



‘We care... because care is growth’. The low-tech imaginaries of India’s small-scale pharmaceutical enterprises

Yves-Marie Rault-Chodankar

► To cite this version:

Yves-Marie Rault-Chodankar. ‘We care... because care is growth’. The low-tech imaginaries of India’s small-scale pharmaceutical enterprises. *SSM - Qualitative Research in Health*, 2022, 2, 10.1016/j.ssmqr.2022.100144 . hal-03952164

HAL Id: hal-03952164

<https://hal.science/hal-03952164v1>

Submitted on 23 Jan 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



'We care... because care is growth'. The low-tech imaginaries of India's small-scale pharmaceutical enterprises

Yves-Marie Rault-Chodankar

Université Gustave Eiffel, Institut Francilien Recherche Innovation et Société (Ifris), Centre Population et Développement (Ceped), 5 rue des Saints-Pères, 75006, Paris, France

ARTICLE INFO

Keywords:

Imaginaries
Pharmaceutical industry
Global health
Small-scale enterprises
India

ABSTRACT

Since the early 2000s, the development of India's generic industry has generated a lot of hope and interest amongst researchers and practitioners of Global Health. This article documents the ambiguous dreams, aspirations, and hopes of the managers of micro, small, and medium companies involved in manufacturing, marketing, and distributing low-cost generic medicine. The analysis draws on semi-structured interviews with managers ($n = 66$) and shows that they contrast sharply with the universalist, tech-intensive, and salvational imaginaries often associated with the global pharmaceutical industry. On the one hand, India's small-scale entrepreneurs see themselves as instrumental to their family's financial welfare and the economic development of their local social groups. On the other hand, they like to imagine themselves as part of India's emergence on the international stage and better global access to affordable medicine. Such imaginaries form a low-tech approach to Global Health where generic pharmaceuticals are not taken as transformative technologies but are meant to play specific socioeconomic roles at different scales.

1. Introduction

The rise of pharmaceuticals from the Global South has generated a lot of hope and interest amongst researchers and practitioners of development who re-discovered the complementarities between health and industry (Horner, 2016). The new geography of generic drug production includes countries like Brazil, China, and India, with an enormous effect on Global Health (Gaudillière et al., 2022, pp. 10–15). For two decades, this field of players, tools, and objectives organizing health intervention at the international scale has had to renew its framework of analysis and modalities of action to include these emerging actors (Baxerres & Eboko, 2019). The health practitioners and researchers notably acknowledged the central role of India's firms in the better availability and affordability of medicine worldwide (Guerin et al., 2020; Löfgren, 2013; Ravinetto et al., 2013), particularly in low- and middle-income countries (Bazzle, 2010; Waning et al., 2010). Some authors have analysed India's pharmaceutical industry (along with China) as an iconic model of local production in the Global South with the potential to be replicated in other developing countries (Chaudhuri et al., 2010; Hafner & Popp, 2011). Several studies enthusiastically reported the emergence of pharmaceutical innovation in India, opening rays of hope for a new global geography of technology and science that includes the developing world

(Chataway et al., 2007, 2007, 2007; Kale, 2019; Kale & Little, 2007). The last narrative is not of hope; the Indian firms are often singled out as suppliers of spurious, counterfeit and substandard drugs worldwide, including in journalistic accounts (e.g., Eban, 2020). However, this role has probably been dramatically exaggerated as a containment strategy by established actors (Hodges & Garnett, 2020; Quet, 2015, 2018).

In this article, I wonder about the socio-cultural factors that drive the pharmaceutical activities of some of the emerging actors in the field of Global Health, namely, India's small-scale pharmaceutical firms. Between 2015 and 2022, I interviewed managers ($n = 66$) of micro, small and medium enterprises involved in manufacturing, marketing, and distributing generic drugs. The main objective was to identify the socio-spatial networks in which these entrepreneurs were embedded and which types of economic resources they were drawing from these networks. At the end of the interviews, I systematically asked about their motivations, aspirations and ambitions. In this article, I reveal the recurrent narratives to unpack how India's small-scale pharmaceutical enterprises imagine their role as Global Health actors.

This article has five parts. First, I review the literature on imaginaries in the pharmaceutical industry and stress the need for such research in the Global South. Second, I describe the research methods and materials. Third, I analyse the empirical data and identify the central imaginaries of

E-mail address: yves-marie.rault.chodankar@ird.fr.

<https://doi.org/10.1016/j.ssmqr.2022.100144>

Received 14 March 2022; Received in revised form 25 July 2022; Accepted 25 July 2022

Available online 7 August 2022

2667-3215/© 2022 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

India's small-scale pharmaceutical enterprises. Fourth, I highlight the limitations of the analysis and characterize the imaginaries of India's small-scale industry, stressing their social embeddedness, contradictions, and specificities. I conclude by discussing the implications of these low-tech imaginaries for Global Health.

1.1. *Imaginaries and the pharmaceutical industry*

The concept of 'social imaginary', or simply 'imaginary', can help us think about the collective norms, values, institutions, visions and aspirations of an actor and understand the way it can create a 'singular way of living, seeing and making its own existence' (Castoriadis, 1997, p. 145). Following Thompson (1984, p. 5), the sociology literature often defines an imaginary as 'the creative and symbolic dimension of the social world, the dimension through which human beings create their ways of living together and representing their collective life'. For example, how people imagine their life and understand social relations can guide their consumption practices (Douglas & Isherwood, 1979) or how they interact and belong with a given society (Baczko, 1984). When large social groups share the same imaginaries, they can shape the material world so actively that some authors argue that they constitute social reality. The things people imagine are not imaginary (Godelier, 2015). They are 'not a set of ideas; rather it is what enables, through making sense of, the practices of society' (Taylor, 2004).

In summary, the concept of imaginary can help us understand how certain actors are in the world, make sense of their activities and envision their futures, and how all this imaginative work shapes their projects (Adams et al., 2015; Flear & Ashcroft, 2021).

Some authors highlighted early on the significant role of technologies in the work of imagination and fabrication of social lives (Appadurai, 1994; Marcus, 1995). The Science and Technology Studies (STS), in particular, have engaged with the concept of imaginary because of the deep connection between how people imagine society's use of emerging technology and how they would like society to become. Such STS analyses approach technology as critical in how imaginaries develop and deploy, so much so that the latter are generally conceptualised as 'sociotechnical'. Following Jasanoff and Kim (2009, p. 120), 'sociotechnical imaginaries' are thus often defined as 'collectively imagined forms of social life and social order reflected in the design and fulfillment of nation-specific scientific and/or technological projects'.

The biomedical industry is a dynamic site for developing complex imaginaries and sensitive sociotechnical space for such imaginaries to deploy. Consequently, the STS scholars have monopolized the analysis of imaginaries in this field to a large extent. They notably engaged with the public understanding of pharmaceutical innovations such as cognitive-enhancing drugs (Bloomfield & Dale, 2020; Coveney et al., 2019) or advances in regenerative medicine research (Duggal & Faulkner, 2020). Some authors also suggested that particular public imaginaries could threaten technoscientific progress in synthetic biology (Marris, 2015). Simultaneously, some studies have shown how the imaginaries of growth in the bio-economy can foster the development of technology bioprinting and the production of biological objects (Lafontaine et al., 2021). Other research pointed to the significant influence of policymakers' imaginaries in shaping personal healthcare policies (Kruining, 2021). These studies help us understand how the debates about antimicrobial resistance have reshaped the imaginaries of healthcare policies (Brown, 2019) or how the national healthcare imaginary influences therapeutics regulation (Møllebæk, 2021).

However, this vivid STS scholarship on imaginaries and the pharmaceutical industry has been mainly concerned with the significant sites of technoscientific innovation in the Global North. In these analyses, the evolution of biomedical technology is the primary concern of the actors considered, generally technoscientific actors from the Global North. Few scholars have looked at imaginaries in Southern technology industries. The social sciences still see developing countries as places where technology is secondary to labour in their emergence and approach its

inhabitants as technology users rather than producers. Several studies have focused on subjectivities in pharmaceutical consumption practices, but rare ones have connected consumer imaginaries to production and distribution practices (Baxerres et al., 2021).

Still, some scholars suggested that the emerging pharmaceutical industries also had vivid visions and specific aspirations for a technoscientific future worthy of research. In Cuba, Nils Graber shows how the local imaginaries of community engagement in the primary healthcare system form an alternative to the Global Health dominant paradigm (Graber, 2018). In her book 'Synthesizing Hope', Anne Pollock (2019) demonstrates how the dreams of putting Africa 'on the map' and the desire to solve local problems without the help of the former colonial powers have shaped pharmaceutical research in a South-African laboratory. Another book by Olga Zvonareva (2020) argues that the particular imaginaries of the Russian nation and its future and the vision of an independent and self-sufficient country have distinctly shaped the pharmaceutical industry's organisation and practices.

In India, the rise of the domestic pharmaceutical industry is part of the narrative about the country's economic, technological, and political emergence on the global stage. Kaushik Sunder Rajan has uncovered the values of India's biomedical elite; the scientists, managers in large companies, venture capitalists, and policymakers (Rajan, 2006, 2017). Although their social representations sharply contrast with actors in Western countries, what is analysed is how they envision their relation to the world. Little attention is given to more locally-embedded forms of social engagement. For example, we do not know much about the embedded imaginaries of the small, younger firms, which are the bulk of India's pharmaceutical industry and will shape its future. Nearly 11,000 pharmaceutical companies registered in India between 2000 and 2015 (Ministry of Corporate Affairs, 2016). Most were micro, small and medium firms, with a turnover worth less than \$35 million. Only 334 firms headquartered in India had a yearly turnover above \$55 million in 2016 (Centre for Monitoring Indian Economy, 2016). Despite their massive Global Health role as generic medicine suppliers, particularly in the Global South, little is known about their dreams and ambitions, which this article hopes to shed light on.

1.2. *Materials and methods*

This article draws on the analysis of a body of semi-structured, in-depth interviews with 66 executive managers of micro, small and medium enterprises conducted between 2015 and 2021 in Western India. I randomly contacted the first set of firms using the Indian registrar of companies, and I subsequently used the interviewees' recommendations to contact other managers. Using this 'snowball sampling' method enabled us to follow specific business networks and let us access companies more easily. During fieldwork, I had institutional affiliations with a French research centre based in India, a prestigious Indian business school, and a famous university known for its social sciences departments. I felt that the latter's perception was the most detrimental to accessing managers. On the contrary, they seemed interested in talking about their entrepreneurial journey to a foreign researcher from a recognized business institution.

The sampled companies were mainly headquartered in the States of Gujarat (39 interviewees) and Maharashtra (25), including 32 in Ahmedabad and 21 in Mumbai.

The enterprises were involved in various activities related to the production and commercialisation of generics; R&D, manufacturing, marketing, distributing, and retailing. The managers held executive positions (director, chairman, CEO, COO, CTO) and most wholly or partly owned the company they were running. They were mostly males (only three females) aged between 24 and 72. Half of them were relatively young, between 24 and 40 years old, and only about two-fifths of the interviewees had a pharmaceutical-related curriculum in their higher education. The most significant number of their enterprises were launched after 2010 (about 40%), and the second largest number (about

31%) between 2000 and 2011.

The interviews mainly took place on the companies' premises. The rest of the interviews occurred in public settings or through audio/video calls. Twenty-one directors did not feel comfortable being recorded, and the interviews ranged from 30 min to 2 h. Informed verbal consent was obtained from study participants after the presentation of the purpose of the study. The study was done by the National Ethical Guidelines for Biomedical and Health Research Involving Human Participants of the Indian Council of Medical Research, applicable to social and behavioural sciences research for health in India (2017, pp. 104–111).

2. Data analysis

The interview formats and collection modes (notes and recording) were too varied to allow consistent text analytics software use. The analysis was done by reading the interview notes and transcripts multiple times. The data analysis specifically focused on their motivations, aspirations and ambitions for themselves and the world around them as drug manufacturers, marketers, consultants, distributors, or retailers. I manually coded the testimonies that showed similar statements. The analysis revealed five recurrent social spheres that the entrepreneurs argued they were serving; the family, the local industry, the traditional groups, the nation, and humanity. I subsequently separated these five groups into two main imaginaries 'serving family and local communities' and 'serving the nation and humanity'. Indeed, it appeared that the intended impact of the entrepreneurs' activities was entrenched into the material, economic improvement of local, close social groups. In contrast, their service to the nation and humanity had more immaterial aims, such as national prestige or improving global access to medicine.

2.1. Serving family and local communities

The most frequent imaginaries integrated the entrepreneurial activities to uplift and support the financial and economic growth of the family, the company people (often conflated with the family), the local small-scale industry and the traditional regional groups, such as the Hindu castes and Muslim communities. This finding is in tune with the extensive sociological literature that highlights the central role of such social groups in India's economy (Harriss-White, 2003; Lachiaier, 1999), at least much more than in the 'individualistic' or 'atomised' societies of the Global North (Putnam, 2001). This section highlights how India's small-scale pharmaceutical entrepreneurs imagine they are serving these social groups.

2.1.1. Family

The family appeared as the centre of the entrepreneurial motivations. Nearly one-third of the interviewees had inherited the companies they were managing, and the managing directors often expected to transmit their company to their children. Only in a few occurrences, the interviewees insisted that their children should be free to decide about their careers. The 72-years old director of a Gujarati pharmaceutical marketing company, who had taken over a textile business from his father, did not have a male child. He said that he wanted to pass on his Ahmedabad-based pharmaceutical marketing company to his grandson:

Since childhood, Gujaratis are taught how to do business. They go to the office, talk with their dad about business, and so on. My grandson is now doing internships in other companies, manufacturing companies mostly. When he is ready, he will come to the company and work there.

Besides leaving a legacy to their children, starting a pharmaceutical enterprise was also a way to find a stable professional occupation near the relatives' residence. One manager who graduated with a Master's degree in Pharmacy explained that he launched his own wholesale business aged 27 due to his inability to find a good position in the city

where his two parents resided (Nadiad, 220,000 inhabitants). As the only son, his role was to support his parents financially, and the family expected his wife to manage the household. Another interviewee grew tired of working in various African cities as a regional manager for five years. He started a consulting business to spend more time with his family: *'I was used to travelling 3 months at a stretch, returning to Mumbai for ten days, and then going on tour. So being a family person, you know. I did it for my kid'*. Another interviewee quit his job as a sales representative to start his venture to generate sufficient income to fund the higher education of his daughter and son in the USA or the UK.

Generally, the managers showcased a strong desire to support the financial growth of their families. They wanted their relatives to consider them essential contributors. The Mumbai-based founder and manager of a company in the pharmaceutical export business, having a modest socioeconomic background, highlighted the family as central to his entrepreneurial motivations:

[My parents] are very proud of me because I am the only most settled person; they have never seen this kind of money earlier. [...] Whenever they want something: 'okay, take'. All are happy because of me. I am not that show-offing or something. You can say that because of me, my family has also got stand-up; my brothers have stood up because of me.

In India's small-scale pharmaceutical industry, the companies' shareholders are generally members of the nuclear and extended family, and the managers often hire the employees through family networks. Beyond these familial ties, many managers also felt a sense of duty towards their employees. Some of them insisted that they considered themselves a standard worker in a collective enterprise or positioned themselves at the service of their employees. In many instances, the interviewees saw their enterprises as a way to create 'regular jobs' (*'naukri'* in Hindi) in a country where labour remains widely informal, low-paying, and heavy. This interview excerpt illustrates this vision that positions the workers at the centre of the entrepreneurial project:

From 27 people initially, my company has grown to 100 people. And I can say that they like working here. My ambition is to own a billion-dollar company. In 10 years, go public, having ten stores, IPO. All employees should grow well. Everyone should be happy.

Besides the employees, serving the company often includes the investors and the shareholders. One founder-director borrowed from a local pharmaceutical distributor to start his company and promised him that he would *'return the money shortly with lots of benefits, and give him some of the profits every year'*.

2.1.2. Industry

The latter example showcases the solidarity ties between the small actors of the local industry and the willingness to participate in collective industrial growth. In Gujarat, several business associations gathered the local small-scale pharmaceutical enterprises and were segmented according to the sector of activity. In Ahmedabad, I interacted with representatives of the local branches of the All-India Small Scale Pharmaceutical Manufacturers Association, the Association of Small and Medium Chemical Manufacturers (ASMCM), the Drug Marketing and Manufacturing Association (DMMA), and the Indian Drug Manufacturers' Association (IDMA). The IDMA, gathering the small-scale manufacturers of drugs, is the most ancient and active on this list. For the vice-secretary of the Gujarat branch, the IDMA is a support network for the local entrepreneurs:

IDMA is that kind of group where you can exchange ideas, and it is very transparent. Together we have been fighting many battles in the name of the IDMA, but we also exchange a lot of help and ideas. We help each other out a lot. It could be technical help or informative. For example, [the secretary] knows very well the Drug Act, our bible. So, with every law coming up, we inform everybody. One bad rule is

coming: we either inform or decide to fight it under the IDMA banner. We share every kind of issue. Most importantly, everybody respects the privacy of business.

Although the business associations generally aim at gathering small and medium pharmaceutical manufacturers at the national scale, the vision for collective growth appeared limited to the urban and regional scale. The geographical proximity seemed to transcend the socio-cultural differences, as the vice-secretary of the Gujarat branch of the IDMA explained:

Gujaratis would not want to fight amongst themselves. We are shrewd businessmen, we have no boundaries, but at the same time, you know, it happens that on Saturday night we have dinner together. We discuss our issues together, problems, and good things that happen. [...] There are not only Gujaratis but also Sindhis, Marwaris, and people from Uttar Pradesh. Everybody is welcome. [...] It is not at all based on caste or breed.

Besides these institutionalized support networks meant to transcend ascriptive communities, multiple sub-networks came to light during the interviewees. For instance, the vice-secretary and secretary of the IDMA - whose testimonies are transcribed above - had a solid interpersonal relationship allowing them to '*share technical issues, financial issues, give contacts of people who can help*'. They were both in their fifties, second-generation entrepreneurs, and managing a manufacturing company. Their connection, the vice-secretary insists, is a '*kind of relationship [he has] with a small group of people*'.

2.1.3. Traditional groups

Such close-knit relationships can also be structured around the traditional ties of caste and religion. Participating in the upliftment of local social groups appeared as a motivation in several instances. The owner and manager of a medium enterprise involved in marketing branded generics notably stressed his desire to emerge as a public figure in his community. '*I want to be the first famous Vala businessman. Because today there are very few rich Vala. My dad is a farmer, so there are community connections, but not many business connections.*' The Vala community is a clan of the Kshatriya caste historically settled in Saurashtra, an agricultural region in Gujarat. This testimony is in tune with the desire to reshuffle the social structures of the Indian economy. Historically the so-called 'business communities' or 'merchant castes' have been dominant (Damodaran, 2008; Gadgil, 1959; Tripathi, 1992). One manager, who did not stem from these social groups, stressed his desire to challenge this domination:

See what happens in this business. We are not business houses. But business houses will be there. You have the Gujaratis, the Marwaris, the Birla family, the Tata, the Patel, and so many varieties. More than one hundred houses. They are here in the pharma business also. In Hyderabad and Rajasthan, it is like 20% of the business. [...] Why is it difficult for us? Because they will support people from the same business house. If they want to start a business in pharma, they will support them. Suppose you are my relative. You want to establish a business. For example, I will start a packaging industry and supply packaging to you.

However, as I asked if the castes had a role in their motivations, some managers, most often young ones, played down the part of such communities. Some argued, concerning the Indian pharmaceutical industry, that '*caste is not important*' or that '*caste only matters to politicians*'. Some other managers nuanced the role of castes in showing their attachment to local traditional communities rather than regional or national sub-groups. One enterprise headquartered in a city of 80,000 inhabitants with a sizeable Muslim community, located 2 h from Ahmedabad by road, is an excellent example of the significance of the 'local' in community ties. Managed by three members of the local Bohra community, the enterprise has benefitted from significant investment and land

allotment from the city's community board ('*Bohra samaj*'). The objective was to '*diversify the community's business profile*' and '*create jobs in rural areas around [the city]*'.

The imaginaries of the small-scale entrepreneurs are thus embedded in the dreams and aspirations to uplift the close-knit social groups that share the same norms, religious beliefs, languages, values, and identities. In India, supporting the family is a significant motivation, followed by the co-workers, the employees, the industry, and the caste. The sense of place strengthens the feeling of commonality from inhabiting a relatively inter-connected geographical area, particularly the village, the city and the State region (e.g., Gujarat).

2.2. Serving the nation and humanity

Participating in the emergence of India, and more broadly, the developing world, constituted another essential set of motivations. Contributing to India's economic growth seemed to bring a sense of pride to the interviewees. Many testified to a desire to put India 'on the map' and compete with the wealthiest countries. Contributing to society's well-being by making affordable medicine available to many constituted another significant set of motivations. This section deals with the ways India's small-scale pharmaceutical entrepreneurs imagine they are serving the nation and humanity.

2.2.1. The nation

The desire to challenge the existing global economic hierarchies and re-affirm the role of India firmly shaped a form of nationalist imaginary. Contemporary India's society and policymakers consider private companies instrumental to the country's global emergence and better suited to ensure people's access to affordable and quality medicine than the State (Das Gupta, 2016). Now that the country rewards the prominent Indian industrialists for their development role, India's small-scale pharmaceutical enterprises also aspire to be the new 'heroes of the nation'. Most managers used India as the major scale to compare and assess their enterprises' economic performance and accomplishments. Many of them stated that they wanted to become '*the leading PCD company in India*', the '*number-one firm in the nephrology segment in India*', etc.

Some larger enterprises had bigger dreams. One manager stated that his goal was to develop '*an Indian-made blockbuster drug for the world*'. A woman director who owned and managed a medium-sized manufacturing firm based in Pune had almost achieved this dream. Her R&D team had developed a generic oncology product that, she argued, was cheaper and more effective than the original drug. Her ambition was to make the product affordable for the Indian population and available in the poorest countries while selling it at a higher price to high-income countries to maintain its profitability:

I have a product that is 200 times better than the innovator, which costs 1/10th or 1/20th of the innovator, a much better molecule. And then cancer is a disease that hits everybody; the rich, the poor or the hungry. But India is not medically covered. [...] Yeah, there are charities, Tatas, and many places where there is a lot of charity work done, but charity is self-sustaining. [...] My dream project, my bucket list, involves making this product in India. I don't want to sell this technology. [...] I want to offer it to countries like India, Africa, you know, those places where there is no medical cover available for people, where people are poor, sell them at this rate where I am giving a product with a 20% or 25% margin to them and simultaneously offer this product in the West at 200% margin.

The interviewees testified to a broader desire to challenge the existing hierarchies of the global market. The previously-cited director vehemently criticised the intellectual property law favouring American companies and deterring access to health. Simultaneously, she praised the merits of the industrial policies of the Hindu nationalist government between 2014 and 2017, stressing India's role as the 'pharmacy of the

developing world'.

Challenging 'Big Pharma' was also frequent in the aspirations of the managers. It testified to a desire to overcome the domination of the large multinational firms from the 'Western' world. For one interviewee, who had started a business in the trade of generic Hepatitis C medicine with Russia, the economic hegemony of the foreign multinationals and the international patent law was a justification for bribing custom officers. He said, '*Big Pharma is like a mafia. What I am doing is life-saving.*'

2.2.2. Humanity

Several managers felt part of the dream to strengthen India as the 'pharmacy of the world' and developed a narrative around their vision to improve access to affordable drugs. This imaginary translates into encouraging access to affordable medicines, enhancing pharmaceutical availability in unserved areas, proposing innovative and quality products, promoting generic medication, or challenging the monopoly of large firms. The young director of a chain of physical pharmacies in Mumbai affirmed that he was working towards such objectives:

If you see, my main aim is to help people save money on their healthcare costs. [...] I have seen people dying because they don't have money for medicine and can't afford surgeries.

Another interviewee ventured into selling Indian generic drugs abroad, in countries where only costly originator drugs are available. The former chartered accountant, who was looking for meaning in his work, explained:

One day I got to Delhi from Mumbai to provide the medicine to a patient because he would not move. I knew I was making money, but also, I was helping him. And then he put a post online saying that he had cured thanks to [me]—best day of my life.

Some rarer interviewees, generally managers whose companies operated WHO-compliant manufacturing units, stressed the quality of the medicine as a central motivation for their pharmaceutical activities. To demonstrate the quality of the medication produced in his factory, the managing director of a manufacturing company from Ahmedabad laid a glass of water in front of him, dropped a paracetamol pill in it, and said: '*What? I don't take, I don't make*'. His story was all about demonstrating his dedication to the quality of his pharmaceuticals:

What drives me is customer satisfaction. I don't do it for money. I will tell you. Last time, I went to the Aditya Birla pigment factory, and I came back with a white shirt. Because the factory is so clean and the production is up to the standards. It's on the vision of the entrepreneur.

These ambitions to 'make the world a better place' seemed firmly entrenched into personal stories. One young director of an online/offline pharmaceutical retail chain from Ahmedabad said he quit a '*well-paid executive job*' to embark on a project '*closer to [his] heart*'. He aimed to '*raise awareness among the population*' and facilitate access to '*low-cost and quality generic alternatives*'. As his story went, the '*wake-up call*' of this MBA graduate happened as he was watching the Hindi-speaking talk show '*Satyamev Jayate*' (Truth Alone Triumphs). The show covered the social problems of contemporary India (e.g., male domination, caste discrimination, poverty) and encouraged Indian citizens to get involved in solving these issues.

It is not coincidental that this testimony came from a pharmaceutical retailer rather than a manufacturer or a marketer. The director of an Ahmedabad-based pharmaceutical company, which he founded in 2015 and primarily involved in manufacturing antibiotics on a contract basis, argued that he felt closer to the patients' needs than when he was working in the R&D department of the biopharmaceutical arm of a large Indian pharmaceutical company:

There are some driving factors for everyone. When I was in this plasma unit of INTAS [a large Indian multinational firm], I used to get direct calls because plasma products are always in short supply. So, people used to call from different places and ask if they could get a particular medicine. So that satisfaction I'm not getting from this business. See, I'm producing the medicine. Some patients get treated. But the satisfaction which I was getting from making those biosimilar products [generic of biologic drugs], I am not getting from this business. Not saying I'm making huge money. I am making good money. But the satisfaction which I was getting there? You felt that you were doing some good at the end of the day. We were working on the products which are not available in India. Then the patients will get treated using these medicines. We get blessings from them. Initially, it was difficult for me to digest for 2–3 years because I am manufacturing old molecules that have been available for 20 or 30. Those biosimilars, they were the need of the hour.

Some manufacturers felt they did not significantly impact public health and stressed their parallel social activities, testifying to a desire to '*give back to society*'. The founder and manager of a marketing firm from Ahmedabad notably stressed his active membership in an association promoting children's education (*Roundtable India*). He also emphasized his funding of cow shelters (Gaushalas) and financing the research and development of products based on cow urine. This example also shows that multiple conceptions of the 'social good' co-exist amongst India's entrepreneurs and sometimes extend to the welfare of the animals, especially the cow, in the case of upper-caste and practising Hindus.

3. Discussion of the findings

In this section, I start by discussing the limitations of our analysis and argue that imaginaries are adapted to the public these narratives address. In the two following parts, I characterize the imaginaries of India's small-scale pharmaceutical enterprises and stress their inherent contradictions and low-tech specificities.

3.1. Multi-social and adaptative imaginaries

This article shows that imaginaries in Southern small-scale industries are intrinsically tied to a desire to impact select portions of the social world. Capturing such small-scale imaginaries makes it necessary to analyse the entrepreneurial phenomenon from both the subjective standpoint of the actor and an objective perspective that looks at the social environment in which the actor is embedded. Because of this dual approach, the concept of 'imaginary' brings more to this particular analysis than the notions of 'identity' or 'field' to understand the portions of the social world the actors engage with and refer to when making practical decisions. First, there is no such thing as an arena where actors only struggle and compete for resources; many solidarities and disinterested behaviours also occur within the social world (Caillé, 1986, 1994). Second, the actors have a subjective and evolutive perception of the interaction space to which they think they belong.

The concept of 'imaginary' helps us grasp the complex subjectivities of India's small-scale enterprises while incorporating the performative dimensions of social identities, i.e., their manifestations in practice. This article showed how these imaginaries provide norms and values to the Indian pharmaceutical enterprises and shape their practices in various ways. Their engagement with diverse imaginaries, sometimes inherently incompatible, generates intense dilemmas and 'hybridizations' that lead the entrepreneurs towards original assemblages. Following Adams et al., (2015, p. 43), this article concurs that 'the social imaginaries field opens onto problematics which resists closure' and 'has much to offer as a paradigm-in-the-making'.

The flexible use of the concept is all the more critical that the managers' narratives often appeared to be adapted to the perceived values of the interviewer (me), stressing the complex entanglements between the

discourses and practices of the small-scale pharmaceutical industry. Talking about one's motivation is an occasion to operate an activity of self-actualisation, particularly self-valuation. The construction of an 'adapted' narrative often led the interviewees to make an apparent effort to speak of buyers as 'patients' rather than 'customers', leading to slips of the tongue: *'huh, I meant patient'*. For instance, reading through local journalists' accounts of interviews with some managers I also interviewed, I identified very similar arguments and narrative patterns. Their discourse was not only adapted to us but to various publics. Reading through their websites, I noticed that some small firms often put forward corporate growth rather than access to health as their main company goal. This is more salient for the enterprises whose customers were other private enterprises such as distributors and retailers.

Hence, some of the firms' directors who had developed a media strategy probably functioned less as 'traditional ethnographic informants and more as public figures' (Rajan, 2006, p. 193). This double standard was also a problem faced by Kaushik Sunder Rajan in his research on the American and Indian biotech corporate worlds, which he neutralized by underlying the socioeconomic objectives of such structured narratives. Indeed, the existence of public presentation strategies does not automatically infer that the interview material is worthless. Instead, the conscious effort to choose certain communication elements interestingly reveals what they think their enterprises should do for the social world and which part of the social world. These imaginaries often clash, highlighting the co-existence of apparently ambiguous visions.

3.2. Contradicting imaginaries

Adapting their narratives to the public they addressed did not prevent the small-scale enterprises from showing apparent paradoxes in their imaginaries. The ambitions to use the pharmaceutical enterprise as a vehicle for the prosperity of their family, staff, communities, nations, and patients could assemble dramatically original imaginaries. The sections 'about', 'mission', 'vision', 'philosophy', and 'commitment' of the various corporate websites and brochures are full of these ambiguities. For instance, the 'mission' of one enterprise was to ensure the *'continuous improvement and development of people & ensure competent professional field force & team to build a team of happy & satisfied employees with ownership who can serve for better health of the people'*.

Another evident paradox is the desire to support the financial growth of their communities and contribute to public health simultaneously. The slogan *'We care ... because care is growth'*, adopted by a medium-sized manufacturer of injectables based in Gujarat, probably best encapsulates it. By placing 'care' and 'growth' on an equal footing, it testifies to a desire to align their economic imaginaries (e.g., generating profits for their communities) with their ambitions for improving patients' health (e.g., selling low-profit drugs for the benefits of the patients). Interestingly, the managers overwhelmingly chose to use the word 'customer' rather than 'patient'. This choice is not only because the end customer is their primary source of income but also because they extensively deal with other firms in the intermediary-packed value chains of the Global South. In the constant search for new investments and partners, they are less concerned with their image amongst potential patients than their perception by financial institutions and business partners. The 'vision' of one company from Gujarat, which sought to *'improve people's live [sic] with genuinely healthy products, while simultaneously heightening the profitability for our customers'*, illustrates this double objective.

The managers often instrumentalised the motivations to justify the disregard of another ideal deemed non-essential or incompatible. One interviewee used his desire to improve access to medicine as an excellent reason to transgress the commercial laws, specifically the international property rights. In other examples, bribing doctors to sell branded pharmaceuticals or government inspectors to obtain clearance to build a manufacturing unit was justified by the need to develop the company and support the community. In another instance, imagining India as a country at par with the Western world justified infringing a patent for an R&D

company based in Maharashtra. This example shows how the local visions of health and business can impact industrial practices.

The narratives and practices are entangled in complex ways. The actors can pick norms, values and other justifications per their personal needs and simultaneously travel in an assortment of coherent imaginaries. Still, such narratives do not only result from conscious and objective labour of explanation, justification and adaptation. Instead, the small-scale entrepreneurs internalize a set of norms and values that help them go on and live with the inherent contradictions of their meaning-making practices. Communicating around the 'social value' of the enterprise undoubtedly helps justify making profits to the public (Bodet & Lamarche, 2007). Still, it is also a work of self-conviction that what they do positively impacts society. These discourses underline a consciousness that the norms of the economic field (e.g., profitability) are not aligned with some other collective norms (e.g., social development, collective wealth, education). By merging diverse, sometimes clashing norms and values to try and find coherence in their business practices, they manipulate a form of 'illusio' to 'give meaning (in the double sense) to [their] existence' (Bourdieu, 1997, p. 248).

3.3. Low-tech imaginaries

This article's account of the imaginaries of India's small-scale pharmaceutical entrepreneurs contrasts with the depiction of India's biotech corporate world by Kaushik Sunder Rajan (2006, 2017). He describes a world where 'attaining a culture of innovation is the rationale offered by many Indian actors who embrace global techno-capitalism', in contrast with the US biotech industry where the 'route to its potential realization is contract work for Western companies, work that is not innovative and for which intellectual property resides with the contracting agent.' (Rajan, 2006, p. 189). The Indian small-scale enterprises described in this article have another set of imaginaries where contract work and independent entrepreneurship co-exist in a world where intellectual property is conspicuously absent. Although India's small-scale enterprises deal with low-cost generics, whose technology is widely known, they do cherish the distant dream of contributing to India's geopolitical emergence and global access to health. This finding comes as nuance to the distinction between the 'salvatory' objectives of the United States and the 'nationalist' goals of India's biomedical industry (Rajan, 2006, p. 185). But most importantly, they primarily hope to provide for their relatives and their close social groups and do not engage with speculative, bioethical, constitutional, philanthropic, and postcolonial values in the same ways and scale as large, tech-intensive organizations do (Rajan, 2017). Overall, more attention to the financial and economic conditions in which technologies emerge – rather than the technology itself – is required to understand the structures of the modern bioeconomy (Birch & Tyfield, 2013).

Hence, one significant contribution of this article lies within the field of STS. It unpacks imaginaries from the Global South and small-scale industries. Such dominated actors can also deploy complex imaginaries without manipulating cutting-edge technoscientific knowledge or radical innovations. It shows that technology can be very marginal in the projects of certain actors, although they play a significant role in the diffusion of technoscientific objects. I highlighted, on the contrary, the central part of the socioeconomic environment in shaping visions for the future, where the technology aims at developing local communities rather than inducing sociotechnical change.

This article also engages with the economics literature on the sidelines. In entrepreneurship and management studies, the 'Darwinians' entrepreneurs are prevalent and follow their 'self-interest' (Fauchart & Gruber, 2011; Sieger et al., 2016). On the contrary, the qualitative analysis shows that the 'individualistic' motivations were absent from the interviewees' testimonies. Those managers who ambitioned to become 'a billionaire' or 'a successful industrialist' mainly aimed to gain a higher status within their local communities and sometimes their country. Hence, one has to consider the local embeddedness of the actors to

capture the subtle difference in meaning they attach to the production and commercialisation of medicine.

4. Conclusion

The small-scale enterprises in India's pharmaceutical industry firstly dream of making their direct social world a better place. That includes their family and company members in the first place and the local industries and traditional groups to which they belong. This imaginary is weakly linked to their activity as pharmaceutical manufacturers, marketers, consultants, distributors, or retailers, but rather as entrepreneurs or business people. Any professional activity would be acceptable as long as they contribute to the material comfort of their families and local communities and are acknowledged as momentous financial and economic providers within their social groups. The second imaginary of India's small-scale industry is firmly embedded in their pharmaceutical activities, which they envision as a way to serve the nation and humanity. The 'nationalist' and 'humanitarian' imaginaries are generally more prominent as the pharmaceutical enterprise is older and larger, or in other terms, when entrepreneurship is less driven by necessity.

The existence of specific imaginaries has implications for the role of India's firms in global public health. Firstly, the small-scale firms' imaginaries are inherently shaped by the complex social world in which they live. This profound social embeddedness contrasts sharply with the large multinationals whose imaginaries are primarily shaped by the economic hopes of the shareholders and financial institutions. As I suggest that the deeper embeddedness of India's small-scale pharmaceutical firms encourages them to adopt socially responsible behaviours, what to make of the multinational firms, which are "dis-embedded" by essence? Can they engage with the social world without solid community and national anchoring? Comparing the imaginaries of small-scale firms with large multinationals could lead to exciting inputs for public policies to foster specific business models that are best for global health.

Secondly, small-scale entrepreneurship in India's pharmaceutical industry is co-constructed by a wide range of dreams and visions that impacts their practices, perhaps much more than the large pharmaceutical companies. In contrast to the monolithic business objectives of financialized corporations, the smaller firms incorporate more dissonant voices that lead them to address financial, economic, political, and health goals while simultaneously responding to the needs of specific social groups. These results suggest that social imaginaries can exert a significant regulating role over the practices of the firms and their impact on global public health. This finding is a nuance to ubiquitous research highlighting the risks of leaving private pharmaceutical industries acting upon their norms and values. This study stresses the complexity of defining the 'private' in a monolithic way and suggests going beyond the public/private dichotomy to overcome public health. The ambiguous imaginaries of India's small firms are thus key to solving the paradoxes and contradictions inherent to producing and commercialising health goods.

Thirdly, the development of high-tech pharmaceutical technology is conspicuously absent from the imaginaries of India's small-scale firms. The Indian firms do not aim at 'saving the world' through high-tech pharmaceuticals but are looking to build financially-sustainable, low-risk firms that can provide a stable income for themselves and their families. This model often revolves around low-investment, affordable, prescription-free, and widely-consumed drugs (e.g., paracetamol, omeprazole, amoxicillin, ibuprofen). They envision a world where intellectual property and pharmaceutical innovation is not the only way to cure patients while keeping an economic organization sustainable. They invent new ways to build cost-competitive solutions and enable better access to medicine, although the effects of the multiplication of generic brands and intermediaries on public health in the Global South ought to be investigated further (Rault-Chodankar & Kale, 2022)

Systematic comparisons between the firms' imaginaries, and the positions of the individuals within the firms, could help cognize their

distinct relation to global health. Our findings indicate that the firms' roles in the value chain shape different imaginaries. The retailers appeared closer to their patients and seemed to have higher motivations to help them than the manufacturers, who were most often concerned with the growth of their organisation. The correlations based on the downstream or upstream position in the value chain remain unclear. For instance, the managers of R&D companies or departments, the most downstream activity, had strong motivations to bring efficacious medicines to the market and imagined a world where Indian drugs saved lives everywhere.

Ethical statement

The study was done by the National Ethical Guidelines for Biomedical and Health Research Involving Human Participants of the Indian Council of Medical Research applicable to social and behavioural sciences research for health in India (2017, pp. 104–111).

The study participants were not patients but managers of pharmaceutical enterprises. Consequently, written consent was not required. Informed verbal consent was obtained from study participants after the presentation of the purpose of the study.

Declaration of competing interest

The author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Adams, S., Blokker, P., Doyle, N. J., Krummel, J. W. M., & Smith, J. C. A. (2015). & zeta books. *Social Imaginaries in Debate: Social Imaginaries*, 1(1), 15–52.
- Appadurai, A. (1994). Disjuncture and difference in the global cultural economy. In *Colonial discourse and post-colonial theory* (1st ed., pp. 324–339). Routledge.
- Baczko, B. (1984). *Les imaginaires sociaux: Mémoires et espoirs collectifs*. Payot.
- Baxerres, C., & Eboko, F. (2019). Politiques, acteurs et dynamiques à l'ère de la Global Health. *Politique Africaine*, n°156(4), 5.
- Baxerres, C., Kpatchavi, A. C., & Arhinful, D. K. (2021). When subjective quality shapes the whole economy of pharmaceutical distribution and production. In *Understanding drugs markets*. Routledge.
- Bazzle, T. (2010). Pharmacy of the developing world: Reconciling intellectual property rights in India with the right to health: TRIPS, India's patent system and essential medicines. *Georgetown Journal of International Law*, 42, 785.
- Birch, K., & Tyfield, D. (2013). Theorizing the bioeconomy: Biovalue, biocapital, bioeconomics or... what? *Science, Technology & Human Values*, 38(3), 299–327.
- Bloomfield, B. P., & Dale, K. (2020). Limitless? Imaginaries of cognitive enhancement and the labouring body. *History of the Human Sciences*, 33(5), 37–63.
- Bodet, C., & Lamarche, T. (2007). La Responsabilité sociale des entreprises comme innovation institutionnelle. Une lecture réglementaire. *Revue de la Régulation*, 1.
- Bourdieu, P. (1997). Le champ économique. *Actes de la recherche en sciences sociales*, 119(1), 48–66.
- Brown, N. (2019). Biotic politics: Immunitary imaginaries in antimicrobial resistance (AMR). In N. Brown (Ed.), *Immunitary life* (pp. 125–167). Palgrave Macmillan UK.
- Caillé, A. (1986). *Splendeurs et misères des sciences sociales. Esquisse d'une mythologie*. Droz.
- Caillé, A. (1994). *Don, intérêt et désintéressement: Bourdieu, Mauss, Platon et quelques autres (La Découverte/Mauss)*.
- Castoriadis, C. (1997). *The imaginary institution of society*. MIT Press.
- Chataway, J., Tait, J., & Wield, D. (2007). Frameworks for pharmaceutical innovation in developing countries—the case of Indian pharma. *Technology Analysis & Strategic Management*, 19(5), 697–708.
- Chaudhuri, S., Mackintosh, M., & Mujinja, P. G. M. (2010). Indian generics producers, access to essential medicines and local production in Africa: An argument with reference to Tanzania. *European Journal of Development Research*, 22(4), 451–468.
- Coveney, C., Williams, S. J., & Gabe, J. (2019). Enhancement imaginaries: Exploring public understandings of pharmaceutical cognitive enhancing drugs. *Drugs: Education, Prevention & Policy*, 26(4), 319–328.
- Damodaran, H. (2008). *India's new capitalists*. Palgrave Macmillan.
- Das Gupta, C. (2016). 'Old oligopolies and new entrants' in the pharmaceutical sector. In *State and capital in independent India: Institutions and accumulations* (pp. 218–256). Cambridge University Press.
- Douglas, M., & Isherwood, B. (1979). *The world of goods*. Basic Books, Inc).
- Duggal, S., & Faulkner, A. (2020). Promissory and protective imaginaries of regenerative medicine: Expectations work and scenario maintenance of disease research charities in the United Kingdom. *Public Understanding of Science*, 29(4), 392–407.
- Eban, K. (2020). *Bottle of lies: The inside story of the generic drug boom*. HarperCollins.

- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of Management Journal*, 54(5), 935–957.
- Flear, M. L., & Ashcroft, R. (2021). Law, biomedical technoscience, and imaginaries. In *Journal of law and the biosciences* (Vol. 8, p. Isaa088). Oxford University Press. Issue 2.
- Gadgil, D. R. (1959). *Origins of the modern Indian business class: An interim report*. University of British Columbia.
- Gaudillière, J.-P., McDowell, A., Lang, C., & Beaudevin, C. (2022). *Global health for all: Knowledge, politics, and practices*. Rutgers University Press.
- Godelier, M. (2015). *L'imaginé, l'imaginaire et le symbolique*. CNRS Editions).
- Graber, N. (2018). An alternative imaginary of community engagement: State, cancer biotechnology and the ethos of primary healthcare in Cuba. *Critical Public Health*, 28(3), 269–280.
- Guerin, P. J., Singh-Phulgenda, S., & Strub-Wourgaft, N. (2020). *The consequence of COVID-19 on the global supply of medical products: Why Indian generics matter for the world?*, F1000Research, 9.
- Hafner, T., & Popp, D. (2011). *China and India as suppliers of affordable medicines to developing countries*, No. w17249. National Bureau of Economic Research, Article w17249.
- Harriss-White, B. (2003). *India working: Essays on society and economy* (Vol. 8). Cambridge University Press.
- Hodges, S., & Garnett, E. (2020). The ghost in the data: Evidence gaps and the problem of fake drugs in global health research. *Global Public Health*, 1–16.
- Horner, R. (2016). Pharmaceuticals and the Global South: A healthy challenge for development theory? *Geography Compass*, 10(9), 363–377.
- Jasanoff, S., & Kim, S.-H. (2009). Containing the atom: Sociotechnical imaginaries and nuclear power in the United States and South Korea. *Minerva*, 47(2), 119.
- Kale, D. (2019). From small molecule generics to biosimilars: Technological upgrading and patterns of distinctive learning processes in the Indian pharmaceutical industry. *Technological Forecasting and Social Change*, 145, 370–383.
- Kale, D., & Little, S. (2007). From imitation to innovation: The evolution of R&D capabilities and learning processes in the Indian pharmaceutical industry. *Technology Analysis & Strategic Management*, 19(5), 589–609.
- Kruining, N. van (2021). *The interplay of the Sociotechnical imaginaries and policies of personalized healthcare in The Netherlands*.
- Lachaier, P. (1999). *Firmes et entreprises en Inde: La firme lignagère dans ses réseaux*. IFP.
- Lafontaine, C., Wolfe, M., Gagné, J., & Abergel, E. (2021). Bioprinting as a sociotechnical project: Imaginaries, promises and futures. *Science As Culture*, 30(4).
- Löfgren, H. (Ed.). (2013). *The politics of the pharmaceutical industry and access to medicines: World pharmacy and India*. Social Science Press. Distributed by Orient Blackswan.
- Marcus, G. E. (1995). *Technoscientific imaginaries: Conversations, profiles, and memoirs* (Vol. 2). University of Chicago Press.
- Marris, C. (2015). The construction of imaginaries of the public as a threat to synthetic biology. *Science As Culture*, 24(1), 83–98.
- Møllebæk, M. (2021). Regulating patient access to therapeutics in Denmark: A rhetorical analysis of welfare imaginaries in public controversy. *Journal of Law and the Biosciences*, 8(2), Isaa047.
- Pollock, A. (2019). *Synthesizing hope: Matter, knowledge, and place in South African drug discovery*. The University of Chicago Press.
- Putnam, R. D. (2001). *Bowling alone: The collapse and revival of American community* (1 (touchstone ed). Simon & Schuster.
- Quet, M. (2015). Sécurisation pharmaceutique et économies du médicament. Controverses globales autour des politiques anti-contrefaçon. *Sciences Sociales et Santé*, 33(1), 91.
- Quet, M. (2018). Géographies pharmaceutiques: Les mutations d'une industrie. In *Impostures pharmaceutiques: Médicaments illicites et luttes pour l'accès à la santé* (pp. 53–103). La Découverte.
- Rajan, K. S. (Ed.). (2006). *Biocapital: The constitution of postgenomic life* (1st ed.). Duke University Press Books.
- Rajan, K. S. (2017). *Pharmocracy: Value, politics, and knowledge in global biomedicine*. Duke University Press.
- Rault-Chodankar, Y.-M., & Kale, D. (2022). 'Manufacturers without factories' and economic development in the Global South: India's pharmaceutical firms. *Journal of Economic Geography*, 20(3).
- Ravinetto, R. M., Dorlo, T. P., Caudron, J.-M., & Prashanth, N. (2013). The global impact of Indian generics on access to health. *Indian Journal of Medical Ethics*, 2.
- Sieger, P., Gruber, M., Fauchart, E., & Zellweger, T. (2016). Measuring the social identity of entrepreneurs: Scale development and international validation. *Journal of Business Venturing*, 31(5), 542–572.
- Taylor, C. (2004). *Modern social imaginaries*. Duke University Press.
- Thompson, J. B. (1984). *Studies in the theory of Ideology*. University of California Press.
- Tripathi, D. (1992). Indian business houses and entrepreneurship: A note on research trends. *Journal of Entrepreneurship*, 1(1), 75–97.
- Waning, B., Diedrichsen, E., & Moon, S. (2010). A lifeline to treatment: The role of Indian generic manufacturers in supplying antiretroviral medicines to developing countries. *Journal of the International AIDS Society*, 13(1), 2–9.
- Zvonareva, O. (2020). *Pharmapoltics in Russia: Making drugs and Rebuilding the nation*. SUNY Press.