

Public Health Perspectives on Vaccine Delivery

DA Henderson

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Franklin Lakes NJ

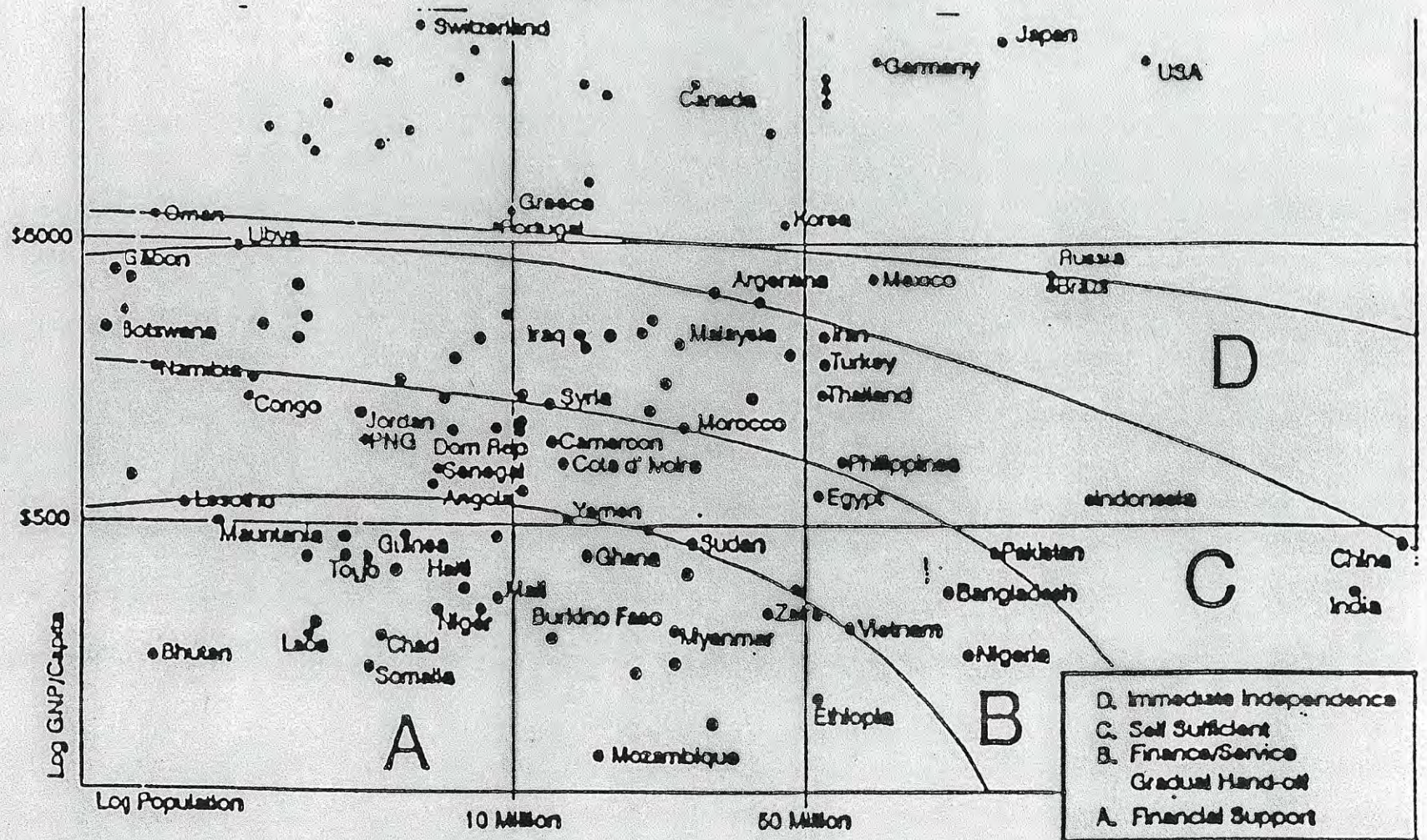
- ^{Soon} Pretty much all that needs to be said has been said. 1994/95 2-3 vacs./child.
8-10
- Back to properly assess the present & to gauge the future
important to understand something of the past re: immunization
^{beg. just 40 years ago} ~~major changes occurred which had accidental dramatic effects~~
~~because last 10-15 years marked by dramatic changes~~ Even the past 10-15 years
of which I suspect some here are less aware.
- ~~Propose briefly to review pertinent elements of immuns. in p.h. before commencing~~
~~on the present and future prospects.~~ ^{public angles}
- Until 1955, only 3 vaccines in widespread use ^{public angles} — DPT, smallpox and BCG.
Smallpox — to some degree everywhere; DPT in indus. countries; BCG Europe & some dev. countries.
(Others such as y.f. ad rabies available but not widely applied)
- Vaccine, almost everywhere, given in clinics or doctor's offices.
Paid the visit / office expenses — like BCG for infants
Pd. — believed a carrot to get children in for well-child visits.
- 1955 Salk vaccine introduced — the first of a series made possible by V.C.
^{Initially} ~~Effects~~ a good response but receptivity lagged.
@ CDC efforts to work c h. depts. for intensive vac. progs.
Strongly objected to even under epidemic circumstances
Insistence that ~~only~~ vac. could be performed only by M.D. or
under his immediate supervision. —
~~that~~ (That concept has prevailed to some extent in a no. of countries even ^{now} ~~now~~)
Others argue the case differently, insisting that all vac. ~~should~~ ^{must} be
performed by the prim. hlt. serv. — part of PHC — "doc in the box")
- 1962 Sabin vaccine — 2 drops on a sugar cube — difficult Barge need for pref. ^{aspirin}
S.O.S. campaigns only for introducing vaccine
- 1967 Smallpox erad. campaign began. — Need to ↑ vac. coverage to 80%
Little help from clinics or hospitals. —
Poor storage, inadequate equipment, no interest

- + So, throughout most endemic countries - vac. by teams at collecting points.
involved teachers, vill. leaders, rel. leaders. - fantastic response.
- + ^{>90% coverage} Vaccine delivery devices - ^{loc. - min 500/day (25-50 used) → 1200/day.} ~~set~~ ^{injection} ~~injection~~ ^{bipolarized needle.} // ^{disinfectant}
- + Program - readily able to be implemented; excess of health staff but unempowered.
- + Approach not approved by WHO. Smeared "vertical program"
- Cons
- 1970 Conference on expanding immun. prog. ¹⁹⁷⁰ beyond smallpox & BCG
Coverage measles, DPT, polio $\leq 5\%$
- 1974 "Expanded Program on Immun." → 1973
- 1983/84 - 20% UNICEF / Rotary.
- 1980 Brazilian experience N.I.D.s. - commun. involvement / communication.
+ Can't be done / can't be sustained / undermines the health system.
+ 90% + 17 yrs. Taylor report.
- 1985 Polio erad. begun in Americas. - extended world-wide - e.g. China
NIDs for polio extended to other vaccines
Like 80s Caribbean countries wanted something to eradicate - measles.
"BIG BANG" → Cent. Amer. / Brazil / rest of L.A.
No end of objections from ^{WHO} Geneva & traditionalists -
but in past 3 years both Britain & Canada - large scale campaigns.
- 1987-90 U.S. measles epidemic - ^{my role.} ~~ignorant parents~~
Belief - not sufficient funds, Conclusion - not the problem.
Physicians - ~~not interested~~ ^{immun.} not a priority, not off. organized to
assure that the children they are vac. (vet. / J. Hy. hubs)
Exemplified Britain

PERSPECTIVES IN PREVENTIVE SERVICES

- 1) INCREASING INTEREST GLOBALLY IN PREVENTIVE SERVICES**
- 2) RECOGNITION THAT SOME SERVICES ARE BETTER DELIVERED
OUTSIDE OF CONVENTIONAL CLINIC-HOSPITAL SETTING**
- 3) BETTER COMMUNICATION WITH PUBLIC THRO MASS MEDIA,
LOCAL GROUPS, ETC.-- NOT TRADITIONAL HEALTH EDUC.**
- 4) GROWING NUMBERS IN MIDDLE-CLASS, TOURISTS,
BUSINESSMEN**
- 5) VACCINE RESEARCH & REVENUES GROWING RAPIDLY WITH
POTENTIAL FOR GROWTH E.G. AIDS, TB, MALARIA**
- 6} NEW APPROACH FOR DEALING WITH INTERNATIONAL SUPPORT**

Vaccine Support Grid



TARGETING STRATEGY FOR VACCINES

Band A : Need financial support

- + Continuing external support at low-tier price**
- + Objective for government funding 10 to 25%**

Band B : Need services

- + Purchase thro UNICEF or other at low-tier price**
- + 80 to 100 % government funding within 3 years**

Bands C and D : Self-sufficient

- + Smaller countries in Band C will probably buy vaccine**
- + Larger countries in Band C and most in Band D will produce
some or all of own vaccine**

FOR NEW VACCINES

- + Band A will receive 90-100% financing**
- + Band B will receive matched funding phased out over 3-4 yrs
at lower tier price**
- + Bands C and D will negotiate their own prices with manu.**

**Improving Global Health Through Immunization
A Becton Dickinson Medical Affairs Scientific Symposium**

August 6, 1997

Franklin Lakes, New Jersey

JK4 Management Room

Building II

8:30 am - 1:30 pm

8:30 - 9:00

Continental Breakfast

9:00 - 9:15

Welcome:

William A. Kozy, President, Worldwide Injection Systems, Becton Dickinson

Thomas A. Reichert, PhD, MD, Vice President Medical Affairs, Becton Dickinson

9:15 - 10:00

Vaccine Market Trends

Elizabeth Mily, Associate, Goldman Sachs International

10:00 - 10:45

International Vaccine Development Partnerships

George Curlin, MD, Deputy Director, Division of Microbiology & Infectious Diseases, National Institute of Allergy and Infection Diseases, National Institutes of Health

10:45 - 11:30

New Trends in Worldwide Immunization

Stanley Plotkin, MD, Medical and Scientific Director, Pasteur Merieux Connaught

11:30 - 12:15

Vaccine Development Challenges and Opportunities

Vincent Ahonkhai, MD, Vice President and Director, Anti-Infectives, Clinical Research, Development & Medical Affairs, NA, SmithKline Beecham Pharmaceuticals

12:30 pm - 1:30 pm

Lunch - Building I - Dining Room G&H

Clinical Public Health Perspectives

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