

Pharmaceutical Pricing at the Change of Millennia

Dr Rehan Haider ¹

Abstract

The pricing of Pharmaceuticals, like the pricing of many kinds of products, has traditionally been an uncertain endeavor. Regardless of the formation gathered and research and analysis conducted, one can never be sure that the price decided upon is the correct price . As we approach the millennium, may we expect the Specter of uncertainty to remain ,will and Aricl Durant, noted historian of the century, Advised, "if you want the present and the future to be different from the past ,Spinoza tell us, find out the cause that made it what it was and bring different causes to bear " In business - specific terms ,Sticker admonishes," long range of planning does not deal with future decisions, but the future of the present decisions" Few firms in the pharmaceutical industry committed adequate resources to pricing matter. Although the lack of formal attention to pricing to pricing is not unique to the pharmaceutical industry, the lack of a purposeful and coordinated approach to pricing within most firms has, to great extent, brought about the pricing woes of the present pricing has been treated as an event, rather than a process, and each product has been priced in a different way, with pricing research and analysis approaches varying greatly from one product to the next.

pricing functions and responsibilities were fragmented within most firms, with Product Managers and Marketing Research departments responsible for the bulk of analysis and consideration and Top managers, relying on instinct, setting the price for Launch. Once commercialized, the price of the product tended to go in two directions, with list prices increasing at a fairly regular rate and contract prices, often managed by sales functions, continually moving downward in response to pressures (both real and imagined) in growing price- sensitive market segments.

Keywords: *pharmaceutical pricing, pricing strategy, marketing literature review, new products customer value.*

¹Riggs Pharmaceutical Karachi, Department of Pharmacy, University of Karachi

These pricing activities tended to be performed in a discrete manner, with little or no coordination among the various parties and precious little coordination between the pricing strategy and the marketing plan for the products. Thus, it was not uncommon for marketing campaign to tout a products unique benefits and clinical value and point out the lack of appropriate alternatives while selling functions were busily discounting the same products to hospitals, nursing homes, and managed care groups, choosing to compete on price with older even generics agents. These and other phenomena have interacted over the past 15 years to bring about the pricing environment currently faced by pharmaceutical makers. The use of generics drugs began to grow as a force in the early 1980s, and manufacturers of branded pharmaceuticals soon discovered that they could substantially raise the price of their off- patient products without suffering severe losses in units' sales levels as unit sales declined.

- 1. This lack of price elasticity was due to two circumstances: the generally low price for pharmaceuticals at the time and the traditional lack of price sensitivity by prescribing physicians*
- 2. Manufacturers soon began to increase prices for patent protected products at nearly the same rate used for multisource drugs and again, suffered no ill consequences, commercially. Simultaneously, the began to price new products at significant premiums over existing agents*

Introduction:

The rate of price growth, however, was noted by several public officials, including Senator David Pryor of Arkansas 4 Government hearing and investigations, together with attention by the media, brought great pressure on drug industry to change its pricing behavior.

It has long been accepted that new pharmaceutical products will enter the market at prices higher than those products preceding than to the market 5,6.that both the pharmaceutical industry's chief critic, senator Pryor and the editor of the trade magazine serving the executives of that industry held the same conception of initial product Pricing bears this out 7 Senator Pryor, in 1990 Health Affairs article entitled "A prescription of Higher Drug Prices" stated : " Rarely is a new product priced at a significantly lower level to attract market share from its competitors" John curran, editor of pharmaceutical executives, noted the "new pricing approach taken by Merck in the launch of Vasotec, which was priced below its competitor, unlike other new agent there appears to be a basic assumption among casual observers and critics alike that new agent will be priced higher than the older agents. they are intended to replace in the market but this trend has reversed itself.

A study by the Boston consulting Group found that 21 of the 24 new chemicals entities with direct competition that were introduced in the united states in 1991 and 1992 were priced on average ,14% below the leading product in their class 8 Far the most active chronic therapeutic areas, which include antihypertensive and other cardiovascular products, the discount average 36% . An investigation by researcher at the university of Mississippi found that only one product has been priced at a premium to direct competition since 1992 this is marked departure from the tractional and assumed pricing behavior of the past. This change also leads us to challenge a general assumption about pharmaceutical prices that generic products are less costly than brands.

Grabowski and Vernon found that the prices for chemically equivalent generic version of branded products varied in price by up to 50% a finding that, according to economic theory, is not expected in a "Commodity Market"⁹ Bloom and Colleague found that generic version of branded pharmaceutical products studied, the highest retail price below the brand 10. In 66% of the products studied, the highest retail price found for generics was above the lowest price found for the brand of the same chemical makeup. while this study was based on multi pharmacy sample and there were no individual stores in which the price of the generic was higher than that of the competing brands, the distribution of retail prices was such that it could be concluded the generic are not always less costly than their branded counterparts.

Given that manufacturers have begun to set the prices of some of their newer products well below those of established brand's and that it is the older, established brands that will receive generic competition because their patents will usually expire before those of their newer competitor's, it is not unlikely that some new brands would be less costly than generic version of some older competing products., This statement would seem to defy what might be considered common wisdom, it can be demonstrated that some newer brands are, indeed, less costly than generic version of their older competitors. A review of the National Prescription Audit and the pharmaceutical pricing database price check- PC reveals that generic version of Nifedipine and Diltiazem, two popular calcium channel blocker, at \$ 1.17 and \$ 1.47 / day respectively, are priced above the newer branded calcium channel blockers Dynacare (Nicardipine) Sandoz, \$ 1.04/ day, Plenti 1 (Felodipine) Merck,\$ 0.92/day and even in older brands, Callan SR Verapamil Searle\$ 1.16/ day 11,12.

Even as the price of newer agent have moderated the rate of price growth, the emergence of managed healthcare and hospital buying groups has brought about significant changes in the way in which pharmaceutical prices are determined. Aggressive bidding has caused a wide disparity between the retail prices and special contract prices of many pharmaceuticals 13. It appears to have become routine to offer discounts to specific customers. The imposition of mandatory reverses based and paid to medical programs, however, appears to have caused many firms to rethink their discount policies, as many have begun to increase prices to these segments 14,15. New pressure emerged in the form of pharmacy and resulted in calls for " unitary pricing" to further narrow the discount gap. Perhaps the most profound change in the pharmaceutical pricing environment in the 1980s was that the prescriber's choice of drug therapy came under the influence of payers and other intermediaries 16. Managed care as opposed to traditional fee for service health insurance, grew from covering 5% of the insured population in the United States in 1980 to 80% of the insured population in 1991 the growth of cost consciousness among payers appears to be a major force behind the change in the way manufacturers are setting their initial prices, Finally, the useful life of Pharmaceutical products has declined rapidly over the past 15 years .Early ,generic erosion and more direct competitors have brought about a shortened commercial life for a product, and lengthier time for approval have delayed the entry of many new products .As a result, the average pharmaceutical products has a " useful" life that the product must generate sales and profit sufficient to finance the discovery and development of newer agents. such a situation would appear to require higher than traditional prices if newer products are to be discovered. Thus, the most recent trends in pharmaceutical, pricing seem to be the combination of the moderation of price growth and narrowing of discount ranges with increased need for price flexibility.

The extension of price controls.

concurrent with the rise and falls of price growth in the United States, healthcare system in other nation began to assert significant and growing control over pharmaceutical prices, Nations in northern Europe such as Germany. The Netherlands and many Scandinavian nations, which began the decades of the 1980s with relatively free pricing for growth in the U.S, which for exceeded the general rate of inflation during the 1980s, real price for pharmaceuticals fell, relative to other goods and services, in most European nation(1) even with this result - deflation of pharmaceutical prices every European government has tightened control over pharmaceutical prices in recent years.it appear that government officials often confuse total spending with pricing problems, assuming that spending growth indicates excessive prices Evaluation of European price control system by the U.S General Accounting office has Concluded that these programs are insufficient to control drug spending because, despite holding price growth below prevailing rates of inflation, total spending on pharmaceutical continued to increase faster than the rate desired 18 Although such evaluation appear to ignore the inherent cost- effectiveness of pharmaceuticals and fail to consider the cost and quality consequences of the underutilization of prescription medications, these issues do not seem to affect decision making within government bodies 19. A regulatory approach common to many nations is " reference pricing " under such a system, the prices charged for a pharmaceutical product in several different nations are compared by a regulatory agency to assure that the prices charged in that nation are roughly Equivalent to those system, and it appears likely that references pricing will be adopted in the near future by Germany, the United Kingdom and other nations.

Canada, Portugal and Italy now use such a system, and it appears likely that reference pricing will be adopted in the near future by Germany, the United Kingdom and other nations. The range of prices changed for the same product in different nations has been studied exhaustively, and it is often found that drug prices in the United States are higher than elsewhere 20,21 comparisons of international drug prices, often commissioned by the Federal government, have brought about calls for a reference pricing system in the U.S. A reference pricing system was prominently featured in the Clinton Health Plan of 1994. Although no such system is now in place, large disparities between prices in the U.S and other nations will continue to be brought to the attention of regulators, A narrowing of international Price "brands" appears to be in the works. Many public financed health care provision system were developed as government responses to the perceived problem of unmet medical need.22 While public official in the United States often note the growth of Medicaid spending, especially for pharmaceuticals and point to this growth as an indication of the need for tighter controls on health Care cost, few have acknowledge the inevitability of cost increases in a system that provides good and services free of charge 23 As a former Minister of the British National Health services noted " there is virtually no limit to the amount of absorbing" Although the many programs provide a comprehensive package of healthcare goods and services and are meant to provide and overall benefits, the components of the benefits are often Budgeted and managed as separate entities, resulting in conflict between budgetary authorities 24.Many private insurers providing a pharmaceutical ,benefits operate the pharmacy program as a " carve out" this mean that the pharmaceutical benefits is managed separately from the other aspect of the system. thus, it has become common that the greater good of the total system is often subordinate to individual budget performance. The budgetary problem of many government provide health care programs are manifestation of a basic paradox in public transfer payment systems, as economic cut out and available tax revenues decrease, the demand for government assistance increases, Hence, as the demand for medical benefits -

including pharmaceuticals increases, the funds available to support those benefits are decreasing 25. Budgetary "Crisis" in such a system is virtually guaranteed, over the past decade, studies have demonstrated that tight budgetary control of pharmaceuticals often result in increases in spending on other healthcare goods and services to offset any saving on drugs, a phenomenon known as the service substitution effect 26,27 other studies by Moore and Newman and Smith and Simmons have shown that the imposition of these controls does not even guarantee a reduction in spending on pharmaceutical 28,29. While some other studies in this area were questioned for their assumptions or methodologies, few studies have been produced that establish the ability of a resistance formulary alone to save money in an outpatient setting 30. Several cost control schemes, such as monthly prescription limitations and cost sharing, have also been shown to be less than optimal in controlling cost. As Nelson Reeder, and Dickson found, restriction or cost sharing can result in problems of underutilization, and underutilization can have a negative effect on health and result in cost increases 31 The imposition of maximum number of prescriptions per beneficiary has been shown to have severe negative consequences, increased total costs by increasing hospitalization and nursing home admission 32 despite the preponderance of evidence that such restrictions are counterproductive, both in financial and health status terms, the bureaucratic faith in budgetary fragmentation appears unlikely to be shaken, and the continued micromanagement of the prescription budget can be expected in the future. Thus the key decision makers in prescription drug use spear to treat price in conflicting ways, physician, in general, pay no attention to the Price of a product while other intermediaries can be said to consider little else, price, then ,plays very different role in decision making, and firms must balance these opposing force when setting prices. Pharmacoeconomics. In response to pricing pressure and to provide more information about their, products, most pharmaceutical firms operating in the United States are, to some extent, engaged in pharmaco economics research .Although the field of Pharmacoeconomics research is still in its relative infancy, there appears to be great hope that such studies will provide an appropriate basis for judging the economic value of pharmaceutical agents, as well as other healthcare interventions.

Conclusion:

The future environment that faces pharmaceutical manufacturers will be determined by the actions of customers, regulators, and the firm themselves, To expert significant changes in the governments is, perhaps, naive, it is thus incumbent upon the pharmaceutical firms and others to adopt to the decision- making styles of these officials. The current trends that, if left unchallenged, are likely to continue include:

- i Narrowing of the range of prices charged in different nations.
- ii Further consolidation of buyers into more powerful groups
- iii More non physicians decision makers.
- iv Continued growth of generic drugs.
- v Continued increase in health care spending and security of drug budgets
- vi More attempts by pharmaceutical manufacturers to use prices as setting point
- vii Continued demand for discount by many customers.

These combined and often contradictory- trends will shape the pricing environment of the future. Many of the trends, several of which are troublesome for pharmaceutical makers, are self-

imposed left unchecked or unchallenged, they will lead to general lowering of price levels in the United States. International price disparities will remain an issue of contention between these producing pharmaceuticals and these purchasing them. There are two distinct areas of concern, price differentials among developed and developing nations. The range of price charged for the same medication in Europe can be quite broad it is not uncommon that price in France, Spain and Greece are less than half the prices charged in Germany, The Scandinavian countries, or the United Kingdom. Such disparities will not be tolerated for long, thus, it is imperative that the price levels of Pharmaceutical in Southern Europe be brought up the approach those in northern Europe and the United States. Failure to address this disparity will eventually lead to downward adjustment of prices in the nations of northern Europe and North America.

The value of pharmaceuticals:

The main impediment to the appropriate and equitable pricing of pharmaceuticals lies in society's lack of acknowledgement of the value of pharmaceuticals, both in macro sense- the financial saving gained through the use of pharmaceuticals products as a whole and from a micro perspective the financial and patient - specific benefits from the appropriate use of many, if not most, new drugs, part of the problem lies in the failure of society to take a system wide view when evaluating healthcare, part in the long terms demonization of the pharmaceutical industry by critics, and the great deal in the industry itself Most pharmaceutical companies have actively worked in ways that devalue pharmaceutical products. The companies, own conduct has reduced the value of medications in the eyes of customers and society at large. For the past several years, prices in pharmaceutical market have gone in two directions, increasing or holding firm in outpatient, cash - based markets and charging lower prices in hospital and managed care markets. Although these lower prices are in response the perceived market demands and are often accompanied by well - reasoned strategies for the discounts, public knowledge of these multilayered prices has brought many to question the appropriateness and equity of the non-discounted prices, Regardless of the legality of multiple price levels, which has been upheld time and again, two observations must be made.

1 There is a little evidence that the deep discounting associated with managed care contracts has substantially affected the use of pharmaceutical products. In most therapeutic areas, the market share for individual products is the same in managed care market as in the cash market.

2 The act of discounting ,especially at some of the levels reported ,signals(rightly or wrongly) that the company is willing to accept less for its products than it charges those who do not benefit from discounts.

Pharmaceutical firms must consider the financial and political consequences of pricing decision and recognize that cannot be made without careful consideration of the effect of those discounts on all aspects of the business. Firms must work to rationalize and manage all pricing activities, while simultaneously working with public official to recognize the value of pharmaceuticals as a cost control tool. I am afraid, however that this value will not be acknowledge as long as perceptions of unfair pricing, brought on by wide price ranges, continue to exist.

References:

1. Grabowski H, Vernon J, A sensitivity analysis of expected profitability of pharmaceutical research and development. *Manage Dec Econ* 1992 1993(1) 36 - 40.
2. Zelmo RN, Gagnon JP, The effect of price information on prescription drug product

- selection, Drug in tell clin pharm 1979,13 156- 9
3. Chukkapati R, Kolassa EM, Ogilvey S, Hay men- Taylor T, The 15 years trend in prices at launch for outpatient Prescription medications.
 4. U.S Senate, Special Committee on Aging - Prescription drug prices: are we getting our money's worth ? Serial No 101F Washington D.C 1992
 5. Pryor D.A prescription for high drug prices,HealthAff 1990,9 101-9.
 6. Dranove D, Medicare drug formulary restrictions J low Econ.1989,23: 143-62
 7. Current JP,strategic shift in pricing policies pharmacy Exec 1986,6 April:92-4
 8. Boston consulting Group. The changing enviournment for U.S Pharmaceuticals New York.Boston consulting Group April 1993.
 9. Graowski HG,Vernon JM,Brand loyalty,entry and prices competition in Pharmaceuticals ,after 1984 Drug Act.J law Econ.1992,23: 331- 50.
 10. Bloom BS,Wierz DJ, Paul M.V cost and prices of compareable branded and generics pharmaceuticals JAMA 1986,256: 2523- 30.
 11. IMS America ,National Prescription Audit, Oct - Dec 1994 Plymouth meeting PA,IMS America
 12. Medispan inc, price check - PC, Dec 1994 Indianapolis, IN: Medispharm inc
 13. Pathak DS, Klinger PA, Predictive, factor in bid purchasing of antibiotics, Top hospital pharm Manage 1981,1(1): 17- 28.
 14. Taylor S, Kucukarslan S, Shcrrcu T, Evidence and response to the impact of the Medicaid Drug Rebate program (OBRA) on hospital pharmacy: a progress report from central Ohio, Hosp Pharm 1991,26: 621- 5.
 15. Palumbo FB, Schondelmeyer SW, Miller DW, Speedie SM, Battered Bottom lines, the impact of eroding pharmaceuticals, Discount on healthcare institutions Am J Hospital pharm 1992,49: 1177- 85.
 16. Wilensky GR,Blumberg LJ,Neumann PJ,Chapter 4 Pharmaceutical and decision making in the united states: cost consciousness and the changing Locus of control ,In: van Eimeren W,Horisberger B,eds,Socioeconomic evaluation of drug therapy,Berlin New York Springer-Verlog 1988: 32-45.
 17. Wettheimer AI, Grumer SK, overview of international pharmacy pricing, Pharmaco Economics 1992,2: 449-55.
 18. Anon, European price control not sufficient to control drug spending without policies in place to control use FDC Rep- pink sheet 1994; (July4) : 7- 9.
 19. Brown RE, Luce BR, The value of pharmaceutical; a study of selected condition to measure the contribution of pharmaceutical to health status, Washington DC: Battle Medical Technology and Policy Research Center, March 1990.
 20. Anderson F, McMenamin P, international price comparison of pharmaceuticals- a review of methodological issues, London and Washington, DC, Battle Medical Technology and policy center(MEDTAP),1992.

21. U.S General Accounting Officer, Prescription drugs companies typically charge more in United States than in Canada. Report to the chairman, House subcommittee on Health and environment committee on Energy and commerce GAO/HRD- 920119 Washington DC, September 1992.
22. Soumerai SB, Ross - Degnan D, Experience of State drug benefit programs. HealthAff,1990,9; 36- 54.
23. Goodman JC, Dolan EG, Economics of Public policy St, Paul, MN: west publishing company,1985.
24. Kozma, CM, Reeder CE, Lingle EW, Expanding Medicaid drug formulary coverage: effects on utilization of related services, Med care 1990: 28: 963-76.
25. Rentzel TJ, The nature and consequences of policies intended to contain costs in outpatient drug insurance programs clinther 1993,15,752- 64.
26. Bloom BS, Jacob J, cost effects of restricting cost effective therapy, Med care 1985: 23: 872-80.
27. Hafner DL.cost effectiveness of restrictive drug formulary, Washington DC, National Pharmaceutical council 1980.
28. Moore WJ, Newman RJ ,US Medical Drug - Formularies do they work ? Pharmoeconomics,1992: 1(suppl 1) : 28-31.
29. Smith MC, Simmons S,A study of the effect of formulary limitations in Medical Programs, Admin Policy J 1982: 2 169- 98.
30. Rucker TD, Morse ML. The Medicaid drug program in Louisiana: critique of the Hefner-Pracon study Am J Hospital pharmacy 1980: 37: 1350- 3.
31. Nelson AA, Reader CL, Dickson WM, the effect of a Medicaid drug co payment program on the utilization of prescription services, Medicare 1984; 22; 724- 36.
32. Soumerai SB, Avorn J , Ross- Degnan D,Gortmaker S, payment restrictions for prescription drugs under Medicaid: effect on therapy, cost, and equity N Engl J Med 1987: 317: 550-6