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ABSTRACT

Objectives: To collate the self-reported assessment of familiarity with some aspects of managerial competencies on the part of some surgeons and their observations on the managerial environment of their health institutions and draw appropriate policy implications.

Design: Cross-sectional study using a structured questionnaire.

Setting: The study was conducted during the 50th Annual Scientific Conference of the West African College of Surgeons, which was held in Calabar, Nigeria, from 6th to 12th February 2010.

Subjects: One hundred and ten out of 150 surgeons who were attending the conference returned their filled questionnaires.

Results: Their familiarity with business and financial concepts was lacking on crucial ones related to marketing strategies. Respondent largely found the listed objections to advertisement of medical services as very appropriate. They preferred largely to interact with themselves in professional associations rather than with others in cross-cultural groupings. Funding (66.4%) and political/ethnic influences (43.9%) were rated as impacting very negatively on their health institutions, while the deployment of information communication technology to institutional processes was adjudged to be unsatisfactory.

Conclusions: Most of the indices of core competencies in modern health leadership and management appeared deficient among our study participants and their health institutions managerial environments were equally deficient. We recommend for a well-focussed short time duration health management course for all physicians particularly specialists.

INTRODUCTION

Calls to modernise health services require health professionals to accept that all clinical decisions have resource dimensions, recognise the need to balance clinical autonomy with transparent accountability, support the systemisation of clinical work, and subscribe to the power sharing (1). Though it had been recognised for long that medical education in developing countries need to produce a physician who has been trained for uncertainties, who is resourceful and adaptable, and who is able to manage healthcare team to the best advantage within a limited financial budget; in short a health manager (2), the present appalling state of health in Africa (3-8) (inclusive of the West African sub-region) would call into

question whatever had been made of this recognition. Compounding country-specific problems such as non-streamlining of the hazy constitutional guidelines on the control and funding of healthcare and lack of coordination and harmonisation of care at the various levels of the administrative health care hierarchy (national, regional and district) in a country like Nigeria which has about half the population of the West African sub-region exists as well (9).

Arguments for the involvement of physicians in health management have been made more compelling (10-13), their exact roles better defined (14-16), and both the content and behavioural competencies that are needed for physicians for their leadership and managerial roles better articulated (11, 17-19). To sum up, it was increasingly better recognised that

the changes occurring in health care demand that physicians expand their professional knowledge and skills beyond the medical and behavioural sciences. Subjects that were absent from traditional medical education curricula, such as the economics and politics of healthcare, practice management and leadership of professional organisations, have become important competencies, particularly for physicians who serve in management roles. Because physicians occupy a central role in planning and allocating medical care services and other health care resources, they must be better prepared to work with other healthcare professionals to create a new civilisation, even if this means leaving the cloistered domain of "physician land" to serve as interface professionals between the delivery of medical services and the management of health care (19). In fact, the current trend in the United States of America where medical and other professionals increasingly advocate applying principles from the managerial sciences to the delivery of health care is to jointly pursue medical (MD) and master of business administration (MBA) degrees (20).

Since adequate knowledge actually exists on how to combat the various poor health indices in the West African sub-region, the problem is really how to mobilise adequate human, material and facility resources in the right mix, to the right people and places, at the right time that they are needed. But this feat can only be realised if the top leaders and managers of the healthcare delivery who are comprised largely of specialist doctors including surgeons in the sub-region possess the requisite competencies to do this and the correct environment exist in their health institutions. We aim in this study to collate the self reported assessment of familiarity with some aspects of managerial competencies on the part of some surgeons and also their views on the managerial environment of their health institutions and draw appropriate policy implications.

MATERIAL AND METHODS

The study was conducted during the 50th Annual Scientific Conference of the West African College of Surgeons, which was held in Calabar, Nigeria, from 6th to 12th, February 2010. One hundred and fifty copies of the study questionnaire were distributed to surgeons that consented to participate in the study. The self-administered and anonymous questionnaire was distributed after full confidentiality of the data collected was ensured to all the study participants and the assurance that the results of this study would not be presented either at an individual study participant or hospital level. Pre-testing was done prior to the definitive study, when the questionnaire

was administered to a sample of surgeons at a University Teaching Hospital in Nigeria in order to assess comprehension and feasibility. Ethical approval for the study was obtained from the University of Calabar Teaching Hospital, Calabar, Nigeria.

This study is part of a wider study on physicians' health leadership and management roles. This aspect of the larger study being reported in this communication comprised 13 questions in the study questionnaire. The first six probed the study participants' bio data and general professional background; two on their views on their familiarity with health economics phrases and advertisement; one on their social interactions; four on their views on the existing status of their health establishments' administrative working, funding sources, information communication technology usage by clients. The format of the responses was generally on a scale of 0-3, with 0 representing none/never/lowest/least and 3 representing most highest/greatest/always/strongest depending on the specific context of the question posed with the respondents' choosing appropriate responses among the already supplied options. All analyses and statistical tests were conducted using SPSS version 15.0 (SPSS Inc, Chicago, Ill, USA). Simple descriptive statistics was used to generate frequencies, percentages, and proportions. Where relevant Chi-square test was used to determine any significant difference and a p-value < 0.05 was regarded as significant.

RESULTS

Response rate: One hundred and ten out of the 150 questionnaires distributed were filled and returned giving a response rate of 73.3%.

Background data: The age range of the respondents was from 35 to 63 years with a mean of 43.15 and SD of 5.957. Ninety-three of the 110 respondents were males and 17 were females (M: F = 5.5:1). Of the 108 who stated their nationalities, 84 were Nigerians, 19 Ghanaians, 2 Senegalese, 2 Guineans, and 1 Togolese. Of the 53 respondents who indicated their years of their surgical practice experience, 25 (47.2%) were less than 5 years, 8 (15.1%) 5-9 years, 11 (20.8%) 10-15 years, and (17.0%) over 15 years. The specialty distribution includes: 31 obstetricians and gynaecologists, 24 general surgeons, 16 ophthalmologists, 10 orthopaedics, 7 anaesthetists, 6 plastic and reconstructive, 4 paediatric surgeons, 3 urologists, 3 cardiothoracic, 3 ENT / ORL, 2 radiologists, and one responder did not indicate his/her speciality. A hundred of them practiced in government-owned facilities, 4 in privately owned ones, 3 in missionary hospitals, and the 3 remaining ones did not specify the ownership profile.

Leadership and Managerial Competences: Table 1 gives a detailed breakdown of the rating of familiarity with some business / financial concepts / phrases by the respondents. Apart from the "4Ps of marketing" (product, price, promotion and place) which close to half (43.4%) of the respondents had no familiarity at all with and to some extent "market imperfection" (24.5%), only a negligible were not familiar at all with the other concepts and phrases namely "branding" (11.2%), "determinants and

costs of health (7.7%), and "supply, demand and utilisation" (5.8%).

Respondent in large majorities found the listed objections to advertisement of medical services as either appropriate or very appropriate in the following order: against existing medical regulation (71.3%), breeds unhealthy rivalry (66.0%), promotes quackery (63.3%), unnecessary as good physicians and hospitals will be known anyway (58.3%), and morally offensive (53.2%)(Table 2)

Table 1

Rating of familiarity with some business/financial concepts/phrases by West African surgeons.

Concepts/ phrases	Number of respondent	None (%)	Somewhat familiar (%)	Familiar (%)	Very familiar (%)	Total %
Branding	107	12(11.2)	28(26.2)	35(32.7)	32(29.9)	107(100.0)
4 "P"s of marketing	106	46(43.4)	28(26.4)	18(17.0)	14(13.2)	106(100.0)
Determinants & costs of health	104	8(7.7)	31(29.8)	41(39.4)	24(23.1)	104(100.0)
Supply, demand & Utilisation	104	6(5.8)	17(16.3)	46(44.2)	35(33.7)	104(100.0)
Market imperfections	106	26(24.5)	39(36.8)	28(26.4)	13(12.3)	106(100)

Table 2

Rating of appropriateness of some objections to advertisement of services by physicians and healthcare facilities by West African surgeons.

Objection	Number of respondent	None (%)	Somewhat appropriate (%)	Appropriate (%)	Very appropriate (%)	Total (%)
Breeds unhealthy rivalry	109	10(9.2)	27(24.8)	29(26.6)	43(39.4)	109(100.0)
Promotes quackery	109	15(13.6)	25(22.9)	19(17.4)	50(45.9)	109(100.0)
Morally offensive	109	17(15.6)	34(31.2)	29(26.6)	29(26.6)	109(100.0)
Unnecessary Against medical regulation	108	24(22.2)	21(19.4)	20(18.5)	43(39.8)	108(100)
	108	7(6.5)	24(22.2)	18(16.7)	59(54.6)	108(100)

The indicated percentages of respondents would not identify at all in their social interactions with the listed organisations: 61.7% with a political association or party, 33.3% with his/her village/town union, 29.9% with his/her tribe or regional association, 9.3% with a religious body and 7.4% with a professional association. (Table 3)

Managerial environment of health institutions

The order in which the various challenges that were militating against the smooth running of the respondents' health institutions were rated in the "highest" category is as follows: funding (66.4%), political/ethnic influences (43.9%), inter-professional rivalry (31.1%), owners' overbearing control (29.4%), and staff agitations (unionism) (8.5%). (Table 4)

Table 3
Identification with some social organisations by West African Surgeons.

Justification	Number of respondents	None (%)	Mildly identify (%)	Identify (%)	Strongly identify (%)	Total %
Village/town union	108	36(33.3)	31(28.7)	27(25.0)	14(13.0)	108(100.0)
Tribe/Regional association	107	32(29.9)	43(40.2)	23(21.5)	9(8.4)	107(100.0)
Religious body	107	10(9.3)	19(17.8)	35(32.7)	43(40.2)	110(100.0)
Political party	107	66(61.7)	23(21.5)	9(8.4)	9(8.4)	109(100.0)
Professional association	108	8 (7.4)	41(38.0)	27(25.0)	32(29.6)	108(100.0)

Table 4
Rating of the negative impact of some challenges to the smooth running of health institutions by West African surgeons.

Challenge	Number of respondent	None (%)	High (%)	Higher (%)	Highest (%)	Total %
Funding	107	4(3.7)	8(7.5)	24(22.4)	71(66.4)	107(100.0)
Owners' overbearing control	102	16(15.7)	31(30.4)	25(24.5)	30(29.4)	102(100.0)
Staff agitations (Unionism)	106	11(10.4)	51(48.1)	35(33.0)	9(8.5)	106(100.0)
Inter-professional rivalry	106	8(7.5)	27(25.5)	38(35.8)	33(31.1)	106(100.0)
Political/Ethnic influences	107	6(5.6)	21(19.6)	33(30.8)	47(43.9)	107(100)

The order of the rating of the relative importance of the sources of funding for running the respondents' health institutions as "very important" are as follows: owners' (largely government) allocation (63.9%), fees for service paid by customers (29.6%), insurance payments (24.5%), and donations (7.6%).

Table 5 details the result of the rating of the application of Information Communication Technology (ICT) in the respondents'

health institutions. The various aspects of ICT application were found "very satisfactory" in the following order: the institutions' listing on the world wide web (28.4%), uninterrupted power supply (8.3%), steadiness of internet access (7.3%), online operation of institutions' processes (6.6%), and adequacy of computers and other peripherals.

Table 6 gives the detailed ratings of the ease with which customers could effect some transactions

without being physically present with the health institutions of the respondents. The order with which the stated transactions could be effected "very easily" are as follows:

Know of the existence of institution (32.1 %), find out about services or specialists available (14.7%), make payments (14.2%), make/change an appointment (8.6%), and gives a feedback or make a complaint (8.3%).

Table 5

Rating of the application of Information Communication Technology (ICT) in their health institutions by West African surgeons.

ICT aspect	Number of respondents	None (%)	Somewhat satisfactory (%)	Satisfactory (%)	Very satisfactory (%)	Total (%)
Institution listing on the web	109	44(40.4)	14(12.8)	20(18.3)	31(28.4)	109(100.0)
Online operations of processes	106	55(51.9)	29(27.4)	15(14.2)	7(6.6)	106(100.0)
Uninterruptible power supply	108	52(48.1)	26(24.1)	21(19.4)	9(8.3)	108(100.0)
Adequacy of computers & peripherals	107	41(38.3)	42(39.3)	18(16.8)	6(5.6)	107(100.0)
Steadiness internet access	109	44(40.4)	41(37.6)	16(14.7)	8(7.3)	109(100)

Table 6

Rating of the ease with which customers could effect some transactions without being physically present with their health institutions by West African surgeons.

Transaction	Number of respondents	None (%)	Somewhat easy (%)	Easy (%)	Very easy (%)	Total %
Know of existence of institution	106	14(13.2)	33(31.1)	25(23.6)	34(32.1)	106(100.0)
Find out services specialists available	109	20(18.3)	41(37.6)	32(29.4)	16(14.7)	109(100.0)
Make/change appointments	105	39(37.1)	38(36.2)	19(18.1)	9(8.6)	105(100.0)
Make feedback or complaints	108	33(30.6)	42(38.9)	24(22.2)	9(8.3)	108(100.0)
Make payments	106	36(34.0)	27(25.5)	28(26.4)	15(14.2)	106(100)

DISCUSSIONS

The demographic data on the respondents, male preponderance, surgical speciality distribution, and the ownership profile of the health institutions in which the respondents practiced were close mirror to those for Nigerian surgeons who constituted the bulk of the respondents (76.4%). The top hierarchy of medical management in the West African sub-region is largely comprised of many mid-career physicians, already experienced in clinical practice, who often assume high level medical management responsibilities with little or no training for these new found responsibilities. The range of competencies needed have been itemised as follows: medical management (planning, design, implementation, and evaluation) financial management to assure efficient delivery of cost effective health services; organisational management; and legal and ethical considerations (11). It is with this background that these self-reported competencies were assessed on the part of our study subjects from both the human and the health institution angles.

Whatever feeling of euphoria that one has for the respondents being largely familiar with the marketing and financial concepts and phrases such as "branding", "determinants and costs of health and "supply, demand and utilisation" quickly evaporated with the finding that they were not at all familiar with the other ones such as the "4 Ps of marketing" and "market imperfections" in significant numbers. The latter two are highly crucial to marketing strategies that facilitate build-up and retention of loyal patients from whom an assured revenue base could be expected since funding was cited by the respondents as being the most challenging of negatively impacting factors to their health institutions. Marketing strategies are also crucial as the subtle and legitimate channel to attract customers without contravening existing legislations against overt advertisement of medical services and products in West Africa. The necessity for such subtle advertisement is also underscored by the identification with a ban on these by the respondents on moral and professional grounds. Most organisations collect no information at all about their consumers. Whatever data they do collect tends to be demographic. Rarely does one see awareness, perception, preference, and usage information. Organisations need to understand how individual patients see, think, feel, and act (21). From the respondents rating of the relative importance of various sources of funding being used to run their health institutions, the combined sources of funding through fees for service and health insurance which represent payments from patients was adjudged by 54.1 % of the respondents as "very important", well behind that from the owners/government (63.9%). Hence greater attention needs to be paid

to truly treat patients (customers) as kings, as the ever-dwindling health resource allocation from the various governments of the West African sub-region may cease all together in no distant future.

Good organisational management requires leaders to possess good inter-personal relation skills and being highly sociable. To the average overburdened surgeon and indeed any other physician, this requirement could be very taxing. Matters are not helped either by the fact that the average physician had been the "smart kid" right from early childhood and treated as such with the unintended consequence of the feeling of independence from others. Our findings appear to support this poor social relationship as the respondents only largely identified with themselves (professional associations) or with their religious body- where less individual social interactions are called upon.

The advent of information communication technology to the health scene in West Africa has changed a lot of things for the good. Computing ICT skills had been noted to be superior among physicians as compared to non physicians among the health staff surveyed in a Nigerian tertiary hospital (22) and this should be an asset to their management skills. But the fact that apart from the respondents' health institution listing on the world wide web-which any individual or organisation can arrange in the sub-region for a few tens of US Dollar, all other aspects of ICT were largely in an unsatisfactory state. Much more disturbing however is the woeful rating for the ease with which customers could effect some transactions without being physically present with the health institutions of the respondents. Since overt advertisements in the traditional print and broadcast media are banned in the sub-region, the internet should be the saviour for customers to know of the existence of institution, find out about services or specialists available, make payments, make /change an appointment, and give a feedback or make a complaint.

In conclusion most of the indices of core competencies in modern health leadership and management appeared deficient among our study participants and their health institutions managerial environment were equally deficient. We recommend for a well focused short time duration health management course for all specialist physicians (including surgeons). In addition the medical school curricula should be combined with a suitable package of managerial science as being adopted in the United States of America (20).

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