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COVID-19 PANDEMIC IMPACT ON PORTUGUESE PHARMACEUTICAL FIRMS' SERVICE PROVIDED AND COMMUNICATION CHANNELS

Pedro de Araújo e Sá Olaio

Master's in Management of Services and Technology

Supervisor:

Associate Prof. João Carlos Rosmaninho Menezes, PhD., Iscte Business School, Department of Marketing, Operations and Management

November 2022

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**BUSINESS
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ABSTRACT

The covid-19 pandemic brought devastating repercussions to the entire human population, including the pharmaceutical sector. With lockdown restriction in place, the promotional area of pharmaceutical enterprises suffered drastic changes, where the service provided, and communication channels were impacted as well. On the other hand, when regarding multinational big size companies, the pandemic situation was more of an opportunity than a detrimental occasion, contrarily to non-covid product related companies. The objective of this dissertation is to qualitatively analyse the research problem at hand, the impact that the covid-19 pandemic had and is having on Portuguese pharmaceutical firms' service provided and communication channels. Semi-structured interviews to two individuals with extremely high expertise level on the matter, focusing on small to medium enterprises, were made and participant observation to a sponsored pharmaceutical event was made as well to collect the data. This analysis will allow for a better understanding of the Portuguese pharmaceutical promotional market changes. The conducted research concluded that the covid-19 biggest change on the communication channels was the emergence of digital channels, with the decrease of the presential format, however, one won't replace the other and both will complement one another. Additionally, a few innovative communication channels were identified. Portuguese pharmaceutical companies need to adapt to continuous market changes. In terms of service provided, the market trends are focusing on customer centred business approaches. Moreover, the desired service provided must consider the customer's expectations and perceptions and ensure an impactful positive experience for the consumer.

Keywords: Portuguese Pharmaceutical Market, Communication channels, Covid-19, Service Provided.

JEL Classification:

I11 – Analysis of Healthcare Markets

M30 - Marketing and Advertising: General

RESUMO

A pandemia covid-19 trouxe repercussões devastadoras para toda a população humana, incluindo o setor farmacêutico. Com as restrições de confinamento, a área promocional farmacêutica sofreu mudanças drásticas, onde o serviço prestado e os canais de comunicação foram também impactados. Por outro lado, em relação a empresas multinacionais de grande porte, a situação de pandemia foi mais uma oportunidade do que uma ocasião prejudicial, ao invés de empresas com produtos não relacionados ao vírus covid-19. O objetivo desta dissertação é analisar qualitativamente o problema de investigação descrito, o impacto que a pandemia covid-19 teve e está a ter na prestação de serviços e nos canais de comunicação das empresas farmacêuticas portuguesas. Foram realizadas entrevistas semi-estruturadas a dois indivíduos com elevado nível de conhecimento sobre o assunto, com foco em pequenas e médias empresas, onde também foi feita observação participante a um evento farmacêutico patrocinado. Esta análise permitirá uma melhor compreensão das mudanças no mercado promocional farmacêutico português. A pesquisa realizada concluiu que a maior mudança apresentada nos canais de comunicação farmacêuticos foi a emergência de canais digitais, com a diminuição do formato presencial, porém, um não substituirá o outro e ambos se complementarão. Adicionalmente, foram identificados alguns canais de comunicação inovadores. O setor farmacêutico tem que se adaptar a constantes mudanças. Ao nível da prestação de serviços, as tendências do mercado centram-se em abordagens de negócio centradas no cliente. Ademais, o serviço desejado deve considerar as expectativas e percepções do cliente e garantir uma experiência positiva e impactante para o consumidor.

Palavras-chave: Mercado Farmacêutico Português, Canais de Comunicação, Covid-19, Prestação de Serviços.

Classificação JEL:

I11 – Analysis of Healthcare Markets

M30 - Marketing and Advertising: General

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LIST OF ABBREVIATIONS

PSR – Pharmaceutical Sales Representative

PC – Pharmaceutical Company

TV - Television

OTC – Over-the counter

1. INTRODUCTION

The recent COVID-19 pandemic had and is having several effects on the entire world population, with societal implications such as mandatory lockdown restrictions, social distancing and use of mask. Due to the severity and fast-spreading characteristics of the virus and the consequential lockdown restrictions, the business environment was also severely affected in all different domains.

The pharmaceutical sector is no different, however, a few companies, more precisely, big multinational companies were able to take advantage of this situation with the need of vaccines and specific prescribed medical products and devices. On the other hand, most companies, such as small to medium sized pharmaceutical companies that do not produce, promote or sell products associated with the pandemic covid-19 virus were significantly negatively affected. Despite these negative implications, for companies that did survive the pandemic associated consequences, business needs to continue, and organizations must adapt to the existing changes. Moreover, the pandemic forced such companies to change their business processes to survive and prosper in the existing environment, such as the utilization of digital channels. It is important to evaluate the effects of such pandemic to, not only document this never seen before situation, but to allow for the preparation for future endeavours.

One of the most affected departments in the pharmaceutical sector is the promotional and this research will be addressing this exact branch, more precisely, the communication customer channels and the service provided.

On the current literature, there is a scarcity of up-to-date information regarding these subjects, especially when considering the Portuguese context. Moreover, Auraskeviciene *et al* (2015) analysed Lithuanian's pharmaceutical communication channels and general practitioners' perceptions, which gave inspiration for the present research. Such study identified that, a further analysis on perceived reliability, meaning the service provided and communication channels usage, will deepen the understanding of the relationship between channel usage frequency and its importance in drug prescribing intentions from health care practitioners. This identified gap will support this research, which in methodological terms will be exploratory and qualitative.

Therefore, the purpose of this research is to understand and evaluate how the service provided and the communication channels of Portuguese pharmaceutical companies were impacted by the covid-19 pandemic. To achieve such analysis, it is important to analyse and identify all existing and emerging possible communication channels, as well as the service provided characteristics differences.

The academic literature flow presented will follow an organisational ambidexterity approach, that to survive and perform, companies need to balance two dimensions: the exploitation of current strengths and activities, and the exploration of emerging valuable opportunities (Hughes, 2018). This perspective is incredibly essential for the research at hand.

To address the research problem identified, a data collection process was conducted, in terms of primary data, through semi-structured interviews, participant and internet-mediated observation, that were specifically structured and presented in order to enhance the overall data analysis.

The presented reading will allow for a better understanding of the Portuguese pharmaceutical promotional market changes throughout this covid-19 pandemic, while providing valuable insights of experienced and knowledgeable individuals on this subject. Additionally, innovative communication channels and desired service provided visions are also addressed.

In structural terms, the existing dissertation is subdivided into 5 main chapters, starting with a review of the available bibliographic literature regarding this subject, it is in this chapter that key concepts are disclosed and understood. The second chapter addresses the research methodology, where the different methods and instruments to analyse the data collected are explained along with the research questions identified. Thereafter, the subsequent findings are addressed, where data collected is displayed, followed by another chapter discussing those same results. Finally, conclusions, future recommendations and limitations are exhibited in the final main chapter.

2. LITERATURE REVIEW

Before enrolling any kind of conclusion or insight, it is important to underline and understand the main concepts within this study.

2.1 Pharmaceutical Industry

The pharmaceutical industry has impacted humanity throughout its history by providing long term benefits to individuals across the world, it is revolved around producing, developing, and distributing pharmaceutical drugs to be used as medication (Henry & Lexchin, 2002) either prescribed or self-prescribed. The companies included in this sector can deal with either generic or brand medications which are supervised through a strict variety of laws and regulations that oversee all processes from testing to safety, efficacy, quality, pricing, patenting and marketing (Scherer, 2000).

The overall objective is to provide to their customers a long lasting and healthy lifestyle with either vaccination, cure of diseases or alleviation of symptoms, however, the industry is perceived by public opinion as: “one of the least trusted industries, often being compared unfavourably to the nuclear industry”; marketing-oriented companies more than research-based and immensely profitable (Taylor, 2016).

2.1.1 Global pharmaceutical industry

The international pharmaceutical landscape has a considerable hefty dimension in regard to its market size. In 2021, according to IQVIA¹, pharmaceutical worldwide revenues totalled a record breaking 1.42 trillion U.S dollars, demonstrating an increase in 1 trillion US dollars if compared to 20 years ago (390 billion USD). In geographical terms, North America (US and Canada) encloses 49.1% of pharmaceutical global sales, whereas Europe retains 23.4% and China 9.4% (EPFIA, 2022)². When evaluating the companies inside this domain, it is clear to see that it reflects as an oligopolistic type of market, large scale multinationals have been reigning for years worldwide

¹ <https://www.iqvia.com/insights/the-iqvia-institute/reports/the-global-use-of-medicines-2022>

² <https://www.efpia.eu/media/637143/the-pharmaceutical-industry-in-figures-2022.pdf>

(Craig & Malek, 1995) and up-to-date reports only confirms this argument, with a small percentage of existing companies having a large percentage of the market share (Statista, 2021)³.

2.1.2 Portuguese pharmaceutical industry

The Portuguese pharmaceutical industry follows the same patterns as the global trends when evaluating the market share, Big Pharma (1%) holds roughly 44 percent of the market volume, according to Banco de Portugal, even though its enterprise environment contains predominantly small and medium size companies (BPStat 2021)⁴. Its domestic market value is in the vicinity of 3.95 billion dollars (0.4% of global industry) and compared to similar market size nations, it exhibits a higher innovation investment trend (Vieira *et al.*, 2021). It is also important to note that it is a quite mature industry as well, since close to 64% of sales volume is within companies that are in the market for over 20 years (BPStat 2021).

2.2 Pharmaceutical Marketing - Channels of Communications between pharmaceutical companies and its customers

2.2.1 Pharmaceutical Sales Representatives

Pharmaceutical enterprises have medical/pharmaceutical sales representatives (PSR) that are critical for the success of the entity, they act as the intermediary between the company and their customers, healthcare practitioners which are mainly pharmacies and doctors, denominated as physicians (Caudill *et al.*, 1996). A PSR does not promote its products to the general public, they sell, promote and provide advice and information on prescription drugs, medicines and medical equipment to Health Care professionals, general practitioners, hospital doctors, pharmacists, dentists and nurses (Levy, 1994). PSRs are usually based in a specific geographical location and specialise in a particular product or medical area.

A PSR aside from these main competences also needs to provide certified documentation, be responsible, knowledgeable, able to clearly communicate and persuade its customers, as well as a

³ <https://www.statista.com/statistics/1245261/value-share-of-pharmaceutical-subsectors-worldwide/>

⁴ <https://bpstat.bportugal.pt/conteudos/publicacoes/1339>

continuous motivation of keeping up to date to all different products available in the current market (Alkhateeb *et al.*, 2011).

According to Avorn *et al* (1982), a PSR contact can be divided by two categories: functional and marketing department. On the functional side, the quality of the promoted medicine, meaning the safety, efficacy, and side effects. On the other hand, the promotional side is related to the brand image that the PSR is representing, the capacity that the PSR has to persuade and create a relationship with the customer, by making use of several different wheedling tactics such as having outgoing personalities, being observant, personable and helpful (Fugh-Berman & Ahari, 2007). The difference between these two categories is clear but can be blurry when analysing from an outside perspective (Azoulay, 2002)

2.2.2 Identified Channels of Communications between pharmaceutical companies and its customers

Considering this study, it is important to identify in which ways the pharmaceutical industry can interact with its different customers. It is estimated, according to Marco *et al* (2006), that around 84% of pharmaceutical marketing is directed towards physicians, including gifts and free samples made by PSRs, hence the previous insight given regarding a pharmaceutical sales representative. However, it is clear, and according to Morrison (2020), that the one-size-fits all approach won't work anymore, therefore, a complete catalogue of the varied and distinct channels of communication between pharmaceutical company and its customers must be made.

Firstly, and most importantly, as described before, the Pharmaceutical Sales Representative interactions realm, which is quite extensive and the most regular of the bunch. The most common interaction within this subject is a regular informational visit, with most of the attending physicians having at least one monthly interaction with an industry representative (Fickweiler *et al.*, 2017). This frequent PSR interaction is considered extensive due to the different procedures it can exhibit, beginning with the type of interaction (face-to-face, online or through telephone) (Heutschi *et al.*, 2003) (Balkanski & Getov, 2019), it can also present several varied gifts given from the PSR (company intermediate) ranging from inexpensive to moderate and expensive priced gifts (Marco *et al.*, 2006): inexpensive vary from promotional merchandise such as pens and notebooks to free drug samples, scientific and academic journals, snacks and beverages (Workneh *et al.*, 2016); moderately priced gifts consist mainly in informational luncheons, anatomical models and dinner

invitations (Ziegler et al., 1995); as for expensive gifts, these can take several approaches, from opinion leaders sponsored lectures (Auruskeviciene *et al.*, 2015) to departmental journal clubs, conference events sponsorship and travels paid (Fickweiler *et al.*, 2017). Websites designed for healthcare, are also a well perceived communication channel to general practitioners. (Purcell *et al.*, 2002) (Auruskeviciene *et al.*, 2015). Direct written contact with e-mail or SMS is also regularly used (Auruskeviciene *et al.*, 2015) and advertising, through different media channels from radio and TV (Wilkes *et al.*, 2000) to social media platforms such as Facebook and LinkedIn (Enyinda *et al.*, 2018) (Costa *et al.*, 2018) is mandatory to be accounted and is growing more and more (Morrison, 2020). There are other minorities in terms of these channels of communication, such as interaction with medical school finalists, according to Sarikaya et al (2009).

Herewith, it is also important to note that several studies, such as Khazzaka (2019) and Gonul *et al* (2001) award the medical sector (physicians) as the main responsible for either the success or failure of a pharmaceutical medicine.

To facilitate the comprehension of each interaction, all identified, possible and impactful interactions between a pharmaceutical enterprise and its customers (direct or indirect), according to the literature available, will be listed on the table below:

Table 2.1: Identified pharmaceutical companies' communication channels, Means of interaction and Literature Review authors (Source: Author's elaboration)

Interaction / communication channel	Means of interactions	Author
PSR informational visit	Face-to-face	Entirety of authors in this table acknowledge this interaction
PSR online informational visit (video call)	Conference call platforms (Teams, Zoom, Skype, etc) through electronic devices	(Balkanski & Getov, 2019); (Heutschi <i>et al.</i> , 2003),
PSR informational mobile device/telephone call	Mobile devices and telephones	(Auruskeviciene <i>et al.</i> , 2015); (Heutschi <i>et al.</i> , 2003),

PSR interaction: Inexpensive Gifts to physicians	Snacks, free drug samples, scientific/academic journals, promotional material (such as pens, notepads and coffee mugs)	(Granja, 2005); (Workneh <i>et al.</i> , 2016); (Marco <i>et al.</i> , 2006); (Fickweiler <i>et al.</i> , 2017); (Auruskeviciene <i>et al.</i> , 2015); (Khazzaka, 2019)
PSR interaction: Moderately priced Gifts to physicians	Informational luncheons, anatomical models, dinner invitations	(Ziegler <i>et al.</i> , 1995); (Granja, 2005); (Workneh <i>et al.</i> , 2016); (Marco <i>et al.</i> , 2006); (Fickweiler <i>et al.</i> , 2017); (Khazzaka, 2019)
PSR interaction: Expensive Gifts to physicians	Presential conference events or lectures/symposia invitations (travels can be included)	(Auruskeviciene <i>et al.</i> , 2015); (Marco <i>et al.</i> , 2006); (Fickweiler <i>et al.</i> , 2017); (Khazzaka, 2019)
	Sponsorship of departmental journal clubs	(Fickweiler <i>et al.</i> , 2017)
	Sponsorship of Opinion leaders and Continuing Medical Education (CME) event	(Auruskeviciene <i>et al.</i> , 2015); (Marco <i>et al.</i> , 2006); (Fickweiler <i>et al.</i> , 2017); (Khazzaka, 2019)
Informational online messaging	E-mail, SMS, messaging platforms	(Heutschi <i>et al.</i> , 2003)
Mass media Advertising	TV, radio and newspapers	(Wilkes <i>et al.</i> , 2000)
Social Media Advertising	Different social media platforms such as LinkedIn, Twitter, Youtube and Facebook	(Enyinda <i>et al.</i> , 2018) (Costa <i>et al.</i> , 2018)

Indirect personal communication	Word-of mouth	(Gonul <i>et al.</i> , 2001)
Medical School students Interaction	Several at disposal such as gifts, word-of mouth, event and conference invitations	(Sarikaya <i>et al.</i> , 2009).

The totality of these interactions and techniques represents the promoting side of the industry, and it is important to point out that there are several studies, with the example of Caudill *et al* (1996) and Sah & Fugh-Berman (2013) that express an overall concern regarding the influence of the pharmaceutical industry with a physician’s day-to-day practice and prescribing decision making. These concerns led to a set of proposed guidelines in order to guarantee a fair and ethical use of these different strategies. Considering the acknowledged industry perspective, a PSR credibility, availability and applicability of administered information is key to its success (Caudill *et al.*, 1996).

Thus, it is understood that promotion/advertising is the factor that has more importance to make sure that the pharmaceutical companies can successfully make their products successfully enter the market.

2.3 The role of customers’ expectations and perceptions in the pharmaceutical industry

As briefly mentioned before, several studies, such as Caudill *et al* (1996) and Granja (2005) on a global and Portuguese view, respectively, express the medical sector concern regarding the influence that pharmaceutical companies can have in a physicians prescribing decision making. While Gonul *et al* (2001) express that are no reasons for public concern regarding the social implications of the reviewed personal selling practice employed by drug manufacturers, because its effect is mostly informative. A clear consensus whether the pharmaceutical sector influence is detrimental or aidful has not been identified, Spurling *et al* (2010) understand and iterate that exact situation of being unable to reach any definitive conclusion. Spurling *et al* (2010) continue this process of thought by explaining that pharmaceutical companies’ impact can be beneficial or harmful in several ways, concluding by recommending practitioners to avoid exposure to pharmaceutical companies’ information “unless evidence of net benefit emerges”. Accordingly, one of the greatest challenges faced by the pharmaceutical sector is how to portrait this net benefit

continually to later build long lasting relationships with physicians. To create this deep-rooted tie, it is crucial for enterprises to understand and respond to customers' expectations (Parasuraman *et al.*, 1991). To attain this objective, companies must strive to not only perform above the adequate service level, which is the minimum level expected by a customer, but also the desired service level and consequently operate at a so called "customer franchise" level.

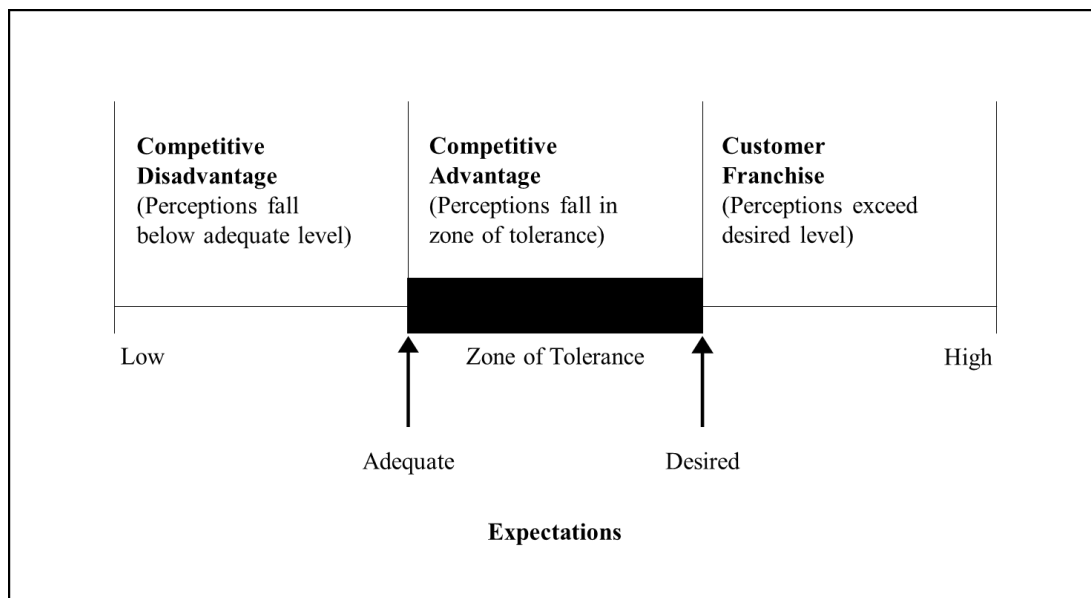


Figure 2.1: The Results of Customer Perceptions of Service Lever Performance
(Source: Parasuraman *et al.*, 1991)

Conceding that a company, according to Parasuraman *et al* (1991), wants to create these bonds with its customers, there is no room for complacency, and capitalizing on opportunities to improve the service quality is imperative. Solely by demonstrating fairness, reliability, management of its promises and leveraging of process dimensions (i.e. efficient fixing of service failures) can a firm succeed in reaching this "customer franchise" level.

Framing this perspective into the pharmaceutical sector, Lagace *et al* (1991) and Wright & Lundstrom (2004) evaluate physicians' perceptions of PSR and the customer relationship quality which directly translates to the understanding and management of customer expectations of Parasuraman *et al* (1991). Lagace *et al* (1991) encompasses a well-known relationship selling model constructed by Crosby *et al* (1990) and translating it into the pharmaceutical sector and the PSR and physician relationship. This model exhibits that the combination of 4 different PSR dimensions: ethical behaviour, level of expertise, frequency of visits and their duration; ultimately

lead to trust building and customer satisfaction, which contribute to performing above the expected service level and establish strong long-term relationships with customers.

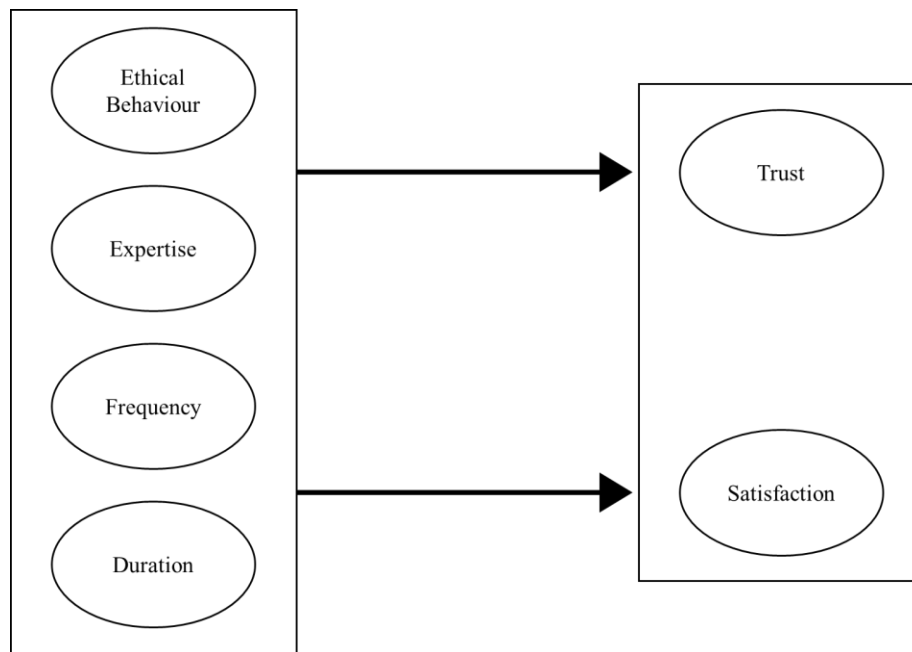


Figure 2.2: Model of Relationship Quality
(Source: Lagace *et al.*, 1991)

Wright and Lundstrom (2004) align with this view as well, a similar model was created by the authors to depict the physicians' perceptions of PSRs, with three areas of primary interest: the physician's perceptions of (1) the pharmaceutical enterprise that the PSR represents; (2) the PSR's values (honesty, trustworthiness and ethics); and (3) the PSR's personal characteristics (physical attractiveness, congeniality and similarity). The authors elaborate by evidencing that nowadays is more critical than ever that pharmaceutical companies focus on how their sales representatives are perceived and further research into this subject by the organization may galvanize a sustainable competitive advantage.

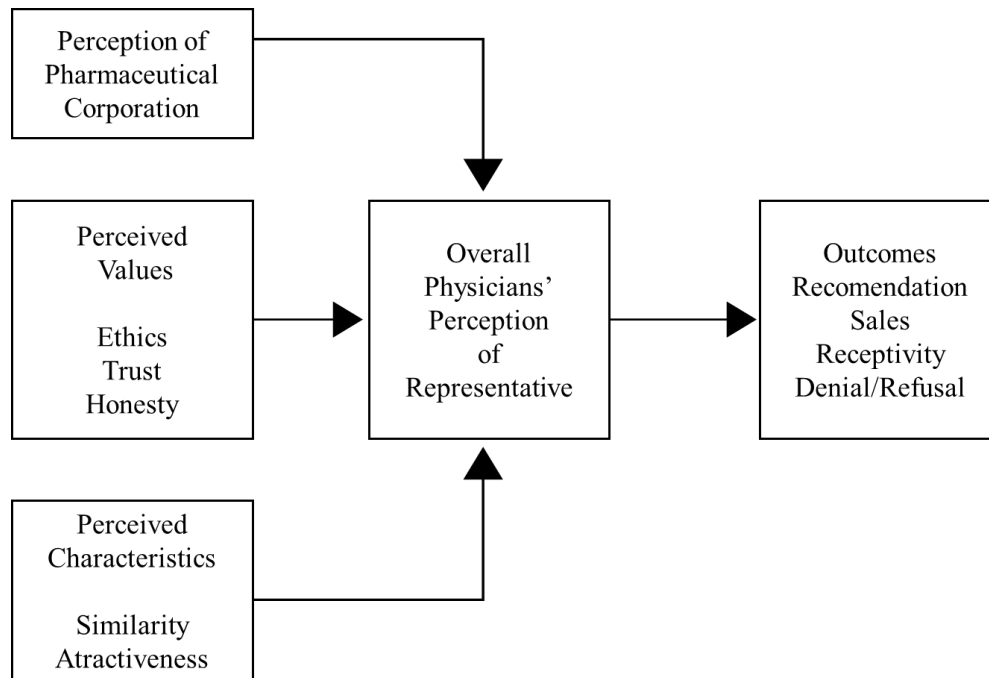


Figure 2.3: Physician perception of pharmaceutical sales representatives' model
(Source: Wright & Lundstrom, 2004)

2.4 Changes in pharmaceutical interaction brought by the COVID-19 pandemic

This present study aims to evaluate how the pharmaceutical industry gave response to this idiosyncratic pandemic period, meaning the different challenges faced, the practices that came to stay, and an outlook of forthcoming periods. Before such analysis, a clear and distinct analysis on what the current available literature has to offer must be made.

At this moment, it is impossible not to equate the effects of the recent and still ongoing COVID-19 pandemic that led and is leading to complete countries' lockdowns, unprecedented challenges to the healthcare sector, failure of millions of businesses and overall devastating repercussions worldwide. (World Health Organization, 2020)

According to a recent study made by McKinsey & Company in 2020⁵, it is still too soon to evaluate the full impact of the covid-19 pandemic within the pharmaceutical sector, however, many

⁵ <https://www.mckinsey.com/industries/life-sciences/our-insights/ready-for-launch-reshaping-pharmas-strategy-in-the-next-normal>

effects, challenges and conclusions have already been identified. In-person contacts between Health Care Providers and pharmaceutical sales representatives have decreased 70% with the appearance of the pandemic, while remote patient appointments have reportedly reached nearly 50% for physicians highly open to remote alternatives in the United States (McKinsey COVID-19 Survey: EU Physician Experiences, Expectations, and Perspectives on Pharma Engagement; survey in the field in May and September 2020). Hence, one of the already identified short term impacts of covid-19 in the pharmaceutical sector, according to Ayati *et al* (2020), is the transition and the adoption of digital channels and telemedicine. As for long term impacts, and related to this study, the authors point out a growing concern on ethical considerations, due to the use of poorly evidence centred therapies amid this pandemic situation. A separate but also meaningful long-term effect identified are the remodelled consumption trends in health-related products.

Regarding the introduction of a new product to the market, which is a recurring proceeding in the pharmaceutical sector, alongside this acquired data, Mlika *et al.* (2020), understand that a new approach that is digital, local and personalized is needed to reinvent the outdated traditional commercial model that is losing effectiveness. Five critical success factors are depicted: (1) Provide rapid and customer-centric content, tailoring information according to customers' interests, (2) an "analytics-enabled engagement" by taking advantage of feedback and advanced tools to help decision making; (3) "innovative patient channels and services" such as providing telemedicine diagnostic platforms through websites, mobile applications, text or voice; (4) "nimble frontline operations" meaning reinventing the front end by equipping PSRs with digital skills and solutions to promote their products; and (5) "close-looped execution" implying an agile operating model that addresses and responds to the brisk customer needs changes.

When evaluating the previously described effects and challenges brought by the covid-19 pandemic, an overall conclusion can be made that it is pivotal for pharmaceutical companies to engage in a customer-centred commercial model (Cohen *et al.*, 2020)⁶, characterized for having special consideration in regards to customers' needs and expectations, by being engaged with physicians and final customers while making use of up-to-date available tools to be able to effectively and promptly respond to the market's constant changing needs.

⁶ <https://www.mckinsey.com/industries/life-sciences/our-insights/covid-19-and-commercial-pharma-navigating-an-uneven-recovery>

Thus, giving an overall perspective of the literature reviewed, it is clear that there are several channels of interaction between a pharmaceutical company and its customer (directly or indirectly) and they have been massively affected in recent years due to the COVID-19 world pandemic. To succeed in the current market, customers' expectations and needs must be analysed and addressed, and, therefore, a customer centred, effective and agile commercial model needs to be in place.

3. RESEARCH METHODOLOGY

The methodology process describes the course of action to untangle a research problem, according to Kothari (2004), it includes the studying of “various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them”. This particular chapter is subdivided into 4 sections, commencing with the research objective and questions, where the research problem is described in detail, followed by three chapters that, combined, formulate the research methods chosen to acquire and administer the data collected.

3.1 Research Objectives and Questions

The delineation of the research main and partial objectives is critical for the elaboration of the research plan, it declares “exactly what it is that the researcher expects to do” (Kothari, 2004). These objectives end up steering the research questions that will be the foundation for the research investigation at hand.

From the written literature review, it can be seen an overall global perspective of the impact that covid-19 had in the pharmaceutical sector and its customer communication channels, especially, in big-size enterprises (multinationals). However, a Portuguese (country) and more precisely, small to medium enterprise outlook is missing on the available literature. Moreover, with this literature gap being identified, the topic and main objective of this research is to focus on evaluating the impact that the covid-19 pandemic had and is having on Portuguese pharmaceutical enterprises’ service provided and communication channels. Thus, the following research question was derived:

How were the service provided and the communication channels of Portuguese pharmaceutical companies impacted by the covid-19 pandemic?

To better understand the latter question with precision and detail, 5 partial objectives and underlying sub-research questions were formulated:

Partial objective 1: Identify the major differences in the pharmaceutical sector’s service provided after and during the critical stages of the covid-19 pandemic.

Underlying Research Question 1: What changed the most in the Portuguese pharmaceutical sector’s service provided with the covid-19 pandemic?

Partial objective 2: Depict the most used communication channel by Portuguese pharmaceutical companies.

Underlying Research Question 2: What is the most used communication channel by Portuguese pharmaceutical companies?

Partial objective 3: Assess which communication channels were most adopted since the appearance of the covid-19 pandemic and the subsequent effects (lockdown restrictions).

Underlying Research Question 3: Which communication channel/channels is/are the fastest growing in terms of adoption since the covid-19 pandemic started?

Partial objective 4: Understand the requisites for a pharmaceutical Portuguese company's service provided to be successful.

Underlying Research Question 4: How can a service and consequent product provided positively stand out in the pharmaceutical Portuguese market?

Partial objective 5: Assess the difference between the service provided from a big-size enterprise (multinational) to a small to medium sized pharmaceutical company.

Underlying Research Question 5: What are the differences between the service provided by big-size companies compared to smaller ones?

These main and sub research questions will act, as previously mentioned, as the foundation for this qualitative and exploratory research, in order to understand the phenomenon under approach. The objective of this thesis will be to respond to these questions and later accomplish the main objective and provide insight on the matter.

3.2 Research Approach and Instruments

In regard to theory development, the defined dissertation resorted to an inductively modelled research approach, where smaller sample conclusions led to insights in regard to the larger population. This specific approach is suitable for qualitative analysis and can lead to new definitions or theories and is context driven (Thomas, 2006).

The previously stated theory development approach perfectly aligns with the research methodology, which is qualitative. A qualitative methodological approach emphasizes on non-

numerical data and focuses on understanding a human's "beliefs, experiences, attitudes, behaviour, and interactions" (Kalra *et al.*, 2013), which, considering the main objective of this investigation, is critical for its achievement. Moreover, since a service provided and communication channels of pharmaceutical companies, by being centred on human behaviour, present as data that cannot be truly evaluated with a numerical approach, there is the need to have a further extensive descriptive dimension, more precisely, an evaluation of human perspectives and interactions.

To proceed with a qualitative analysis, data collection methods need to be defined. As primary qualitative data collection methods: semi-structured interviews, and participant and internet-mediated observations were made. Primary data is closest to the source, the data collection is performed by the researcher and collected to specifically address the existing research problem (Hox *et al.*, 2005), in this case, more than one method was used to collect data due to it being encouraged for researchers in order to enhance the validity and credibility of the findings (Merriam, 2002).

Besides primary data, and regarding secondary qualitative data collection methods, which is the reutilization of other researchers' interpretation of primary data (Hox *et al.*, 2005), the current investigation makes use of the analysis of several literature documents available.

3.3 Data collection procedure

In terms of data collection procedure, as mentioned before, there are 3 types of methods used: Semi-structured interviews and observation for primary data; and document analysis for secondary data. The reasoning behind the decision of undertaking these methods will be described below:

3.3.1 Individual semi-structured interviews

To support the investigation, individual semi-structured interviews were made to 2 well experienced and evident experts in the Portuguese pharmaceutical sales field. Interviews were conducted due to it being the method of choice in phenomenological research, giving a direct and actual depiction of the interviewees' experiences and views. The reason behind the semi-structured aspect is aligned with the flexibility that it allows, by containing open ended questions, while maintaining a conversational structure that focuses on a specific topic of exploration, using a guide (Fossey *et al.*, 2002).

As mentioned before, the interviewees' sample consisted of 2 individuals that were selected according to their high-level of experience, proficiency, knowledge, status and accomplishments. The respective interviewees were: Amélia Pereira Coutinho who has been in the pharmaceutical industry for as long as 30 years, is a Board Member at Tecnifar (Tecnifar - Industria Tecnica Farmaceutica, S.A.) and responsible for the sales and marketing department, as well as corporate social responsibility; the other interviewee is João Sousa who has also been in the pharmaceutical industry for approximately 30 years, and now owner and general manager of Phytoderm (Phytoderm - Especialidades Farmacêuticas, Lda.), PHD (PHD - Especialidades Farmacêuticas, Lda.) and a pharmacy called Planalto located in Lisbon. The interviews were conducted between June (Amélia Pereira Coutinho) and September (João Sousa) 2022.

Both interviewees can clearly be considered high level experts in the pharmaceutical sales sector. Their insights, perspectives and experience are second to none and the information given is considered more valuable and credible than of other multiple individuals in the same sector, without the same repertoire of skills and expertise. Furthermore, the enterprises that each interviewee represent, Tecnifar and Phytoderm, affect and are located in the entire Portuguese territory, including Azores and Madeira, by selling pharmaceutical products to pharmacies and hospitals across the nation while also contacting healthcare practitioners to give information about their products.

Each interview had an approximate duration of 60 minutes, where one was internet mediated through Microsoft Teams (video call) and the other was face-to-face. Both interviews were audio recorded in real time through a mobile phone and later transcribed, additionally, notes were written by the interviewer to better describe the visual and overall conversation.

3.3.2 Participant and Internet-mediated observation

A degree of observation was performed during this research, namely low-level participant and internet-mediated observations. As for low-level participant observation, this qualitative research method allows for a researcher to attend an event or series of events and examine the situation by immersing in the researched environment (Saunders *et al.*, 2009). Observation can range from full participation to pure observation, in this case it was in between this spectrum. It consisted of an attendance of a 2-day presential sponsored (by PCs) event from physicians to physicians, where physicians were invited by PSRs to educate themselves on how to improve their practice by

mitigating and treating medical situations regarding a specific health care branch, this particular case was in respects to urology. As a researcher, it was embraced the role of a physician, and it gave the possibility to observe a PSRs course of action and the service provided, as well as all the tools used to attract other invited physicians. As for internet-mediated observation, both companies in the present research (Tecnifar and Phytoderm) share information online that further bolsters interpretation on how the companies portray themselves. These observations methods were employed to support the interviews made and complement the overall insights found.

3.3.3 Document analysis

Secondary data collection was made as well, which is, as mentioned previously, the collection and interpretation of other researchers' useful primary data (Hox *et al.*, 2005). To this extent, external document analysis will be made to strengthen the research made, especially as a comparative analysis from the interviews made to the available literature and insights on bigger sized companies (multinationals).

3.4 Data treatment approach

According to Seers (2012) “good qualitative research uses a systematic and rigorous approach” in order to effectively express what was researched. Qualitative data can be seen as overwhelming and to combat that, a proper organisation and data treatment need to be in place.

To achieve this high level of organisation, the data collected from interviews (transcripts), document analysis and observation notes were subdivided into different categories to analyse the data correctly and objectively. Moreover, interviews that were audio recorded were transcribed into Microsoft Office Word and divided into different sections and subsections. Observational notes and document analysis took the same path and were divided as well to facilitate overall analysis.

4. FINDINGS

Before directly addressing the results and findings of the existing research, it is important to describe the environment thoroughly to better associate and interpret the acquired data. Two interviewees, representing two different companies, were analysed.

4.1 Companies analysed

4.1.1 Tecnifar - Industria Tecnica Farmaceutica, S.A.

Tecnifar is a Portuguese pharmaceutical company that promotes and distributes own products as well as licensed products from various notable R&D and manufacturing pharmaceutical companies. The enterprise strongly embraces a “family company” environment by detaining 100% of its capital and staying strong, steadily and independently prospering in the market for over 3 generations, since 1986. Regarding its direct customers, the company provides its products to pharmacies and hospitals, that intermediate the sale to final customers, throughout all Portuguese territory, including Azores and Madeira, and exports internationally, majorly to the United Kingdom and African Countries of Portuguese Official Language (PALOP). Regarding the Portuguese context, the organisation is positioned in the market as a reference among the healthcare sector, by evidencing continuous precision, professionalism, innovation and care from top to bottom. The existing product portfolio is notorious, ranging from prescribed and non-prescribed (OTC's) medical products to medical devices for treatment, in various medical areas including central nervous system, respiratory, urology, and several more. Moreover, Tecnifar's sustainable success can be observed through the evident efforts on innovation practices and attention to detail, as well as customer centred service provided, where the objective is to actively improve the quality of life of Portuguese people along with acting on important newly noticed matters such as social responsibility.

4.1.2 Phytoderm - Especialidades Farmacêuticas, Lda.

Phytoderm is, as well, a company that acts on the Portuguese pharmaceutical sector, however, it promotes, sells and distributes medical products from one main single Italian research Laboratory and company named Aboca that is a definite worldwide reference in the pharmaceutical sector, thus, Phytoderm works as a Portuguese representative of Aboca that, except manufacturing, is responsible for Aboca's product domain, which only provides OTC or non-prescribed products that

mainly regard common conditions in several areas such as gastrointestinal and respiratory airways. The company was founded 2005 and focuses on providing safe, natural and quality products that achieve the main objective of consumer overall well-being. The focus on innovation is a clear strength that the company possesses, Aboca's products are constantly directing efforts towards R&D and present to the market completely natural organic products from extraction to production with several scientific research that confirms the advertised quality of the product, leading to a competitive advantage. Moreover, in terms of innovation, Phytoderm also strives to innovate on all other business domains, such as sales and distribution, while being firmly aligned with the 3 values it defends: Work, humbleness and coherence. In terms of direct customers, the product selling is made to pharmacies and hospitals, that intermediate the sale to final customers. The enterprise also makes its presence known in the social responsibility domain by proudly possessing a "B corp" certification since the year 2020, which is a cluster of companies from all over the world that are considered leaders in the global movement for an inclusive, equitable, and regenerative economy. To achieve this certification, enterprises are thoroughly evaluated by a certifying third party entity with a strict set of standards regarding its social and environmental impact on all its areas.

Both companies will be evaluated regarding the promotion and distribution of the products provided, therefore, the target customer of these companies is important. The final consumer of these products is the whole population, since it is possible that any human can encounter some sort of medical condition that leads to its consumption. However, besides final consumer, the physicians are considered the main customer, since, although not directly regularly buying the products, most of the time they prescribe and advise medical products to their patients. Companies that provide prescribed medical products focus all efforts to the promotion and access to physicians, while companies that also offer OTC pharmaceutical products also englobe final consumers in their marketing strategy.

Additionally, both these enterprises present similar supply chain models by supplying their products from third party producers, which are directly transferred to a logistics and distribution enterprise, that afterwards sell and ship products to wholesalers where pharmacies order the products, whereas for Hospitals the process may not include wholesaler. These two enterprises work aligned with their respective logistics and distributing company and normally negotiate the

price of products to sell to the wholesaler and, therefore, the direct sale to pharmacies and hospitals is not made by the companies, but by the distributors.

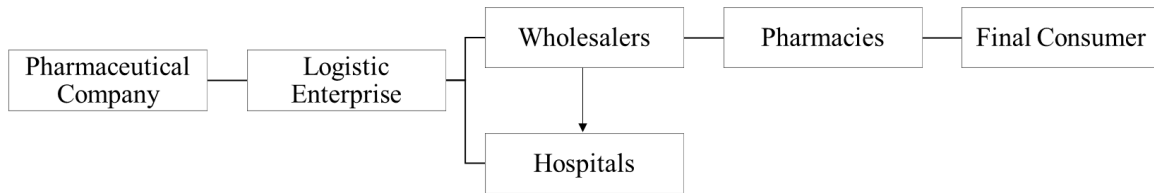


Figure 1.1: Tecnifar and Phytoderm (PCs) supply chain processes
(Source: Author's elaboration)

With this, it is clear that the focus of these two enterprises is on the promotion and service provided, which leads to sales. Always keeping in mind that several areas are involved in this area such as procurement of licensing opportunities, pricing, marketing and human resources.

As previously mentioned, the pharmaceutical sector is severely regulated. The European regulator is the European Medicines agency (EMA) and in Portugal is the National Authority of Medicines and Health Products (INFARMED)

4.2 Conducted Interviews

Preliminary to conveying an interview display according to each interviewee and respecting company, it is important to bear in mind that both semi-structured interviews had the exact same conversational guiding structure. Due to being semi-structured, some points were more elaborated in one interview than the other, and the other way around, it all being dependant on the interviewee, which is completely common in this specific method. Nonetheless, the structural guide made sure that critical questions were correctly addressed and answered, where, if the flow of the conversation took a different path, the interview would later come back to the structured guide after the interviewee clearly explained his/her thought process. This method allowed for insightful supplementary information being brought to light, that only enhanced the overall research quality. The main topics regarded in the interviews will now be addressed, focusing on the interviewees'

career history, an analysis of the company's used communication channels, the service provided, a comparison to global PCs and the covid-19 pandemic effect.

4.2.1 Interview 1 – Amélia Pereira Coutinho (Tecnifar)

The interview commenced with questionings regarding the interviewee's professional career and education that unquestionably contributed to the level of expertise and success that are now exhibited. The interviewee Amélia Pereira Coutinho, current board member at Tecnifar, started superior education by obtaining an economics bachelor's degree in Católica Lisbon Business School and afterwards immediately started working in the marketing area for sizeable final consumer goods brands where a career growth was observed, due to hard work and good outputs. Several years later, ended up joining the family enterprise Tecnifar, and after getting to properly know the industry, which was considerably different due to its immense regulations, became a board member, and still is, with responsibilities in the marketing and sales area for approximately 30 years. This introduction was important to evidence that the interviewee is indeed an expert in the pharmaceutical field and the insights provided are credible, reliable and insightful. Besides the career life, the interviewee was requested to explain all the firm's operations in detail with the intent for the researcher to be contextualized and understand the complexity of the organisation, which was already previously explained.

Regarding the research topic, the interviewee was presented with the identified communication channels and described which ones were mostly used or are growing, as to no surprise, the overall area with the most investment is the PSR department. Tecnifar "utilizes most available communication channels in some way or another, but always striving to do it in good faith and considering the ethical aspect". Moreover, some particular channels were addressed, for example, e-mail and SMS is not really invested due to the GDPR regulations in the pharmaceutical sector being really inefficient and not worth the investment. This is one of the instances that confirms that pharmaceutical promotion, as perceived in the literature review, is highly regulated (Scherer, 2000). With these regulations in place, PCs need to understand how to reach physicians and pharmacies, and that's why so many communication channels exist, and innovation is fostered. Tecnifar promotes its products and inform final consumers through social media (primarily to LinkedIn) and TV advertising, but only OTC products (non-prescribed), prescribed-only products are not allowed to be advertised to final consumers. Other channels such as workshops and

magazines were also discussed. Furthermore, with innovation as a strong core of the firm, Tecnifar is also planning on releasing a platform, named “ITecnifar” exclusive to healthcare practitioners with clinical trials and research regarding its products, promotional material and other important information.

Regarding other innovative initiatives, the interviewee unveiled a different setting that the enterprise provides to physicians which is a combination of two channels, which they call “tertúlias”, a Portuguese non-common word for social gathering. These “tertúlias” are a combination of a dinner with information from an invited specialist, “a handful of physicians in a specific medical area are invited and while enjoying the social gathering are also able to get valuable information”. The interviewee explains that this method is considerably new in the Portuguese market and is enticing for everyone involved, “a pleasant dinner in a less formal environment where doubts regarding a specific medical pathology are addressed and, for Tecnifar, the invited/paid specialist demonstrates the efficacy and quality of the product involved” where the pleasurable environment contributes to the creation and maintenance of good and long-lasting relationships with physicians. However, there is an understanding that this innovative method of communication will soon be copied by other companies and its benefits are mostly short term, the respondent explains that this is the nature of the pharmaceutical business, “the continuous efforts are what makes the firm stand out and maintain these relationships”.

Another important and innovative communication channel created by Tecnifar is in respects to pharmacists. Which are informational webinars, given by a third-party company but administrated by Tecnifar. A webinar is a web platformed lecture. These webinars are not the innovation, to stand out and guarantee attendants, the innovation comes when the enterprise was able, through the Portuguese Pharmacists Association, to award credits for fully attending these webinars. A pharmacist to continue exercising its function needs to retain a certain amount of credits, therefore, these webinars were and are another innovative success.

Regarding the effect of the covid-19 pandemic restrictions, the respondent disclosed that in the peak period, especially in the first incident of total lockdown, when everything was closed and people were not allowed to leave their residences, “nothing was happening”. These restrictions were completely unexpected, and no company was well prepared for such event. To that extend, the possible means of communication were cell phone calling or texting and digital alternatives

such as e-mail or video calling. The interviewee admitted that the “pandemic unveiled the need to invest in such communication channels”, to combat these never seen before changes. After the first lockdown, pharmacies started opening up but, due to strict restrictions imposed by the government, it was not possible for PSR to efficiently and properly face-to-face contact health care practitioners. Some efforts were made to contact them, for example, on an outside area of their place of work but it was really difficult to get their attention in such period. To visit pharmacies only one individual could be inside, and pharmacists gave, understandably, priority to customers, giving more adversity to the PSR normal activity.

And with time, as restrictions started getting removed, “business started to pick up at different paces due to unexpected government covid restrictions form week to week”, the Portuguese market was even unstable from territory to territory, for example, “the Northern region of Portugal was slower to waive pandemic restrictions”. During this time, special rooms in hospitals for PSR interaction were created, however, its impact was not meaningful.

The biggest challenge identified was, therefore, the access to healthcare professionals. With access, according to the interviewee, “it was business as usual”. It was conjointly pointed out the difficulty of gauging public attention without access, the pharmaceutical market is a daily battle where “each day is an important day, each visit is an important visit, and each achievement is an important achievement”, especially when the financial capacity is not the same as of big-time multinational companies.

When comparing Tecnifar to big pharmaceutical multinationals, Tecnifar’s perspective is clearly different, a multinational follows international company guides, that can suffer small location-based changes but in most cases the PSR visit is not as impactful, sort of like reading a script, and only describing one to two products. Deploying a strategy of describing two products in a sequence and, one week later another PSR describes the same two products but in a reversed sequence as a way for the healthcare practitioner to remember both products. This strategy is named “mirror” visit and multinationals can afford to do this due to its vast amount of resources. Tecnifar on the other hand, “focuses more on an impactful visit and can ill afford to present only one or two products”, therefore, PSR visits are done with a bundle of products that can be related, in order to make an impactful and easily flowed product presentation, instead of just talking. Tecnifar’s PSRs have regions assigned to them and manage their visits accordingly, also making sure to only present

products that are related to the specific healthcare practitioner contacted. Furthermore, “Tecnifar’s perspective on the PSR visit is on personalization and adapting according to the health practitioner traits”, the product promotion in its entirety is not memorized, only the key messages and then it is up for the PSR to tailor their speech. This customizing idea enables impactful visits and long-lasting relationships. One last and critical perspective that the interviewee mentions is that, accompanied with personalised and impactful visits, “a health professional feedback is remarkably important”. Customer needs must be understood in order deliver a desired quality service, “knowing a physicians experience with one of our products and the feedback of their patients are what makes us understand what they need and what to deliver”, and without the enhanced resources of big-time players, everything needs to be maximized.

Lastly, to prepare and achieve these personalized visits, the total company’s PSRs that are spread all over the Portuguese territory are regrouped, approximately every four months, for 3 to 4 days in a specific location such as an hotel, and new important topics and information are addressed such as new products, promotional strategies, market trends and so on. In these 4 days, 2 of them are completely focused on practicing PSR visits, “every different scenario is tested by emulating different healthcare practitioner type, personality trait and disposition”.

Thus, Tecnifar acknowledges the importance of understanding what their customers need and retain that information to deliver a quality customer centred service, with flexibility and effectiveness to adapt to the everyday struggles and market changes that characterize the pharmaceutical sector.

4.2.2 Interview 2 – João Sousa (Phytoderm)

Following the questioning structure, the interview was initiated by the description of what led the interviewee to attain the current position and achievements. João Sousa is currently the owner and general manager of two companies in the pharmaceutical sector, one of them being Phytoderm (Phytoderm - Especialidades Farmacêuticas, Lda.), which is the focused enterprise for this research, and an owner of a pharmacy in Lisbon. The interviewee has been working in the pharmaceutical sector for roughly 30 years, regularly collaborating with pharmacies, worked with several companies, started as a PSR and progressively ascended career wise to product manager, head of sales, business unit manager and later commercial director. Thenceforth, the interviewee went to Phytoderm and, after 3 months, acquired the company that has been now alongside him

for, approximately, 18 years. The career route that was described and the evident success that the company demonstrates, can testify to a high level of expertise, hard work and perseverance.

When observing the interviewee's talkative manners and attitude, it is clear to see that a true visionary is at hand, always with a strong, positive and ambitious mindset. "The company grew step by step", according to João, being faithful to their core values of "hard work, humbleness and coherence". Consistently "seeking to create and deliver value which led to a continuous growth of the company in quantitative and qualitative dimensions" and the opportunity to create other business ventures, such as, another pharmaceutical company and a pharmacy that intends to expand and create a group.

Regarding the company, the interviewee expresses that every employee, no matter the department, is and "must be primarily focused on their customers" which are healthcare practitioners. It is not only the PSRs that have that job, but the whole firm also needs to understand that everyone needs to work for the company's customers.

When displayed the identified communication channels, it was clear to see that most of them are adopted, where PSR is the channel with the mass investment due to encompassing human resources. Some channels are key points of contact, beginning with free samples where "Phytoderm makes a point of emphasis of stimulating the final consumer to experiment its products before buying them". This approach even if it does present as costly, demonstrates the trust that the company has in its product's effectiveness and quality that, if that is true, in the long run will present tremendous benefits. As for social media, although ensuring presence in other ones, the most used one is LinkedIn for promoting and also hiring. As for TV advertising, a hefty investment is still made in this department.

The respondent explained that the company's growth, although substantial, "has not been fast, it is a slow and grinding process", a company must be present in all different channels, especially with the constant market environment changes. But Phytoderm "creates value to sell" and not the other way around, therefore, slowly but surely, with the quality provided in all facets of the business, further success will emerge in the long run. This comes in line, as well, with the complete confidence and trust on the product delivered, which is completely innovative and, by being disruptive, it is understandable that it will take time. These are the differentiating factors, the interviewee took this opportunity to address their 3 main values, where you can see that they are

really the backbone of the company's views. The first one being "coherence", the company since its beginning ensured the same values, principles and message, "always delivering on what is promised". The second one being "work", the company makes sure that all employees are hardworking individuals that "only rest when the service provided is well delivered". And lastly, "humbleness", more associated with the views on innovation, the interviewee explains three types of innovation which are "concept innovation, product innovation and advice innovation".

Regarding the covid-19 effect, the interviewee expressed that, at first, when the first pandemic restrictions were in place, it was a "really scary situation". All business activities stopped from one day to another without any timely notice. The fear for business owners even increased when it was understood that the situation wasn't going to be resolved in one month, but it could be here to stay, and no one could give exact information on what the future held. The biggest challenges were access and communication, "the company couldn't communicate with its customers, everyone closed their doors". However, the health problems that the products addressed were still present, and with time, the firm "had to adapt". This adaption was enabled with small innovations in communication channels, namely the production of personalized videos with product information that were sent through online message platforms, such as WhatsApp, to healthcare practitioners where the feedback was favourable and most importantly "brought results". Besides this, during the pandemic, the enterprise capitalized on offering small snack boxes to healthcare practitioners, where product information was included in the box. It was understood that physicians, nurses and pharmacists were in continuous rush and "giving them these small incentives was exactly what they needed". All these methods were in place to achieve what really matters, making sure that the contacted individuals "remembered the enterprise's products, values and that the company supported them during these difficult times".

With the made comparison of Phytoderm promotional strategy to huge multinational PCs, the respondent immediately and confidently said that the firm's PSRs are "the best representatives in the world", while multinational companies sell a product, Phytoderm's representatives, with the values proposed, talk about the pathophysiology, give advice, and inform about the product innovation, creating value to sell and not the other way around.

When looking ahead, the interviewee has a positive outlook on the matter, believes that "people need to pursuit going back to normality", that covid-19 is most likely, here to stay, but people now

know what to expect. “Prosperity” is the key word used, even with ups and downs, in the long run consumers will understand that the enterprise provides added value, by making sure that the product delivered “has quality but most importantly that the advice given is focused on conducting individuals to take health-conscious decisions, and not just selling a product”.

At last, Phytoderm also conducts quarterly cyclical meetings that last around 2-3 days, in a hotel, to continuously strategize the promotional department. Market changes, company overview, values, PSRs performance and objectives are analysed, product information is presented with the associated merchandise and, if needed, product presentation simulation is practiced. It is very important for Phytoderm’s PSRs to understand the values that the company strongly defends and bring them to the workplace. To no surprise, when covid-19 restrictions were in place, all of this was made online.

All these efforts, as mentioned before, contribute for the success of these two companies. The pharmaceutical market is always innovating and changing, and it is part of the job to continue to adapt and overcome emerging challenges.

4.3 Research Observation

Besides interviews, a research observation was made regarding a congress sponsored by Tecnifar where the PSRs’ usual activity and interactions could be observed. From this particular method, the main takeaways obtained related to the research problem were the opportunity to better understand how a PSR interaction and serviced provided to a physician, which is the most prominent, is performed and the possibility to evaluate this exact communication channel, a sponsored event’s environment.

This observation has complementary research implications due to it being only a one event observation, but it is definitely important for the research at hand, and all the combined research methods will forge thorough higher quality insights.

On September 29th and 30th 2022, a medical congress (from physicians to physicians) took place in Entrecampos in Lisbon, Portugal, regarding the subject of Urology towards General and Medicine Family, where Tecnifar was one of the sponsors of this event and the entirety of the event was directly observed in order to understand how PSRs interact with physicians. The complete duration of the event was one and a half day, the first day starting at 09h00 and ending at 18h00,

with a lunch break from 13h00 to 14h30, and the second day from 09h00 to 13h00. The event schedule was centred around several lectures and speeches from several subjects within urology with clinical cases, round tables, conferences and discussion. In between sessions, coffee or snack breaks were provided by the pharmaceutical companies, part of the sponsorship of the event, and it was in those occasions where interaction between PSR and physicians were made and observed. These breaks were made in a hefty room, where around 50 physicians were usually present and 12 different PCs stands were located around the room promoting some specific product. The room's atmosphere and frame of mind was very relaxed and joyful, attendants were definitely enjoying the occasion, and a vast amount of physicians were invited from the pharmaceutical companies by intermediary of a PSR. The PCs stands had a considerable size, containing a sizable promotional banner, a coffee machine, a table, two seats and some merchandise, in this specific case, magazines and bookmarkers including information about the product being advertised by Tecnifar. Physicians talked with the PSRs, but usually only whom they already knew, a Tecnifar PSR later explained that these congress presences predominantly "serve the purpose of maintaining already established relationships but always open to create new relationships if the opportunity arises". A PSR content of conversation changes according to the physician at hand, however, the topic of conversation is not particularly centred around the product advertised, the PSR wants to create a pleasant experience for the healthcare professional and, therefore, provides, for example, a coffee and bookmarker, and conversations were usually unrelated to the product since the physicians already knew it. These interactions are important to maintain a good and long-lasting relationships between the company and the physician. Additionally, in terms of opportunities to interact with healthcare practitioners, the lunch break was considered one of them, but most importantly, after the first day, a dinner was arranged between the lecturer physicians and Tecnifar's employees which was a success and empowered the firm's presence in the physician environment. Besides the personal interaction, the brand exposure, meaning the sizable stand, is also important, practitioners just by visualizing the stand, remember the product and associate the brand, which is the intended objective, to be remembered. Furthermore, when approaching the Tecnifar's attending employees, it could be seen that their views were completely aligned with the previously described interviewee's, Amélia Pereira Coutinho. The family culture and professionalism that they display are fundamental values that they carry in their everyday activities.

A simulated PSR visit was also performed and observed for researching purposes, the different tools used, such as presentation through a tablet and promotional merchandise, were presented and the informative speech as well.

Lastly, there was also the chance to approach the event organizer, where some questions were asked regarding how the pandemic impacted this sort of events. The organizer has been coordinating these congresses for several years and described that everything went to an online platform, but the medical impact made is considerably less visible and also incurred some unjustified costs. For the foreseeable future, returning to an online alternative is something that, even though it was previously needed, is not in the mind of the congress organizer.

Furthermore, internet-mediated observation, through the companies' social media, was also conducted in order to understand the interviewees' perspectives and views alignment with the respective company.

Upon observing Tecnifar's social media presence, namely LinkedIn platform page and postings, it can be seen that several efforts are made to inform consumers and the overall Portuguese community on important health related practices such as exercising and mental health awareness, evidencing the clear vision of embracing "an active role in improving the quality of life of Portuguese people", concepts that directly align with the stated values from the interviewee.

Phytoderm also makes its presence known in the social media realm, providing information on the firm's products, values, vision, achievements and updates, and raising concerns in important issues such as sustainability.

5. DISCUSSION OF RESULTS

5.1 Comparative analysis: Small medium enterprises vs Multinational companies

Upon conducting an in-depth research method display, the views and procedures of the two companies analysed, which are in most cases similar, will be compared to large multinationals PCs. Tecnifar and Phytoderm are considered small to medium enterprises, which are the backbone of the Portuguese context, and the comparison between them and the global pharmaceutical powerhouses is important to be made.

The comparative analysis will focus on two major categories: how different sized companies reacted to the covid-19 pandemic; and what communication channels are used, including the manner that they are approached.

5.1.1 Covid-19 pandemic effect in pharmaceutical Portuguese sector

The covid-19 pandemic effect on the pharmacy industry was either a tremendous opportunity or an adverse chapter, depending on the product mix offered. Multinationals are characterized for providing an extensive amount of different medical products, and therefore, can capitalize on a specific one if an opportunity arises to do so, considering their massive amount of resources. That was the exact situation during the covid-19 pandemic, the market demand for specific prescription medicines, vaccines and medical devices skyrocketed, and multinational pharmaceutical companies took advantage and prospered the most during these times. On the other hand, companies such as the ones interviewed, by not providing the specific products related to the covid-19 demand, were negatively affected, especially when restrictions were in place, meaning no PSR visits were allowed and there was a remodelling of health-related consumption trends. Moreover, the resource capability of these enterprises cannot be compared with global pharmaceutical companies that, due to this reason, can be more flexible to changes and invest abundantly in different R&D departments and supply chain changes. Therefore, while most small to medium sized pharmaceutical companies were forced to essentially stop their normal activities, most multinational companies performed exceptionally well.

5.1.2 Communication channels used

Regarding communication channels used, both types of companies use the same communication channels, although, small to medium pharmaceutical enterprises, due to not having the resource firepower of multinationals, understand that more customer centred and personalized channels provide the better long term sustainable benefits. This customer centred approach allows for innovation in the promotional department such as the previously described “tertúlias” and webinars. Multinational enterprises, contrarily, by encompassing global standards, demonstrate a more standardized channel utilization. However, even if less customer centred, multinational abundant resources achieve the main objective of a product being impactful and memorized. Thus, smaller companies impact and are remembered by delivering a customer centred and personalized service, while big size companies impact by being heavily present in every channel, due to their resource capacity.

5.2 Research Questions Answers

The main objective of this dissertation is to answer the main research question, but before that, the designed research sub-questions need to be addressed first, since they are critical to achieve the research main objective. In this chapter all the mentioned answers will be explained, where the results obtained will be combined and evaluated. The answering of such questions was elaborated through the combination of the obtained results from this research and the reviewed academic literature.

Research Question 1: What changed the most in the Portuguese pharmaceutical sector’s service provided with the covid-19 pandemic?

The covid-19 pandemic had several effects on the entire world population, including the pharmaceuticals sector. The most impactful and visible pandemic effect identified in the pharmaceutical service provided was the importance of maintaining quality non-presential communication channels, more precisely, digital platforms that may have not been previously and correctly addressed. The digital transformation is now a reality (Ayati *et al.*, 2020) and enterprises, such as the ones interviewed, understand that it is now an important channel to focus on and that delivers results. Moreover, during peak covid restrictions, the biggest challenge was attaining access to healthcare practitioners, and this need accelerated the digital channels adoption.

Pharmaceutical companies are now more prepared than ever to face such challenges by educating employees on the different methods and tools available, equipping them with skills and solutions to promote products (Mlika *et al.*, 2020). The digital channels are here to stay and, nowadays, PCs need to conjointly combine quality digital and presential environments. This combination, if well designed and implemented, although more complex, will allow for a more personalized, efficient and flexible promotional approach, enabling the possibility of providing the desired customer centred service.

Research Question 2: What is the most used communication channel by Portuguese pharmaceutical companies?

The most used communication channel approach is, without a doubt, the PSR informational presential visit and, to no surprise, is the most invested one as well. The literature available along with the interviews made, confirm that this channel, although severely affected during peak covid-19 lockdown restrictions, is still the most prevalent one. This visit is the presentation of a pharmaceutical product to a healthcare practitioner, such as a physician or pharmacist, and is the essence of these pharmaceutical companies service provided. PSRs are located throughout the Portuguese territory and perform several daily visits as their main activity. The importance of these visits for prescribed pharmaceutical products is larger than for OTCs because of the smaller direct customer population, however, the presential PSR visit is still the most used channels for both product types.

Research Question 3: Which communication channel/channels is/are the fastest growing in terms of adoption since the covid-19 pandemic started?

Aligning with the answer for the first sub-question proposed, the fastest growing communication channels in terms of adoption are non-presential and digital related channels, more precisely, social media advertising, PSR online informational visit (video call) and messaging. As mentioned before, with the accelerated digital adoption due to covid-19 lockdown restrictions, online platform adoption grew at a tremendous rate. Furthermore, from the research made, an innovative fast growing online alternative was also identified, namely, web platformed lectures.

Research Question 4: How can a service and consequent product provided positively stand out in the pharmaceutical Portuguese market?

A PC's product quality is critical for the success of a company, however, there is a complexity in this perspective. In the pharmaceutical sector, a product quality alone without a good service provided cannot reap full success benefits and can only take so far. The combination of a quality manufactured product, regarding safety, efficacy and benefits, and a customer centred service will ensure a sustained competitive advantage.

To achieve such exceptional customer centred service, a few considerations must be addressed. Firstly, it is important to understand the target customer's expectations and perceptions, a company must strive to sustainably operate above the customer's desired expectation and perception levels, this can only be achieved by evidencing fairness, reliability, promise delivery, service failure compensation and continuously making efforts to improve the provided service quality. Additionally, in the pharmaceutical sector, to achieve such optimal service provided and with the presence in several communication channels, it is crucial to ensure that a company's desired values and reputation must be aligned throughout the whole business, where a customer centred approach is enforced. Besides, also ethical considerations are extremely important in the pharmaceutical environment.

This sector is, as well, continuously and frequently changing and, therefore, is necessary to constantly adapt to market changes which confirms the hard-working nature of the business. "Quality, work and coherence" are the main values of one of the analysed companies and both companies noticeably provide flexible, personalized and efficient customer centred services which only further confirms the importance of such matters to reap the sought success benefits.

Research Question 5: What are the differences between the service provided by big-size companies compared to smaller ones?

The main identified difference in the service provided is the relationship established with customers. Bigger sized companies, due to being so massive and presenting products that are already steadily inserted in the market, have a less intimate relationship with its customers. Smaller to medium sized companies, on the other hand, understand the importance of such relationships and need to capitalize on them. Sometimes a product can have a better quality and benefits than of multinational big sized enterprises but, due to not having the same exposure, can be overshadowed. That is the power of the promotional environment, however, in the long-term with a continuous

customer centred quality serviced provided accompanied with a quality product, a pharmaceutical company will continue to achieve success, which is the case of both companies analysed.

6. CONCLUSIONS

The main objective of this research is to evaluate the impact of the covid-19 pandemic on Portuguese pharmaceutical companies' communication channels and service provided.

As for conclusions, it is clear that the available communication channels were and are being undoubtedly affected by the recent covid-19 pandemic virus, the negative effects such as the unexpected business interruption during lockdown restrictions were devastating, however, one positive perspective can be withdrawn. The emerging adoption of digital channels that now enable a stronger viable communication channel portfolio, for example, web platformed lectures. It is important to point out that digital platforms are not in-place to replace conventional methods but to complement them (Heutschi *et al.*, 2003).

Moreover, the covid-19 pandemic enforced companies, such as Tecnifar and Phytoderm, to adapt to the described changes, and this was the main narrative throughout this phenomena, continuous efforts where flexibility and adaptation was critical, making use of different channels and modify existing ones to seek business normality.

The interviews conducted were able to identify two innovative communication channels. The first one, which is related to the Covid-19 effects, meaning digitalization, is the Tecnifar's pharmacist's credited webinars in association with the Portuguese Pharmacists Association. The second one, although unrelated to the pandemic effect, is the so called "tertúlias" or social gathering by Tecnifar that, even though being a combination of two other channels, represent as an innovation in the Portuguese pharmaceutical market.

A separate generated conclusion is that, nowadays, more than ever, with the emerging ethical concerns, the ideal service provided must be customer centred and take into account the health care practitioners and final consumers' expectations and perceptions, especially when it comes to PSRs. A PSR needs and will continue to need to have a high expertise, digital and personal soft skill levels, as well as being trustworthy, transparent, ethically conscious and caring. The market is trending towards tailoring according to healthcare practitioners, and if not accomplished, could be in risk of losing market size.

The study is further focused on small to medium enterprises because these enterprises are the ones that are less addressed in the available literature and multinational PCs have global standards that are applied to the Portuguese market.

It is clear that the power of appearance and having access is critical for these companies, interviewees also revealed important notions in the changes of the service provided, a firm should strive to “create value to sell” instead of the opposite, always working towards the customer and their needs in order to create continuous pleasant impactful experiences, by being fair, reliable and promise delivering, that will later correspond to long lasting strong customer relationships where feedback is of utmost importance as well.

The research observation made, further confirmed the previously described notions. A company’s success is not coincidental, presence is key, and being well distributed across all communication channels is critical. A values alignment throughout the whole enterprise is also of considerable importance.

With all these arguments presented, it is understandable to conclude that, despite the devastating repercussions of the covid-19 pandemic, the existing pharmaceutical companies are now more prepared than ever to face upcoming future challenges.

7. LIMITATIONS AND FUTURE RESEARCH

It is understood that the quality of information collected was extremely valuable, however, interviewee sample size is not immense, even though the level of expertise of such individuals is very notorious. Besides, this research was unable to attain a multinational similar knowledgeable representative who could provide further insights, despite several information regarding these big companies being available in the literature.

Therefore, for future endeavours, a multinational perspective could be further analysed. It would also be of value to analyse and observe qualitatively the Portuguese PSRs activities, in this specific case only one event was observed, and other events may present different atmospheres, synergies and consequential insights. In addition, pharmaceutical companies' customers, namely health care practitioners such as pharmacists and physicians, perspectives could also be evaluated to deepen the research made and provide further insights.

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9. ANNEXES

9.1 Annex A: Interview Guide

Semi structured Interview (closed and open questions)

Sample: 2 interviewees

Initial information: Full Name, Age and Position in company

Questions:

1. Could you please do a brief description of your academic and career path, and then moving on to your position in the company and the functions performed on a daily basis?
2. Can you explain how does your company work? More specifically, can you elaborate on the company's structure, partners, size and locations affected?
3. What steps does a product take from its production to its final delivery? Explain the company's supply chain.
4. From the identified communication channels, which ones does your company use?
5. Do you confirm that the most invested promotional department are the pharmaceutical sales representatives?
6. Are there any new/innovative communication that your company undertakes? If yes, please elaborate.
7. With the arrival of the covid-19 pandemic, what were the differences detected in the communication (relationship) between the company and the respective doctors/pharmacies in the presentation/promotion of products?
8. During the pandemic, what was the biggest challenge in promoting a product to doctors/pharmacies?
9. When presenting a product to doctors/pharmacists through a PSR, what are the most conventional methods of carrying out this presentation (compared to the market)? Does your company use these methods?

10. Comparing your company with the biggest global/multinational distributors (big pharma) what are the major differences in the method of marketing and sourcing (ordering) products?
11. In this day and age, with the easing of restrictions, are there any clear transitions in customer interaction methods (pre and post pandemic)? Can you identify a new trend/direction that the market is taking?