Some Thoughts on Strategy Options for the South African Pharmaceutical Industry

Rod Crompton

Pharmaceutical production in a less developed country like South Africa should primarily be determined by demand. The demand for drugs is shaped by a wide range of factors, including. the size and role of the public and private sectors, and drug policy with regard to generics and essential drugs.

It is, therefore, almost impossible to set out a development strategy for pharmaceutical production when the demand pattern that is likely to prevail in a new South Africa has not yet been crystallised and stabilised. The state needs to set the direction of development for health care first. Hopefully, a new government will do so. Thereafter, a production strategy can more easily be identified. Consequently, what follows is more an identification of problem areas and possibilities than a set of solutions.

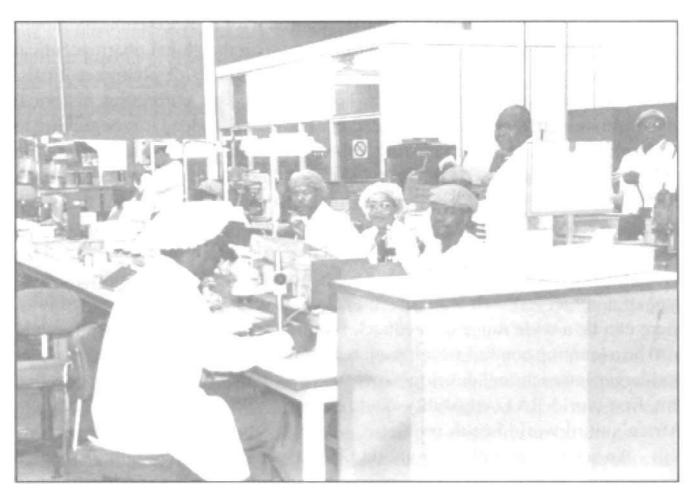
Research and Development

The international pharmaceutical industry is a small but important part of the chemical industry. It is characterised by high levels of profit. Although the volumes of material handled are comparatively small, manufacture often involves many, up to 14, processing stages.

The engine driving the international pharmaceutical industry is Research and Development (R&D). Typically, the leading multinational companies (MNCs) spend 15% of sales on R&D. They are mainly in pursuit of new active ingredients with which to make a new 'blockbuster' drug which, when globally patented and marketed, will generate the high profits to fund the next round of R&D.

The USA, western Europe and Japan, with only 20% of the world's population, account for about 70% of the world market for drugs, so the MNCs have tended to focus on the most profitable ailments in these rich countries. These MNCs have huge numbers of researchers and sales people. Merck & Co., for example, employ 6-300 researchers and 6300 sales people, excluding

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Photo courtesy of SALB

production workers. Together, this represents more than the total South African pharmaceutical industry workforce, including production workers.

Part of the reason for the small workforce in the local industry is the very limited expenditure by pharmaceutical companies in South Africa on R&D. The more active firms typically spend only about 4% of sales on R&D. Clearly, South Africa is not in a position to compete against the major MNCs.

Over the last decade, R&D spending by MNCs in the developed countries has been increasing, partly because of wage gains made by researchers. This also has to do with the fact that most of the 'easy' drugs have been discovered and the remaining health problems require more 'difficult' and costly solutions. The MNCs are therefore looking for ways of conducting R&D more cheaply.

Putting Our R&D Capacity to Use

This presents South Africa with an opportunity. Our historically skewed emphasis on providing health care for rich whites and establishing relatively

good 'white' universities has led to the development of an R&D capacity. South Africa may, therefore, be able to make an impact on the global pharmaceutical industry which is larger than our meagre local demand for pharmaceuticals. Although much attention is rightly being devoted to correcting historical discrimination, this resource base need not be wasted. Indeed it is beginning to be exploited where some existing infrastructure already exists. In certain research areas, South African firms and universities have been able to take on contract research for MNC clients. This capacity is enhanced by the weak exchange rate and, by international standards, comparatively low wage costs of researchers, especially those with technikon type training.

There are a number of reasons why an active state policy encouraging this type of contract research would be useful. Apart from generating skilled jobs, there can be a wide range of feedback into the scientific community. It could also be a learning conduit which may, over time, connect South Africa to wider and larger international developments. Moreover, there are also prospects that this first world R&D capability could be used to help solve some of South Africa's third world health problems.

An active state policy promoting R&D would have to be complemented by matching policies in the fields of science and technology and education and industrial policy.

Trade Imbalance

One of the general problems facing the South African economy concerns the balance of payments. The pharmaceutical industry contributes to these problems. Imports are greater than exports. In the late 1970s and early 1980s, imports of pharmaceuticals increased significantly, from 10% of domestic demand to about 30%. Exports over the 1980 to 1990 period declined from about 10% of production to about 6%, despite the fact that export incentives make exports more lucrative than sales on the domestic market.

It may be that the import of brand name finished goods is boosting imports. Imports could be reduced by an essential drug list and a central buying organisation such as we have for crude oil. The low level of exports may be increased by the usual incentives, such as access to duty free intermediate inputs, soft credit and tax write offs for marketing expenditure. The contract research discussed above is also an export product which can help to address the trade imbalance.

However, the larger problem is likely to be the preponderance of MNCs in South Africa. They account for 70% of the pharmaceutical industry within

the country and are reluctant exporters. For years they have had a cosy time selling into our protected market. The De Villiers investigation established that the prices of ethical drugs produced by MNCs rose at a much faster rate than those produced by local firms.

Countering the Negative Effects of the MNCs

The high level of penetration of the local industry by foreign MNCs allowed by the apartheid regime is a difficult problem which will take some undoing. Nationalisation would be one simple solution, but the political price that SA would have to pay in terms of a drop in international 'confidence' may not make it worth the trouble.

A different package of policies could achieve a similar result. For example, the UK, even after years of right wing government, still expropriates surplus profits made by pharmaceutical corporations. Even that cornerstone of free market ideology, the USA, is considering a price freeze on drugs.

The foreign MNCs active locally are chiefly involved in the production of more profitable brand name products. Accordingly, a drugs policy which gives far greater emphasis to generics will squeeze their market and should reduce imports. Secondly, policies such as a state purchasing policy which gives preference to firms which exported, say, over 30% of sales, would also force firms to export.

Proper state licensing and investment policies will be crucial, with access only for those which make significant exports and which enter into joint ventures with local or state owned firms. The strategy should be to force MNCs into joint ventures with an export orientation.

Lack of Training and Inflated Prices

It is quite probable that local production efficiency levels are well below internationally competitive levels. For example, whilst capital has been quick to invest in hi-tech computerised warehouses, they have neglected the basics such as worker training. The only real solution for continuing improvements in production efficiencies lies in the fruits of industry level collective bargaining. This is because of the particular political, cultural and racial heritage which inform current shop floor attitudes and perceptions.

Another important feature of the local industry is the very high cost delivery chain, from production to wholesaling to retailing. This is despite the



The demand for drugs is shaped by a wide range of factors. Photo: Ismail Vawda

fact that there is a high level of vertical integration in the ownership of the pharmaceutical chain. In other words, the major local producers are also the major local wholesalers and also dominate the retail pharmacy industry. Three firms dominate the local industry and some 70% of retail pharmacies are bonded to these manufacturers. Vertical integration is usually a strategy adopted by firms to keep final prices down in the face of competition. In South Africa, it seems to be a mechanism for market control and excessive profits.

Oligopolies do tend to inflate prices if they are given the opportunity and stricter measures are needed to prevent this. An active competition board with some backbone and a judicious use of tariffs will help to keep prices down. A plethora of detailed regulations contribute to this high cost chain and they will need to be substituted with regulations and schemes which deliver lower prices rather than protection for some interest group or other.

State with Resolve or Forum with Worker Participation

All of these measures require a good deal of state intervention. Internationally, the pharmaceutical industry is one of the most highly regulated industries, so this should not draw undue attention from the detractors of post apartheid reconstruction. Nevertheless, the morass of existing problems will require a state with firm resolve, capable of some rapid political footwork to deal with the squabbling interest groups. It will also require a co-ordinated strategy which draws in education policy, science and technology policy, trade policy and industrial policy around that most important ingredient, a clear state health care policy.

In order to address the pharmaceutical production issues raised here, it will be necessary to develop a research capacity to identify far more precisely the nature of the problems and then to develop a detailed strategy for the industry. Ideally, we will need a state committed to and able to implement a proper strategy for health care and the pharmaceutical industry. However, the prospects of these requirements being met is, at best, uncertain.

Recently, a representative of one of the major local firms called for the establishment of a forum of "the real movers and shakers in the industry" to address the cost of medicines and other issues and thereby "get their house in order". Squabbling interest groups within the forum will fight to promote their particular interests. Nevertheless, this might have been an important initiative if the representative in question had not excluded organised labour, the real producers. Clearly, it is an invitation to organised labour to do some "moving and shaking" in the industry so that they too may be regarded as eligible to attend,

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