Original Article

Perspectives of Nigerian doctors on the practice of rebates, fee-splitting, and kickbacks

Bukunmi Michael Idowu, Mayowa Abimbola Soneye[1], Tolulope Adebayo Okedere[2], Stephen Olaoluwa Onigbinde[2], Aderemi Ishola[3]

Department of Radiology, Union Diagnostics and Clinical Services Plc, Yaba, [1]Department of Radiology, Afriglobal Medicare, Ikeja, Lagos State, [2]Department of Radiology, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State, [3]Federal Medical Centre, Asaba, Delta State, Nigeria

Abstract

Background: Fee splitting is a global pandemic in the health-care industry, whereby financial and nonfinancial inducements are offered to health-care practitioners in exchange for guaranteed patient referral, continuous patronage, or preferential usage/prescription of the payer's products.

Methods: We surveyed 280 medical doctors from August 2017 to October 2017 to assess their knowledge, perception, and attitude toward fee-splitting using self-administered questionnaires.

Results: The majority (89%) of our respondents indicated that they were aware of the existence of fee-splitting in the Nigerian health-care industry. About 34% accept rebates, while 70% admitted to knowing other colleagues who accept rebates. The amount received as rebates was ≤20% of the cost of an investigation. More than half of the respondents (52%) opined that the practice is a nationwide phenomenon. An astonishing 78% of respondents either did not know (61%) or asserted wrongly (17%) that the practice is not a violation Nigerian Medical Council rules. Only 46% affirmed that the practice is unethical. Compared to private hospitals, fee-splitting is less in public hospitals. Sixty-one percent noted that other health-care workers (besides physicians) are also involved. The primary allures of fee-splitting were a quest for an extra source of income (64%), poor/irregular salaries (60%), ignorance of its illegality (56%), and greed (47%). The identified deleterious consequences were unnecessary investigations/procedures, inflated health-care cost, quackery, delayed treatment/prolonged hospital stay, beclouded clinical judgment, and negative public perception.

Conclusion: Stricter regulatory enforcement and continuous ethics education are needed to disrupt the widespread fee-splitting culture.

Keywords: Fee splitting, kickback, medical ethics, rebates, referral fees

Address for correspondence: Dr. Bukunmi Michael Idowu, Department of Radiology, Union Diagnostics and Clinical Services Plc, No 37 Tejuosho Street, Yaba, Lagos State, Nigeria.
E-mail: ibmcontacts@gmail.com

Submitted: 14-Jun-2019 **Revised:** 10-Oct-2019 **Accepted:** 07-Apr-2020 **Published:** 24-Sep-2020

INTRODUCTION

Rebates refer to "money, credits, or anything of value, which is received, directly or indirectly, in any guise whatever, by the referring physician from any person, partnership, or corporation, profit, nonprofit, or cooperative, to whom a patient or any person is referred or sent for medical or

Access this article online	
Quick Response Code:	Website: www.wajradiology.org
	DOI: 10.4103/wajr.wajr_19_19

How to cite this article: Idowu BM, Soneye MA, Okedere TA, Onigbinde SO, Ishola A. Perspectives of Nigerian doctors on the practice of rebates, fee-splitting, and kickbacks. West Afr J Radiol 2020;27:128-35.

laboratory services, or for the medical or professional device, equipment, materials, or supplies."[1] It is a form of corruption in medicine and health care[2,3] which encompasses a spectrum of practices[4] that have been given various nomenclature including fee-splitting/fee-sharing, kickbacks, referral fees, profit/income sharing, cut, bounty, commission, gratuity, gratification, dichotomy, and ambulance-chasing. The main motive behind the practice is to incentivize the referrer to continually direct patients to the payer,[5] i.e., encouragement of guaranteed trade by per capita payment on each referral.[6]

It is said to have begun in the 1890s when medical doctors started receiving commissions from pharmacies and suppliers of medical items.[5] Over the years, this unwholesome practice has become endemic and evolved into a culture (often covert/subterranean or craftily disguised), becoming a nagging ethical concern in many countries including the USA,[7-16] Great Britain,[17] Iran,[18] India,[19-28] Canada,[5] Singapore,[29] Malaysia,[30] the Philippines,[31] Italy,[32,33] South Korea,[34] Argentina,[35] and practically everywhere else.[36] Indeed, the World Medical Association[37] and other professions[6,38,39] have also attempted to curb this practice by issuing policy statements, practice guidelines, and codes of conduct.

In Nigeria, it seems plausible that the practice had been in existence in various forms for a while even though it is forbidden expressly in the Medical and Dental Council's (MDCN) code of medical ethics.[40] Anecdotal accounts of its existence in the Nigerian health-care system is commonplace. The market entry of exclusively entrepreneurial (radio) diagnostic centers whose business survival depends on the volume of referrals from clinicians has further engendered the rebate culture.[41] Besides, the unregulated and relentless targeting of Nigerian doctors as facilitators of medical tourism is also contributory.[42,43]

While there is no shortage of editorials, review articles, guidelines, opinion pieces, commentaries, and newspaper reports addressing this scourge, there is a dearth of quantitative studies that examine the various aspects of the practice.[18,19,44] This study was done to determine the level of awareness, prevalence, contributory factors, consequences, and attitudes to fee-splitting among Nigerian medical doctors.

METHODS

A self-administered questionnaire was used in this descriptive survey. A cover letter/introduction to explain the purpose of the study was included. All cadres (House Officers and above) of medical doctors who practice or had practised in Nigeria were eligible to participate. Radiologists and Radiology residents were excluded. The anonymity of the respondents was guaranteed.

The questionnaire were sent to only those who consented to participate in the survey.

A small pilot survey was conducted before the commencement of the study. The responses from the pilot survey were used to fine-tune and restructure the questionnaire by expunging ambiguous questions and rephrasing others. The result of the pilot study was not included in the final results. Incompletely filled questionnaires were excluded from the final data. The questionnaire contained both open- and close-ended questions.

A hybrid approach was employed for questionnaire distribution since our target respondents resided far apart across the country. Links to the questionnaires which had been entered into Google Form (Googleplex, Mountain View, California, USA), a web-based survey tool, were sent to prospective respondents through E-mail, Whatsapp messenger (Whatsapp Inc., Menlo Park, California, USA), or Telegram messenger (Telegram Messenger LLP, Covent Garden, London, United Kingdom). For others who could not be reached through the means above, printed versions of the questionnaires were sent by courier to an anchorperson in their region who subsequently returned the completed questionnaires by courier. For the electronic distribution, reminders were sent to those who had not responded at 2-week intervals. The surveys were completed from August 2017 to October 2017. The results were entered into an Excel spreadsheet (Microsoft, Redmond, Washington, USA) and analyzed using STATA for Windows (StataCorp LLC, Texas, USA). Descriptive statistics and Chi-square tests were utilized as appropriate. $P < 0.05$ was considered statistically significant.

RESULTS

A total of 430 questionnaires were distributed, with 280 of these duly completed and returned, giving a response rate of 65%. The characteristics of respondents are shown in Table 1. Most respondents were males aged 31–40 years who work in academic public institutions. Table 2 shows that most respondents were aware of rebate practice. The number of respondents who were aware of rebate practice in the private sector was significantly higher than those in the public sector.

The awareness of respondents about the acceptance of rebates by other health workers is summarized in Table 3.

Table 1: Characteristics of respondents

	Frequency (%)
Gender	
Male	206 (74)
Female	74 (26)
Age (years)	
<30	52 (19)
31-40	207 (74)
41-50	18 (6)
>50	3 (1)
Status	
Consultant/Attending	32 (11.4)
Senior Registrar	89 (31.8)
Registrar	62 (22)
Chief Medical Officer	2 (0.7)
Principal Medical Officer	2 (0.7)
Senior Medical Officer	10 (3.6)
Medical Officer	67 (23.9)
Intern	16 (5.7)
Hospital	
Private (nonacademic) hospitals	56 (20)
Academic public institutions	165 (58.9)
Nonacademic public hospitals	59 (21)

Table 2: Awareness of the rebate practice

	Aware, *n* (%)	Not aware, *n* (%)	*P*
Awareness about the practice of rebates	248 (89)	32 (11)	-
Awareness about colleagues who accepts rebates			
Private sector respondents	51 (91)	4 (9)	<0.0001
Public sector respondents	146 (65.2)	78 (34.8)	
Overall	197 (70)	83 (30)	-

Table 3: Respondents' opinions about the acceptance of rebates by Nigerian Health workers

	n	Percentage of total respondents
Only doctors receive rebates	3	1
Don't know if other health workers receive rebates	87	38
Other health workers receive rebates	141	61

Most of the respondents stated that other health workers indulge in rebate practice. The responses to questions on some factors influencing rebate practice are shown in Table 4.

Most respondents said that fee-splitting is a nationwide practice, but more common in Lagos. The majority also opined that rebate practice occurs in other countries [Table 5]. Table 6 shows the participants' responses to the various aspects of rebate practice, while Table 7 contains the responses to some ethical questions arising from the practice of rebates.

As an open-ended question, respondents were asked to state possible benefit(s), if any, that may accrue to patients from rebate practice. Most of the respondents stated that there is no benefit to the patient. A few of the respondents listed the following as possible

Table 4: Factors responsible for rebate practice

	Frequency (%)
How rebate practice started in Nigeria?	
Doctors blackmailing of business owners	2 (0.9)
Health business competition	110 (39.2)
Do not know	168 (38.4)
Reasons for referring doctors' acceptance of rebates	
Poor/irregular salary	168 (60)
Greed	131 (46.8)
Unaware of its illegality	156 (55.7)
Extra source of income	178 (63.6)
Think it's their right	47 (16.8)
Do you think rebates payment is inimical to the survival of private businesses making the payments?	
Not an obstacle to business profitability	119 (42.5)
Obstacle to business profitability	79 (28.2)
Do not know	82 (29.3)

Table 5: Responses on the geographical spread of rebate practice

	Frequency (%)
Is rebate practice nationwide or just urban?	
Nationwide	145 (51.7)
Urban	55 (19.6)
Difficult to tell	80 (38.4)
Where rebate is most rampant in Nigeria	
Lagos	129 (46.1)
Equally prevalent everywhere	124 (44.2)
Difficult to tell	27 (9.7)
Existence of rebate in other countries	
It exists in other countries	159 (56.9)
It doesn't exist	5 (1.7)
Do not know	116 (41.4)

Table 6: Responses on the practice of rebates

	n (%)	*P*
Acceptance of rebates		
Do not accept	184 (66)	<0.0001
Accept	96 (34)	
Accept in private practice	43 (76.8)	
Accept in public practice	53 (23.7)	<0.0001
Referral not indicated, but solely for rebates		
Yes	5 (2)	
No	275 (98)	
Percentage of referral accepted as rebate		
<5	7 (2.5)	
5-10 ^	29 (10.4)	
11-15	9 (3.2)	
16-20	7 (2.5)	
>20	2 (0.7)	
It varies	47 (16.8)	
Patient referral when rebates stop		
Would stop referring patients	11 (3.9)	
Would continue referring patients	100 (35.8)	
Frequency of referral to other countries for rebate, even when treatable in Nigeria		
Very often	19 (6.9)	
Often	30 (10.8)	
Sometimes	53 (19)	
Rarely	27 (9.5)	
Never	4 (1.3)	
Do not know	147 (52.6)	

Table 7: Responses to ethical questions

	Frequency (%)
Rebates practice violates MDCN rule	
Don't know	171 (61)
Yes	61 (22)
No	48 (17)
Is fee splitting morally justifiable?	
Indifferent	108 (39)
Yes	43 (15)
No	129 (46)
Fee splitting should be outlawed	
Indifferent	106 (37.9)
Yes	111 (39.6)
No	63 (22.5)
Rebate consideration can comprise clinical judgement	
Don't know	23 (8.2)
Yes	173 (61.8)
No	84 (30)
Rebates practice benefits patients?	
Yes	36 (12.9)
No	244 (87.1)
Do you think Nigeria public will approve of rebate practice if it becomes public knowledge?	
Yes	60 (21.6)
No	220 (78.4)

MDCN – Medical and dental council's

benefits: "Facilitation of prompt/early referral (a doctor may decide to refer a patient because of the anticipated rebates;/he might have kept the patient despite not having the necessary resources or expertise for their care)." "Some patients get faster and better services when referred to good centers for their investigation(s)." "Stopping rebates may not change the cost of investigations as the private centers will still charge the same amount for investigations regardless of rebates payment."

Some respondents listed the following as adverse consequences of rebates on patient management: Patients do unnecessary tests which impoverish them and delay the start of definitive treatment. Fee-splitting increases the cost of healthcare and exposes patients to needless risks (e.g., irradiation, anaesthesia, etc.). There is the likelihood of referral to unqualified personnel/substandard centers (since a perverse incentive exists) with attendant misdiagnosis and/or mismanagement. Patients are sometimes referred abroad for procedures that are available locally, a practice that sabotages the public health-care system. There could be an increased length of absence from work by caregivers because the referrals may be to other states or countries. Some doctors' clinical judgment may be compromised by the need for rebates, being more concerned with pecuniary gains than proper management. Loss of confidence and trust in medical professionals and a high rate of patients lost to follow-up having been overburdened financially.

DISCUSSION

Fee-splitting in the health-care industry has festered. Our results show that 34% of our respondents admitted to accepting rebates, which is similar to the 32.2% reported by Parsa *et al*.[18] in Iran and lower than the almost 100% prevalence in India.[21,25] Conversely, the acceptance rate of rebates was much lower in the study of Anyanwu *et al*.[44] where only 8.3% of respondents admitted to accepting rebates – this is possibly due to their small sample size of 12 respondents. The "potential prevalence" in this study more than doubled as 70% of our study participants answered in the affirmative when asked if they knew colleagues who accept rebates. This latter value (70%) may reflect the true extent of the practice, which is often covert – this speculation appears even more conceivable when the fact that 89% of our respondents indicated that they are aware of its existence is considered. In the Iranian study mentioned earlier, respondents noted that the prevalence of fee-splitting among their colleagues was 21%–40%.[18] In a survey of 130 allopathic doctors in private practice in India,[19] fee-splitting ranked marginally second to over-prescription of drugs among undesirable practices in that country's medical private sector.

The amount received as rebates was ≤20% of the cost of investigation/service rendered. Only two (0.7%) respondents indicated that they earned >20% as referral fees. However, the earnings may be much higher (often paid in US Dollars) for Nigerian doctors who act as medical tourism facilitators, principally to India.[43] The referral fee figures from India vary widely from as low as 10% to as high as 60%[20,21,23,24,26] while a rather astronomical figure of 60%–70% was reported in some endemic areas in the USA.[12]

More than half of the respondents (51.7%) thought that the practice is a nationwide phenomenon, with only 19.6% saying that it occurs only in the urban centers. Asked where they thought rebates practice is most rampant in Nigeria, 46.1% of the respondents said that it is difficult to tell while a close 44.2% mentioned Lagos, the commercial capital of the country. Similarly, Parsa *et al*.[18] reported that general practitioners (GPs) working in large cities had practised fee-splitting 10% more than GPs in small cities though the difference was statistically insignificant.

Our respondents displayed an alarmingly high level of ignorance of the MDCN code of ethics regarding fee-splitting. An astonishing 78% of respondents either did not know (61%) or asserted wrongly (17%) that the practice is not a violation of MDCN rules. This is

somewhat surprising because new medical graduates often get a copy of the rule book during induction ceremonies into the profession in Nigeria. Moreover, the electronic copy of the document is freely downloadable online. The responses suggest that some physicians do not bother to familiarise themselves with the rules governing their professional conduct and practices.

When asked if the practice is morally/ethically wrong or not, 46% said it is wrong, 39% were indifferent, while 15% thought that it is justifiable. Juxtaposing these findings with results from elsewhere, 78.5% of Iranian GPs said the practice is wrong[18] while only 17% of Indian doctors considered it unethical in an Indian Medical Association survey.[20]

There is another worrisome dimension to the fee-splitting practice as it appears to have become a free-for-all in the health-care industry. As noted in India that doctors there are "*bribing colleagues, ambulance drivers, and even yoga teachers to get patients*,"[26] a similar "jamboree" seems to be unfolding here in Nigeria. Pharmacists, Nurses, Physiotherapists, Community Health Extension Workers, traditional bone setters, and traditional birth attendants are also said to be involved in the rebates carnival by 61% of our respondents. This lends credence to the theory that corruption thrives where there is "*opportunity to engage in corrupt practices by dint of being in a position of power in a system with inadequate oversight; financial, peer, or personal pressures felt by officials; and a culture that rationalises and accepts corruption*."[36] A possible manifestation of such rationalization was the fact that 98% of our respondents asserted that they had never referred any patient for a procedure without clear indication, i.e., solely to receive rebates. While this may be true, it could also serve as a pretext to mollify the twinge of conscience over the questionable morality of the practice. In fact, about 13% of our respondents asserted that patients derive some benefits from the fee-splitting practice. However, the supposed benefits listed were neither weighty nor convincing.

About 57% of our respondents did not know if fee-splitting exists in other countries, 1.7% said it does not exist in other countries, whereas 41.4% stated that it exists in other countries. For the avoidance of doubt, a spectrum of fee-splitting practices has been reported on every continent, as elaborated in the introduction.

Less than 1% of our respondents said that doctors initiated the practice in Nigeria by blackmailing business owners to pay them rebates, 39.2% said fee-splitting was started in Nigeria by private health businesses trying to gain an advantage over competitors. It is noteworthy that cut-throat competition[13,21,25,26,34] and unwholesome marketing practices[21,23,25,34,43] among entrepreneurial private businesses were fingered repeatedly in previous scholarly articles and newspaper reports.[19,41] Parsa *et al*.[18] reported that fee-splitting is less practised in public hospitals compared to private hospitals in Iran– this is similar to our findings where statistically significantly more private-sector physicians admitted to accepting rebates and/or knowing colleagues who accept rebates than public sector physicians. As Mahawar[21] observed: "*The advantage of any marketing innovation lasts only as long as the competitors take to figure it out…… owners of diagnostic facilities today have little choice as all players give out commissions and local doctors refuse to send patients (or even accept the reports issued by the diagnostic facility as accurate) without this cut*." Rao[25] also noted that: "*While this practice has been prevalent for years, private hospitals, facing cut-throat competition, have now institutionalised it*."

Besides cut-throat competition among (private) health-care outfits, our respondents identified some predisposing factors to indulging in rebates practice including: as an extra source of income (64%), poor/irregular salaries (60%), ignorance of its illegality (56%), greed (47%), and a sense of entitlement (17%). These themes are broadly similar to those elicited by Parsa *et al*.[18] in Iran (unrealistic health-care tariffs, economic problems of physicians, lack of supervision/monitoring, lack of full insurance coverage, some physicians' poor ethical commitments, lack of an appropriate patient referral system, direct financial relationship between physicians and patients, greed of some doctors, physicians' unawareness of the unethical nature of fee-splitting, and assisting patients to prevent confusion in finding good facilities in that order). Others[20,21] have also noted the crucial role that physicians' greed plays in institutionalizing the practice. Other subtle but frequently unadmitted predisposing factors to fee-splitting could include physician incompetence,[12] an alarming decline in clinical skills with over-reliance on investigations[20,45,46-48] and the widespread practice of "defensive medicine"[49,50] in the face of rampant/flippant medicolegal litigations.

Regarding the deleterious consequences of the practice, the main issues identified by our respondents include unnecessary investigations and procedures, inflation of health-care cost, quackery, delayed treatment with a prolonged hospital stay, capital flight from medical tourism, sabotage of the public health system, beclouded clinical judgment, negative public perception of medical professionals, and erosion of patients' trust in their doctors. An overwhelming majority (78%) of our respondents stated that members of the public would disapprove of the

practice if they knew of its existence. These consequences are similar to what had been noted in previous studies and commentaries.[5,12,18,23,27,51] In addition, the practice encourages medical tourism and may expose patients to the risks of organ trafficking, hinders fair competition, and stifle small-scale players[41] (It was considered inimical to the survival of businesses making such payments by 28% of our respondents). It may also militate against service excellence.[12] A frequently unrecognized, but pernicious effect is physician addiction to the practice,[34,51] which may partly explain why some of our respondents stated that they would stop referring patients to any institution that discontinues paying them for referrals.

From the foregoing, there is no doubt that curbing fee-splitting ought to be a topical issue in the medical circle. However, available evidence suggests some level of ambivalence toward it. Indeed, only 46% of our respondents viewed the practice as wrong and unethical, while only about 40% favored its abolition. Given the unambiguous provisions of the MDCN code, there is virtually no difference between those who were indifferent and those who opined that the practice is right and should not be abolished.

Apart from policies, laws, and codes of conduct, some recommendations have been put forward to help stamp out the practice from the health-care industry. First, there should be stricter and more proactive enforcement of existing rules by the various regulatory bodies. For instance, the MDCN code of medical ethics states that "*it is in the interest of the profession generally that every practitioner who becomes aware of any such case should report it to the Medical and Dental Council of Nigeria for appropriate disciplinary action against the offending colleague*"[40] while the President of the Maharashtra Medical Council in India submitted that "*We are not a policing agency. We act on complaints by agencies and try to find the truth*."[20] This current stance of waiting for infractions to be reported before action is taken appears to have been unhelpful thus far. Whistle-blowers[2] and penitent, conscience-stricken doctors should be protected and encouraged to come forward.[12] Furthermore, sting operations by investigative journalists could be encouraged.[21]

Second, undergraduate medical ethics education needs to be strengthened in order to start building a strong internal moral compass early,[24,27,52] as also eloquently demonstrated in the study by Stalin and Thomas.[53] Similarly, greater awareness of the MDCN code and the negative impacts of fee-splitting amongst physicians should be fostered through regular continuous medical (deontological) education.

Third, punitive/retributive measures should target both the payer and receiver of referral fees– this has been appropriately dubbed "Dual Punishment System" in South Korea.[34] The USA appears to have taken the lead on the retribution, whistleblowing, and sting operations front.[54-58]

Fourthly, legalization of fee-splitting practice has been put forward as a possible solution to the knotty issue both by a previous commentator[21] and even by one of our respondents who wrote that: "the practice of rebate payment and fee-splitting can be made legal by modifying its practices and putting checks in place." Although this suggestion may have some merit and should not be discountenanced cavalierly;, previous experiences seem to suggest that in the long run, legalizing inappropriate conducts can by itself determine our moral values and alter our notions of what is acceptable behavior.[21] Furthermore, "*legalisation will pose a further ethical dilemma of overburdening the sickest in society with referral fees on top of all the other necessary expenses that they must incur*."[21]

Finally, adequate, competitive, and timely financial compensation are necessary to shield most health workers from the lure of corruption. Sometimes, government doctors in Nigeria are owed a backlog of several months salary. This untenable scenario, coupled with runaway inflation, is a fertile breeding ground for such corrupt practices.

CONCLUSION

Fee-splitting exists in the Nigerian health sector. Patients suffer the consequences of this unethical conduct. The practice is addictive, with the involvement of other health professionals apart from physicians. A mix of pragmatic approaches is needed to curb it.

Acknowledgments

We would to thank Dr. Dapo S. Oyedepo, Dr. Durojaiye A. Adeuja, Dr. Henry O. Awogbenga and Dr. Nicholas Kogha for helping to distribute hard copies of the questionnaire. We acknowledge our debt of gratitude to all our respondents who took time off their busy schedules to participate. The kind support of Dr. Olatunde Ola is also appreciated.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Horwitz M. Fee splitting and rebates. Radiology 1948;50:545.
2. Chattopadhyay S. Corruption in healthcare and medicine: Why should physicians and bioethicists care and what should they do? Indian J Med Ethics 2013;10:153-9.
3. Agbenorku P. Corruption in Ghanaian healthcare system: The consequences. J Med Med Sci 2012;3:622-30.
4. Kale PA. An objective look at 'cut practice' in the medical profession. Issues Med Ethics 1996;4:19-20.
5. Levin AV, Ganesh A, Al-Busaidi A. Fee splitting in ophthalmology. Can J Ophthalmol 2011;46:21-7.
6. Davidson G. Payment for referrals. Psych Bull Australian Psychol Soc 1998;20:10.
7. American Medical Association. Code of Medical Ethics. Opinion 6.02-Fee Splitting; 2001. Available from: http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/opinion602.page? [Last accessed on 2017 Apr 05].
8. Armstrong D. MRI and CT centers offer doctors way to profit on scans. Wall Street J 2005:1. Available from: http://online.wsj.com/article/0,SB111498587452921637,00.html. [Last accessed on 2018 Mar 22].
9. Manatt P, Phillips LL. Examining Fee Splitting Statutes in the Context of Value-Based Healthcare. Available from: https://www.manatt.com/insights/newsletters/health-update/examining-fee-splitting-statutes-in-the-context-of. [Last accessed on 2018 Mar 21].
10. Antoon JW. Is it unethical to offer incentives for patient referrals? J Am Dent Assoc 2007;138:393-4.
11. Dyer O. Six doctors are charged with taking kickbacks for sending patients to Chicago hospital for no reason. BMJ 2015;350:h22.
12. Jesilow PD, Pontell HN, Geis G. Medical criminals: Physicians and white-collar offenses. Justice Q 1985;2:149-65.
13. Schaffer WA, Holloman FC Jr. Consultation and referral between physicians in new medical practice environments. Ann Intern Med 1985;103:600-5.
14. Berlin L, Berlin JW. Leasing imaging facilities to referring physicians: Fee shifting or fee splitting? Radiology 2005;234:44-8.
15. Reicher MA. Self-dealing in medical imaging: Call for action. J Am Coll Radiol 2007;4:202-7.
16. Campbell EG, Gruen RL, Mountford J, Miller LG, Cleary PD, Blumenthal D. A national survey of physician-industry relationships. N Engl J Med 2007;356:1742-50.
17. Rao JN, Cassia LJ. Ethics of undisclosed payments to doctors recruiting patients in clinical trials. BMJ 2002;325:36-7.
18. Parsa M, Larijani B, Aramesh K, Nedjat S, Fotouhi A, Yekaninejad MS, *et al*. Fee splitting among general practitioners: A cross-sectional study in Iran. Arch Iran Med 2016;19:861-5.
19. Bhat R. Characteristics of private medical practice in India: A provider's perspective. Health Policy Plan 1999;14:26-37.
20. Roy S. Refer a Patient, Earn a Commission. Available from: http://www.businessstandard.com/article/opinion/refer-a-patient-earn-a-commission-113071601111_1.html. [Last accessed on 2018 Mar 12].
21. Mahawar KK. Cuts and Commissions: Exposing the Murky World of Indian Health Care. Available from: http://www.dailyo.in/politics/the-Ethical-doctor-Medicine-corruption-cut-practice-referral-diagnosis-hospitals/story/1/13219.html. [Last accessed on 2018 Mar 12].
22. Korula RJ. Fee-Splitting– the Unethical Side of Medical Practice Today. Available from: http://english.manoramaonline.com/wellness/health/matters-of-the-heart-fee-splitting-unethical-medical-practice-india.html. [Last accessed on 2018 Mar 12].
23. Berger D. Corruption ruins the doctor-patient relationship in India. BMJ 2014;348:g3169.
24. Rao GN. Medical Experts Seek Laws Against Cut Practice. Available from: http://health.economictimes.indiatimes.com/news/industry/medical-Experts-seek-laws-against-cut-practice/59361888. [Last accessed on 2018 Mar 22].
25. Rao M. Referral Fees or Bribes? Corporate Hospitals have Legitimised Paying Hefty Commissions to Independent Doctors for Sending Patients to Them. Available from: http://www.hindustantimes.com/india/referral-fees-or-bribes/story-gLpdw2zVOYEE5jaEqQgM8I.html. [Last accessed on 2018 Mar 22].
26. Vora P. Indian Doctors are Bribing Colleagues, Ambulance Drivers, and Even Yoga Teachers to Get Patients. Available from: https://qz.com/1021541/indian-doctors-are-bribing-colleagues-ambulance-drivers-and-even-yoga-teachers-to-get-patients/. [Last accessed on 2018 Mar 22].
27. Mishra S. What ails the practice of medicine: The Atlas has shrugged. Indian Heart J 2015;67:1-7.
28. Nagral S, Nundy S. We Need to End "Cut" Practice in Indian Healthcare. Available from: http://blogs.bmj.com/bmj/2017/07/07/we-need-to-end-cut-practice-in-indian-healthcare/. [Last accessed on 2017 Feb 10].
29. Jih CJ, Soon LP. SMA advisory No. 01/2005. Medical Fee-splitting among doctors. An ethics advisory from the 46th SMA council and the SMA centre for medical ethics and professionalism. SMA News 2005;37:9. Available from: https://www.sma.org.sg/UploadedImg/files/Advisories/medical_fee_splitting.pdf. [Last accessed on 2017 Mar 02].
30. Merican IM. Fee Splitting (Malaysian Medical Council Press Statement 2 April 2010). Available from: http://www.mmc.gov.my/images/contents/publications/2010/1-Fee-splitting-Tan-Sri-Dato-Seri-Dr-Hj-Mohd-Ismail-Merican2010.pdf. [Last accessed on 2017 Mar 23].
31. Philippines Medical Association Code of Ethics (Based on the PMA Board of Governors Meeting Held Last February 7, 2009, General Santos City); 2009. Available from: https://www.philippinemedicalassociation.org/downloads/pmacodes/IRR%20of%20the%20Code%20of%20Ethics.pdf. [Last accessed on 2017 Mar 11].
32. Turone F. Italian GPs suspended for accepting bribes. BMJ 1998;316:1264.
33. Turone F. Italian doctors face criminal allegations over bribes. BMJ 2004;328:1333.
34. Yu SY, Yang BM, Kim JH. New anti-rebate legislation in South Korea. Appl Health Econ Health Policy 2013;11:311-8.
35. Doval HC, Tajer CD, Borracci RA, Nuñez C, Samarelli M, Tamini S. Survey on ethical conduct thresholds in cardiological medical practice in Argentina. Dev World Bioeth 2015;15:68-75.
36. Jain A, Nundy S, Abbasi K. Corruption: Medicine's dirty open secret (Doctors must fight back against kickbacks). BMJ 2014;348:g4184.
37. World Medical Association. Statement on Conflict of Interest (Adopted by the 60th WMA General Assembly, New Delhi, India, October 2009 and editorially revised by the 201st WMA Council Session, Moscow, Russia, October 2015). Available from: https://www.wma.net/policies-post/wma-statement-On-conflict-of-interest/. [Last accessed on 2017 Mar 22].
38. Hannah HW. Fee splitting, kickbacks, rebates, and commissions. J Am Vet Med Assoc 1998;212:966-7.
39. Barker RL. Fee splitting: A growing ethical problem. J Indep Soc Work 1987;1:1-3.
40. Code of Medical Ethics in Nigeria: Rules of Professional Conduct for Medical and Dental Practitioners. Available from: http://www.mdcnigeria.org/Downloads/CODE%20OF%20CONDUCTS.pdf. [Last accessed on 2017 Mar 22].
41. Soroosh G, Ninalowo H, Hutchens A, Khan S. RAD-AID Nigeria Country Report; June, 2015. Available from: https://www.rad-aid.org/wp-content/uploads/Nigeria-Country-Report-Final.pdf. [Last accessed on 2017 Oct 12].
42. Makinde OA. Physicians as medical tourism facilitators in Nigeria: Ethical issues of the practice. Croat Med J 2016;57:601-4.
43. Nsofor I. Tangled Web: The Complicated Ethics of Medical Referrals

from Nigeria to India. Available from: http://nigeriahealthwatch.com/a-tangled-web-the-complicated-ethics-of-medical-referrals-from-nigeria-to-india/. [Last accessed on 2017 Mar 12].
44. Anyanwu EB, Abedi Harrison O, Onohwakpor EA. The practice of medical referral: Ethical concerns. Am J Public Health Res 2015;3:31-5.
45. Akl KF, Damra HS, Melhem MJ. Decline of the medical history and physical examination. Indian J Pediatr 2012;79:676-7.
46. Fred HL. The downside of medical progress: The mourning of a medical dinosaur. Tex Heart Inst J 2009;36:4-7.
47. Lysdahl KB, Hofmann BM. What causes increasing and unnecessary use of radiological investigations? A survey of radiologists' perceptions. BMC Health Serv Res 2009;9:155.
48. Yousafzai AW. Corruption in medical practice: Where do we stand? J Ayub Med Coll Abbottabad 2015;27:515-6.
49. Chen XY. Defensive medicine or economically motivated corruption? A confucian reflection on physician care in China today. J Med Philos 2007;32:635-48.
50. Buowari OY. Practice of defensive medicine. Jos J Med 2013;7:30-1. Available from: https://www.ajol.info/index.php/jjm/article/view/94214. [Last accessed on 2018 Dec 03].
51. Connell FJ. Problems of professional and business people: The morality of fee-splitting. Linacre Q 1964;31:21-2. Available from: http://epublications.marquete.edu/lnq/vol31/iss1/9. [Last accessed on 2018 Jan 19].
52. Okoye O, Nwachukwu D, Maduka-Okafor FC. Must we remain blind to undergraduate medical ethics education in Africa? A cross-sectional study of Nigerian medical students. BMC Med Ethics 2017;18:73.
53. Stalin P, Thomas A. Medical students 'perceptions about fee splitting for diagnostic procedures: A mixed methods research. J Res Med Educ Ethics 2017;7:124-8.
54. Thompson TL. Whistleblower Accuses Radiologist of Referral, Lease Kickbacks. Available from: https://www.auntminnie.com/index.aspx?sec=sup&sub=imc&pag=dis&itemid=67135. [Last accessed on 2018 Jun 22].
55. U. S. DOJ Joins 'Kickback' Case Against Ohio Heart Centers. Available from: https://www.auntminnie.com/index.aspx?sec=sup&sub=ult&pag=dis&ItemID=80629. [Last accessed on 2018 Jun 22].
56. Yee KM. California Doc Gets Jail Time for Ultrasound Medicare Fraud. Available from: https://www.auntminnie.com/index.aspx?sec=sup&Sub=ult&Pag=dis&ItemId=81633. [Last accessed on 2018 Jun 22].
57. Casey B. Radiologist Nabbed in Calif. Workers' Comp Fraud Sting. Available from: https://www.auntminnie.com/index.aspx?sec=sup &sub=imc&pag=dis&ItemID=112596. [Last accessed on 2018 Jun 22].
58. Beverly Hills Doctor Sentenced to 10 Years in Custody for Massive Workers' Comp Scheme. Available from: https://www.justice.gov/usao-sdca/pr/beverly-hills-doctor-sentenced-10-years-custody-massive-workers-comp-scheme. [Last accessed on 2018 Jun 22].