 hours), an 107 mg. per 100 ml.

In this case the long duration of diabetes, prior larg doses of insulin, and several blood-sugar readings of ove 300 mg. per 100 ml. did not preclude a good response t oral therapy.

It is plain that oral drugs in diabetes are more than ju 'convenient'.

1. Fajans, S. S. and Conn, T. W. (1962): Diabetes **11**, Suppl. p. 123.
2. Jackson, W. P. U. (1963): S. Afr. Med. J., **37**, 695.

## PROBLEMS OF URBANIZATION

The explosive rate at which urbanization is occurring in Africa is explainable in terms of 2 types of rural immigrant; those who are determined to settle in the town and the casual migrant, who comes for a period and then returns. Both groups are attracted for social and economic reasons. Misinformation about job opportunities, too abrupt severance of home ties, ignorance of urban institutions, impediments of communication with city people an educational deficiencies are major handicaps to such immigrants. These lead to major difficulties which may affec the health and nutrition of the immigrant.

Abstracted from the *Ghana Medical Journal*, **3**, 1.