

**RECORDING OF POISONOUS SUBSTANCES DELIVERANCE IN PRESCRIPTION BOOK**Ndao Y.\*<sup>1</sup>, Mbaye G.<sup>2</sup> and Fall D.<sup>3</sup><sup>1</sup>Laboratory of Galenic Pharmacy and Legislation, Faculty of Medicine, Pharmacy and Odontology (FMPO), Cheikh Anta Diop University of Dakar (UCAD).<sup>2</sup>Laboratory of Biophysics and Pharmaceutical Physics, Faculty of Medicine, Pharmacy and Odontology (FMPO), Cheikh Anta Diop University of Dakar (UCAD).<sup>3</sup>Laboratory of Organic and Therapeutic Chemistry, Faculty of Medicine, Pharmacy and Odontology (FMPO), University Cheikh Anta Diop of Dakar.**\*Corresponding Author: Dr. Ndao Y.**

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**ABSTRACT**

**Introduction:** Deliverance of a drug subject to poisonous substances class must be recorded in the prescription book. However, most licensees don't comply with this obligation. The objective of this work is to study compliance with recording of poisonous substances deliverance in the prescription book, at Guediawaye municipality. **Materials and Method:** This is a survey conducted from January 1<sup>st</sup>, 2010 to December 31<sup>th</sup>, 2014 within forty five (45) pharmacies at Guediawaye. Data collected were related to staff, level of knowledge of the prescription book, recording of deliverance in the prescription book. **Results:** Pharmacy staff is mainly made up of sellers (60%), pharmacists holders (33.3%) and pharmacists assistants (6.7%). Pharmacy personal exercise is not respected at 58%, and activities are entrusted to a seller, or a pharmacist and a seller. Regulatory details of authorizing officer and importance of recording deliveries are more or less known. However, the average number of recording is estimated at 2.348 dispensations among 27% pharmacies visited. Obstacles to recording are forgetfulness and understaffing, neglect, laziness and laxity, neighborhood with customers, impatience of customers and ignorance of prescription book importance. Also, non-compliance with profession rules, commercial aspect dominant, unauthorized prescribers, absence of inspection were mentioned. **Conclusion:** Recording of poisonous substances deliverance in the prescription book is not systematic at Guédiawaye. Among reasons, non-compliance with personal exercise, insufficient inspections and unauthorized prescribers were mentioned. However, it would be useful to conduct the same study in urban areas for a better appreciation.

**KEYWORDS:** Prescription book - Poisonous substances - Recording - Deliverance - Staff - Pharmacy.**INTRODUCTION**

Drug is an essential good which shouldn't considered as a consumer product. This is what justifies monopoly entrusted to pharmacist specializing in medicines, to ensure patient safety.<sup>[1]</sup> Pharmacists are required to justify acquisition and disposal of drugs falling under poisonous substances regulation.<sup>[2]</sup> The deliverance of a drug subject to poisonous substances class, must be recorded in the prescription book. It's a special register initiated by the regulatory authority, where pharmacists transcribes all prescriptions.<sup>[3]</sup> However, the finding is that most owners after such drugs sale, do not record more often. The non-fulfillment of this obligation is synonymous with tax evasion, and can lead to criminal sanction. The objective of our work is to study compliance with recording of poisonous substances deliverance, in the prescription book, at Guédiawaye department.

**I. MATERIALS AND METHOD**

It's a retrospective study based on a survey from January 1<sup>st</sup>, 2010 to December 31<sup>th</sup>, 2014 within forty five (45) pharmacies in Golf South, Sham Notary Ndiarème Limamoulaye, Medina Gounass and Wakhinane-Nimzatt. The questionnaire used dealt with the staff and the prescription book.

Variables studied related to staff profile dedicated to dispensing activities, medication recorded during the period, level of knowledge of the prescription book, and obstacles to fill prescription book. Data collected was expressed as a percentage using an Excel file.

**II. RESULTS AND DISCUSSION**

Data collection was limited by the lack of cooperation of some sellers who didn't want to speak without prior authorization of the pharmacist holder, difficulty of obtaining number of poisonous products sold during the

period, counting of products recorded by non-compliance with order numbers in the prescription book.

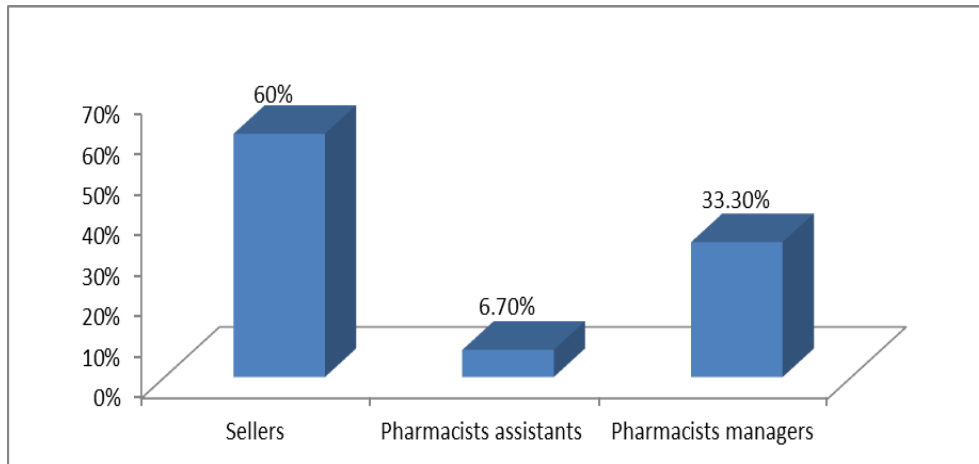
However we could collect following information on staff categories, dates initialing of prescription book, level of prescription book knowledge, number of recorded drugs and reasons for not filling.

**II. 1 The staff of pharmacies**

**1. Category of staff**

Categories of staff empowered to assist pharmacist holders are pharmacists-assistants and pharmacy

technicians.<sup>[4]</sup> However, our results are marked by a strong predominance of sellers (60%), followed by pharmacists holders (33.3%) and pharmacists-assistants (6.7%), and a total absence of pharmacists in pharmacies (fig.1). Instead, we find sellers who aren't empowered to assist pharmacists. Indeed, article L. 587 prohibits drug deliverance to sellers.<sup>[5]</sup> Unskilled sellers don't know the importance of a prescription book, and can't appreciate associated risks with a poisonous substance deliverance.

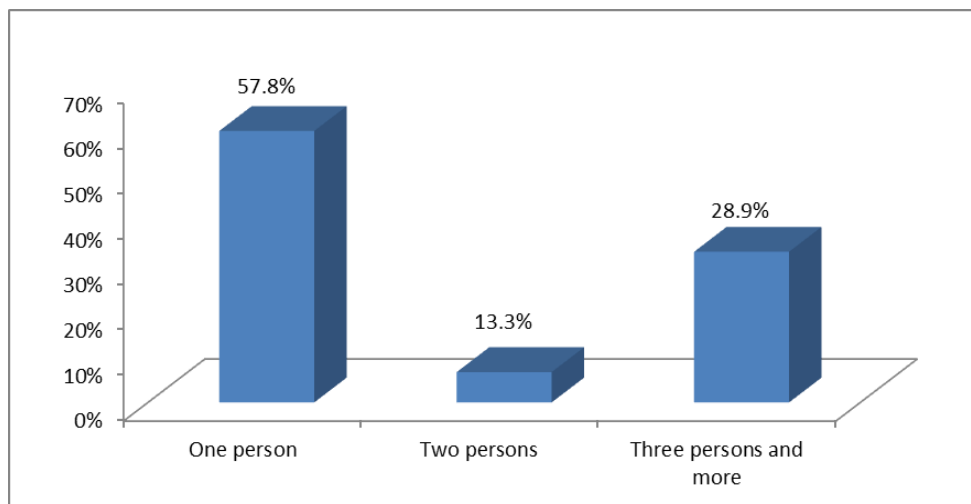


**Figure 1: Category of staff in pharmacies.**

**2. Staff with a dedicated task**

Pharmacy activities as numerous as they are, are entrusted to a single person (13.3%) or to three or more people (28.9%). However, the highest proportion

(57.8%) entrusts this activity to two people (two sellers) or (a pharmacist and a seller) (fig.2). The last binomial more complementary might be an approach for respect of rules issued.<sup>[6]</sup>



**Figure 2: Number of staff with a dedicated task.**

**3. Respect for personal exercise**

According to code of ethics, pharmacist holder has the obligation of personal exercise, and if he must be absent he must be replaced.<sup>[7]</sup> But in our study we

found in 58% of cases, pharmacies without pharmacists (fig.3); however article 58 of code of ethics stipulates that : no pharmacist can keep the office open if he is not regularly replaced.<sup>[8]</sup>

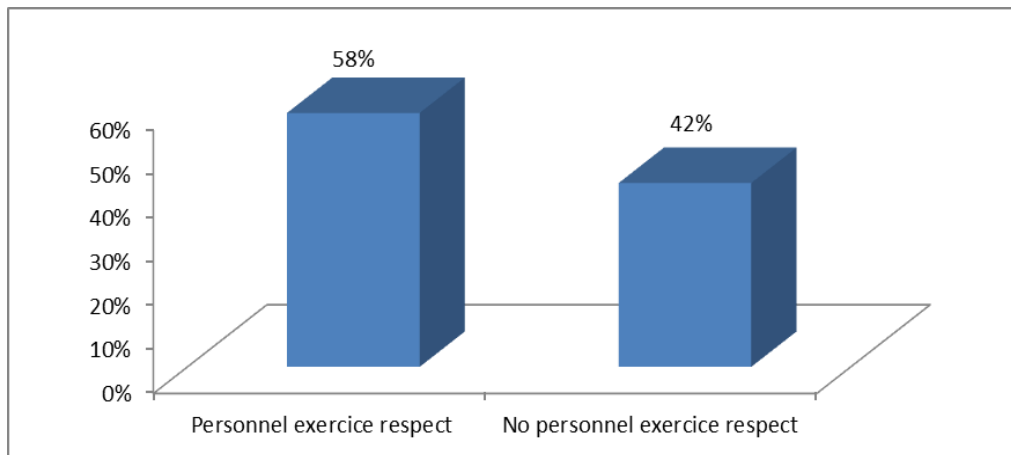


Figure 3: Personal exercise respect in pharmacies.

**II. 2 Initials of prescription book**

Most of prescription book in our study were initiated between 2005 and 2010, including nine (9) since the 1990<sup>s</sup>, and two (2) between 1990 and 1995. Although we haven't detected a maximum use of the prescription book, that is unacceptable given the rotation of the

products from the list, to find that the rest schedulers haven't over 20 years without being completely filled. This situation would be explained by ignorance of legal obligation by ignorance of this legal obligation.

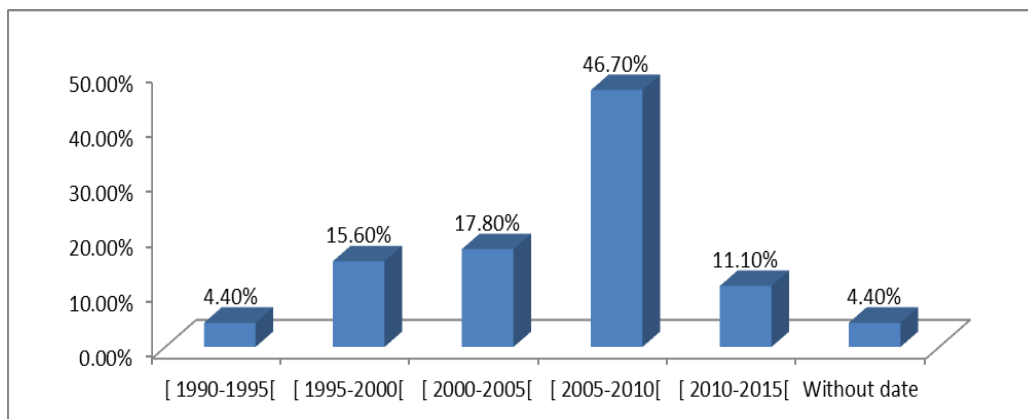


Figure 4: Initialing year of prescription book.

**II. 3 Level of prescription book knowledge**

**1. Prescription book importance**

Most people surveyed (78%) recognized importance of recording poisonous substances, against (17.8%) who spoke respectively of traceability and

pharmacovigilance, and (4.4%) have no idea about the record. Most of staff knows motivation of prescription book recording. However, it ignores the counterparty of pharmacists' liability fees<sup>[9]</sup> included in drug price and collected by pharmacists.

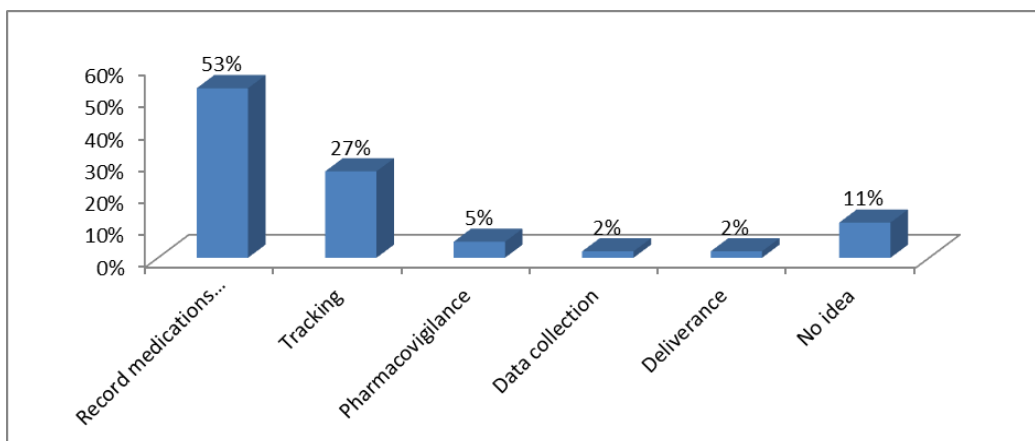
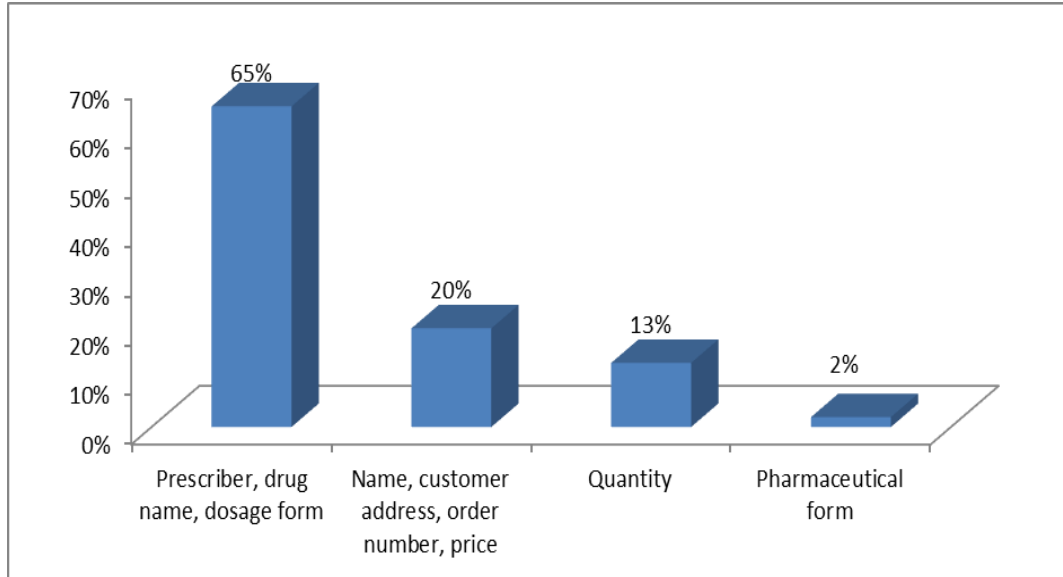


Figure 5: Knowledge of prescription book use.

**2. Details of prescription book**

The most important details like prescriber, drug name, pharmaceutical form were respectively cited by (65%) of people surveyed; name, customer address and serial number were cited by (20%); quantity (13%)

and pharmaceutical form (2%). These results show that most of surveyed people have a greater or lesser knowledge concerning various regulatory references of the prescription book (fig.6).

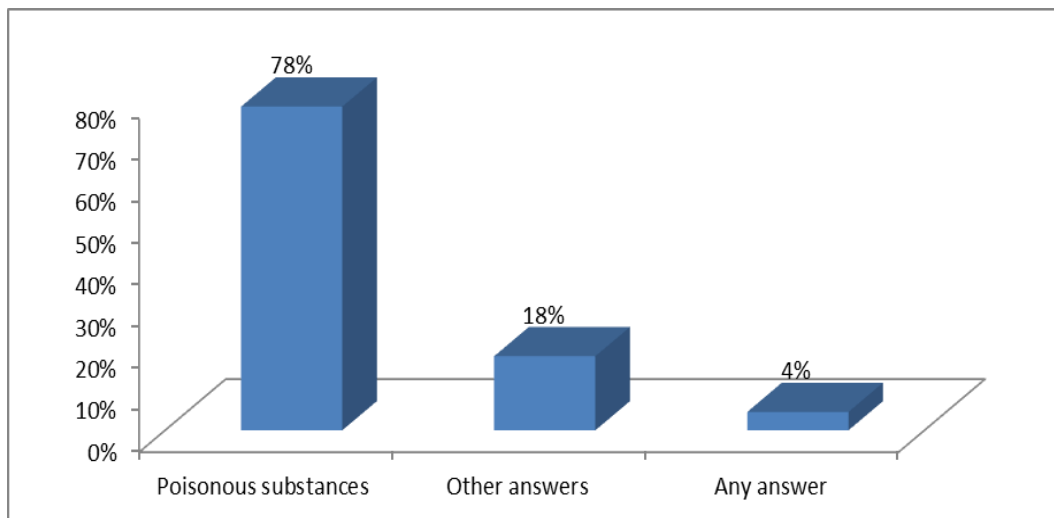


**Figure 6: Knowledge on prescription book details.**

**3. Drugs to record**

Poisonous substances are subject to legal provisions and must be registered in the prescription book.<sup>[10]</sup> Thus, 78% of surveyed people knows main informations. 18% think that only certain

antihypertensive drugs, psychotropic drugs, anxiolytics, antiepileptics should be registered. Others add contraceptives. However, 4% have no idea on the matter. This finding could be explained by the fact that most of surveyed people are sellers.



**Figure 7: Knowledge on drugs to record.**

**II. 4 The number of drugs recorded**

Among forty five (45) pharmacies visited, the record average during these four (4) years is two thousand three hundred and forty eight (2348) products; only 27% of pharmacies against 73% reached it. For a prescription book initialed on September 21<sup>th</sup>, 2010, pharmacy that made the best recording took at least six (6) years, without finishing its prescription book. However, if we

refers to the prescription book number of pages (600), and by filling half a page per day (at least 20 products); actual filling of a prescription book could be completed after three (3) years. However, most pharmacies have reordered maximum number of products during periods preceding inspection.

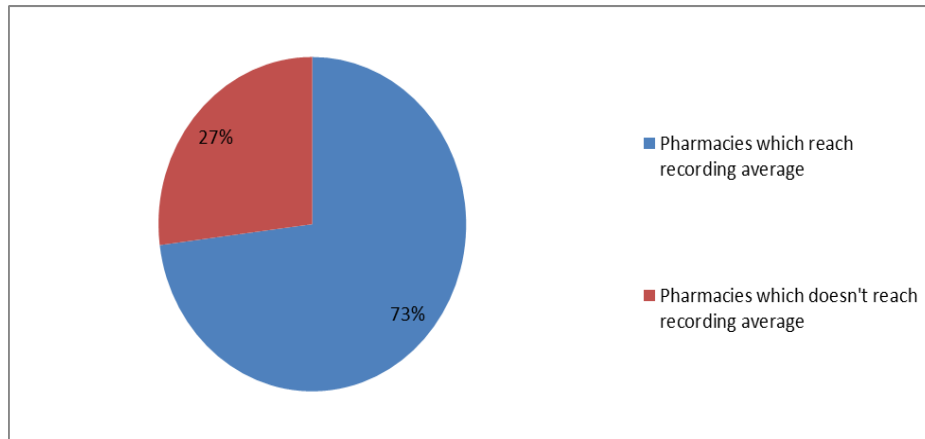


Figure 8: Distribution of pharmacies according to average record.

**II. 5 Reasons for not filling**

Among the reasons, 67% have discussed the influx of customers and lack of staff. This situation could be remedied by better organization in pharmacies, where 57.8% have at least two people. Forgetfulness and lack of staff (4%) are other reasons that we find unacceptable, given the importance of the scheduler. Negligence, laziness and laxity (4%): are also reasons contrary to the obligations of prudence and diligence of the pharmacist. There is also the recurrence, the neighborhood with the customers, the impatience of the customers and (9%) are all reasons that are problematic, especially since the pharmacist forgets

that he has an obligation of result and that " he engages his civil liability in case of non-compliance with said obligation.

Non-compliance with the rules, the dominant commercial aspect, unqualified prescribers (9%) are also reasons. These arguments could be explained by the non-respect of personal exercise by the holders, but also and above all the insufficient exchange of information on poisonous substances (7%). In addition, the availability of a restrictive list of prescription drugs could help holders meet this obligation.

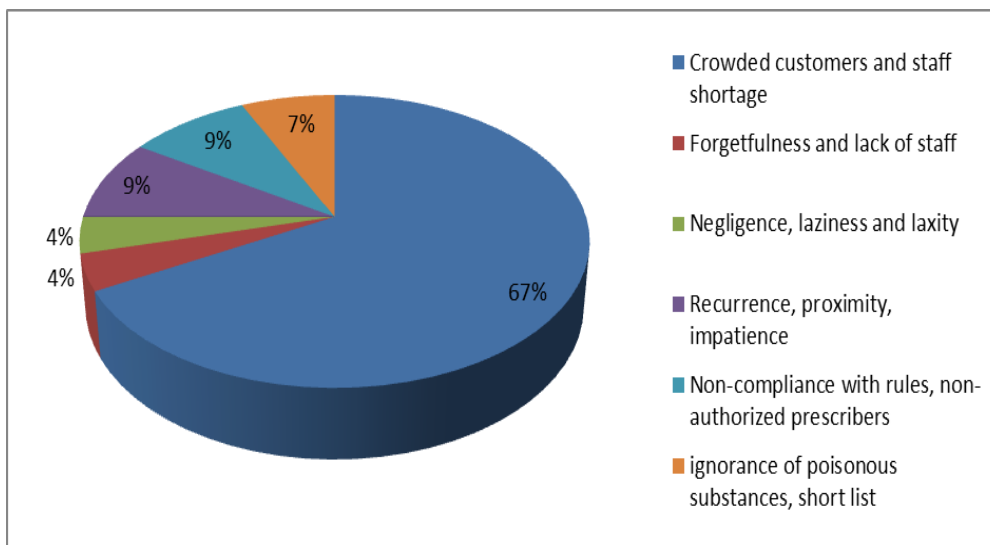


Figure 9: Reasons given for non-filling.

**CONCLUSION**

Recording of poisonous substances in the prescription book is not systematic in most pharmacies of Guédiawaye department. Among the reasons mentioned, there is non-compliance with personal exercise, insufficient inspections, unqualified prescribers, lack of time, crowds and negligence. It would be important to conduct this study in urban areas for a better assessment of compliance with this obligation.

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