

Communication

Some considerations on veterinary drug use and supply in Nigeria

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Les mauvaises conditions d'emploi des produits vétérinaires au Nigeria sont générales, que les médicaments soient administrés sous contrôle ou hors prescription, avec des doses insuffisantes ou pour des traitements incomplets. Les résistances thérapeutiques et les intoxications sont les conséquences habituelles de cet état des choses. Les ruptures de stocks, les répartitions inégales, la prédominance des médicaments falsifiés ou périmés sont les problèmes les plus fréquemment rencontrés dans la fourniture des médicaments vétérinaires. Tous ont un effet négatif sur la santé et la productivité animales. Ceci résulte d'une mauvaise coordination au sein des services et à l'absence de politique nationale en la matière. Les auteurs suggèrent des solutions qui vont de la restructuration et de la réhabilitation des services concernés à la dotation de fonds adéquats pour faire face aux achats, en passant par la création de fonds de roulements autogérés, la privatisation partielle, la fabrication et une législation appropriée pour la pharmacopée vétérinaire. Ces propositions devraient conduire à la suppression des goulets d'étranglement dans l'approvisionnement comme dans les conditions de répartition, la distribution, la prescription et l'emploi des médicaments. Des projections et une planification doivent également être réalisées en vue de la fabrication locale des médicaments réservés aux maladies animales. *Mots clés* : Médicament - Distribution - Utilisation - Thérapeutique - Nigeria.

Introduction

Poor health remains one of the most important factors limiting livestock production in Nigeria (4) despite the progress that has been made in the past to control major zoonotic diseases and the development of more effective drugs. Disease control activities involve the expenditure of considerable resources in terms of finance, facilities and trained manpower (6). There is therefore an ever increasing demand for the provision of adequate veterinary care. Ideally, routine veterinary care and drug prescription should be administered by veterinarians. This is not the situation in Nigeria where the use of veterinary drugs without expert supervision is rampant. The result is the misuse of veterinary drugs seen quite frequently in recent times. Misuse is commonly in the form of underdosing and incomplete treatment regimes. Some examples of misused drugs include diminazene aceturate (Berenil[®]), several antibiotics used singly or as combinations, anthelmintic formulations and several orally administered drugs against poultry diseases.

Since veterinary drugs constitute important resource materials in animal health and productivity, one consequence of this misuse is the development of drug resis-

tance and toxicity in treated animals. Diseases ultimately become more difficult and expensive to treat and control. Where veterinary supervision is available, good quality veterinary drugs are often in inadequate supply. These shortcomings can be attributed in part to the lack of a well-coordinated veterinary service and the absence of a national policy on veterinary drugs.

In this paper, we consider some aspects of the use and supply of veterinary drugs in Nigeria and make recommendations for short-term and long-term improvement.

Supply and use of veterinary drugs

Although veterinary care proves to be more essential than ever in the maintenance and improvement of animal health and livestock yields in Nigeria, the quality of veterinary services has gradually deteriorated in the last decade. At present, a major setback in veterinary service is shortage of veterinary drugs and related products to field veterinary officers. This situation seems to arise from a poor administrative organization and an insufficient allocation of funds for veterinary services. This appears to be the trend in Sub-Saharan Africa (2). Funds for the livestock sector have decreased both in relative and in real terms (2). Due to the size of staff costs, the money left for operational costs (e.g. drugs, vaccines, transportation) is disproportionately small (3). In Nigeria and most West African countries, veterinary services were created 60-80 years ago when the main production inhibitor was disease epidemics (2, 4). The present organization reflects this situation. In the past, veterinary products such as drugs, vitamins and mineral salts were imported and distributed by the government which also represented the chief consumer of these products. However, with the establishment of pharmaceutical firms, efforts are being made to meet locally the veterinary drug requirements of government and other users such as private farms and small animal holders. Since most drug firms package rather than manufacture, locally produced drugs are still expensive. Where manufacturing is done, the finished products are expensive due to the rising costs of drug production. This situation, coupled with insufficient government funding of veterinary services is partly responsible for drug shortages to veterinary officers and others who apply veterinary drugs under supervision. The appearance on the Nigerian market of considerable quantities of fake or expired drugs is a direct result of perennial drug shortages. Such fake products constitute serious risks to public health and livestock productivity. Where drugs are available, there are often problems of uneven distribution due to government monopolies, administrative red-tape, and transport difficulties. Delays and bottlenecks encountered in transit result in exposure of drugs to adverse weather. This is a common cause of drug damage, loss of potency and further reduction in available supply. As far as can be ascertained, laws governing distribution and utilization of veterinary drugs are lacking. This creates room for handling and usage of veterinary drugs by unqualified and unauthorized persons.

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Recommendations

From the problems highlighted, it is not premature to call for a veterinary drug policy in Nigeria. The policy should be in keeping with a restructure and properly operated veterinary service. It is suggested that the problem of non-availability and/or shortage of veterinary drugs be tackled in the short run by an increased funding of veterinary service and purchase of drugs. A first step in restructuring should be the rehabilitation of veterinary services through increasing their main prerogative and redefining the roles and responsibilities of the livestock production services (2). Special attention must be paid to drug distribution. Transportation and storage should be improved to ensure that drugs are delivered promptly and in satisfactory condition to the different areas of use. Restructuring should also provide means for effective peddling in cases of dangerous and expired drugs.

Another update solution is partial privatization of veterinary service and the establishment of revolving funds which could be fed from mass campaign returns or from clinical activities. The World Bank in a Staff Technical Paper (7) has recommended a combination of policy changes including increased cost recovery for services rendered and inputs provided. It has also recommended easing of monopoly restrictions on many government tasks while encouraging private sector involvement especially in curative treatments and drug distribution. This World Bank standpoint is shared by other donor agencies such as the Food and Agriculture Organization (FAO), the Overseas Development Administration (ODA) and the GTZ.

An interim and long-term measure adaptable to suit Nigeria is the "no more free care" proposal of the GTZ which suggests that good quality services and veterinary drugs would guarantee profitability of investments and encourage the private sector to compete freely for importing, distributing, selling and administering veterinary products (3). The ODA proposes a similar fee recovery measure as well as a policy whereby the veterinary service is allowed to operate revolving funds to enable it continuously purchase and maintain an adequate supply of drugs which can then be sold and the returns ploughed back into its operating funds (3).

The FAO proposal (3) focuses on harnessing trained veterinary manpower into private veterinary associations which will both lessen and complement State veterinary service and improve the availability of veterinary expertise to livestock owners in rural areas.

Long-term solutions lie first in the need to conduct appropriate drug utilization studies. Such studies will serve as invaluable tools for all involved in health policy and related decision-making and can improve communication between health authorities, health personnel and scientists (1,2). These studies require adequate research input in the absence of which policy implementation is impeded.

There is need to create, adjust and coordinate functional drug legislation and regulation. This will include criteria and rules for drug evaluation, selection, quality control, prescription, dispensing and logistics. Logistics will embrace questions on whether there is need to manufacture or buy drugs to meet local needs, stock storage and inventory, distribution and delivery. There is also a need for the establishment of descriptive and analytical drug utilization surveys primarily for the purpose of evaluating and re-evaluating various decisions and actions taken e.g. research and development.

Another long-term solution can be found in local drug manufacture. It is becoming increasingly essential for Nigeria and other developing tropical third world countries to develop an efficient pharmaceutical industry which will meet both human and animal health needs. However, the cost of all aspects of drug development has increased (5). Such cost includes the expense of maintaining permanent screening facilities for compounds of potential interest. Local drug development is also hampered by difficulties of securing adequate facilities and investigators. This partly accounts for the low rate of introduction of new products to control tropical animal and human diseases.

Conclusion

It is recommended that a national veterinary drug policy be formulated which will take account of the existing setbacks in veterinary service in Nigeria. This policy could be an integral part of a new animal health care structure. The policy will need to address short-term budgetary problems in veterinary service while it decreases costs to the State and adopts steps to improve the quality of veterinary services. This can be achieved by a restructuring of the actual organization and by the introduction of revolving, self-servicing funds. The policy should incorporate and emphasize a strategic plan for local drug development and production with the aim of solving the rising demands for veterinary drugs and associated products. Research priorities in this area must take account of the real health needs of all classes of veterinary stock. There is need to ensure an effective and uniform distribution and delivery of drugs within the country through appropriate legislations which are expected to check the current misuse of drugs and also ensure adequate supply to field veterinary officers. Effort should be made to encourage the formation of private veterinary associations thereby increasing access to trained veterinary manpower, quality service and good veterinary drugs.

In developing this policy, it is important to have continuous drug surveys of statistical value. These data will be required for identifying the potential problem areas, controlling drug misuse, establishing drug needs, performing further research and improving the communication on drug utilization among those involved in the planning and implementation of the policy.

For convenience, the policy planning process should establish goals and targets for the animal health pro-

gramme. There must be elements of design and appraisal as well as implementation, monitoring, control and evaluation.

Finally, the implementation of a such policy requires the harmonization of political will and professional skill, factors which are essential and complementary.

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There is widespread misuse of veterinary drugs in Nigeria resulting from controlled and unsupervised drug administration, underdosing and incomplete treatment. Development of resistance and toxicity are common consequences of this misuse. Drug shortage, uneven distribution, preponderance of fake and/or expired drugs and inadequate local drug production are some of the problems identified in veterinary drug supply. All these problems have an adverse effect on animal health and productivity and are related to an improperly coordinated veterinary service and the non-existence of national veterinary drug policy. Suggested solutions include rehabilitation and restructuring of the veterinary service, improved funding to support drug purchase, installation of self-servicing revolving funds, partial privatization, drug manufacture and appropriate legislations for veterinary drugs. These proposals are expected to overcome bottlenecks encountered

in drug supply, distribution, delivery, prescription and use. Projections and plans must also be made toward the local development and manufacture of drugs for animal disease. *Key words* : Veterinary drugs - Supply - Use - Therapeutic - Nigeria.

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