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Review Article

Devising of *Lazūq* (A Conventional *Unani* Dosage Form) with reference to Transdermal Patch; Then and Now: A Critical Review

Amreen^{1*}, Asif Iqbal Siddiqui², Mohd Nauman Saleem³

¹ Post-Graduate Research Scholar, Post-Graduate Department of Ilmul Saidla, Ayurvedic and Unani Tibbia College and Hospital, Karol Bagh, New Delhi, University of Delhi, India.

² Associate Professor, Post-Graduate Department of Ilmul Saidla, Ayurvedic and Unani Tibbia College and Hospital, Karol Bagh, New Delhi, University of Delhi, India.

³ Assistant Professor & Head of Department, Post-Graduate Department of Ilmul Saidla, Ayurvedic and Unani Tibbia College and Hospital, Karol Bagh, New Delhi, University of Delhi, India.

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*Address for Correspondence:

Dr. Amreen, Post-Graduate Research Scholar, Post-Graduate Department of Ilmul Saidla, Ayurvedic and Unani Tibbia College and Hospital, Karol Bagh, New Delhi, University of Delhi, India.

Abstract

Objective: The endeavor is made to criticize the classical indications, preparations and application of *Lazūq* even after passing many centuries since its inception. **Background:** According to classical *Unani* literature, *Lazūq* is primarily formulated for headache, migraine, toothache, cervical pain, dropping of uvula and different types of pain like sciatica, backache, myalgia and some orthopedic conditions. Its approach is still conventional that encompasses thick sticky stuff of drug/s which is pasted over a cloth or thick paper, consequently, maximum ratio of medicinal properties remains insignificant owed to stratum corneum (layer of skin that functions as a barrier). Devising and method of drug delivery in classical form of *Lazūq* makes it inconvenient to the patient, thus, it drops patient's compliance and anticipated efficacy. In this day and age, *Unani* practitioners do not prescribe it very often because of its devising and limited indications documented in classical literature. Hence, it's now becoming out of practice. Whereas, modern medicine is practicing its novel approach epitomized as *Transdermal patch* for several bodily conditions like Acute post-operative pain, Alzheimer disease, Angina pectoris, Anti-emetic patch, Atrial fibrillation, Attention deficit hyperactivity disorder, Dementia, Depression, Dysmenorrhea, Hypertension, Local dermal analgesia, Menopausal symptoms, Motion sickness, Osteoporosis, Overactive bladder, Parkinson's disease, Post herpetic neuralgia pain, Smoking cessation, Tic disorder, Tourette syndrome and to prevent pregnancy. In transdermal patch, drug is used in micro/nano form with chemically produced permeation enhancers (CPEs) and other smart physio-chemical techniques that makes it very easy to apply, imparts maximum active pharmaceutical ingredients with controlled release of drug. **Methodology:** Ancient classical *Unani* formulations of *Lazūq* was appraised and then its course with respect to today's newer formulations as transdermal patch was reviewed to look for its progress and application in novel dosage form with the advantage of innovations in pharmaceutical and allied sciences. **Conclusion:** Classical *Unani* formulations of *Lazūq* must be reviewed, transformed, evaluated, coped and applied as per the standard operating procedures (SOPs) of transdermal drug delivery system. **Future Prospects:** New formulations of *Lazūq* should be designed and appraised from the medicinal treasure of *Unani* system of medicine for different therapeutic conditions.

Keywords: *Unani*, Ilmul Saidla, *Lazooq*, *Lasooq*, Formulation of *Lazūq*, Formulation of Transdermal Patch, Transdermal Drug Delivery System.

Introduction:

According to WHO international standard terminologies on *Unani* medicine, *Lazūq/Laṣūq*, is described as adhesive drug which is spread over a piece of cloth or paper and pasted at affected part of the body and its equivalent term/concept in English is *Adhesive Medicine* (Term Id: IUMT-6.2.93).¹ The classical *Unani* text describes that "*Lazūq/Laṣūq/Laziq* is an ancient *Unani* dosage form made up of the drug or drugs dissolved in a suitable solvent to make it thick and sticky paste which is then coated upon a piece of paper/cloth to apply on the affected area".¹⁻³ The traditional method to prepare this dosage form is that fine powder of drug/s is mixed to white part of egg or other mucilaginous substances like *Luab-e-Aspagol* or *Joshanda* (decoction) of various drugs, then spread over already sieved paper or cloth and apply it on affected part.⁴⁻⁵ *Lazūq* as

a part of topical application probably been around since the beginning of human history and it is remarkably mentioned in classical *Unani* literatures. In this day and age, *Unani* practitioners do not prescribe it very often because of its devising. Its approach is still conventional, consequently, maximum ratio of medicinal properties remains insignificant due to barrier mechanism of stratum corneum (layer of skin). Devising and method of drug delivery in classical form makes it inconvenient to the patients and drops patient's compliance. Hence, nowadays it's now becoming out of practice.

After analyzing the concept of *Lazūq* with novel drug delivery system, it can be easily acknowledged that *Transdermal patch* follows the blue prints of *Lazūq*.⁶ *Transdermal Patch* are now widely used as cosmetic, topical and transdermal delivery systems. The transdermal drug delivery system (TDDS) has

emerged as a feasible, widely-accepted and well-liked approach to a revolutionary drug delivery system after extensive research. It is a promising method for efficient drug delivery because of its simplicity of handling, minimal systemic exposure, least amount of discomfort, wide range of flexibility, controlled release, sustained therapeutic action and many other advantages. This system is able to pass through the stratum corneum, the skin's barrier layer, with the aid of fusion with other cutting-edge techniques like Nano carriers, specifically crafted transdermal delivery devices, and various physio-chemical penetration enhancers. ⁷ By employing these tactics, several products have been marketed, numerous products are being researched and others are undergoing clinical trials.

The market for transdermal medication delivery systems increased from \$12.7 billion in 2005 to \$21.5 billion in 2010, \$37.79 billion in 2018, and it is projected to reach roughly \$49.37 billion by the end of 2024. The transdermal medication delivery market system is expected to reach US\$ 88,422.40 million by 2030, with a compound annual growth rate of 5.0% from 2021 to 2030. In 2021, its estimated net worth was US\$ 55,100.33 million. The regions with the largest market shares were North America, Asia Pacific, Europe, and LAMEA (Latin America and Eastern Africa). North America held the largest market share for transdermal medication delivery systems in 2020 among these regions. This continuous surge in the utilization of transdermal products demonstrates the importance of the transdermal drug delivery system in the health care system. ⁸

In this manuscript *Lazūq* is being critically reviewed with respect to its definitions, formulations, indications, application and progression with the help of current pharmaceutical innovations and techniques. The main objective of the effort is to demonstrate the latest developments in transdermal patches for efficient transdermal medication administration. Overall, this collection will offer up-to-date knowledge on the

fundamental designs of *Lazūq* and innovative updates, as well as, clinical advancement and challenges in applying TDDS to the *Unani* system of medicine.

Ancient Classical Formulations and Indications of *Lazūq* described in *Unani* System of Medicine: Documentary evidences of topical techniques are very ancient even on *Sumerian clay tablets*, have made their use clear. ⁹ The use of patches in the form of *Lazūq*, comprising of plant, mineral and animal origin drugs were already popular in ancient *Egypt* and *Babylonian* medicine around 5000-3000 BC. ¹⁰⁻¹¹ The inclusive ancient pharmaceutical record appears to be found in the *Papyrus Ebers* (1550 BC), a multiplicity of prescriptions is encompassed to treat skin disorders such as blisters, burns, wounds and exudation. ¹²⁻¹³ Powder of *Hyoscyamus* was stated to be topically applied for abdominal discomfort. Topical *frankincense* application for headache and other type of pain is also found. A formulation was applied in the form of *Lazūq* to a woman's or man's abdomen to relieve tapeworm related abdominal pain. ¹⁴⁻¹⁵ Ancient Chinese (around 2000 BC) had used *Emplastra* (Medicated plasters) that were usually applied to the skin for local conditions. These primary plasters commonly contained several ingredients of plant origin drugs dispersed into an adhesive natural gum rubber base, applied to a backing support made of fabric or paper. ¹⁶ This proves the concept of *Lazūq*, in Chinese medicine also. *Pedanius Dioscorides* (circa 1st century CE) used of *Khardal* (*Brassica nigra*) in the form of mustard plaster. ¹⁷ *Jalinūs* (Galen; 131-200 AD) a *Greek* physician introduced the compounding of *Unani* drugs and other excipients in dosage form. He is widely considered to be "*Father of Pharmacy*". He invented cold cream very first time which is certainly his most renowned formula with a composition relatively similar to the one used today. ¹⁸ In the following table formulations of *Lazūq* are stated from the different *Unani* pharmacopeia to scrutinize them and their indication.

Table No. 01: Formulations and indications of *Lazūq*; from the different *Unani* pharmacopeia:

S. N.	<i>Unani</i> Formulation of <i>Lazūq</i>	Indication	Site of application	Ref
1.	Husk of castor oil plant in water (16th Century BC).	Headache.	Temporal area of both sides.	[19]
2.	Mustard plasters.	Vomiting.	At the site of stomach.	[20,21]
3.	<i>Ghandhak</i> (Sulphur) was mixed with tar and applied to the skin with a piece of paper applied as backing to keep the formulation in place to treat. (<i>Avicenna</i> , 980-1037 AD)	Sciatica.	At lower back and Hip.	[22]
4.	<i>Aqaqiya</i> , <i>Habbul-Aas</i> , <i>Kishneez Khushk</i> , <i>Aspagol</i> , <i>Kaddu Daraz</i> , <i>Barg-e-Sabz Khurfa</i> , <i>Barge Sabz Mako</i> , <i>Saresham Mahi</i> , <i>White part of egg</i> .	Migraine, Headache.	Temporal area of both sides.	[23]
5.	<i>Barge Aas</i> , <i>Mur Makki</i> , <i>Aelva</i> , <i>Rasaut</i> , <i>Gond-e-Babool</i> , <i>Nishasta</i> , <i>Anzaroot</i> , <i>Sak-ul-Misk</i> , <i>Kateera</i> , <i>Supari</i> , <i>Qashar Kund</i> , <i>Gulnar Farsi</i> , <i>Aqaqiya</i> , <i>Dam-ul-Akhwain</i> , <i>Shiyaf-e-Mameesa</i> , <i>Afyun</i> , <i>Zafran</i> , <i>Joshanda-e-Barge Aas</i> . Make <i>Qurs</i> from above formulation, Take two tablets and mixed with decoction of <i>Post Khashkhash</i> at the time of need.	Migraine, Headache. Dropping of uvula.	Temporal area of both sides, and at the site of the pain. After removing hairs of head, apply over the scalp.	[23]
6.	<i>Kattha Safaid</i> , <i>Supari</i> , <i>Gulnar</i> , <i>Gulab</i> , <i>Dam-ul-Akhwain</i> , <i>Simaaq</i> .	Pain of Gums and Teeth.	Teeth and Gums	[23]
7.	<i>Afyun</i> , <i>Mur Makki</i> , <i>Tukhme Kasni</i> , <i>Tukhme Kahu</i> , <i>Rasaut</i> , <i>Luab Aspagol</i> .	Migraine, Headache.	Temporal area of both sides.	[23,24]
8.	<i>Powder of Maazoo mixed with Sirka and Samagh Arbi</i> .	Dropping of uvula of the children.	After removing hairs of head, apply over the scalp.	[24]

9.	<i>Dam-ul-Akhwain, Zafran, Afyun, Gond Babool, Tukhm-e-Khashkhash, Kateera, White part of the egg.</i>	Headache.	Temporal area of both sides.	[24]
10.	<i>Aelva, Farfiyun, Jund Bedastar, Koth, Gond Keekar, Zafran, Alcohol.</i>	Headache due to phlegm.	Temporal area of both sides.	[24]
11.	<i>Clay of Multan, Sirka.</i>	Dropping of uvula of children.	After removing hairs of the head, apply over the scalp.	[24]
12.	<i>Afyun, Mur Mukki, Tukhme Kasni, Rasaut, Luab Aspagol.</i>	Migraine, Headache, Neuralgia.	Temporal area of both sides, and at the site of the pain.	[23,25]
13.	<i>Sibr, Aqaqiya, Saresh, Luab Aspagol.</i>	Diphtheria.	Back of the neck.	[24,25]

Current medications of *Lazūq* as Transdermal Patch:

Transdermal drug delivery system (TDDS) is where a drug is delivered across the skin to have a systemic effect, it is an appealing contrast to conservative approaches.²⁶ The transdermal patches are smart methodology for treatment via increased safety and efficacy. It is an adhesive patch which contains a drug reservoir system, penetration enhancer, backing layer, adhesive layer, etc., within it, which play a dynamic role in release of drug (diffusion) from the patch to the skin (permeable membrane) where it is diffused into the blood capillaries which are distributed below the skin.²⁷ The detailed morphological, biophysical and physio-chemical properties of the dermal layer must be kept in mind when delivering therapeutic agents across the human dermal layer for systemic effects. The barrier, which serves for protection of the stratum corneum, is the primary concern with the transdermal approach. Chemically produced permeation enhancers (CPEs) are employed to aid in drug transdermal administration in order to get around this issue. They improve penetration through altering the skin's protective characteristics, raising the skin to vehicle partition coefficient and the thermodynamic activity of substances.²⁸⁻³² TDDS employees a variety of rate controlling mechanism including *matrix diffusion, membrane diffusion, biodegradation and osmosis*. There are two main objectives of this drug delivery system; (1) *Drug Targeting*: This means to deliver a drug to desired location in body and (2) *Controlled Release*: This state to deliver a drug at desired rate over a desired length of time.³³⁻³⁵ Transdermal dose forms

ensure that drug levels stay within the therapeutic window and are not exceeded by the maximum tolerated dose (MTD) or falling below the minimum effective dose (MED) for extended periods of time.³⁶ Transdermal delivery not only allows controlled, consistent drug administration, but it also allows for continuous input of medications with limited biological half-lives and prevents pulsed entry into systemic circulation, which may result in unwanted side effects. As a result, different types of novel and innovative drug delivery systems are devised, such as transdermal drug delivery systems, controlled and predetermined release systems and trans mucosal delivery systems.³⁷⁻⁴¹ Transdermal drug delivery has numerous advantages such as controlled discharge of drug from reservoir through porous membrane or by body heat, it is painless, non-irritating, non-invasive procedure that have minimum side effects, skips first pass metabolism, increasing patient compliance, faster onset of action and more effective. It also has some disadvantages, like local irritation at site of application, molecular size of drug should be smaller than the pore size of skin for penetration, drugs with high melting point will have less solubility and will not melt with body heat. But with evolving the time, technology is also progressing in TDDS with more upgrades for challenges, safety, prevention and treatment of diseases with minimal patient inconvenience to support better healthy life.⁴² A summary of transdermal patches/products and their distinctive features is being given below in tabular form since its invention as transdermal patch to sense its scenario and application worldwide in different therapeutic conditions.

Table 2: A brief detail of transdermal patches/products first approved by FDA*:

S. N.	Approval Year	Drugs	Indications	Product Name	Duration of Application	Marketing company	Ref
1.	1979	Scopolamine	Motion sickness	Transderm-scop®	72 Hours	Novartis Consumer Health (Parsippany, NJ)	[43, 44]
2.	1981	Nitroglycerin	Angina pectoris, Relieve pain after surgery	Minitran® Nitrodur®	12-14 Hours	Novartis (East Hannover, NJ)	[45-48]
3.	1984	Clonidine	Hypertension, Tic disorder, Tourette syndrome, Attention deficit hyperactivity disorder (ADHD)	CatapresTTS®	7 Days	Boehringer Ingelheim (Ridgefield, CT)	[49-53]
4.	1986	Estradiol	Menopausal Symptoms	Estraderm®	3-4 Days	Novartis (East Hannover, NJ)	[54]
5.	1990	Fentanyl	Moderate/Severe	Duragesic®	72 Hours	Janssen Pharmaceutica	[55]

			Pain			(Titusville, NJ)	
6.	1996 1991	Nicotine	Smoking cessation	Habitrol® Nicoderm® Nicoderm CQ® Nicorette®	16-24 Hours	GlaxoSmithKline (Philadelphia, PA), Novartis Consumer Health (Parsippany, NJ) Elan (Gainesville, GA)	[56-58]
7.	1993	Testosterone	Hypogonadism in males	Testoderm®	24 Hours	Alza, Mountain View, CA	[59, 60]
8.	1995	Lidocaine/Epinephrine (Iontophoresis)	Local Derma Analgesia	Iontocaine	Up to 3 times Daily for not more than 12 Hours	Iomed (Salt Lake City, UT)	[28]
9.	1998	Norethindrone Estradiol	Symptoms of menopause	Combipatch®	3-4 Days	Novartis (East Hannover, NJ)	[61]
10.	1999	17-β-Estradiol	Postmenstrual syndrome and Osteoporosis	Vivelle-Dot®	3-4 Days	Novartis	[62, 63]
11.	1999	17-β-Estradiol	Postmenstrual syndrome and Osteoporosis	Alora®	3-4 Days	Watson Laboratories Inc.	[62, 63]
12.	1999	17-β-Estradiol	Postmenstrual syndrome and Osteoporosis	Climara®	7 Days	Berlex Laboratories Inc.	[62, 63]
13.	1999	Lidocaine	Post Herpetic Neuralgia Pain Treatment of pain	Lidoderm®	Up to 3 times Daily for not more than 12 Hours	Endo Pharmaceuticals (Chadds Ford, PA)	[64, 65]
14.	2000	17-β-Estradiol	Postmenstrual syndrome and Osteoporosis	Vivella®	3-4 Days	Novartis	[62, 63]
15.	2001	Ethinyl Estradiol	Prevent pregnancy	Ortho Evra®	7 Days	Ortho-McNeil Pharmaceutical (Raritan, NJ)	[66, 67]
16.	2003	Levonorgestrel, Estradiol	Postmenstrual syndrome	Climara Pro®	7 Days	Bayer Healthcare Pharmaceuticals (Wayne, NJ)	[68, 69]
17.	2003	Oxybutynin	Overactive bladder	Oxytrol®	3-4 Days	Watson Pharma (Corona, CA)	[70, 71]
18.	2004	Lidocaine (Ultrasound)	Local Dermal Anesthesia	SonoPrep®	Up to 3 times Daily for not more than 12 Hours	Waston Pharma (Corona, CA)	[28]
19.	2004	17-β-Estradiol	Postmenstrual syndrome and Osteoporosis	Menostar®	7 Days	Bayer Healthcare	[62, 63]
20.	2005	Lidocaine/Tracaine	Local Dermal Analgesia	Synera®	Up to 3 times Daily for not more than 12 Hours	Endo Pharmaceuticals (Chadds, Ford, PA)	[28]
21.	2006	Fentanyl, (Iontophoresis)	Acute Post-Operative Pain	Ionsys®	72 Hours	Alza, Mountain view, CA	[28]
22.	2006	Methylpheni	Attention Deficit	Daytrana®	Up to 9		[72]

		date	Hyperactivity Disorder		Days	Shire (Wayne, PA)	
23.	2006	Selegiline	Depression	Emsam®	24 Hours	Bristol-Myers Squibb (Princeton, NJ)	[73]
24.	2007	Rivastigmine	Alzheimer disease/Dementia	Exelon®	24 Hours	Novartis (East Hannover, NJ)	[74, 75]
25.	2007	Rotigotine	Parkinson's disease	Neupro®	24 Hours	Schwarz Pharma (Mequon, WI)	[76]
26.	2008	Granisetron	Anti-emetic	Sancuso®	Up to 7 Days	Cumberland, Nashville, TN	[77-79]
27.	2012	17-β-Estradiol	Postmenstrual syndrome and Osteoporosis	Minivelle®	3-4 Days	Noven Pharmaceuticals, Inc.	[62, 63]
28.	2013	Bisoprolol	Atrial fibrillation	Bisono®	24 Hours	Toa Eiyo Ltd., Tokyo, Japan	[80]
29.	2014	Buprenorphine	Management of pain	Butrans®	7 Days	Stamford, CT, Purdue Pharma LP	[81-83]
30.	2019	Asenapine	Mania, Bipolar disorder	Secuado®	24 Hours	Noven Pharmaceuticals Inc	[84, 85]
31.	2022	Dextroamphetamine	ADHD	Xelstry®	Up to 9 Hours	Noven Pharmaceuticals Inc	[86]
32.	2022	Donepezil	Alzheimer disease	Adlarity®	7 Days	CORIUM, Greater Boston, MA	[87, 88]

*This list includes transdermal patches and delivery systems approved by the FDA. Only the first approved product for a given drug or drug combination administered by a given delivery method is given. Topical creams, ointments, gels and sprays are not included.

The following (table no. 03) includes various transdermal patches/products which are redesigned and developed with *Unani*/Herbal formulations for the treatment of different

disease by recent scholars of the subject with the assistance of current knowledge of transdermal drug delivery system.

Table 3: Various transdermal patches/products with *Unani*/Herbal formulations for the treatment of different disease developed by recent concerned scholars: ^{37-41, 89-95}

S. No.	Active Constituents	Botanical Name	Pharmacological activity
1.	<i>Khardal, Zanjbeel, Pudina and Sirka</i>	Brassica nigra, Zinger officinalis, Mentha arvensis and Vinegar	Antiemetic therapy
2.	Extract of <i>Hibiscus</i>	Hibiscus rosasinensis	Antidiabetic activity
3.	<i>Adrak, Haldi, Lavender, Katuvera, Clove Oil, Kafoor, Pudina, Aloe Vera and Turpentine</i>	Rhizomes of Zingiber officinale, Curcuma longa, Lavandula angustifolia, Camphor, Mentha arvensis Aloe barbadensis,	Anti-inflammatory
4.	<i>Neem oil</i>	Azadirachta indica	Anti-microbial
5.	<i>Indian lotus</i>	Nelumbo nucifera,	Anti-ischemic Antioxidant Anticancer Antiviral
6.	<i>Shalaki, Haldi and Adhapushpi</i>	Boswellia serrata, Curcuma longa and Trichodesma indicum	Anti-rheumatic activity
7.	<i>Cumin essential oil</i>	Cuminum cyminum	Antioxidant Anti-Hypertensive
8.	<i>Capsaicin</i>	Capsicum annum	Anti-inflammatory Antispasmodic Analgesic
9.	<i>Berberine</i>	Berberis vulgaris	Antidiabetic
10.	<i>Ginseng</i>	Panax ginseng	Antioxidant, Immune modulators.

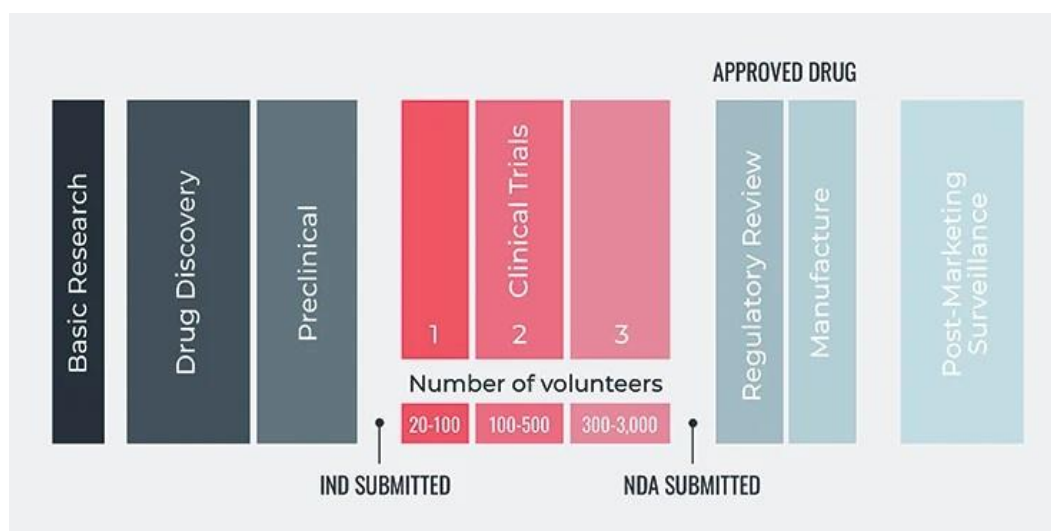
Discussion:

Transdermal drugs are a vast category of drugs defined as vessels for delivering drugs for a local or systemic mechanism of action via a specific dosing formulation.⁹⁶ Currently, *structural and functional definition* of transdermal patch is as follows; “A transdermal patch is a pre-prescribed medicated adhesive patch that is placed on the skin to deliver a specific dose of medication through the skin and into the bloodstream”. Whereas, in *Unani* system of medicine, *structural definition of Lazūq* is defined as “It is one of dosage form made up of the drug or drugs dissolved in a suitable solvent to make it thick and sticky paste which is then coated upon a piece of paper/cloth to apply on the affected area”. This structural and functional difference among classical and modern definitions of *Lazūq* or Transdermal patch, is just because of the difference in approach in classical and modern era. *Unani* scholars had defined it according to its physical form, as pharmacy and medical science was not as advanced as today. On the other hand, currently, things are being defined according to their structure as well as function, due to advancement in sciences and technologies. But the basic logic behind the both approaches is same is that “to deliver the specific drug through skin”.

The researches done by *Unani/Ayurved/other streams* scholars

seems to be nothing in comparison to modern medicine and pharmacy, as their newer products follow each and every protocol from hypothesis to Food and Drug Administration (FDA) approval till its commencement to the market as mentioned in table no: 02. Primary protocols that are followed are as follow:⁹⁷

1. **Discovery and Development:** Research for a new drug begins in the research laboratory. This can include new insights about existing diseases, development of new compounds or development of new technologies required for drug processing.
2. **Preclinical Research:** Drugs undergo laboratory and animal testing to answer basic questions around safety.
3. **Clinical Research:** Drugs are tested on people to make sure they are safe and effective.
4. **FDA Review:** FDA review teams thoroughly examine all of the submitted data related to the drug or device and make a decision around whether or not to grant approval.
5. **FDA Post-Market Safety Monitoring:** FDA monitors all drug and device safety once products are available for use by the public.



Picture 1: Depicts basic essential steps to be followed by every new product⁹⁷

The same protocol must be followed by *Unani* research scholars at the level of institutions, industries and research councils of *Unani* medicine that comes under Ministry of AYUSH. Every novel work must undergo all such protocols i.e. *Basic research idea, Drug discovery, Pre-clinical research, Clinical research, Regulation/Approval at national and international level, Manufacturing and Post market surveillance*, so that, mankind can avail the benefits of newer approaches of the *Unani* system. The researches should not left at their initial steps. Multidisciplinary, interdisciplinary and continue mode of research work should be done at the post graduate departments of *Ilmul Saidla* (Pharmacology) in *Unani* institutes across the India to uplift the *Unani* system of medicine. Any new research hypothesis/protocol should follow all the necessary steps. If time is a factor, then institutes and research councils of *Unani* system of medicine can start a propagative chain-system of research. If a research scholar at institute level cannot take a newer idea to its final form due to limited time during post-graduation (that is three years according to course and curriculum), then the same ongoing research must be followed and continued by the new research scholar or the same work should be continued by primary/other researcher in the form of projects/fellowships. Councils for *Unani* research, like

Central Council for research in *Unani* Medicine (CCRUM) that comes under Ministry of AYUSH, Govt. of India should enhance and expand research schemes/fellowships and assistance in terms of modern pharmaceutical labs, equipments and other required measures that could endorse institutes ongoing researches to take them at final productive phase.

Strength, Conclusion and Future Prospects:

The theory of *Lazūq* and its description is logical and scientific and in accordance with the facilities available since its classical form found in ancient *Unani* literature. The view and knowledge gets improvement with acceptably proven changes in its form with the advancement of time. If anything changes, it is the view to apply the things with the future innovative applications.

After reviewing the various products delivering to humankind as *Lazūq* or transdermal patch: then and now, it can be merely felt that how much hard work to be done in the field of drug delivery system by *Unani* scholars. Timely goals must have to be set by the *Unani* scholars to strengthen their system in terms of patients' compliance and to increase the efficacy of their products. Transdermal patch is nothing but the timely progress

in the class of *Lazūq*. Basic logic behind the both approaches is same is that “to deliver the specific drug through skin”. Classical *Unani* formulations of *Lazūq* must be reviewed, transformed, evaluated, processed and applied as per the standard operating procedures (SOPs) of transdermal drug delivery system. New formulations of *Lazūq* should be designed and evaluated from the medicinal treasure of *Unani* medicine for various conditions. *Unani* classical dosage forms must be analyzed in the light of novel drug delivery system, present pharmaceutical tools and techniques, so that students, practitioners and patients could retain their faith and credibility in the *Unani* system of medicine. *Unani medicine* is a science with progressive history, recent *Unani* scholars have to just analyze their logics and principles with present knowledge to adopt advanced approach.

Conflict of interest: The authors declare that there is no conflict of interest.

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