Underfunding Health Research: Failure of Diplomacy or Lack of Political-Will?

Reida M El Oakley1

Abstract

The recent report of the Global Consultative Expert Working Group on Research and Development: Financing and Coordination (CEWG) calls upon individual Governments to commit at least 0.2% of its Gross Domestic Products (GDP) to health research in general and 0.01% to research and development needs related to neglected diseases in developing countries. The 0.2% of GDP may allocate a total of 140 billion dollars per year to government-funded health research (calculations are provided in table 1). Moreover, the report recommends to all Member States to establish a legally binding agreement, pursuant to Article 19 of WHO's constitution, to provide effective and sustainable financing mechanism for health research. Many countries, however, are yet to accept these recommendations. Here we discuss the current difficulties facing CEWG implementations and provide a way forward that may be considered before the upcoming World Health Assembly (the main governing body of the WHO).

Keywords: Health, Research, Funding, Global, CEWG, Neglected Diseases

1 Introduction

The gross mismatch between the burden of disease and investment in health research has been recognized for decades (1). Many World Health Organization (WHO)-guided reports, commissions, plans and Global Strategies (1,2) failed to persuade most Governments to provide effective and sustainable funding for Health research and innovations. This has prompted the 63rd World Health Assembly (WHA), the main governing body of the WHO, to establish a Consultative Expert Working Group on Research and Development: Financing and Coordination (CEWG) in May 2010 (3). The aim of the CEWG was to

Article Info: *Received*: July 12, 2013. *Revised*: August 9, 2013. *Published online*: October 1, 2013

¹Permanent Mission of Libya to the United Nations Office at Geneva, 25 Rue de Richemond, Geneve 1202, Switzerland.

examine the current financing status of health research, and to provide proposals for new and innovative sources of funding.

2 Preliminary Notes

The dialogue on funding health research started back in the 80s with the Commission on Health Research and Development (1), Ad Hoc Committee on Health Research, the Global Forum on Health Research, the Commission on Intellectual Property Rights and more recently the CEWG "reviewed by Hoffman and Rottingen (2)". Despite these high quality studies and reports, we are yet to achieve the desired coordinated strategy on financing Health R&D. The CEWG final report (4), that was submitted to the 65th WHA in May 2012, concluded that all countries should commit at least 0.2% of its GDP to health research in general and 0.01% to research and development needs in developing countries with particular reference to neglected tropical diseases (which also called type III diseases). The additional funding generated by fulfilling the 0.01% commitment is close to seven billion US dollars per year, 20%-50% of which were to be pooled to an international governing mechanism, presumably under the WHO umbrella. The 0.2% of GDP may grant a total of 140 billion dollars per year to government-funded health research worldwide. Moreover, the report recommends that Member States are to establish a "legally-binding" agreement pursuant to Article 19 of WHO's constitution to provide effective and sustainable financing mechanism for health research.

3 Main Results

The report recommendations (4) were not universally accepted by the 65th WHA; where many Member States considered the CEWG report an ideal basis for a binding convention for all Member States while others referred to it as "an undesirable new Global Tax" that will affect countries with high nominal GDP - in particular - such as the USA, China and Japan (5, table 1).

Through a drafting group, assembled in parallel to the 65th WHA in May 2012, CEWG recommendations were deffered to subsequent National and Regional consultations followed by an open-ended member-state consultation (OEMSC).

Negotiations were focused on whether individual countries should commit 0.01-0.2 of GDP to health research? Should that be legally binding? And whether the fund, or part of it, should be pooled under direct control of an international mechanism? This OEMSC was held in Geneva, 26th-28th of November 2012. Unfortunately, but not surprisingly, the participants failed to agree upon the recommended "legally-binding" funding mechanism for health research (3,6). As a compromise, it was agreed to simply set a Global Observatory on Research and Development within the WHO to collect more data on the subject and repeat the same exercise (an open-ended member state consultation) in 2016! A draft proposal to that effect was reviewed in the WHO Executive Board (EB) meeting, which was held in Geneva between 21st and the 29th of January 2013. Needles to say, it sparked yet another heated debate within the EB. It is likely that the primary CEWG recommendations will be rejected, for the second time, by the forthcoming WHA that may put a moratorium on the CEWG report for years to come.

4 Theorem

Are the difficulties facing funding health research at global and /or national levels due to failure of diplomacy? or are they simply due to lack of political support to such national and Global Public Goods?

The most likely reason is a combinations of these factors; negotiations regarding funding health-related issues within the WHO often requires close cooperation / effective communication between various missions in Geneva and the Ministries of Foreign Affairs Finance and Health in Capitals. Furthermore; delegates often approach the negotiating table with a pre-determined position that may change only through those channels. Such close cooperation / communication can not always be achieved within the time frame of the process of negotiations. Some Member States, such as Switzerland and Sweden, have realized this dilemma a few years ago, and to circumvent this complexity they appointed a Global Health Ambassador who may also sit in the cabinet and has direct access to all Cabinet members. Such an intervention proved highly successful in promoting the Global Health Agenda of these Governments.

Others reasons that hampered genuine progress with implementing the CEWG report as recommended are;

- 1. The unyielding recommendations to commit such sum of money from the outset without consultations with finance and planning ministries at a time where many developed countries spend around 0.15% of GDP on health research in general and in one case, the USA, spends \$1.4 billions (just under 0.01% of its GDP) on research of the so-called neglected diseases (6). Financial implications of the CEWG recommendations to individual countries are presented in table "1" Showing World Bank Data on Nominal GDP per country with 0.01 and 2% Calculations in Millions of US\$.
- 2. Failure to harness momentum behind CEWG report through Media, the academic community and politicians...etc lead to reluctance, on behalf of some Member States, to commit taxpayer's money to this process in a climate of economical uncertainty and tight austerity measures enforced in many countries.
- 3. CEWG recommendations is perceived by many as a problem of the poor (6,7), despite the fact that it calls upon all governments to spend 0.2% of GDP on health research at National levels.
- 4. The implication of a "legally-binding agreement" is rather difficult to accept by high-income countries, and will remain a major hurdle against accepting the CEWG recommendations.

Table 1: World Bank Data on Nominal GDP per country with 0.01 and 2% Calculations in Millions of US\$.

- FO I	in Millions of US\$.				
WB ranking	Country	GDP in Million US\$ (2011)	0.2% of GDP in Million US\$	0.01% of GDP in Million US\$	
1	United States	15,094,000.00	30,188.00	1,509.40	
2	China	7,318,499.00	14,637.00	731.85	
3	Japan	5,867,154.00	11,734.31	586.72	
4	Germany	3,570,556.00	7,141.11	357.06	
5	France	2,773,032.00	5,546.06	277.30	
6	Brazil	2,476,652.00	4,953.30	247.67	
7	United Kingdom	2,431,589.00	4,863.18	243.16	
8	Italy	2,194,750.00	4,389.50	219.48	
9	Russia	1,857,770.00	3,715.54	185.78	
10	India	1,847,982.00	3,695.96	184.80	
11	Canada	1,736,051.00	3,472.10	173.61	
12	Spain	1,490,810.00	2,981.62	149.08	
13	Australia	1,371,764.00	2,743.53	137.18	
14	Mexico	1,155,316.00	2,310.63	115.53	
15	South Korea	1,116,247.00	2,232.49	111.62	
16	Indonesia	846,832.00	1,693.66	84.68	
17	Netherlands	836,257.00	1,672.51	83.63	
18	Turkey	773,091.00	1,546.18	77.31	
19	Switzerland	635,650.00	1,271.30	63.57	
20	Saudi Arabia	576,824.00	1,153.65	57.68	
21	Sweden	538,131.00	1,076.26	53.81	
22	Poland	514,496.00	1,028.99	51.45	
23	Belgium	511,533.00	1,023.07	51.15	
24	Norway	485,803.00	971.61	48.58	
25	Argentina	445,989.00	891.98	44.60	
26	Austria	418,484.00	836.97	41.85	
27	South Africa	408,237.00	816.47	40.82	
28	United Arab Emirates	360,245.00	720.49	36.02	
29	Thailand	345,649.00	691.30	34.56	
30	Denmark	332,677.00	665.35	33.27	
31	Colombia	331,655.00	663.31	33.17	

32	Iran	331,015.00	662.03	33.10
33	Venezuela	316,482.00	632.96	31.65
34	Greece	298,734.00	597.47	29.87
35	Malaysia	278,671.00	557.34	27.87
36	Finland	266,071.00	532.14	26.61
37	Chile	248,585.00	497.17	24.86
37	Hong Kong	243,666.00	487.33	24.37
38	Israel	242,929.00	485.86	24.29
39	Singapore	239,700.00	479.40	23.97
40	Portugal	237,522.00	475.04	23.75
41	Nigeria	235,923.00	471.85	23.59
42	Egypt	229,531.00	459.06	22.95
43	Philippines	224,754.00	449.51	22.48
44	Ireland	217,275.00	434.55	21.73
45	Czech Republic	215,215.00	434.33	21.73
46	Pakistan	213,213.00	422.18	21.32
47	Algeria	188,681.00	377.36	18.87
48	Kazakhstan	186,198.00	377.30	18.62
49	Romania	179,794.00	359.59	17.98
50	Peru	176,662.00	353.32	17.67
51	Kuwait	176,590.00	353.18	17.66
52	Qatar	172,982.00	345.96	17.30
53	Ukraine	165,245.00	330.49	16.52
54	New Zealand	142,477.00	284.95	14.25
55	Hungary	140,029.00	280.06	14.00
56	Vietnam	123,961.00	247.92	12.40
57	Iraq	115,388.00	230.78	11.54
58	Bangladesh	110,612.00	221.22	11.06
59	Angola	100,990.00	201.98	10.10
60	Morocco	100,221.00	200.44	10.02
00	Puerto Rico	96,261.00	192.52	9.63
61	Slovakia	95,994.00	191.99	9.60
62	Oman	71,782.00	143.56	7.18
63	Ecuador	67,003.00	134.01	6.70
64	Croatia	63,850.00	127.70	6.39
65	Azerbaijan	63,404.00	126.81	6.34
66	Libya	62,360.00	124.72	6.24
67	Cuba	60,806.00	121.61	6.08
68	Luxembourg	59,475.00	118.95	5.95
69	Sri Lanka	59,172.00	118.34	5.92
70	Syria	59,147.00	118.29	5.91
71	Dominican Republic	55,611.00	111.22	5.56
72	Belarus	55,136.00	110.27	5.51
73	Sudan + South Sudan	55,097.00	110.19	5.51

74	Bulgaria	53,514.00	107.03	5.35
75	Slovenia	49,539.00	99.08	4.95
76	Guatemala	46,900.00	93.80	4.69
77	Uruguay	46,710.00	93.42	4.67
78	Tunisia	45,864.00	91.73	4.59
79	Uzbekistan	45,359.00	90.72	4.54
80	Serbia	45,043.00	90.09	4.50
81	Lithuania	42,725.00	85.45	4.27
82	Lebanon	42,185.00	84.37	4.22
83	Costa Rica	41,007.00	82.01	4.10
84	Ghana	39,200.00	78.40	3.92
	Macau	36,428.00	72.86	3.64
85	Yemen	33,758.00	67.52	3.38
86	Kenya	33,621.00	67.24	3.36
87	Ethiopia	31,709.00	63.42	3.17
88	Panama	30,677.00	61.35	3.07
89	Jordan	28,840.00	57.68	2.88
90	Latvia	28,252.00	56.50	2.83
91	Cameroon	25,465.00	50.93	2.55
92	Cyprus	24,690.00	49.38	2.47
93	Bolivia	24,427.00	48.85	2.44
94	Turkmenistan	24,107.00	48.21	2.41
95	Côte d'Ivoire	24,075.00	48.15	2.41
96	Paraguay	23,877.00	47.75	2.39
97	Tanzania	23,705.00	47.41	2.37
98	El Salvador	23,054.00	46.11	2.31
99	Bahrain	22,945.00	45.89	2.29
100	Trinidad and Tobago	22,483.00	44.97	2.25
101	Estonia	22,185.00	44.37	2.22
102	Afghanistan	20,343.00	40.69	2.03
103	Equatorial Guinea	19,790.00	39.58	1.98
104	Zambia	19,206.00	38.41	1.92
105	Nepal	18,884.00	37.77	1.89
106	Bosnia and Herzegovina	18,088.00	36.18	1.81
107	Botswana	17,627.00	35.25	1.76
108	Honduras	17,259.00	34.52	1.73
109	Gabon	17,052.00	34.10	1.71
110	Uganda	16,810.00	33.62	1.68
111	Congo, Democratic Republic of the	15,642.00	31.28	1.56
112	Jamaica	15,070.00	30.14	1.51
113	Congo, Republic of the	14,748.00	29.50	1.47
114	Georgia	14,367.00	28.73	1.44
115	Senegal	14,291.00	28.58	1.43
116	Iceland	14,059.00	28.12	1.41

117	Albania	17 (16(1 (1/1)		
		12,960.00	25.92	1.30
118	Papua New Guinea	12,937.00	25.87	1.29
119	Cambodia	12,875.00	25.75	1.29
120	Mozambique	12,798.00	25.60	1.28
121	Brunei	12,370.00	24.74	1.24
122	Namibia	12,301.00	24.60	1.23
	Guernsey + Jersey	11,515.00	23.03	1.15
123	Mauritius	11,313.00	22.63	1.13
124	Mali	10,590.00	21.18	1.06
125	Armenia	10,248.00	20.50	1.02
126	Burkina Faso	10,187.00	20.37	1.02
127	Macedonia, Republic of	10,165.00	20.33	1.02
128	Madagascar	9,947.00	19.89	0.99
129	Zimbabwe	9,900.00	19.80	0.99
130	Chad	9,486.00	18.97	0.95
131	Malta	8,887.00	17.77	0.89
132	Mongolia	8,558.00	17.12	0.86
133	Laos	8,298.00	16.60	0.83
134	Bahamas, The	7,788.00	15.58	0.78
135	Haiti	7,346.00	14.69	0.73
136	Nicaragua	7,297.00	14.59	0.73
137	Benin	7,295.00	14.59	0.73
138	Moldova	7,000.00	14.00	0.70
139	Tajikistan	6,522.00	13.04	0.65
140	Kosovo	6,446.00	12.89	0.64
141	Rwanda	6,377.00	12.75	0.64
142	Monaco	6,109.00	12.22	0.61
143	Niger	6,017.00	12.03	0.60
144	Kyrgyzstan	5,919.00	11.84	0.59
	Bermuda	5,765.00	11.53	0.58
145	Malawi	5,700.00	11.40	0.57
146	Guinea	5,131.00	10.26	0.51
147	Liechtenstein	4,826.00	9.65	0.48
148	Montenegro	4,550.00	9.10	0.46
149	Suriname	4,351.00	8.70	0.44
150	Mauritania	4,076.00	8.15	0.41
	Isle of Man	4,076.00	8.15	0.41
	West Bank and Gaza	4,016.00	8.03	0.40
151	Swaziland	3,978.00	7.96	0.40
152	Fiji	3,813.00	7.63	0.38
153	Andorra	3,712.00	7.42	0.37
154	Barbados	3,685.00	7.37	0.37
155	Togo	3,595.00	7.19	0.36
	French Polynesia	3,448.00	6.90	0.34

	New Caledonia	2,682.00	5.36	0.27
156	Eritrea	2,609.00	5.22	0.26
157	Lesotho	2,426.00	4.85	0.24
158	Burundi	2,326.00	4.65	0.23
159	Guyana	2,259.00	4.52	0.23
160	Sierra Leone	2,243.00	4.49	0.22
	Faroe Islands	2,198.00	4.40	0.22
161	Central African Republic	2,166.00	4.33	0.22
162	Maldives	2,050.00	4.10	0.21
	Virgin Islands, U.S.	1,996.00	3.99	0.20
	Aruba	1,911.00	3.82	0.19
163	Cape Verde	1,901.00	3.80	0.19
164	San Marino	1,900.00	3.80	0.19
165	Bhutan	1,689.00	3.38	0.17
166	Belize	1,474.00	2.95	0.15
	Greenland	1,268.00	2.54	0.13
167	Saint Lucia	1,232.00	2.46	0.12
168	Liberia	1,161.00	2.32	0.12
169	Antigua and Barbuda	1,129.00	2.26	0.11
170	Gambia, The	1,109.00	2.22	0.11
171	Timor-Leste	1,054.00	2.11	0.11
172	Djibouti	1,049.00	2.10	0.10
	Cayman Islands	1,012.00	2.02	0.10
173	Seychelles	1,007.00	2.01	0.10
174	Guinea-Bissau	973.00	1.95	0.10
175	Somalia	917.00	1.83	0.09
176	Solomon Islands	838.00	1.68	0.08
177	Vanuatu	819.00	1.64	0.08
178	Grenada	816.00	1.63	0.08
179	Saint Kitts and Nevis	709.00	1.42	0.07
180	Saint Vincent and the Grenadines	688.00	1.38	0.07
181	Samoa	649.00	1.30	0.06
182	Comoros	610.00	1.22	0.06
183	Dominica	482.00	0.96	0.05
184	Tonga	436.00	0.87	0.04
185	Micronesia, Federated States of	318.00	0.64	0.03
186	São Tomé and Príncipe	248.00	0.50	0.02
187	Palau	180.00	0.36	0.02
188	Kiribati	178.00	0.36	0.02
189	Marshall Islands	174.00	0.35	0.02
190	Tuvalu	36.00	0.07	0.00
		22.30	2.2,	
	Total		138,652.99	6,932.65

5 Conclusions

- 1. Implementation or rejection of the CEWG report will have a significant impact on future funding for both basic and health research in both developed and developing countries. Interestingly, the academic community, the end-user of various research funds, is yet to deliver its verdict regarding CEWG report and its recommendations as evident by the paucity of related publication on PubMed (7,8).
- 2. The key to moving forward on the CEWG report, however, is a strong "political-will" at the level of individual governments to rally the relevant ministries behind its delegates in the upcoming WHA with a mandate of commitment to spending on Health R&D at national and International levels.
- 3. What is needed is a political leadership and wisdom to realize that committing 0.01% 0.2% of GDP on health research does not only save lives and alleviate suffering but also halts the escalating Global cost of health care that exceeds 6.8 trillion US dollars per year.

References

- [1] The Commission on Health Research for Development (1990) Health research: Essential link to equity in development. Available: http://www.cohred.org/downloads/open_archive/ComReports_0.pdf. Accessed 11 April 2012.
- [2] Hoffman SJ, Røttingen JA. Assessing implementation mechanisms for an international agreement on research and development for health products. Bull World Health Organ. 2012 Nov 1;90(11):854-63. doi: 10.2471/BLT.12.109827. Epub 2012 Oct 11.
- [3] http://www.who.int/phi/news/wha A63 R28 en.pdf
- [4] http://apps.who.int/gb/CEWG/pdf/A65_24-en.pdf
- [5] http://data.worldbank.org/data-catalog/GDP-ranking-table
- [6] Moon S, Bermudez J, Hoen E. Innovation and access to medicines for neglected populations: could a treaty address a broken pharmaceutical R&D system? PLoS Med. 2012; 9(5):e1001218
- [7] Mullard A. WHO heads back to the drug development drawing board. The Lancet 375; 9732: 2133 2134
- [8] Hersher R. Pharma backs latest attempt at a global health R&D treaty. Nat Med. 2012 Jun 6; **18**(6):838