Evaluation of the Econo-Synergistic Model of International Research Network And School Of Health System Management And Economics In South-Eastern Nigeria

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ABSTRACT:

The concerns of escalating disease burden with limited donor funds and debates of sustainability are legitimate due to the magnitude of expenditure on health services which account for as much as 5 % of GDP and between 5% and 10% of government expenditures in developing countries , though this falls below the Abuja target of 15% of government expenditure allocated to the health sector. Methodologically, the leadership of the Cashville Group of Companies and Partners empathized with the situation of incessant under-subventions to public health facilities including Nnamdi Azikiwe University Teaching Hospital ,Nnewi, Aanambra State (NAUTH), thus, initiated this hybridized model of sustainability as alternative to funding of institutions ,the NAUTH in particular. The Cashville Group of Companies and Partners had partnership with the Nnamdi Azikiwe University Teaching Hospital (NAUTH) Management Board. The Steering Committee constituted of the Cashville Group and Partners and NAUTH management. The agreed approaches were institutionalization of sustainability instruments by research, inter-professional journals, enterprises and Institutes (including Centres and schools). The results were that the public-private partnership model inspired the institutionalization of the International Research Network with worldwide membership distribution approximated by the NAUTH Research Group(domiciled in the office of and chaired by the Chairman, Medical Advisory Committee) with all heads of departments of NAUTH appointing their departmental representatives as well as the Cashville Group of Companies and Partners doing same appointments of their representatives for routinized for a participation and contribution. Membership registration of all departmental representatives and other researchers as well as trainees applications processed for admission to undertake diploma courses in the School of Health System Management and Economics worldwide improved internally generated revenue for NAUTH to address their increasing budget deficit gap over the years. Entrepreneurially, there was also realization of the following interdependent business models, which have been / are now incorporated at the Corporate Affairs Commission of the Federal Government of Nigeria. They include the following: International Institute of Leadership, Management and Economics LTD/GTE; International Institute of Science, Education and Technology LTD/GTE; International Centre of Leadership, Management and Economics LTD/GTE; Journal of Global Community Inter-professional Practices LTD; Cashville Multipurpose Cooperative Society International LTD;Cashville Consults LTD;The Brethren Centre International Ministry; Cashville University with proposed locations in Delta, Ekiti and Anambra States, Nigeria; Aminu Kano-Cashville University with proposed location in Kano State, Nigeria; Global Community University with proposed locations in Federal Capital

Territory-Abuja, Nasarawa, Bauchi and Benue States, Nigeria; Cashville Modular Refinery with proposed locations in Kano, Bauchi, Nasarawa, FCT-Abuja, Benue and Ekiti States; Cashville Farms LTD with spread over all states of Nigeria; Cashville Insurance Ltd; International Association of Professionals of Leadership, Management and Economics; International Association of Professionals of Science, Education and Technology; International Association of Consultants of Leadership, Management and Economics; International Association of Consultants of Science, Education and Technology; International Association and Technology. In conclusion, the workability of the model is in no doubt successful, customizable, adoptable and adaptable to any system, more so that the up-scalability increased from the Southeastern Nigeria to different geo-political zones of Nigeria. Therefore, its highly needful to boost income generating revenue (IGR) of health and non-health facilities. Its universally workplace friendly -Its not limited to healthcare space only. It enforces management of resources in an economic manner. Its, therefore, recommended all systems should embrace its adoption and adaptation for managerial economic sustainability of resources in the light of the Sustainable Development Goals (post-2015) pontificated at the United Nations Third International Conference on Financing for Development July 2015 at Addis Ababa attended by the Cashville Group of Companies and Partners . All interested researcher(s) and trainee(s)/ applicants and facilities managers to apply their correspondence of request addressed to Dr. Efegbere, H.A. via email and mobile. This is because the model has been patented and trademarked. Any violat(ion)/tor of this information shall be legally and appropriately related with.

INTRODUCTION

Public Health is the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community effort ¹. A recent critical review of the Health Sector Reforms (HSR) in Sub-Sahara Africa (SSA) points to the fact that besides the issue of the ever diminishing financial inflows to the health sector, poor quality of health care, mainly occasioned by a variety of inefficiencies at all levels of health care delivery is one of the most important concerns which has precipitated a number of reforms initiatives and initiation in nearly all the developing countries ². In fact, in every developing countries decisive steps are needed to correct the pervasive inefficiency of clinical health programs and facilities and especially of government services³. In the 21 st century SSA health care systems are still facing numerous threats including increasing demands for quality care, severe budgetary constraints, over concentration of resources on high –level health facilities that benefit relatively few people¹, skewed distribution of health care resources between geographical regions ⁴, health inequalities, limited responsiveness to clients rational expectations , unfair financing systems ^{5,6}, and inefficient use of health resources leading to inflation in cost of service delivery, and hence undermining health sector reform benefits^{7,9,10-15}.

From a strict sustainability perspective, it can be argued that most African countries including Nigeria are approaching or have already reached their upper limit in terms of increasing real financial resources allocated to the health sector. Given the escalating disease burden and limited ability of government, private and donor funds to meet this burden, the issue of health systems sustainability has gained prominence in policy debates about finding a solution. These concerns are legitimate due to the magnitude of expenditure on health services which account for as much as 5 % of GDP and between 5% and 10% of government expenditures in developing countries , though this fall below the Abuja target of 15% of government expenditure allocated to the health sector. ^{8,9,16-17} In a bid to proffer solution to this resource constraints bedevilling the Nigeria health care sector ,hence, the econo-synergistic duo-model initiatives, already being piloted as , in February 2013, at the Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria to mitigate budgetary deficits and irregularities to health facilities in Nigeria, with consequences of the later reflected as poor quality of health services and borne by the patients , healthcare staff, and even the Federal Government of Nigeria in falling health indices among the comities of nations. To reverse this dwindling trends of resources for public health facilities, hence, there is the need to build a National healthcare system that is self-sustainable through income generating activities (IGA) contributed to by model of best practice marketing strategies and inter-professionalism .

METHODOLOGY

The model aims to enhance inter-professionalism in the national health system through inter-professional training and mentoring on knowledge, skills and attitude on team building, research, entrepreneurship, management and economics with awarding of proficiency certificates at end of completion of the learning cycle for each course ,thus, enhancing productivity of human resources for health for the health system.¹⁸⁻³³

It also envisions to boost incomes generating activities (IGA) for Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi management where the two initiatives are domiciled for a pilot project, to be test run for a year period, before nationally, geo-politically and state-wisely scaling up to all public health facilities in the South –Eastern zone(with the five states therein), South -South zone(with the six states therein), South –West zone(with the six states therein), North Central zone(with the 6 states therein), North West zone(with the six states therein) and North East zone (with the six states therein) and the Federal Capital Territory-Abuja of Federal Republic of Nigeria. Strategically, a community entry into any of the remaining five geo-political zones , at a selected state level, based on findings of advocacy , communication and social mobilization and willingness and resource-support of that state government that state shall have this model, after a Memorandum of Understanding signed, piloted for a year before cascading to other states of that zone. Operationalization of the dual initiatives shall be leveraged on available public-private resources for resources effectiveness and efficiency, with inclusion of local development partners (Civil Society Organizations, NGO, CBO, FBO, etc), international development partners (Multilateral Agencies like the United Nations and its agencies and Bilateral Agencies like USAID, CIDA, DFID, etc) and governments of other nations. It also enhances inter-professionalism through collaborative research on health systems management and health economics, with outputs/outcomes publishable in reputable journals (local & international).

It inspired and institutionalized the conglomerate Cashville Group of Companies and Partners which consists of the following firms, among others, Journal of Global Community Inter-professional Practices LTD; International Institute of Science, Education and Technology; Cashville Multipurpose Cooperative Society International LTD; Cashville Consults LTD/GTE; The Brethren Centre International Ministry; Cashville University with proposed locations in Delta and Benue states ,Nigeria; Aminu Kano-Cashville University with proposed location in Kano State, Nigeria; Global Community University with proposed location in Abuja/ Nasarawa State, Nigeria); Cashville Modular Refinery with proposed locations in Kano, Ekiti, Bauchi, Kaduna, Sokoto and Delta States ; Cashville Farms LTD with spread all over different states of Nigeria; Agricultural Villages; Industrial Parks, Trade Centres. All with Africa-wide(over 52 countries) scope operationally. The model as facilitates inter-professional health systems Management & Economics contents /methodology as a platform for mentoring and publishing works of writers from all walks of life.

The model institutionalizes the School of Health Systems Management and Economics. This school/ centre is aimed at generating income for NAUTH management to neutralize budget deficit / irregularity challenges and setting NAUTH a trail blazer on IGA among comities of health facilities in Nigeria, and indeed Africa.

The School of Health System Management and Economics was empowered by NAUTH management board to undertake all forms of speciality /specialist trainings and research for all departments. This curbed out-of-facility workshop/seminar/conference/etc attendance that is usually with attendant depletion of work force for the period the affected healthcare workers are officially permitted to undertake the former. All cadres of professionals of human health resources (including Consultants, Senior Registrars, Registrars, Medical Officers medical doctors; Chief Nursing Officers, Principal Nursing Officer ,etc of Nurses; Chattered and non-Chattered Accountants , Chattered and non-Chattered administrators; pharmacists, medical laboratory scientists ,etc) were routinely (monthly or quarterly) trained in-facility at the school/ centre as requested by individual professional or department or hospital management . Fees payable for trainings were deductable either at source of salary payment or as may be approved by hospital management, on Memorandum of Understanding with trainees.

The school engages/hire/employ resources/experts of all fields of expertise/specialty for appropriate trainings/research. Trainings, among other methodologies and strategies, shall be an instrument of Income Generating Activities (IGA) for the NAUTH management and the smooth running of the research network and the school/centre . The funds generated shall be distributed in a pattern to accommodate the major parties of the NAUTH and Cashville Group.

The school is empowered to award certificates/degrees to trainees. The certificates are graded from ordinary certificates to Ordinary National Diploma (OND)/Higher National Diploma (HND) to degree and postgraduate certificates, with appropriate partnership with the National Board of Technical Education/Federal Ministry of Education, Federal Ministry of Health, National University Commission and other relevant Ministries, Departments and Agencies (MDAs) of the Federal Government of Nigeria and International Development Agencies of other Nations and the United Nations and its agencies including but not limited to UNITAR (United Nations Institute for Training and Research).

Membership Categories Fees For Admission /Subscription Of The International Research Network /School of Health System Management and Economics

- Individual Professional membership Admission fee =N5,000.00 OR US \$ 34 Annual subscription fee = N1,000.00 US\$ 7
- Departmental Professional membership Admission fee = N200,000.00 OR US \$ 1, 334 Annual subscription fee = N100, 000.00 OR US \$ 667
- 3. Corporate Professional membership (including sister/allied institutions of similar professions like School of Health Technology, School of Nursing, Polytechnics, Universities, not-for-profit organizations (non-governmental organization, faith-based organization, community-based organization, etc) Admission fee = N1,000,000.00 OR US \$ 6,667

Annual subscription fee = N500,000.00 OR US \$ 3,334

Membership Conditions Of The International Research Network / School For All Categories of applicants/entrants

Any health and non-health worker/professional, globally, with potential or actual inter-professional team building mind set is admissible.

Ad-hoc committee set up to assist gazette of admission procedure in tandem with the appropriate regulating agency(ies) of that level of certificate of education in Nigeria.

Benefits Of Membership Of The International Research Network/ School For All Categories of applicants/entrants

Minimally, all certified trainee(s) graduated shall have return on investment of increased knowledge, improved attitude and skills acquired, cascadable to their workplace or their sponsor .

Some of the benefits included but not limited to the following:

Fundamentals of research work/nature, components of standard thesis/ dissertation, academic publication of research articles in journals(how to make your career pathway as a research- scholar or practitioner or both, their differences, advantages of one over the other); computer-research assisted protocols/tools (including statistical packages like Statistical Package for Social Scientists, etc), seminar/ research presentation skills, research budget defense ,networking profiles expanded; plethora of research grant opportunities/ grantsmanship; international business linkages; how to start and fund your own research and enterprise outfit, Non-governmental organizations/Private Sector Organizations (for-profit and not-for-profit firms[Cooperative Society, journal, educational services like primary, secondary and tertiary systems, etc]); Application of management and economics using their residential home and (health)workplace as adaptable models; Team building and its dynamics (knowledge, attitude and practice); sustainability of projects/ programmes in health and non-health milieus; consultancy services on research , management and economics of all kinds of workplace models spaces, internationally recognized certification in partnership with the Ministry, Department and Agencies of the Federal Government of Nigeria and other United Nations agencies like UNITAR, WHO, UNDP, etc on the contents of the programme, among others.

Membership Categories Fees For Admission /Subscription Of The International Research Network / School Of Health System Management and Economics

Ad-hoc committees set up to assist gazette.

Minimally, all trainees / their sponsor institutions be consulted through appropriate avenues of business channels , such that they shall have return on investment on certified trainee graduate.

RESULTS

The public-private partnership mega-model synergized the two micro models of the International Research Network and School of Health System Management and Economics and ultimately improved the internally generated revenue of NAUTH through membership registration of the two micro-models. The school through the leadership of the Steering Committee members design , implement and mentor the researchers (worldwide). The curricular content and fees of the school and the research network are reviewed routinely in accordance with local and international best practices. The model also inspired the realization of the following inter-dependent business models, which have been / are now incorporated at the Corporate Affairs Commission of the Federal Government of Nigeria.

- International Institute of Leadership, Management and Economics LTD/GTE;
- International Institute of Science, Education and Technology LTD/GTE;
- International Centre of Leadership, Management and Economics LTD/GTE;
- The Journal of Global Community Inter-professional Practices LTD;
- Cashville Multipurpose Cooperative Society International LTD;
- Cashville Consults LTD/GTE;
- The Brethren Centre International Ministry
- Initiation of Business plans of Cashville University with proposed location in Delta State, Nigeria; Aminu Kano-Cashville University with proposed location in Kano State, Nigeria; Global Community University with proposed location in Abuja/ Nasarawa State, Nigeria);
- Cashville Modular Refinery with proposed location in Kano and Delta States
- Cashville Farms LTD with spread all over different states of Nigeria

CONCLUSION

The workability of the model is in no doubt successful, customizable and adaptable to any system. More so that the upscalability increased from the South-Eastern Nigeria to different geo-political zones of Nigeria. Therefore, the recommendability of the model is highly needful to boost income generating activities (IGA) of health and non-health facilities. Its universally workplace friendly- its not limited to healthcare space models only. It enforces management of resources in an economic manner. All systems should embrace its adoption and adaptation for managerial economic sustainability of resources in the light of the Sustainable Development Goals (post-2015) pontificated at the United Nations third International Conference on Financing for Development July 2015 at Addis Ababa attended by the Cashville Group of Companies and Partners .³² All interested researcher(s) and trainee(s)/ applicants and facilities managers to apply their correspondence of request addressed to Dr. Efegbere, H.A. via email, in addition to his mobile communication to secure permission, after appropriate Memorandum of Understanding signed with fees paid by all parties affected, for domestication of the model in their domain as well as access information they need. This is because the model has been patented and trademarked. Any violat(ion)/tor of this information shall be legally and appropriately related with.

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REFERENCES

1. Winslow, C.E.A. (1920) The Untitled field of Public Health. Modecine 2:183-191

Leighton, C. & Makinen, M.(1999) Health Sector reforms in Sub-Sahara Africa. In paper presented in a workshop. Addis Ababa, Ethiopia; 1999
 World Bank(1993). World Development Report Investing in health: Oxford University Press, Oxford.1993.

4. Makan, B., Valentine, N., & Kirigia, J.M.(1996). Looking back and Looking ahead: South Africa's 1995/1996 health budget.: Budget Watch.2:4

- 5. Murray, C.J.L. & Frenk, J.A. (1996). WHO framework for health systems performance assessment. GPE Discussion paper no 6. Geneva: WHO .
- 6. WHO. The WHO Report (2000): health systems improving performance. Geneva: WHO

7. Kirigia, J.M., Sambo, L.G., & Lambo, E.A. (2000) Re Public Hospitals In Kwazulu/Natal Province of South Africa technically efficient? *African Journal of Health Sciences* 7(3-4): 25-32.

8. World Bank (2004): The Millennium Development Goals for health : rising to the challenges. Washington DC, World Bank ;

9. Ghana Macroeconomics and Health (2005): Scaling –Up Health Investments for Better Health, Economic Growth and Accelerated Poverty Reduction. Report of the Ghana Macroeconomics and Health Initiative ;

10. Ichoku, H.E., Fonta M.W., & Onwujekwe, O. (2009). Incidence and intensity of catastrophic health financing and impoverishment due to out-ofpocket payments in southeast Nigeria. *Journal of Insurance and Risk Management*. IV (4), 47-59.

11. Ichoku, H.E. (2008). Anambra State of Nigeria: Public Expenditure Review of the Health Sector. A Report for EU-SRIP, Abuja, Nigeria.

12. Ityavyar, D.A. (1988). Health services inequalities in Nigeria. Social Science & Medicine. 27 (11), 1223-1235.

13. Jacobs, R. Smith, P.C., & Street, A. (2006). Measuring Efficiency in Health Care: Analytic Techniques and Health Policy. Cambridge: Cambridge University Press

14. Kirigia, J.M. et al. (2004). Using Data Envelopment Analysis to measurement the technical efficiency of public health centers in Kenya. *Journal of Medical Systems*. **28**(2) 155-166.

15. Leibenstein, H. (1977). X-efficiency, technical efficiency, and incomplete information use: a comment. *Economic Development and Cultural Change*. 25:311-16a".

16. Nwosu, E. J. (2000). The Challenge of Poverty in Africa. Skillmark Media Ltd., Owerri.

17. Ozcan, Y.A., Luke, R.D., & Haksever, G. (1992). Ownership and organization performance: a comparison of technical efficiency across hospital types. *Medical Care*. 30(9)781-794.

18. Tierney, M.R. (2006). Team building events for staff: Are they just play or do they pay? An investigation into the evaluation of team building interventions. [Unpublished dissertation]. University of Glasgow Business School Publications.1-89.

 19.
 Federal Government of Nigeria. National Human Resources for Health Strategic Plan 2008-2012. Federal Ministry of Health Abuja publication ,

 2007[cited 2012 May 20]: 1-84. Available
 from who.int/workforcealliance/countries/Nigeria_HRHStrategicPlan_2008_2012.pdf

20. Oandasan, I., Baker, G.R., & Barker, K. (2006). Teamwork in healthcare: Promoting effective teamwork in healthcare in Canada. Policy synthesis and recommendations. *Canadian Health Services Research Foundation*, [cited 2012 May 10]: 1-46. Available from : <u>www.chsrf.ca</u>

21. Lehman, U., Van-Damme, W., Barten, F., & Sanders, D.(2009). Task Shifting : the answer to the human resources crises in Africa? *Human Resources Health*. 7: 49-50

22. Callaghan, M., Ford, N., & Schneider, H.(2010). A Systematic review of task shifting for HIV treatment and care in Africa. *Human Resources Health.* 8: 8-9.

23. Ogbini, R.I., & Adebamowo, C.A.(2006). Questionnaire survey of working relationships between nurses and doctors in university teaching hospitals in Southern Nigeria. *BMC Nursing*. [cited 2012 September 2] ; 5: 2. Doi : 10. 1186/1472-6955-5-2. (Online) Available from : http:// www.biomedcentral.com/1472-6955/5/2

24. Adeniji, F.O.(2012). Groupthink among health workers: The Nigerian Perspective . *Research Journal*. [cited 2012 October 2] ; 2(5): 1-4. Available from http://www.sciencepub.net/research/0205/01_0880/research/0205_1-4.pdf

25. Iyang, U.S. (2007). Interprofessional conflict in Nigeria health care system. Nigerian Journal of Health Planning and Management. 3 : 47-50.

26. Ogbimi RI. Career development: the unexplored source of job satisfaction in the Nigerian health care delivery system. Journal Nig Inst Mgt. 2007; 38: 23-33.

27. Sweet, S.J., & Norman, I.J. (2005). The nurse-doctor relationship: a selective literature review. J of Adv Nursing. 22: 165-170.

28. Health Nairaland Forums (2012). Why the professional rivalry and disharmony among medical and health workers? [cited 2012 October 2]:20 .(Online) Available from http://www.nairaland.com/935694/why-professional-rivalry-disharmony-among

29. Alubo SO (2008). The political economy of doctors strike in Nigeria: a maxist interpretation. Soc Sc Med. 22: 467-477.

30. Institute of Health Service Administration of Nigeria at the 2007 National Conference/ General Meeting and National workshop. In J inst. 3(1): 45-46.

31. Abiodun, A.J. (2010). Patients satisfaction with quality attributes of primary health care services in Nigeria. J Health Mgt. 12 (1): 39-59.

32. Efegbere, H.A., Ilika, A.L., Ebenebe, U.E, Adogu P.U., Igwegbe, A.O., Afiadigwe, E.E. (2015). Effect of training on Team building on the knowledge and attitude of healthcare workers in two federal tertiary health facilities in Southern Nigeria. Dissertation submitted to National Postgraduate Medical College of Nigeria; 1-114.

33. United Nations . (2015). United Nations Third International Conference on Financing for Development. Conference proceedings July 13-16, 2015. (Online)Available at http://www.ungls.org/index.php/financing-for-development-conference/47-financing-for-development-conference (July 20,2015)