"Primary Health Care - Insights from the Smallpox Erad. Prog."

WORLD BANK
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Delighted to have the opportunity to meet with you today and to offer certain conceptual views on primary health care which derive from my experience in smallpox eradication. The views I shall express, I'm afraid, are neither traditional nor widely held - at least as yet. However, the more I have thought about SE and probed other types of programs and in other countries, the more convinced I am that we need to rethink strategies in primary health care - that a basic departure is required in our thinking if indeed we are to make significant progress in health as applied to development. To obtain your own reactions to these views, based on your own quite different range of experiences, is simply too tempting an opportunity to pass up. Thus, I welcome questions and debate. At the end of time, you may conclude that I am afflicted with an advanced case of the Steinbrunner-Irsay syndrome characterized by someone who really doesn't understand the problem but is able to offer all the wrong answers. At least you won't confuse it with the North-Pole Doctor syndrome, i.e. someone who comprehends only part of the problem and takes the 5th amendment.

It is said that Deans during the first 4-5 yrs. of their tenure utilize real data when they make presentations; during the next 4-5 years, they customarily turn to philosophy and platitudes; finally, at an advanced stage of arteriosclerosis, they revert to history. This Dean has now celebrated his 10th anniversary of servitude and true to form, I turn to history.

It seems to me that if we can identify the principal longer-term events which have resulted in the methods we now use to provide health care (and attitudes toward them) we might more clearly see directions for the future.

Two basic and very different strategies for the delivery of health care in developing countries have dominated our thinking, consciously or subconsciously, at least over the past 4 decades. —

1) The so-called vertical programs (strategy) (a term I dislike as will later become apparent) stemming in significant part from originating earlier in this century vector eradication efforts ~~changed by Ford Foundation in the 1930-1960 era~~ and 2) The otherwise reprehensible term — horizontal program strategies — which are, in effect, industrialized country models for the provision of health services (for this, read "curative" rather than "preventive services") which basic structure is comprised of hospitals and doctors' offices (which, in the 3rd world, are usually called Primary Health Centers).

I shall deal first with the so-called vertical programs which (until the 1960's) derived in ~~the~~ their form and philosophy, principally from efforts to control vector-borne disease, beginning with yellow fever and extending thru the malaria eradication campaigns. The impact of these programs and, more important, the reasons for them (cause and nature of the adverse reactions) must be appreciated if I understand today's arguments regarding health strategies involving special, targetted programs.

These form of the so-called vertical [among ?] programs ~~originated with~~ was actually set by Gorgas in Cuba in 1902 shortly after it was occupied in the course of the Spanish American War.

- Cuba — continuing high incidence yellow fever / frequently exported to U.S. coastal cities.
- Reed demonstrated the disease to be vector-borne — domesticated Aedes aegypti
- Gorgas — military operation in Havana only — eliminated yellow fever <1 year. diminished breeding rate of mosquito
  Repeated success — Panama and Oswaldo Cruz in Rio de Janeiro
- Gorgas — believed eradication of y.f. possible by ↓ (not eliminating) Aedes aegypti in urban conurbations of 50000+
- Rockefeller Foundation (1915) just established — looking for something to do — ~~proclaimed its willingness to support~~
  Wickliffe Rose to Far East
  Major concern — yellow fever c̄ opening of Panama Canal
  Proclaimed its support for global eradication of y.f. — 1st in the Americas.
  Note: no recognition of a jungle reservoir at that time.

- Programs in Central America remarkably successful.
- Program in Brazil — largest and most difficult.
  Soper in charge in late 1920's (? confusion as to who ran the prog. — Govt. or Rockefeller → no confusion in Soper's mind)
  Characteristics + Independent service reporting only to a Commission + President (no Health Dept)
  + Meticulously ~~Highly~~ detailed, highly prescribed military-type set of activities (arsenal story)
  + Belief that better management — effectively all that was needed — research was unnecessary
  + No attention given to surv. of disease
- Early 30's — discovery of jungle yellow fever and shift to total A. Aedes erad. ~~in Americas~~
  — success c̄ A. gambiae cemented principles

- 1948 — Soper became R.D. for WHO in Americas — 1st action A. aegypti eradication (1949)
  next principal program — malaria eradication (1953).
  at WHO — Brock Chisholm, 1st D-G — proposed global SE in 1952 but plans and ideas quickly scrapped one yr. later by next D-G — Marcolino Candau, a Brazilian who grew up in ~~the Aedes aegypt~~ Soper's vector disease control program.

and note: many senior intl. p.h. staff whose principal experience was malaria control in southern Europe in 1940's and those from South America.

1955 – A global malaria eradication program voted by WHA with characteristics just like those ~~[illegible]~~ of Gorgas and later Soper's yellow fever programs

+ Autonomous program reporting only to Commission & head of state
+ Highly detailed, highly prescribed set of activities
+ Belief that better management was all that was needed → no research
+ A general lack of attention to disease surveillance until late in the program.

1965 – 1970 Growing realization that the program could not succeed with available tools but, because research had effectively stopped, nothing else available and no research establishment to which one could turn.

Backlash vs. program –
- principal expenditure of WHO – >40% of funds early in 1960's
- malaria costs larger than many MOH budgets for P.H.
- authoritarian system independent of MOH and with better paid people

From this – a reflex action against any program with a defined disease control objective

Smallpox eradication proposal 1966 – received with considerable hostility by ~~WHO~~ the dominant and pervasive malaria program staff for fear it would compromise their failing efforts and by others in ~~[illegible]~~ health ministries who foresaw another autonomous disease control effort

Other targeted health initiatives – UNICEF / bilateral support – likewise disparaged

Family planning

Service des Grandes Endemies – French mobile teams in central and western Africa intended to control sleeping sickness, yellow fever, smallpox – which they did with surprising efficacy

Note this prog. in detail because it was, in fact, the genesis of [illegible] reaction to special programs.

I'll return later to the smallpox eradication model as it differed from that of malaria eradication – has implications for the future.

STRATEGY 2 – Medical care delivery model – basically, the existing system in industrialized countries transplanted to the developing world.

Designed to provide curative or rehabilitative care to those who get sick and seek services.

Consists of hospitals and health centers which, as Tony Measham correctly points out in his Dec. 1986 paper in Finance and Development, are heavily weighted ~~expenditures~~ to the urban areas and, in their expenditures, to expensive hospitals.

Primary health centers are glibly ~~talked~~ talked about as providing curative and preventive care to all in the population. ~~Did~~ Do they? Experience in Smallpox eradication.

① Run by M.D. whose interest in anything but curative medicine was close to '0'
PHC, in fact, often was employed as a part-time private clinic.

② Vaccination rarely performed ("no time")
If so, with improperly stored vaccine. At places where tried, seldom more than 50% of those living within 2 miles.

③ Rarely reported cases and seldom tried to contain an outbreak

④ Supervision of activities – '0'

⑤ Dispensed such drugs as were received – often no drugs for weeks, sometimes months. ~~with~~ Doubtful effect on either morbidity or mortality.

Why do we say this?

Estimates suggest that correct illness unaffected in 75%+ of those seeking the services of an M.D. even if proper drugs used.

Dispensing of proper drugs, perhaps as much the exception as the rule.

e.g. Steroids in Ethiopia

In brief, we had then and have now in most countries, an unsupervised curative care system (like Mom & Pop grocery stores) providing services to those who happen to show up and if they have the drugs. Not very different from what we have in most industrialized countries if you come right down to it.

~~The pro~~

Vaccination in USA, for example.

Program has no objectives (or strategy) other than to provide care to those who choose to come.

There is no quality control — no measurements of progress re: occurrence of disease / extension of life / & mortality and no incentive to measure these

- Smallpox ERADICATION — really began in 1967

Principles

1. Prog. was part of health ministry and relied on existing health services (because of few staff)
2. Clear definition of objective — "0" cases of smallpox not mass vaccine
   Forced development of surv. system.
3. Strategy defined broadly — vaccination of 80% +
   — surveillance - containment system.
4. Quality control system
   + Cases —
   + Vaccine —
   + Vaccination coverage —
   + Reporting efficacy
   + Speed of response + control of outbreaks.

note: Research emphasis

This and any other properly constituted

In summary — "community-based program" must endeavor to deal with disease throughout the whole of a community — not simply those who present & wait at PHC

+ Demands measurement, at least of cases in order to guide the program
+ Requires — marketing and merchandising of product.
+ Better supervision was possible a cadre of specially trained people
+ Greater efficiency possible in motivating the population

These are all necessary attributes of a "community-based program —

e.g. family planning, immunization, ORT.

Can such programs utilize the infrastructure of primary health centers, etc.

They "can" but seldom in this effective.

Must overcome curative care orientation and this requires adequate specialized supervision.

But: Special progs. are important - note tension.

Some have assumed that the Alma Ata declaration addresses the problem – it does not

Hx of Alma Ata – barefoot doctor
– USSR
– statement of primary health care – nothing new

note: includes all possible interventions – curative progs which have to be and community-based

Provided an openness on the need for health care for all the people rather than those served by hospital but Health for All – a slogan, not a strategy

Regrettable – any specific intervention deployed / must do all things for all people (unrealistic financially + managerially)

Others – note Rockefeller Foundation, in particular – assume can make change thru provision of quick curriculum courses of training for medical students. This will have about the same effect as providing a short course on safer automobile design to Mr. Goodwrench.

The orientation, preoccupation of physicians in sickness care – they really can't comprehend community-based programs until after they have had some experience but even then, docked into the curative care network, there isn't much they can do. They don't have the skills in marketing + merchandising and, even those who do don't receive necessary tools for the work.

My feeling is that there is a need to address community-based programs on a quite different subset of activities in PHC and to build an administrative structure appropriate to the need.

+ Definition of objectives
+ Strategy which incorporates marketing + merchandising.
+ Program for measurement of outcomes.

What are these interventions – family planning, ORT, immunization, Vit A.

But so long as we senselessly mouth the slogan "Health for All" and decry all targetted progs. as the "Black Satan", I foresee little progress.