Kenneth Newell: Primary Health Care's Midwife

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In the mid-1970s, the World Health Organization (WHO) adopted primary health care (PHC) as the key for improving the health of those populations in greatest need. Kenneth Newell was largely responsible for shaping this approach and for promoting its wide acceptance. He did this largely through his publications. The Soviet Union felt threatened by the widespread perception that China's bare-foot doctors best exemplified the practice of primary health care. They maneuvered to get WHO to organize a global conference on PHC in the Soviet Union in 1978 at Alma-Ata. PHC then came under fire from those who believed that a better approach to improving health was through action against selected problems, e.g., the control of individual diseases. Newell strongly opposed 'selective' PHC until his untimely death in 1990 at the age of 64.

Newell's Background

Newell began his career as a medical officer in the Te Araroa Maori region of New Zealand; as a testament to his work there the Ngati Porou Tribe sold some of their cattle to finance his further training in the UK.

The nearest major hospital was more than 100 miles away over secondary roads. He had come from a medical school which had taught him how to treat people in a hospital, to explain to them their responsibility for the registration of births and deaths, for clean food and water, and for childhood immunization in urban situations. But omitted was what was his role as a health worker.

While he quickly came to know the families of the policeman, the schoolmaster, the hotel keeper, the owner of the village store and some of the large-scale farmers, hardly another person knocked on his door. Babies were being born unassisted by him and some of them died. Children and adults were dying too but none of them were his patients or people that he had ever seen. The roots of 'health by the people' are clearly in evidence in this account of his experience.

A two-year assignment as a WHO epidemiologist in Indonesia allowed him to make this critical observation concerning New Zealand's policies concerning pregnancies:

Present policies encourage pregnant women to deliver in hospitals with costs borne by the state and all deliveries to take place there. The argument is made that pregnancies do vary and that delivery in hospital with special staff and resources can increase safety. But does this have to be extended to all deliveries?

Response of health system: All complications of delivery cannot be predicted in advance and a home delivery results in some additional risks to mother and baby. Why do you want to have your babies at home?

This assignment was followed by a five-year period as Director of Field studies at the International Centre for Medical Research and Training in Cali, Colombia, a project that later linked the medical school in Cali with Tulane University Medical School, New Orleans, which is where I met him in 1967.

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Research in Epidemiology and Communication Sciences (RECS)

Dr Marcelino Candau, WHO's Director General (1953-1973) proposed the creation of a World Health Research Center (WHRC) to the 16th World Health Assembly (WHA) in May 1963; he argued that there was an "urgent need for the creation of a world center for communications and information on health research".[1]

After a "long study with the help of a large number of experts from all over the world", the Director General was requested to "take the action necessary to develop WHO research activities and services in epidemiology and the application of communications sciences", i.e., an in-house program. This led to the establishment of RECS in 1967 with Newell as its Director. I joined as Chief of Operational Research.

There were 5 ADGs at that time; one from each of the major powers. Although he worked in the US, Payne was of British nationality. The UK government decided not to replace him following his untimely death with another person from their country on condition that Dr Halfdan Mahler, who had been chief of WHO's Tuberculosis unit before becoming Director of Project Systems Analysis (PSA) was made Director General of WHO; this took place in 1973.

Pressure from the Soviet Union

During the 1950s and the 1960s WHO's top priority was the eradication of malaria and the control of certain other diseases. WHOs commitment to the malaria eradication campaign was largely promoted by the US government and was obtained in the middle of the 1950s at a time the Soviets were not participating in the work of WHO, having withdrawn in 1949 only to return in 1957. Criticism of the eradication campaign began in the early 1960s, much of it coming from those, including the Soviets, who felt that the development of the health services was not receiving adequate attention due to the attention being given malaria. As it became more evident that eradication was impossible, the Soviets took the lead in calling for a review of the campaign. That review took place in 1969 and essentially led to the abandonment of the eradication goal.

The failure of the eradication campaign left the door open for the Soviets to take a leading position concerning the development of the health services. Having fought the battle against WHO's vertical campaigns of the 1960s it was natural that the Soviets would seek to gain as much political advantage as possible from what they had accomplished in this field. Venediktov was given a golden opportunity when the EB in January 1971 had to select a subject for its Future Organizational Study. Three topics were proposed by the Secretariat - (a) the use of computer services in WHO programs, (b) the scope of information systems in WHO, and (c) the role of the new managerial sciences in public health administration. The delegates were divided in their opinion until the UK delegate, for reasons that he did not elaborate other than indicating that most previous studies "had been relatively sophisticated and perhaps were of interest only to the more developed countries," suggested "a study on methods of promotion of basic health services." Venediktov jumped on the suggestion, indicating that it "was the most interesting and the most challenging." Others agreed and the EB found itself involved in a topic radically different from any of those proposed by the Secretariat.

RECS' interest in health planning led the Soviet Union inviting Newell to send a team to visit that country to examine their approach to health planning, which they were rightly rather proud of. I joined him along with two other RECs members. This took place in the fall of 1971.

The historian Anne-Emmanuelle Birn, who interviewed Venediktov, says that Venediktov found Newell to be "very bright, very bright". The Russians "were afraid of him because he introduced new methodological methods, mathematical modeling, system's approach and so on. But we knew that he is trying to find out an alternative to socialism, and this we could not tolerate."[2]

I can well believe that the Russians were afraid of Newell, but I find it hard to associate Newell with mathematical modeling. Of much greater importance was Newell's opposition to the highly centralized Soviet health system dominated by medical doctors.

At this point we turn to a parallel development of some importance in this history, namely the Christian Medical Commission (CMC) and WHO joining forces.

The Christian Medical Commission (CMC) and WHO join Forces

By the summer of 1973, the CMC had brought to the attention of the world a good number of projects that offered innovative ways to improve the health of populations in developing countries. WHO, under its new leadership, intensified efforts to seek alternative approaches to meeting the basic needs of those very same populations.

A joint working group was established with Nita Barrow, Deputy Director of the CMC, and Newell designated as representatives from the CMC and WHO, respectively, to decide on how to explore "possible collaboration and the mechanisms of action."[3]

Newell attended the CMC annual meeting in July 1974 where the joint statement was discussed. Following the meeting, McGilvray wrote Mahler that it was "enthusiastically welcomed by our membership."[4] In his annual report McGilvray noted that "cooperation has already begun at a very practical level." Referring to the inclusion of the CMC supported projects in the reports being prepared by WHO, he expressed his delight "by this development, not so much because of the credibility it confers upon us, as because it significantly enhances our mutual efforts to ensure health services for those who are now deprived of them."[5] Those projects were included in the publications *Alternative approaches to meeting basic health needs in developing countries* and *Health by the People*, as discussed below.

Mahler invited the CMC to introduce PHC to WHO Directors in 1974. Nita Barrow, then Deputy Director of the CMC tells how she responded, "But this is like David and Goliath." "Yes," Mahler replied, "but I am a parson's son and I know what David did to Goliath".[6]

The Executive Board Study on Basic Health Services

RECS was essentially abolished in early 1972 when it was merged with the Division of Organization of Health Services to become the Division of Strengthening of Health Services (SHS). On being appointed Director of SHS, Newell inherited the responsibility of serving the EB group formed to conduct this study. The group submitted its report to the EB in January 1973. Its key conclusion was that the basic health services approach, one that had been developed and promoted by WHO from the early 1950s, had failed, and that a "major crisis" was "on the point of development" which must be faced at once. The crisis was reflected in the "widespread dissatisfaction of populations" for reasons that included "a feeling of helplessness on the part of the consumer, who feels (rightly or wrongly) that the health services and the personnel within them are progressing along an uncontrolled path of their own which may be satisfying to the health professional but which is not what is wanted by the consumer." The dramatic language used suggests to me that Newell played a leading role in its drafting.

- The Board's study emphasized:
- The continuing low health status of the majority of the people.
- The lack of coherence between health services and other services which could influence the main precursors of ill health.
- The concentration of resources upon centralized high technology institutions concerned with highly selected and unusual conditions.
- The inability of health services to function as a system.
- The selection and training practices of health professionals which put them apart from the population the serve.
- The failure to arrange public accountability for resource allocation at the local level.[7]

Venediktov, after noting that "the Group might have drawn more fully on resolution WHA23.61," identified three shortcomings in the report. First, it ignored the socialist countries where such problems "had been successfully tackled." Secondly, it lacked a definition of "public health." And thirdly, he objected to the fact that the report indicated that "no list of minimal requirements for health services actions ... existed, or should exist," whereas he felt that "it was possible to draw up a model of a health service system that all countries would find useful."

Alternative approaches to meeting basic health needs in developing countries

A parallel history of great importance to the refinement of the PHC concept was a study commissioned, in February 1972, by the UNICEF/WHO Joint Committee on Health Policy (JCHP) to evaluate existing basic health services. This study was crucial as it allowed SHS staff to gather information from a wide range of sources from which a selection was made of "promising programs."[8] Some of these programs were visited and a draft report prepared for a consultation that took place in mid-1974. The final report, *Alternative approaches to meeting basic health needs in developing countries*, was presented to the twentieth session of the JCHP in February 1975 for approval and then to the UNICEF EB in May 1975 for endorsement.

Ten case studies were included in this report:

- Bangladesh: approach to the development of health services.
- Health care in the People's Republic of China.
- Cuba's health care system.
- United Republic of Tanzania: an innovative approach to the development of health services.
- Venezuela. The 'simplified medicine' program.
- The health program in Ivanjica, Yugoslavia.
- Comprehensive rural health project, Jamkhed, India
- Use of village health workers and trained traditional birth attendants in the Department of Maradi, Niger.
- Indigenous systems of medicine: Ayurvedic medicine in India.
- Nigeria – use of two-way radio in the delivery of health services.

A number of far-reaching recommendations were made for WHO and UNICEF, including, *inter-alia*: WHO and UNICEF should adopt an action programme aimed at extending primary health care to populations in developing countries, particularly to those which are now inadequately provided with such care, such as rural and remote populations, slum dwellers and nomads; WHO and UNICEF should study in detail not only the innovations described in this study but those are occurring continuously in different parts of the world under different sponsorship; they should record and monitor them; learn from them; evaluate them; make their results widely available; assist them when necessary; adapt them; build upon them; and encourage similar endeavors.

Health by the People

Newell drew upon the projects reported in the JCHP to prepare *Health by the People*, a publication which he conceived as "an extension" of the alternative approaches study, one that allowed those who had participated in the preparation of those case studies to provide further details concerning "what really happened."[9]

Newell classified the China, Cuba and Tanzania examples as representing change at the national level. The examples from Iran, Niger and Venezuela represented "extensions of the existing system," while the three examples presented above were classified under the heading "local community development."

Mahler, in his introduction to *Health by the People*, wrote:

I consider that within this diversity of experience and outlook there are some common messages and qualities in addition to the pleas for help. We should listen to these voices and add to our own knowledge and then consider whether their conclusions could influence our attitudes and actions.[10]

Newell expressed "excitement" at what had been demonstrated in these projects. He was particularly enthusiastic about what had been achieved related to community development:

The wider issues presented include: productivity and sufficient resources to enable people to eat and be educated; a sense of community responsibility and involvement; a functioning community organization; self-sufficiency in all important matters and a reliance on outside resources only for emergencies; an understanding of the uniqueness of each community coupled with the individual and group pride and dignity associated with it; and, lastly, the feeling that people have of a true unity between their land, their work, and their household…

…such ideas may be …more difficult to translate into action than the control of malaria or the provision of a water supply. A conscious effort is required to accept these ideas as essential qualities or to admit that without them there must be failure. It is easy to say that food is what is

needed by a malnourished child and that community development is a mechanism that can be used to supply it. It is hard to say that community development is a goal and that communities in the process of developing find a way of seeing that children get food.[11]

Helping People Help Themselves

This article, published in April 1975, begins with a somewhat dramatic description of a poor rural family whose lives are like that of 80 per cent of the developing world. The son has died; he is small for his age and clearly a survivor of an earlier malaria infection and carries a full load of intestinal parasites gathered from the infected water and ground, and from the dust of the house.

"This boy who had what we would call a minor infection has had a mortal illness because of lack of food, lack of knowledge, lack of health care, lack of attention, but not from lack of love... Whatever way we look into this village or the particular family it is clear that something is wrong. This boy has died for stupid reasons."[12]

Newell then went on to explore what the usual solutions countries might offer: a specially trained health educator with at least a high school or possibly a college education who might advise the boiling of water, the washing of hands before eating or the safe disposal of garbage or feces; supplementary feeding program organized by the authorities; digging a well in the village or the provision of a piped water supply, which the village might or might not afford its upkeep. As the village is within 10km of a health clinic, the village is "covered". But "if a clinic was built five kilometers away and if it was free, are we confident that this boy would not have died? It seems unlikely.

Newell continued by suggesting that "people must be asked what they want or need rather than having priorities or solutions forced upon them". One might learn that people understand the terrible situation they are in, which Newell suggests that their awareness provides "a potential for change, and a local will to be harnessed". In situations that are insolvable by individuals but require the combined efforts of many or most of the inhabitants, a first step might be the establishment of a village organization "which has real authority from the village itself and which can be the mechanism of action". When health is the big issue it "rarely takes the form of basic health services as we at present know them. The local expression of need may result in a children's feeding program using products from new village, school, or family gardens; it may be the harnessing of village labor to dig a well or pipe water from the river under the authority and administration of the village committee; it may be an arrangement leading to an increased availability of vaccines or drugs at the village shop or from the traditional midwife or healer". Village health workers or primary health care workers "may be selected, appointed, administered members of the village" but for them to survive "they need support, understanding and a continuing practical education directed towards the problems they most continuously face".

Newell returned to the dying boy at the conclusion of his article

The boy from our village family did not die because he did not have food, medicine or a loving family. He was a victim of our lack of understanding of the way in which people organize their lives and of our weakness when we attempt to face other people's problems individually or try to DO things TO people. Today's question is not what we should do, but whether we have sufficient humility to use our own resources to help people help themselves and let **them** take the credit[13]

Principles of Primary Health Care Presented to the EB

Newell was responsible for preparing the DG's next report to the EB on this subject. It was presented to the EB in January 1975. Entitled *The Promotion of National Health Services*, it proclaimed that the development of "primary health care services at the community level is seen as the only way in which the health services can develop rapidly and effectively." This development was to be guided by seven principles which stressed the need: (a) to shape PHC "around the life patterns of the population"; (b) for involvement of the local population; (c) for "maximum reliance on available community resources" while remaining within cost limitations; (d) for an "integrated approach of preventive, curative and promotive services for both the community and the individual"; (e) for all interventions to be undertaken "at the most

peripheral practicable level of the health services by the worker most simply trained for this activity"; (f) for other echelons of services to be designed in support of the needs of the peripheral level; and (g) for PHC services to be "fully integrated with the services of the other sectors involved in community development."[14]

The Board adopted Resolution EB55.R16 Promotion of national health services, which *inter alia*

Requested the Director General to develop a programme of activities in the field of primary health care, including identifying the primary health care activities best suited to populations in developing countries, evolving methods of promoting such activities in the community, planning and implementing the training of primary health care workers, coordinating and participating in technical and financial measures for the establishment and improvement of primary health care at the country level, and evaluating and reporting on major efforts to develop primary health care systems;

In view of the importance and urgency of the promotion of national health services, particularly primary health care, the World Health Assembly may wish, at an appropriate stage, to undertake a review of the experiences of health services of various countries in providing primary health care as well as of the principles and progress of the program of the World Health Organization in this field.

On the Road to the Alma-Ata Conference[15]

Venediktov's reaction to resolution EB55.R16 was to note that the subject "was too large to be considered at a single session of the Board or even of the Health Assembly," and went on to propose a "conference on the same scale of the World Population Conference".

When Newell introduced the PHC report to the 1976 EB, he indicated that the Director-General "was not convinced that the time was opportune (for an international conference) ... he felt that action should be directed to the regional, sub-regional and national levels and pursued with clear knowledge and awareness of the problems and present solutions of individual countries".

Venediktov responded immediately and sharply: "He failed to understand how the desirability of holding the conference could now be questioned." He indicated that Newell had omitted mentioning that the USSR had also proposed that a conference should be held in 1977 in any of the Republics of the Soviet Union. Furthermore, his Government was willing to make "substantial financial resources available ... in particular to cover the costs of participants from developing countries." Mahler apologized to Venediktov, explaining that the resolution had referred to the "desirability" of holding the conference; now it was up to the Board to "consider the most appropriate time for such a conference."

After a very long discussion, the Board voted in favor of a conference to be held in 1978. It established an ad-hoc EB committee to decide on the "detailed objectives, the agenda, the place, the date, the participants and the nature of the preparatory steps necessary to fulfil the objectives of an international conference on primary health care." This committee began meeting at the end of March 1976.

By the time the ad hoc group met, the only viable proposal which was that of the Soviet Union. To seek another location, one more acceptable to those who opposed the Conference taking place in the Soviet Union, would only cause further delays and risk provoking a further escalation of tensions with the Soviets.

A key reason for the Soviets pushing for a Conference on their soil was their fear that China's barefoot doctor program would serve as a model for PHC, a fear that Venediktov confided to David Tejada, the WHO ADG responsible for organizing the Alma-Ata Conference. When Tejada asked Venediktov why the Soviets were willing to give two million dollars for an international conference, Venediktov replied: "Because primary health care has been already accepted by the World Health Assembly, and this is a Chinese victory. We cannot permit a Chinese victory".[16] The Chinese did not participate in the Alma-Ata Conference.

Attention turned to the preparation of a background paper for the Conference. Mahler said that he knew of only two people that could write such a paper; one was Newell, the other was Carl Taylor, the founding chair of the Department of International Health at the Johns Hopkins Bloomberg School of Public Health.

Newell was given first crack. There is no doubt, given the personal and professional changes that were taking place in his life at that time, that he experienced great difficulties in giving adequate attention to this paper. Nevertheless, he completed the first draft by June 1977 and the second by October of that same year. Both drafts were widely circulated within WHO and UNICEF. Everyone found "excellent material" in these drafts but the line of presentation he chose proved too complex for most and too "academic" for many to follow. Both were found to be too long and too argumentative, highlighting constraints and problems to the detriment of solutions. Eventually, Newell's drafts were put aside, and others were invited to contribute further to the elaboration of various themes and issues that had been identified for inclusion in the position paper to be presented to Alma-Ata.

Primary Health Care in Industrialized Nations

The last time I saw Newell was at this conference which took place in New York City on 12-14 December 1977 and where he presented a paper on the goals, role and promises of primary health care. [17]

This is a paper that is difficult to summarize. Instead, I have chosen excerpts from it that I believe illustrate his combative spirit:

The conferences that are taking place indicate a stirring and questioning about health and health care which includes providers, governments, international organizations and village committees, as well as a series of worried mothers and sick children.

There is an inability of the health services to deliver a level of national health coverage adequate to meet the stated demands and changing needs of different societies.

When forced to face such problems the health professionals have generally classed themselves as passive agents of national social policy and permissively passed the responsibility for correction to the national authorities or to political processes. This then, can be thought of as a medico-political crisis.

That professional opinion places the personal and social needs of mothers and families as minor inconveniences when compared to life threatening risks is not unexpected. That some people now question this balance publicly and are prepared to backup opinions by action and the use of resources is new and importance.

Venediktov was also present at this conference, where he presented *Organizing Primary Health Care in a Systems Approach to Primary Health Care*[18]. I find it somewhat ironic that he promoted a systems approach which he earlier had accused Newell of introducing!

Like Newell, he pointed to "the demands of the public, at large in all countries for properly guaranteed rights for each and every person and for the whole population for the protection and promotion of health and have become even more acute and thus a political necessity". He did not use his paper to argue the superiority of the socialist approach to health care, although its highly structured presentation with a number of complex drawings, does suggest that only a heavily centralized political system would be capable of organizing health care along desirable lines.

He outlined the role of systems analysis as follows

A systems analysis of the functions of primary health care, including health education and community participation, the implementation of preventive measures, the provision of elementary medical care and the referral of patients, when the need arises, to the appropriate establishments for qualified specialized medical care, should be regarded as an integrated part of the nationwide health system. The central establishments must fortify outlying branches with specialist advice, needed resources and appropriate supervision so that the primary health workers systematically improve their qualification; as the health system develop, they may be replaced by more qualified workers.[19]

Selective Primary Health Care, an Interim Strategy for Disease Control in Developing Countries[20]

This is the title of a paper written by Julia Walsh and Kenneth S Warren and published in the *New England Journal of Medicine* in 1979. The title speaks for itself – its focus is disease and **not** health. In their paper, they identified entry points through which basic health services could be developed, beginning with a package of low-cost technical interventions to tackle the main disease problems of poor countries.

Newell identified this strategy as "the counter revolution".[21] Readers will note that Newell's paper was written 9 years after that of Walsh and Warren. Furthermore, he was no longer in New Zealand at that time having taken a position at the Department of International Community Health, Liverpool School of Tropical Medicine.

To the convinced PHC advocate, argued Newell, "SPHC proposals are not PHC at all but are the antithesis of it. They are disease control programs which are ideologically similar to the malaria eradication disaster and are a regression to the very qualities of imposed systems which were described in the Organizational Study… In no way do they share the objectives of PHC … the apparently preferred vertical program management structure is very different from the horizontal decentralization which is an essential component of a PHC form." Newell illustrated the difference by comparing SPHC's solution to the malnourished child (provision of proper food) with that of PHC (a healthy village feeds its children). [22]

In a paper that he used to promote the importance of district health systems, he continued his argument against SPHC by saying that it was advocating "a series of vertical disease control programs that can destroy primary health care and set back health development by decades. Malaria eradication failed partly because there was no day-to-day and house-to-house presence in villages, and the present proposals will fail for similar reasons."[23] Readers might be interested to learn that global efforts to eliminate/eradicate malaria suffer similar problems.[24]

Concluding Comments

Newell's advocacy of helping people help themselves was deeply rooted in his own personal history. Added to this was his distrust of those elements in the medical establishment that wished to impose their solutions on populations, the most blatant example of that being expectant mothers being advised that they should deliver their babies in hospitals rather than at home.

That Newell's ideas are as relevant today as they were then is evident to anyone familiar with the health needs of those most in need of help. I can only hope that this paper revives interest in his ideas and beliefs.

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