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Patient safety and compliance in Aesthetic Pharmacy: theoretical foundations and an auditable conceptual model for screening, patient education, documentation, and monitoring of adverse events.

Patient safety and compliance in aesthetic pharmacy: theoretical foundations and an auditable conceptual model for screening, patient education, documentation and monitoring of adverse events

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Summary

The expansion of products and services associated with Aesthetic Pharmacy intensifies the need for conceptual frameworks capable of supporting patient safety, quality, and compliance in outpatient and community care settings. Although cosmetics and personal hygiene products are mostly for external use, undesirable effects and technical complaints can occur and require post-use surveillance mechanisms. In Brazil, cosmetovigilance is defined as a set of activities that includes the identification, notification, evaluation, investigation, monitoring, communication, and prevention of adverse reactions resulting from the normal or reasonably foreseeable use of cosmetic products, also encompassing events related to ineffectiveness, misuse, and technical complaints that result in harm. In parallel, classic quality and safety frameworks (structure-process-outcome; systemic approaches to error) provide a basis for discussing why screening, patient education, document traceability, and continuous improvement should be treated as safety “infrastructure,” and not as accessory requirements. This conceptual/theoretical article integrates national and international literature and proposes an auditable implementation model for Aesthetic Pharmacy organized into six pillars: governance and responsibilities; risk screening and stratification; patient education and risk communication; documentation and traceability; surveillance of adverse events (including cosmetovigilance when applicable); and continuous improvement. It also discusses a maturity model with different levels, frequent barriers (time, operational variability, training gaps, commercial pressure, and underreporting), and mitigation strategies. It concludes that consolidating safety in Aesthetic Pharmacy depends less on isolated actions and more on the institutionalization of processes, sufficient minimum record-keeping, and risk-oriented organizational learning.

Keywords: Aesthetic Pharmacy; patient safety; quality management; risk management; cosmetovigilance; traceability; patient education.

Summary

The expansion of products and services associated with Aesthetic Pharmacy intensifies the need for conceptual frameworks capable of supporting patient safety, quality and compliance in outpatient and community care settings. Although cosmetics and personal hygiene products are mostly for external use, undesirable effects and technical complaints may occur and require post-use surveillance mechanisms. In Brazil, cosmetovigilance is defined as a set of activities that includes identification, notification, evaluation, investigation, monitoring, communication and prevention of adverse reactions arising from the normal or reasonably predictable use of cosmetic products, also covering events related to ineffectiveness, misuse and technical complaints that result in damage. At the same time, classic quality and safety references (structure–process–result; systemic error approaches) offer a basis for discussing why screening, patient education, document traceability and continuous improvement should be treated as safety “infrastructure” and not as accessory requirements. This article, of a conceptual/theoretical nature, integrates national and international literature and proposes an auditable implementation model for Aesthetic Pharmacy organized into six pillars: governance and responsibilities; risk screening and stratification; patient education and risk communication; documentation and traceability; adverse event surveillance (including cosmetovigilance when applicable); and continuous improvement. A maturity model in levels, frequent barriers (time, operational variability, training gaps, commercial pressure and underreporting) and mitigation strategies are also discussed. It is concluded that the consolidation of safety in Aesthetic Pharmacy

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1. Introduction and delimitation of the problem

1.1 Why patient safety is a structuring axis in Aesthetic Pharmacy

The Aesthetic Pharmacy operates at the intersection of product, guidance, and self-care. Even when it comes to products for external use, exposure is frequent, and there is a diversity of skin types. It is broad and the combinations of routines (assets, frequency, area of application, concomitance with Procedures and habits) increase the variability of actual use. In community settings, the greater Part of the risk does not stem from a single “rare” and spectacular event, but from the accumulation of small deviations: Insufficient screening, imprecise communication, inadequate expectations, misuse, and absence. records that allow the case to be reconstructed.

Patient safety literature describes error as a systemic phenomenon, associated with Incomplete barriers, latent conditions, and process design. Through this lens, security is not... It is neither a professional's moral attribute nor an automatic consequence of good intentions; it emerges from The architecture of the work system, the way tasks are organized, and how decisions are made. Supported and how information circulates.

1.2 Scope Definition

The discussion is conceptual and theoretical. No specific procedures are being carried out. There is no discussion about professional scope dependent on jurisdiction. The focus is on infrastructure. Safety protocols applicable to Aesthetic Pharmacy in community settings: screening and stratification of risk, education and risk communication, sufficient minimum documentation and traceability, surveillance post-use adverse events and technical complaints, as well as quality management, risk management and Continuous improvement.

1.3 Objectives

The aim is to consolidate theoretical foundations and propose an auditable conceptual model for Patient safety and compliance in Aesthetic Pharmacy, integrating classic references of quality and safety, systematizing cosmetovigilance as post-marketing surveillance and outlining screening, education, and documentation requirements as safety barriers.



2. Theoretical foundations of patient safety and risk management applied to Pharmacy

Aesthetics

Patient safety, when applied to community settings, ceases to be a...

It becomes an abstract ideal and a discipline of working design. Instead of attributing faults to agents.

In the established literature of the field, individual incidents are treated as products of systems: barriers.

incomplete, unsupported decisions, poorly specified tasks, communication vulnerable to noise and

The absence of mechanisms that convert occurrences into learning. This framework is

This is especially relevant to cosmetic pharmacy because the risk almost always manifests itself as...

Variability in routine: the same product used in different profiles; recommendations that change between

attendants; fragmented guidance; combinations of active ingredients with self-care that increase irritation.

sensitization or worsening of dermatoses; and insufficient records to reconstruct the pathway.

cause of a complaint.

The structure-process-outcome model offers a classic key to transformation.

"Quality" in something observable. Structure includes protocols, recording instruments, materials.

educational factors, team competence, physical environment, and organizational conditions that facilitate or

They prevent safe execution. The process corresponds to what is actually done: screening based on

risk, risk communication, selection and guidance, conduct recording, complaint management and

referrals. The result, in turn, is not limited to serious outcomes; it also encompasses

stability of care, reduction of recurrence of problems and the service's capacity to

responding consistently to predictable situations. The critical point is that secure processes do not

They can be sustained without a minimum structure — and, in high-volume services, the minimum structure begins.

with standardization, functional documentation, and ongoing training.

The contribution of socio-technical models, such as the Systems Engineering Initiative for Patient

Safety, in this context, means that safety arises from the interaction between people, tasks, technologies, and the environment.

Physical fitness and organization. This perspective prevents simplistic solutions. It's not enough to "train better" if the

The patient flow compresses triage time to the point of making it impractical; it's not enough to "ask"

that they register" if the registration is costly and competes with the service; it is not enough to "create a protocol"

If it doesn't connect with the reality of the work and doesn't receive feedback. In short, safety.

Compliance in Aesthetic Pharmacy depends on operational reliability: well-designed routines

to reduce uncertainty at points where the decision changes, and mechanisms that allow for review,

Correct and stabilize these routines over time.



3. Post-use surveillance and cosmetovigilance: from concept to regulatory frameworks

Cosmetovigilance, in the contemporary sense, describes post-use/post-market surveillance aimed at capturing and addressing adverse events and other occurrences of health interest associated with cosmetic products in the "real world". The value of this field lies less in producing statistics of prevalence — always limited by underreporting — and more in building a protection circuit: identification, qualified registration, initial assessment, monitoring, communication and measures proportional mitigation. This circuit is justified by a basic piece of evidence: cosmetic products, Although associated with well-being and self-care, they can generate events of varying severity, and part These events emerge from reasonably predictable usage, especially when combined with predisposing products, habits and skin conditions.

In Brazil, recent regulatory debate acknowledges the low effectiveness of previous regulations. This largely stemmed from the absence of clear structural requirements: internal systems. Heterogeneous data, incomplete records, poor standardization for evaluation, and weak guidelines that guide inspection and monitoring. This diagnosis has direct implications for the Pharmacy. Aesthetics as a community practice: the problem is not just "underreporting," but not having the resources. minimum standards that make it possible to record well, evaluate consistently, and act accordingly. Traceability. Without minimum requirements, cosmetovigilance tends to be restricted to episodic actions. and reactive, dependent on individual effort and incapable of producing learning. organizational.

Comparative regulation reinforces this reasoning by addressing serious undesirable effects such as Obligation to report and object of governance. In the European Union, the cosmetics regime. It establishes explicit reporting obligations for serious adverse events by those responsible and distributors. highlighting that post-use surveillance is a core part of consumer protection. In systems Mature surveillance also requires discipline in classification and causality assessment: The assignment is not intuitive, but based on minimal information (product identification, method of Use, chronology, signs and symptoms, evolution after discontinuation, re-exposure when applicable, relevant concomitances). This methodological requirement serves two functions: it avoids both trivialization ("all discomfort is attributed to the product") as well as denial ("there is no proof, so it is not relevant"), and allows for proportionate decisions — from education and guidance adjustments to more corrective actions. broad when the pattern suggests collective risk.



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4. Patient screening and education as the core of safety; documentation and quality as... infrastructure

The Aesthetic Pharmacy, in order to operate safely, depends on a conceptual shift:

Patient screening and education are not "additional steps," but the very mechanism of patient management.

Risk at the point of care. Risk-based screening does not mean lengthy forms; it means

To reduce uncertainty in the factors that change behavior. It is guided by short, decisive questions:

History of reactions and sensitizations; current skin condition; concomitant use of active ingredients with

Potential irritant; self-care routines that increase exposure; ability to adhere to the regimen.

proposed; and warning signs that indicate the need to interrupt, observe, and refer. To

By establishing a "safe minimum" for screening, the service reduces the variability of decisions and protects

Both the user and the organization are protected against the predictable mistake of recommending without sufficient knowledge.

Patient education, in turn, is the safety barrier that acts upon the

behavior. What is called "normal or reasonably predictable use" is, in practice, a

field of interpretations. Effective guidance describes how to use (frequency, duration, area), what

to avoid (incompatible combinations and practices), what is expected versus what is a warning sign, and what

how to respond to reactions. Structured communication techniques — such as active verification of

understanding — is relevant here because it reduces the discrepancy between what was said and what was done.

Understood. Education should not be "information overload," but rather the conversion of risk into reality.

Operational instructions: clear language, critical points, and confirmation of understanding in cases of
greater risk.

Documentation and traceability complete the safety triangle by enabling continuity and

learning. The minimum sufficient documentation fulfills four simultaneous roles: it records the

Decision logic (screening and guidance) allows for the reconstruction of the case in response to a complaint, making it feasible.

Monitoring and adjustments, and provides a basis for detecting patterns over time. The risk of

Large amounts of records lead to abandonment; the risk of scarce records is blindness. The conceptual solution

is the "minimum sufficient": essential fields, low friction, and immediate utility. It is the

Documentation, not memory, is what supports internal auditing, incident review, and updates.

of protocols.

Finally, quality infrastructure emerges as a practical discipline: standardizing processes.

(screening, guidance, registration and handling of complaints), training and retraining staff, supervision

Adherence through sampling and establishing periodic review times. Continuous improvement does not

It depends on grand projects; it depends on a simple cycle: recording what happened, discussing what...

The case reveals about the process, adjust the protocol, train again, and observe if the adjustment...

The practice has stabilized. In Aesthetic Pharmacy, this cycle is what transforms "guidance" into care.



reliable and "vigilant" in prevention.

5. Proposal of an auditable conceptual model: framework, maturity, and mitigation of barriers

An auditable model in Aesthetic Pharmacy starts from one premise: safety and Conformity cannot be sustained as an individual virtue; it needs to be an organizational capability. The causal chain is direct: governance and standardized routines reduce variability; documentation A sufficient minimum allows for traceability; continuous training stabilizes execution; and post-operative surveillance Usage transforms occurrences into learning. When these elements are connected, the service It stops reacting only to isolated cases and starts producing prevention: it adjusts screening criteria, refines guidance, identifies risk combinations, and improves record quality.

The proposed framework organizes this capability into six integrated pillars. The first pillar... It's about governance and responsibilities: defining roles, escalation criteria, and decision-making flow. for complaints and incidents, with clear internal and external communication channels where applicable. The second pillar is risk screening and stratification: a short roadmap that focuses on variables that alter... conduct and define criteria for contraindication, postponement, or referral. The third pillar is Patient education and risk communication: standardized guidance by category of use, with Emphasis on warning signs and verification of understanding in relevant cases. The fourth pillar is Documentation and traceability: a minimum set of data, designed for routine use, that allows... Reconstruct the case and support the audit. The fifth pillar is surveillance of adverse events and complaints. Techniques: structured registration, initial classification, and causality assessment based on data. minimums, in addition to proportional decision-making regarding referrals and corrective actions. The sixth pillar is Continuous improvement: periodic review of records, trend analysis, and protocol updates. with documentary evidence of changes and related retraining.

The maturity of the model can be understood as operational progression. At the stage Initially, reactive functioning predominates: sporadic records and heterogeneous decisions. Next, the standardized basics are established: minimal screening, essential guidance, and documentation. Functional. In the integrated stage, post-use surveillance feeds into quality routines, with analysis. Periodic and ongoing training. During the apprenticeship phase, the service consolidates light internal auditing, Structured risk management and improvement cycles that are supported by data, not impressions.

The most common barriers are predictable: lack of time, expensive registration, protocols. Disconnected from the actual flow, underreporting due to lack of feedback, pressure for speed and difficulty. assessing causality. Mitigation requires precision, not volume: reducing friction in record-keeping with data. Minimum standards, standardize the minimum safe level, introduce periodic feedback, and train for critical decisions.



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When the system is designed to be executable, membership no longer depends on payment and becomes...

Depending on feasibility.

Final considerations

The Aesthetic Pharmacy, by operating at the intersection of product, guidance, and self-care, requires... a security infrastructure that is both technically sound and operationally feasible. In community contexts, exposure is frequent, actual use is Heterogeneity and variability in routines tend to amplify risk. Therefore, risk-based screening, Patient education, sufficient minimum documentation, and post-use surveillance should not be overlooked. not as "additional steps," but as the very core of clinical and health governance of the service. Without these elements, the practice becomes hostage to improvisation, and the reconstruction of cases becomes difficult. Compromised, and prevention loses its empirical basis.

Cosmetovigilance, as outlined in the Brazilian health framework, specifies a cycle. which doesn't end with notification: identifying and recording incidents is only the first step. of a chain that includes evaluating and classifying, investigating and monitoring, communicating and, above all, to prevent. This design broadens the scope beyond strictly adverse reactions, incorporating complaints. techniques and situations of misuse when harm occurs, which reinforces the need for minimum criteria. of recording and consistent methods of assessing causality. The strength of a surveillance system. It is not measured solely by the quantity of reports, but by the quality of the data, by the ability to... distinguishing noise patterns and the speed at which learning translates into behavioral adjustment, Risk communication and proportionate corrective measures.

Classic quality and safety standards maintain that safety is not an attribute. individual, but a property of the system. The structure-process-outcome matrix allows for the organization of Discussion with objectivity: structures (protocols, registration instruments, training, resources and governance) condition processes (screening, guidance, monitoring, registration, management of complaints) and make more consistent results plausible (reduction in recurrence of problems, Greater early detection, more standardized and reliable response). The systemic approach to error, by In turn, it offers a pragmatic interpretation: events and failures rarely result from a single act, but from the alignment of vulnerabilities along the flow. From this perspective, screening, education, documentation Surveillance and other security measures act as barrier layers — and continuous improvement is the mechanism that repairs them. It reinforces and updates these barriers over time.

The proposed framework organizes this infrastructure into auditable and progressive pillars. compatible with maturity-based implementation. Auditability here is not a commitment to It's about reducing bureaucracy; it's a commitment to traceability and learning. In practical terms, this...



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This involves defining a minimum set of data for registration, essential screening protocols, and...

guidance, clear escalation and referral criteria, and periodic review routines

Occurrences that prompt adjustments to protocols and training cycles. Recommended indicators.

— always understood as suggested metrics, not as assumed results — help to support

Governance: completeness of records, adherence to screening/guidance, typology of events and complaints.

Internal response time and evidence of implemented changes with associated retraining.

Finally, the contribution of this article is deliberately conceptual: it offers an architecture.

Theoretical framework to support safety and compliance in Aesthetic Pharmacy without relying on assumptions.

heroic. The future agenda is clear and necessary: validation through implementation studies in services.

community-based assessments, including acceptability, adherence, record quality, and stability.

processes and the capacity to produce institutional learning. When treating security as design of

The system—and not as an attribute of individuals—opens a more realistic path to elevate

operational consistency, reducing decisional variability, and strengthening protection of

patient/consumer in a field that tends to grow and become more complex.

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