

Minireview paper

**DRUG REVOLVING FUND AND ESSENTIAL DRUG MANAGEMENT IN
NIGERIA**

ABSTRACT

Efficient and effective preventive and curative care relies predominantly on the availability of essential drugs and seen as a positive step towards quality health care. The cycle of terror characterized by decapitalization, lack of sustainability and collapse of the Drug Revolving Fund system is common in most African countries today. This study described the situation in Nigeria and the ways to promote better management and utilization of the scheme.

Published studies and documents obtained through Google search, which met the eligibility criteria, were used for the study. Study suggested that poor economic, political, and business forecasting and human factors contribute greatly to DRF decapitalization in most government hospitals in Nigeria.

Key words: decapitalization, recapitalization, essential drugs, revolving fund, health care, Nigeria

Introduction

Access to the essential drug is important to the establishment and functioning of a sound health care delivery. The provision of safe, effective and affordable  essential drugs in the right quantity to the whole population is a priority in health and drug policy ^[1]. The concept of drug revolving fund was hed through the Bamako initiative to be one of the ways of solving the challenges and difficulties in having availability of medicines ^[2]. Drug Revolving Fund, DRF, is a system whereby the revenue generated by the sale of drugs to patients is used to purchase new drugs. The aim is to provide safe and quality drugs of affordable prices and is usually part of wider user charge scheme ^[3]. Nigeria has been one of the most active supporters of Bamako initiative, viewing the initiative as a strategic opportunity to support local councils in promoting health care delivery at the grass root ^[4]. DRF was adopted in 1988 with financial and technical support from support and donor agencies like WHO, United Nations Children's Fund and the United Kingdom Departments for international development (DFID) ^[5]. The DRF mechanism within Bamako initiative was adopted as the initial approach for sustainable financing of drug supply at the local level. The case for the use of a generic essential drug list in Bamako initiative was hinged on the fact that generic drugs are cheaper and should be captured in Essential Drug List (EDL) ^[6]. New drug introduction into the

33 system involve selection from EDL according to need, efficacy, safety, and affordability of
 34 the product ^[7]. The concept of an essential drug list as proposed by WHO is, “that *the list*
 35 *should comprise drugs corresponding to the health needs of the majority of the people*”. In
 36 Nigeria, patient’s visits to hospital dropped by 50-75% when health facilities ran out of
 37 commonly used drugs ^[8]. Regular supply of drug in a health care facility is one of the major
 38 hallmarks of an efficient health system in both the perspective of patients and care providers
 39 as well as that of the policy makers. Many governments, nongovernmental organizations,
 40 community health program have implemented user fees to fund or partially fund to cost
 41 pharmaceuticals or other health services. Many different types of DRF exist. Their common
 42 element is that fees are charged for medicine dispensed. In the Bamako initiative context,
 43 community pharmaceutical schemes often have cost-recovery objectives that include the
 44 financing of Primary Health Care programs.

45 **Concept of DRF**

46 This is where the seed money provided by the government, donor agencies or interested
 47 community is used to purchase an original stock of essential and commonly used medicines
 48 to be sold, ideal at a price sufficient to replace the stock of medicines and ensures a
 49 continuous supply. DRF is very necessary in health care delivery in developing countries
 50 because essential medicines are critical component of effective preventive and curative care,
 51 patients perceive the increased availability of medicines and other pharmaceuticals as real
 52 improvement in the quality of care, and patients are willing to pay for the pharmaceuticals.
 53 Patients spend more money buying pharmaceuticals, but spend less through DRF and have
 54 increased value of drugs of which they have paid for as evidenced by improved level of
 55 adherence ^[9]. DRF linked to essential drug has improved efficiency of pharmaceutical
 56 services and increase revenue and increased price awareness by prescribers and patients may
 57 result in improved use of medicines. If current public financing is sufficient to ensure
 58 universal access to essential medicine without charge, medicine fees are unnecessary. If
 59 current financing is inadequate, DRF can provide supplementary resources to make low-cost
 60 essential medicines more accessible ^[10]. DRF is associated with substantial revenue is
 61 generated & added to central allocations, improved quality of care, available pharmaceuticals
 62 and improve revenue and equity is promoted as limited public funds can be targeted to the
 63 most needy while the rest pay ^[11]. Decentralization is re-enforced through local control of
 64 resources.

65 For an efficient working of DRF, the design should include community involvement careful
 66 implementation associated with quality improvement, and good management. Planning,

67 implementation and operation of DRF requires simultaneous commitment to the public health
68 goals and should business management principles ^[12]. There should be a thorough situation
69 analysis and feasibility assessment.

70 Use a financial plan that considers cost recovery objectives, capitalization requirements and
71 long term financial needs ^[13]. Determination of the organizational structure staffing, and legal
72 status of the DRF, develop an implementation plan determine pricing and exempting policies,
73 development of the necessary systems for pharmaceutical management and financial
74 management, preparation of public communication for introducing the DRF, monitor impact
75 and adjust the program accordingly are all very imperative.

76

77 **Situation assessment of DRF**

78 Weak political, socioeconomic, managerial, and administrative circumstances structures all
79 impact negatively on the DRF system operation ^[14]. When considering discontinuing DRF,
80 the government must take measures and have the resources in place to handle the
81 consequences of losing revenue, such as stock out syndrome and upsetting healthcare
82 providers who have come to rely on fees to supplement income ^[15]. Political issues for
83 establishment include acceptance of the user fee concept ^[16], local retention of fee revenue,
84 local retention, political and administrative and decentralization ^[17]. Can sufficient fund be
85 recovered to justify the effort required to make DRF successful? The answer to this question
86 depends in national and economic strength, patient ability, and willingness to pay,
87 competitions, availability of capital, and policies ^[18]. Can a cost recovery system operate?
88 There should be accountability, a business like orientation supply management capacity etc.
89 This involves defining that cost-recovery objective, the roles of government and external
90 funding, capitation requirement and foreign exchange. Implementing planning involves
91 decision about bottom – up versus top-bottom implementation phasing and pilot testing and
92 development of DRF procedures ^[19]. Pricing and exemption policies are essential in DRF
93 efficiency and sustainability ^[20].

94 Management of pharmaceutical and money requires a well-coordinated selection,
95 procurement, quality assurance, distribution, management information, and medicine use and
96 should fall in line with the essential drug list. There should be rational drug use and proper
97 inventory management. There should be proper accountability of every money spent to avoid
98 depleting the capital. There should be proper financial resource management ^[21]. The entire
99 health staff, especially the pharmacy staff should be oriented. Both the patients and the public
100 like the communities and others should be properly mentored on the operations, gains, and

workings of DRF with the aid of the media. Regular monitoring and supervision are important to assess the impact of DRF on patients and financial performance of the system [22].

Before the introduction of DRF, acute shortage of essential drugs was seen in most public hospitals. However, DRF was adapted to solving the problem of acute shortage. Nigerian states had tried different DRF system including centralized state controlled schemes, the petroleum Trust Fund, and 50% cost recovery DRF system [23]. None of these was particularly successful for a variety of reasons which include insufficient financial resources, undue political interference in the functioning of the scheme [24], inadequate managerial and financial autonomy, barrier to access for the very poor and vulnerable, poor capacity of facility staff, operation guidelines not sensitive to the local environment [25]. Lack of a culture of transparency and accountability within the health system, the community, and limited capacity for rolling out the schemes militate against the scheme. A review of the previous DRF in 2003 indicated that four interventions for a successful DRF. These interventions include establishment of facility based DRF system [26], strengthening financial management system, creation of safety net for the very poor and establishment of an assured source of drug

Initially, the focus was to establish DRF and financial management system. In some states, safety nets for the very poor were introduced. Establishing or strengthening existing state medical stores, as an assured source of drugs and medical supplies for health facilities, was addressed. Stakeholders recognized the importance of involving a critical mass of health facilities in the sustainable drug supply mechanism whose impact is measurable [27]. Thus, statewide rollout took place once the DRF model was tried experimented in a few facilities. The DRF and financial management system against a backdrop of acute shortages of medicines and related products, lack of financial prudence, political affiliations and poor monitoring and evaluation led to emergence of different unregulated and illegal DRF unethical practices in many facilities.

Again, four levels of DRF were established, the central medical stores, Local Government Areas, hospitals and primary health facilities [28]. DRF has been practiced based on essential drug since Nigerian governments imbibed the idea. It has not been fully implemented according to the original blue print as many political issues due to inter-professional rivalry. Many hospital management have decided to modify the operations and principles of DRF such that it no longer conforms to the original plan. This hospital management has enlarged the scope of the activities of DRF by including several other departments in the management

of DRF. In some places some pharmaceutical products like needle and strings, antiseptics cotton wool etc. that were supposed to be under the control of pharmacy department are now under the control of other hospital departments. The target is to frustrate the pharmacists from having a full control of the DRF scheme. Again, the Head of Pharmacy Department who, by law, is supposed to be one of the signatory to DRF account has been denied this right. Recently, there is the emergence of Public Private Partnership (PPP) that was recently introduced to be the main system for drug procurement where there is inefficiency in the operation of the existing DRF. This PPP is a system where the private pharmacies to collaborate with the public pharmacy in supplying and management of drug and other pharmaceutical. The gains from such PPP are to be shared by both the private and public pharmacies in line with laid down rules. However, this PPP has witnessed a massive criticism from the public pharmacists, as introduction is believed to be politically motivated by the doctors. This is because the pharmacists in the public hospitals have not been given the free hand to operate the DRF scheme. The apparent failure or challenges faced by DRF in most hospitals are believed to be politically motivated. PPP in fact, if allowed to be implemented in its original form, could ensure availability of essential drugs when not interfered with by the Hospital management ^[28].

Limitations to DRF in Nigeria

There were critical challenges in strengthening the financial management systems in the early stage. The major challenges were multiple oversight institutions all of which had generally weak financial management systems. In many states in Nigeria, State Hospital Management Board has been established to exercise the necessary oversight over hospitals while the State Ministry of Health limited itself to Planning and Policy Formulation. In few cases, the health and human services secretariat combined the function of State Hospital Management Board. This created different set of accounting rules ^[29]. Several other changes include establishment of financial management system in facilities in the face of acute shortage of account staff, establishment 4 financial management in areas with low capacity among facility staff and corruption ^[30]. It has improved the availability of essential drugs unlike the non-DRF policy. However, there is compelling evidence that the drugs are not prescribed optimally by the health workers. It is not just enough to make essential drug available through DRF, but the stronger measures or policy should be made to encourage rational prescription. Drugs will be better used in an approach that includes better regulatory frame works standard treatment schedules, training and supervision to avoid over prescription and ensure rational use ^[31].

169 DRF adopted from the Bamako initiative has been subject to wide-spread criticism at its
 170 inception^[32]; and one of the areas identified by those who prefer a need-determined basis for
 171 policy making was an over emphasis on drugs relative to other components of health delivery
 172 system. They argued that linking finance with drug supply might re-enforce an undesirable
 173 emphasis in drugs in the mind of both patients and community health workers.

174 Concerns were expected on the potential impact of the rational use of drugs. One of the
 175 limitations of the operation of DRF and essential drug is the lack of availability of essential
 176 drugs, forms a problem for the treatment of disease that predominantly affect the developing
 177 countries like Nigeria^[33]. Though constant provision of these essential drugs are essential,
 178 their rational use at the lower levels of healthy services like primary health care without
 179 supervision are problematic the source of irrational prescribing practices is a major concern
 180^[34]. Inappropriate prescribing practices by health workers encourage inappropriate self-
 181 medication^[35]. There is the tendency that the type of available drugs and not on patient needs
 182 motivates prescription. Since financial remuneration is linked to prescribing, there is
 183 tendency for over prescribing, especially the antibiotics. This could increase the tendency for
 184 antibiotic resistance development. Evidence exists in Nigeria that health personnel tend to
 185 embark on poly-pharmacy in their attempts to treat a number of possible diseases
 186 simultaneously^[36]. Critiques claimed that collection costs might exceed revenue collected
 187 when the full cost of developing the system and all additional administrative costs
 188 considered.

189 Again, no improvement may take place in pharmaceutical availability and other quality
 190 measures. They also argued that user charges might become a form of “sick tax” substituting
 191 for rather than supplementing central allocation. People, particularly the poor, are dissuaded
 192 from seeking essential health care. Experience has also shown that cost recovery programs
 193 are rarely able to achieve the standard of DRF in the long term. Programs that have
 194 implemented large fees with no preparation of the public and little improvement in quality
 195 have seen significant decline in the use program designed with little attention to management
 196 and accounting systems have resulted in abuse and generated little revenue. Programs that
 197 have not re-invested revenues to improve quality have resulted in a decline in public
 198 convenience and use. DRF without a reliable source of low-cost medicines have quickly
 199 ceased to revolve, and some schemes with pharmaceutical charges have led to over
 200 prescribing. Sometimes, the money generated from the sell of these drugs is not enough to
 201 replenish the original stock. This may be because DFR is viewed as nonprofit venture

Financial failure may also be due to corruption, inter-professional interference from the management. It could be due to poor planning or monitoring.

Steps to better utilization and management of DRF

All operators must see the DRF capital investment as a money strictly meant for business and should be guarded and managed based on sound financial principles. Expansions should be based on proper forecasting, situation analysis and use of data generated for making informed decisions. Strict monitoring and evaluation can only be effective through inputs from feedback mechanisms which must be implemented and controlled by supply of cost effective essential drugs supply, rational exemption policies for equitability of access, revenue retention and accountability. Implementation of DRF projects systematically and in phases should be encouraged. The DRF account independently maintained for ease of access is preferable while upholding the stakeholders to maintain public confidence. Theft, pilfering, expiration of drugs which has crippled many DRF systems could be minimized or controlled by the use of effective softwares, good management information systems and physical measures. Cost recovery potentials which if user and operator friendly should be upheld ^[38, 39, 40]

Prospects of DRF in Nigeria

In November 2007, a review of the models recommended that there was a need to reverse the models to both improve operational efficiency, reduce costs, and to deal with critical emerging issues in the health sector. Key recommendation from the review included. The model of DRF should now metamorphose into a more general “sustainable drug supply systems which encompasses DRF as well as special purpose interventions e.g. national health insurance scheme (NHIS) ^[31], institute of health Ahmadu Bello University (ABU) Zaria. Reduction of workload by collapsing and simplifying the result paper work as well as addressing staffing issues by specifying minimum staffing requirement vis-à-vis increased utilization of services and modification of the pricing system at the L.G.A/PHC level whereby the LGA includes the transportation cost incurred for replenishing its stock in the L.G.A store is being experimented ^[37].

Conclusion

Achieving sustainable universal health coverage without a viable, efficient, and affordable drug supply system will be a mirage especially in developing countries. Government must spread her tentacles to fight corruption and decadence in the system and track her operations at all level of health care through sound monitoring, evaluation and feedback mechanisms.

Advocacy strategy should be promoted during implementation as well as scaling-up or rollout, which should include setting up the state team of facilitators. Strengthen the oversight agencies so that they can serve efficiently as a repository of data from the facility and provision of models for a central drug supply system at the state level of an assured source of drug and other medical supplies should never be compromised. Sales should be extended faith based sector. To promote equity of access and improve overall performance, of the scheme, cost recovery potentials, organizational structure, planning, process, financial management systems, government funding and exemptions should be reviewed periodically. This is without prejudice to public communication, monitoring and supervision, external funding, stakeholders' involvement, drug supply systems and scale up. These will help to arrest the "Cycle of Terror" which recapitalizes the entire system leading to inefficiency and system collapse. The roles of continual operators training, consideration of the economic, population dynamics, political, and managerial status as it affects operations should be captured during planning.

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