On Building Safer Hospitals & Private-Public Partnerships

at the 2007 Global Platform (June 04-08), UN Conference Centre, Geneva

SWH This is Sarah Wade Hutman with Prevention Web and I am speaking with Tony Gibbs who is Consultant to the firm Consulting Engineers Partnership Limited[1] and he is also a consultant to PAHO[2].

Welcome to Prevention Web.

TG Hello Sarah.

SWH I'd like to ask you first where you're from and where you're currently working?

TG I am from the island of Grenada and I now live in Barbados, but I have lived in six Caribbean countries[3]. As a youngster I went to ten schools[4] in four islands[5] before going to university[6]. And after going to university I lived in two other islands[7].

SWH And you are a consultant to PAHO in what capacity?

TG I am a civil engineer who specializes in structural engineering and, in particular even more narrowly, into the effects of hurricanes and earthquakes on buildings. So my work for the Pan American Health Organization has to do generally with building standards but, in particular, with standards required to resist the natural hazards of hurricanes and earthquakes.

SWH And how did you first become involved in the effort of what we now call "Disaster Risk Reduction"?

TG As a consulting engineer, I'm working in an area where there is little or no enforcement of standards. In fact, working in an area that did not have any documented standards when I started my career, where the question of standards was one which had to be addressed by the individual company, and I was fortunate to be working in a company that took standards very seriously. So not only did we aim to follow good standards, but we were very involved in the development of those standards for the Commonwealth Caribbean. So my company, Consulting Engineers

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[1] in Trinidad & Tobago, Grenada, Barbados and Dominica

[2] Pan American Health Organisation

[3] Grenada, St Lucia, St Vincent & the Grenadines, Trinidad & Tobago, Jamaica and Barbados

[4] Catholic, Methodist, Anglican, government and private

[5] Grenada, St Lucia, St Vincent & the Grenadines and Trinidad & Tobago

[6] The Queen's University of Belfast and The University of Leeds

[7] Jamaica and Barbados – I also lived and worked in England.

Partnership Ltd, has been in the forefront of standards development for the Commonwealth Caribbean. As a normal course of doing our work for our clients, whether they were private sector or public sector clients, we would aim to design buildings which would be resistant to the natural hazards which applied to those countries in which we worked. So we didn't know about it as being a specific theme, we don't know about disaster risk reduction as such, we just know that we had to do a job for our client and part of that job was making their building safe for the infrequent occurrences of earthquakes and hurricanes.

However, as for the particular field that you are talking about of disaster risk reduction, I got into that by accident in 1979. I was working very hard, I was very tired, and Dr John Tomblin, later of UNDRO[8] but at that time working for the Seismic Research Unit of the University of the West Indies in Trinidad, telephoned me and said there was an eleven-day conference taking place at a beach hotel[9] in St Lucia, and would I like to come and present a couple of papers. What attracted me was the eleven-day stay at the beach hotel and the opportunity to rest. So I said "yes". And of course the penalty was that I had to prepare two papers. So I went to this conference[10], which had about 150 people from all over the Caribbean dealing with disaster preparedness, not prevention, but preparedness. I thought the conference was very interesting. In fact, they dealt with prevention as well as preparedness at the conference, and those eleven days was not a rest for me as I got very enthusiastic about this whole thing, and I got stuck into the subject since then.

SWH And what are you currently working on with PAHO? What is one of the main projects or initiatives?

TG Well, we are developing an Index, or what we call a Hospital Safety Index, which is a tool which would give us a sort of numerical measure of the safety of different hospital facilities, and a tool which can be used quickly. I mean, typically, we would do a 300-bed hospital with about 5 man-days of effort to get a measure of the degree of vulnerability or otherwise of the facility. So I am working on that with them at the moment. I have also recently completed an independent check, or independent assessment, of the design of a facility, a health care facility, which was being designed by another agency. I acted as an independent checking consultant.

SWH You were telling me just before that your work with PAHO began in the health sector obviously due to the need for the health sector to respond to disaster preparedness and building safety, but saying that the mandate wasn't necessarily coming from outside of the health sector but actually starting there. Can you tell me a little bit more about the beginnings.

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[8]Office of the United Nations Disaster Relief Co-ordinator

[9]the then Holiday Inn

[10]The First Caribbean Conference on Disaster Preparedness, 10-20 June 1979

TG What I was saying was that building standards, or the development of building standards in the formal sense – formal documented sense – in the Commonwealth Caribbean has been promoted by the health sector from the time of that same 1979 conference that I thought was going to be a lovely 11-day vacation. That was where the Caribbean Uniform Building Code (CUBiC) was conceived. And it was conceived by people in the health sector. There were four persons sitting around a small table. One was Dr Philip Boyd who was the head of the health desk of the Caribbean Community[11], and another was Sir Carlisle Burton[12] who was the Permanent Secretary in the Ministry of Health in Barbados, and the other two people were Franklin MacDonald (who is at this meeting here in Geneva today) and me. Then what those two health-sector gentlemen, Philip Boyd and Carlisle Burton, did is that they persuaded the ministers of health of CARICOM to initiate a project[13], which took place from 1979 until 1985, and ended up with the Caribbean Uniform Building Code. But then, coming out of that, was all of this work by the Pan American Health Organisation. And that work continues. It is a lot of work that the Pan American Health Organisation has done in the field of safe hospitals, but also safe institutional buildings, and even beyond that, safe buildings generally.

SWH Curious to know some of the challenges that you still face as well as some of the lessons learned since 1979, and some of the lessons learned in the environment of today?

TG The main problem is to persuade people that it is important to have buildings that are safe in low-frequency events. Hurricanes do not hit any particular place with any great frequency, and earthquakes are even less frequent events than hurricanes, so people go to sleep. A hurricane devastates a particular island today and for the next 3 or 4 years it is in the forefront of people's consciousness but gradually people forget about it. Unless another hurricane hits within half a generation the issue of hurricane-resistant building design and construction is put on the back burner.

The enforcement mechanisms which are currently in place throughout the Caribbean, with the exceptions of the French islands and (possibly) Cuba, are ineffective. They are not effective. And therefore, if one wishes to avoid doing a rigorously good job of hurricane-resistant or earthquake-resistant design, you can usually get away with it. So, to a great extent safe building is something which is self imposed by the design company and, very rarely, by the client. The Government agencies charged with the enforcement of standards are just not up to the task. They can't do it, so it's as simple as that – not the way it needs to be done, especially for the health sector and for very important buildings.

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[11]Caribbean Community Secretariat (CARICOM) – at that time a grouping of Commonwealth Caribbean states

[12]He was not yet knighted at that time.

[13]In July 1979 at the Council of Ministers of Health of CARICOM the ministers directed CARICOM to develop uniform building standards for the Commonwealth Caribbean.

Hospitals are very important buildings. In most of our communities there's only one referral hospital, especially in the smaller island communities, and that is a facility which is fully occupied 24 hours a day every day of the year. It is always full. The only referral hospital in a small island is always full. It is full of patients and their doctors, nurses and visitors. Not as in the case of a school which, if the earthquake occurs at midnight, the school is probably empty. At midnight the hospital is full. So that is one aspect of importance. The other aspect of importance is that if you have a major natural hazard event, hurricane or earthquake, the hospital has an additional load to carry in terms of providing services, especially in the case of an earthquake – a lot of casualties and some fatalities of course. That makes it important. The other reason why it is important is that it is a very expensive facility and the countries which are not wealthy, cannot afford to lose expensive facilities.

SWH So going back to the project that you're currently working on in developing the Hospital Safety Index, what are some of the partnerships and collaboration that is going on to make that project happen? Is there collaboration and partnership with the private sector in addition to public sector? What is the level of awareness, what is the level of awareness at the community level and how are people getting involved?

TG First of all, this Hospital Safety Index is the culmination of about 11 years of effort. It wasn't always called a Hospital Safety Index. It started off as being called Initiative to Rank Hospitals or to give certificates to hospitals, and most countries rejected that. They did not want an agency to come and tell them that any particular hospital was not 100 percent safe. Over the years, some of them, very few of them, have accepted that it would be a useful thing to know how safe the hospitals are. Along the way, there were cases where countries were offered financial grants to have their hospitals surveyed, and the countries have said "..no we don't want that. We don't want a document which tells us how safe or how unsafe our hospital is."

SWH So is the timing better today?

TG It is improving, and in developing the Index, of course we have to test it, and we have been able to get some countries to accept that we could test our Index on their hospitals.

SWH What would be the best measurement of success in this project?

TG The best measurement of success would be if the recipient countries actually implement the recommendations which would be the final part of the report. The Safety Index is a tool. What happens is that the investigators using this tool would go and examine a hospital and the end result, one of the end results, would be a measure in terms of percentage safety of that facility. Not only is there a review of the structure, but also the non-structural components, and also the emergency organisational aspects of the hospital. So it is not only the physical facilities, but also the organisational aspect of the hospital that is part of the Safety Index. At the end, there would be a list of recommendations – these are the things one needs to do to move the percentage safety from 60 percent to 90 percent, or nearer to 100 percent.

Now a measure of success is the extent to which the recommendations are implemented by the owners or custodians of the hospitals.

SWH And I had asked earlier if there was any collaboration at a community level, and by that, with regard to this project, I wonder if there are training opportunities or if you're working with local building inspectors, or people who may be working more locally with the hospitals to better….

TG What is useful to do and what we try to do is that in the team investigating any particular hospital there must be people from that particular country. Because, I think it was Pandit Nehru, the first prime minister of India, who said "If you help me without my input, you harm me". So if we are going into … I mean I am from the Caribbean but not from every island. I am living in Barbados, and if I go to St Lucia to look at a hospital, I try to get a St Lucian to work along with me, so that I would not be attempting to help St Lucia without involving St Lucia. And in fact we have now done four studies of health care facilities in St Lucia, and on every occasion, we have consciously involved on our team a person living and working in St Lucia.

SWH Is there anything else you would like to share with us about your experience as a private sector professional having consulted in the public sector?

TG Well I am a very old man now … as you can see I am approaching a hundred. I have had a long career and I am convinced that human beings make errors, and that what we should do if we want to increase significantly the good performance of our buildings, especially our critical buildings … our institutional buildings … we should have independent reviews of design for all such buildings. Every health care facility ought to be designed by one team and independently reviewed by another team or person. And that team or person doing the independent review is not just anybody. It needs to be a person with a degree of education and training and experience which makes that person or team credible to review the project. The reviewer must be at least as good as the designer, and preferably better than the designer.

SWH Excellent. Thank you for your time in speaking with me today here at the Global Platform for Disaster Risk Reduction. I was speaking with Tony Gibbs, consultant to the company Consulting Engineers Partnership Ltd from Barbados and consultant to PAHO on the Hospital Safety Index project. Thank you very much.