Cupping Therapy (Al-Hijamah) Points: A Powerful Standardization Tool for Cupping Procedures?

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Authors’ contributions

This work was carried out in collaboration between all authors. Authors NAQ, OAA and SMA designed the study and wrote the protocol. Author NAQ wrote the first draft of the manuscript. Authors OAA and SMA managed the analyses of the study. Authors NAQ and SMA managed the literature searches. Author NAQ revised the paper a number of times before and after submission. All authors read and approved the final manuscript.

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ABSTRACT

Background: Cupping (Al-Hijamah) therapy is a traditional complementary and alternative medicine practice used in diverse diseases with the variable outcome since ancient times. The precise selection of cupping points is a core component of cupping therapy techniques and one of the important determinant factors concerning the outcome of a disease and safety of the patient.

Objective: The aim of this narrative overview is to critically describe various cupping points and their tentative selection criteria that help cupping practitioners in applying cups accurately on the afflicted skin surface.

Methods: Electronic searches of certain databases and scientific publishing websites were made using Boolean Operators and keywords, and based on exclusion/inclusion criteria and consensus 40 full pertinent English articles of the last five years (2013-2017) were included by two independent reviewers.

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1. INTRODUCTION

Cupping therapy (Al-Hijamah) is a traditional practice used in diverse diseases since ancient times. Evidently cupping therapy is reported to be used first in Egyptian culture (1550 BC), Chinese society and then spread to Greek culture, Middle East and now across the world [1], i.e., including countries of seven continents. Since primordial days, there have been progressive advancements in cupping therapy (dry and wet cupping and combined cupping when cupping is combined with acupuncture or other forms of therapies); cups and cupping sets tremendously improved, indications and contraindications identified, classification, policies, safety protocols and antiseptic and sterilization guidelines developed with standardized techniques and safe practices [2-5], mechanisms of action and effects explored [6,7], and efficacy studies concerning various diseases using rigor and better quality designs such as case controlled studies, randomized clinical trials, systematic reviews and meta-analysis were conducted with good outcomes [3,8]. Hijamah therapy (cupping) is reported to rarely cause some local and systemic adverse effects of mild to moderate severity often attributed to untrained and incompetent practitioners, infection control laxity and risky operation sites (critical anatomical sites) such as cupping around nose and nasal sinuses, near jugular veins and skin overlying thyroid glands and others, details available in subsequent section [3,9]. These adverse effects are hyperemia, circular erythema, edema, and ecchymosis, minor burns, localized infection, pruritis and hyperpigmentation, abscess (lumbar and cervical epidural) and bullae development, factitial panniculitis (inflammation of subcutaneous fat), cutaneous mycobacterium infection, bleeding, Köebner phenomenon (Cupping-induced Localized Psoriasis), scar formation, atrophic or crusted lesions, lipoma, keloid scar (local events), erythema Ab Igne and headaches, vasovagal attack, herpes viral infection, cardiac hypertrophy, and pruritis (systemic events) [3,10-17]. Notably, standardization of cupping techniques is reported to reduce the aforesaid events [18]. In addition, several research methods including sham cupping devices and designs developed and used for rigor and better quality studies on cupping therapy around the world [19]. Furthermore, innumerable cupping treatment centers are developed to streamline the clinical practice of cupping therapy around the world. Cupping training methods including simulation using manikin [20], and efficacy evaluation tools were developed for capacity building and demonstrating its effectiveness, and also mitigating professionals' false beliefs against Hijamah therapy, respectively [21,22,23].

Clinical wisdom suggests that selecting cupping points (certain acupoints and points across meridians) locations precisely for a given disease is vital for achieving good recovery among patients with different diseases. In other words, selection of precise cupping points, standardized cupping therapy techniques, and good outcomes concerning various diseases are inherently connected. Notably cups usually applied to certain acupuncture points and site of pain and pathology along meridian points. Furthermore selection of precise cupping points by cupping practitioners will differ according to a particular body system and its diseases' paraphernalia. Consequently cupping practitioners need to have in-depth knowledge of anatomical cupping points, their underlying philosophical, theoretical, biological and psycho-sociocultural paradigms and outcomes related to several disease conditions and selection of precise cupping points [6,24]. To our knowledge, there is no

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**Results:** The theme of cupping points is complex controversial and often puzzling, and connected to a variety of determining tentative criteria and factors and have their prime roots in Prophetic Islamic medicine and Traditional medicine, Traditional Chinese medicine (TCM) and Modern medicine.

**Conclusion:** The cupping (Al-Hijamah) therapy techniques with precise selection of cupping points on the afflicted skin surface (i.e., sites of pain) tend to produce good therapeutic response without any major adverse events in patients with specific diseases. This study calls for further research in order to uniformly define and classify cupping therapy points concerning individual specific diseases, prevention of diseases and promotion of health at global level.

**Keywords:** Al-Hijamah; cupping therapy; cupping points; prophetic medicine; Chinese traditional medicine; modern medicine; adverse events.
published literature on anatomical sites for cupping points in Saudi Arabia after year 2013 [24]. The objective of this study is to overview qualitatively the pertinent literature with a special focus on cupping therapy (Al-Hijamah) points used in the management of many medical conditions. The significance of this pilot research calling for an universal acceptable system of cupping points is that cupping practitioners within and outside Saudi Arabia may have knowledge concerning cupping point locations derived from different traditional medical systems, which need to be used accurately in various diseases resulting in further standardization of cupping techniques associated with better outcome and good quality of life.

2. METHODS

2.1 Search

Boolean operators were used to search specific data on cupping therapy points. Electronic searches of three databases and three open access scientific publishing houses (Google Scholar, PubMed, OvidSP and Dovepress.com, Hindawi.com and Scienisdomain.org) using keywords such as cupping therapy points OR Cupping points OR Hijamah points OR Chinese Cupping points OR Acupoints OR Traditional cupping points OR Islamic Cupping points OR Sunnah Cupping points OR Modern Cupping points AND Cupping procedures OR Cupping case reports OR Cupping observational studies OR Cupping RCTs OR Cupping systematic reviews were conducted for retrieving articles published in English literature. A large number of articles (n=5759) were retrieved. Two authors (NAQ and SMS) independently reviewed the available data for extracting pertinent articles. Consequently, unrelated articles (n=2075), inaccessible papers (n=1102), no abstract available (n=142), and duplications (n=2375) were excluded. The remaining were 65, which were screened further, and those full English articles (n=40) which mainly focused on cupping (Hijamah) therapy points along with scientific relevance of the last five years (2013-2017) were selected by two independent reviewers.

3. RESULTS

3.1 Cupping Points

There are a large number of cupping points reported in the pertinent literature. Most cupping points used in cupping therapy are located at head and neck region, back, front chest, abdomen, anterior, posterior and sides of trunk, front of upper arms, front, back and sides of both legs, and feet but overall cupping points most frequently used are located on dorsal side of the body [3,24]. There is converging evidence that cupping therapy is used in a variety of diseases with variable outcomes [3,24-27], and inconsistent recovery could be attributable to a number of factors including an improper selection of cupping points. Therefore selection of cupping point locations concerning a medical condition by a trained experienced professional is highly important for reducing adverse events and increasing efficacy of cupping therapy. Besides precise selection of cupping point, quality of cupping sets and aseptic procedures are equally important tools to achieve good results in a disease. To be concise but unambiguous, cupping point locations on the body surface (hence cupping is a skin surface therapy) mainly connected to TCM meridian acupoint system, and assimilated over decades and corresponding important medical conditions especially presenting with pains are given in order of importance in the adapted Table 1[24, 28]. However, the cupping points with numbers localized on the body surface (back and front) regarding a particular disease needs scientific research to provide evidence-based data to support its comprehensiveness and standardization because this system from Arab traditional practitioners and healers is outdated as impressed by modern cupping therapists, though these points may be derived or copied from TCM or Traditional Korean or another system. The moot idea is if a cupping point number from traditional healers matches with Chinese meridian acupoint number with a Chinese prefix is not the reliable point for Chinese or Arabic cupping (Al-Hijamah) therapy? Most researchers will agree on this point positively if traditional healers point matches with acupoints. This is our pure presumption but we lack the evidence, and researchers should bridge this important knowledge gap by conducting pertinent studies. However, some anatomical cupping point sites without numbering concerning a number of diseases are described elsewhere [3]. In this review 20 case reports and case series reported cupping points in the following way; back (n=12), back combined with other areas such as abdomen, chest, shoulder, forearm, sternum, (n=5), posterior cervical area (n=3), no report of cupping points (n=3) and other areas [3] without specifying any points or
following any system including TCM acupoints, Prophetic medicine, modern anatomical system and traditional points. There are several nomenclatures of cupping points without any substantial evidence and hence cupping points system remains a challenging grey area. In a randomized controlled trial (RCT) dry cupping was reported to apply on P6 acupoint on the wrist for managing postoperative nausea and vomiting with success in patients who underwent laparoscopic cholecystectomy [29]. In another RCT, patients were relieved of shoulder and neck pain when cupping therapy used SI 15, GB 21, and LI 15 acupuncture points [30]. There is probably no clear universal classification of cupping points and their origin concerning cupping therapy, and Chinese researchers especially use different meridian acupoints with specific names and numbers in Chinese cupping [30]. It is beyond this paper to include a full spectrum of diseases, adverse effects, efficacy and outcome studies and all cupping points system in the given Table 1 and for more details see these sources [3,24,26,28,31]. Notably cupping therapy has evident role in promotion of health and prevention of diseases [1, 24, 32] and notably cups are applied on healthy skin surface. With special reference to interscapular region points including Kahel (Fig. 2) which are used frequently in most systemic diseases but not all, this area is characterized by five features; brown adipose tissue, direct proximity to sympathetic ganglia, passage of the thoracic duct, two important acupuncture meridians, and closeness to the main vessel divisions carrying blood from the heart and the brain. The interscapular application of wet cupping (Hijamah) therapy discharges waste products, stimulates the body’s metabolism, increases immunity, and regulates blood biochemistry reflecting its therapeutic effects [24,28,33]. The Kahel area covers the largest skin surface on the back between the two scapulars and may include these points (# 1, 55, 45, 46, 48 and others with different Chinese cupping points).

### 3.2 Tentative Criteria for Selecting CPs

Arguably, there is no need to select and use all cupping points especially taken from Chinese meridian system (acupoints) which are thousands in numbers (maybe the key points on the main meridians =365, extra-meridian points more than =1000); however, according to traditional healers most frequently used CPs are 55(1-55) on the back and 43 on the front (141-143) [28]. Notably cupping therapy points differ from disease to disease and certain methods or rules need to define the precise selection of cupping points and current overview attempted to do so. The first criterion is that cupping points may be one or more but select the least number of points, may range from 1 to five from the above mentioned CPs. Furthermore select the most frequently used points in most diseases, which are beneficial to many patients concerning cupping practice. Another important criterion for selecting cupping points is the most painful locations on body surface concerning a disease under consideration, matching with recommended cupping points. The head region must be the last option for selecting cupping point. Notably the site of cupping (front or back of the body) will decide about the types of cupping, and use of two respiratory windows (back) located in the interscapular region in most systemic diseases. Notably, opposite points to the selected cupping points on the skin for a disease should be given equal importance for cupping therapy but this is more fitting to acupoints often selected in acupuncture therapy. Furthermore, cups should not be placed on any skin disease/or lesion, i.e., eczema or psoriasis and directly over varicose veins which are not only the contraindications of cupping therapy but posit a potential risk of rupturing veins and consequently bleeding. There are other areas where cupping points also should not be selected and cupping is not done on those locations mentioned in the subsequent section. Conversely, cupping points include pathological sites based on more than a dozen mechanisms from which a high degree of clearance of blood and interstitial spaces is required [24]. Furthermore, the third important criterion for selecting cupping points is related to the mechanism of cupping actions and effects and therapeutic value, which are comprehensively described elsewhere [3,6,24,]. Briefly, the proposed mechanisms underlying Hijamah include pain-gate theory, diffuse noxious inhibitory controls (DNIC) and reflex zone theory, and accordingly pain is reduced through competitive inhibition either at peripheral (pain gait theory) or central (DNIC) levels, biomechanical properties of the skin (neovascularization and microtrauma) are favorably changed and transformed, and fresh blood circulation (with oxygenation) is increased considerably to the diseased area by cupping (Hijamah) therapy [6,24,34]. In other words, Hijamah tends to increase pain threshold and consequently pain is reduced and not perceived by the patient. From TCM perspective, illnesses
are triggered when the life force of body in terms of “chi” or “qi” is disturbed or stagnated attributable to medical disease or trauma, infections, stress, anxiety and other factors. According to Chinese theory, cupping therapy (and also acupuncture modality) that impact energy channels brings back equilibrium, and thus patient condition including pain improves. Another hypothesis- nitric oxide theory explains cupping effects in terms of muscle relaxation, changes in local tissue structures (microtrauma and inflammation) and increase in oxygenated blood circulation, anticoagulation effect and anti-inflammatory responses. Activation of immune system theory by cupping explains physiologically its immunological effects, hormonal adjustments and clearance of proinflammatory cytokines especially in those health conditions linked with immunological disturbances [6,7]. According to blood detoxification theory, cupping (Hijamah) helps to release toxins and removes wastes and heavy metals from the body [6,35] attributed to enhanced excretory functions of the dermis, removal of congestion, tissue adhesions being broken and restoration of homeostasis [26]. Assumingly these theories mostly work in tandem in producing cupping effects in the body. In context to cupping points, reflex zone theory is important but other theories too because it guides practitioners to put cups on distant points which are painful but may be away from the diseased organs [36]. Overall selection of cupping points in a particular medical condition is governed by a number of criteria linked with disease type, its severity and nature, most painful sites, areas surrounding disease site, disease site itself, most safe sites, most frequently used points linked with good efficacy such as Kahel, critical anatomical sites, and underlying mechanisms of action and effects of cupping [3,6,24]. It is advisable not to apply cups to critical anatomical sites such as skin overlying carpal tunnel (a potential possibility to injure nerves and veins), axilla skin (may injure brachial plexus), over nasal sinuses (dangerous area may transfer infection to intracranial structures), skin in front of ears (may injure 7th cranial nerve), skin overlying thyroid gland (may injure underlying great vessels and veins), and potentially dangerous triangle of face (may transmit infection to dural sinuses to intracranial structures causing thrombosis and death) and skin overlying superficial neck veins and arteries (may rupture them and cause hemorrhage) [24]. The overall selection of cupping points may include local and adjacent points, distal and proximal points, clustering points and their combinations. However, when it is necessary extreme precautions should be taken in applying cups on anatomical critical sites.

3.3 Other Salient Features of Cupping Therapy Points

Dry cupping (without puncturing/scarification), wet-cupping (with scarification) and other forms of cupping including combined with other therapies like acupuncture are used in various ailments across different parts of the world [2,8,24]. These conditions typically include many chronic diseases which are associated with moderate to severe pain. In specific terms, variable numbers of cups but often not more than five in a given session are used on precisely selected points on ill or surrounding body surface at a time for a variable time, usually 5 to 20 minutes. Conversely cups are applied often on the back involving healthy skin surface in the prevention of diseases and promotion of health such as in athletes for enhancing their performance. There is no fixed number of sessions, fixed number of cups, and fixed time schedule for a session. Notably cupping therapy might be given lifelong in chronic diseases with monthly interval or so. Later on, these cupping points might be changed depending on the outcome of disease or recovery rate, for example, if the outcome is poor or recovery is very slow. Accordingly number of cupping sessions and the interval between them may also vary for a particular disease as there are no scientific rules concerning these items of cupping therapy. Cupping sessions can be repeated in case of relapse of the disease. Overall aforesaid cupping technique components may vary based on clinical condition of an individual patient. Notably, wet cupping (Al-Hijamah) is preferred compared to other forms of cupping therapy, based on severity and nature of disease such as infections or non-communicable disease and painless or painful condition [2,8,24,25,37]. It is wise to know that dry cupping has been used successfully in many conditions including musculoskeletal conditions associated with pain and plantar fasciitis [38,39] and this mode of cupping is going to survive in future. Wet cupping therapy is widely used in Arabic and Islamic countries whereas dry cupping is the commonest type of therapy in the Western landscape.
Table 1. Cupping points (CPs) with a specific site on the body surface concerning diseases presenting mainly with pain [adapted from 24, 28]

<table>
<thead>
<tr>
<th>Diseases/illnesses</th>
<th>Main symptoms#</th>
<th>Mostly used CPs for first 1 session**</th>
<th>Less frequently used CPs</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>Pain in head or neck</td>
<td>1, 55, 2, 3</td>
<td>-----</td>
<td>Various headaches identified. Each CP has a specific anatomical area on skin surface.</td>
</tr>
<tr>
<td>Migraine</td>
<td>Throbbing headache &amp; visual disturbance</td>
<td>1, 55, 2, 3, 106</td>
<td>-----</td>
<td>Plus cupping at area of pain</td>
</tr>
<tr>
<td>Low back pain</td>
<td>Backache</td>
<td>1, 55</td>
<td>-----</td>
<td>Plus cupping on both sides of the spine and places of pain</td>
</tr>
<tr>
<td>Neck &amp; shoulder pain</td>
<td>Neck &amp; shoulder pain</td>
<td>1, 55, 40, 20, 21</td>
<td>-----</td>
<td>Plus places of pain</td>
</tr>
<tr>
<td>Knee pain</td>
<td>Pain</td>
<td>1, 55, 11, 12, 13</td>
<td>-----</td>
<td>53, 54 points plus cupping around the knee</td>
</tr>
<tr>
<td>Rheumatism</td>
<td>Pain in joints</td>
<td>1, 55</td>
<td>-----</td>
<td>Plus all areas of pain</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>Pain and swelling in joints</td>
<td>1, 55, 120, 49, 36</td>
<td>-----</td>
<td>Plus cupping on all large and small joints</td>
</tr>
<tr>
<td>Muscle spasm</td>
<td>Pain and difficult movements</td>
<td></td>
<td></td>
<td>Multiple cupping sessions around the affected muscle</td>
</tr>
<tr>
<td>Gout</td>
<td>Swollen joints with pain</td>
<td>1, 55, 28, 29, 30</td>
<td>31, 121</td>
<td>Plus cupping on pain points. Pain due to excess uric acid</td>
</tr>
<tr>
<td>Varicocele</td>
<td>Pain in the scrotum</td>
<td>1, 55, 6, 11, 12</td>
<td>13, 28, 29, 30, 31, 125, 126</td>
<td>Enlarged venous plexus in the scrotum.</td>
</tr>
<tr>
<td>Skin diseases</td>
<td>Itching and pain</td>
<td>1, 55, 49, 120, 129,</td>
<td>6, 7, 8, 11</td>
<td>Plus cupping on the affected areas (excluding eczema &amp; psoriasis)</td>
</tr>
<tr>
<td>Sores (skin wounds)</td>
<td>Pain</td>
<td>1, 55, 129, 120</td>
<td>-----</td>
<td>Do not confuse with sores in mouth and on genitals</td>
</tr>
<tr>
<td>Cellulite</td>
<td>Pain, redness of skin</td>
<td>-----</td>
<td>-----</td>
<td>Daily massage cupping over affected area.</td>
</tr>
<tr>
<td>Diseases of the eyes</td>
<td>Pain &amp; secretion of tears</td>
<td>1, 55, 36, 101, 104</td>
<td>105, 9, 10, 34, 35</td>
<td>CP above the eyebrows and on the hair line</td>
</tr>
<tr>
<td>Heart disease</td>
<td>Angina pain</td>
<td>1, 55, 19, 119, 7</td>
<td>8, 46, 46, 47, 133 &amp; 134</td>
<td>Includes multiple disease &amp; symptoms, same CP are used</td>
</tr>
<tr>
<td>Peripheral circulatory dis.</td>
<td>Pain while walking</td>
<td>1, 55, 11</td>
<td>-----</td>
<td>Plus DC on both sides of the spine from the top to bottom</td>
</tr>
<tr>
<td>Menstruation problems</td>
<td>Pain and irregular menses</td>
<td>1, 55</td>
<td>-----</td>
<td>Plus DC on 125, 126, 137, 138, 139, 140, 141, 142, 143</td>
</tr>
<tr>
<td>Diseases/illnesses</td>
<td>Main symptoms#</td>
<td>Mostly used CPs for first 1 session**</td>
<td>Less frequently used CPs</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ear, nose, &amp; throat</td>
<td>Pain, nausea and dizziness,</td>
<td>1, 55, 20, 21, 41, 42, 120, 49, 114, 43, 44</td>
<td>Also include tonsils, oral cavity and teeth</td>
<td></td>
</tr>
<tr>
<td>Kidney disease</td>
<td>Renal pain &amp; bleeding</td>
<td>1, 55, 9, 10, 41</td>
<td>42</td>
<td>Plus DC on CPs 137,140</td>
</tr>
<tr>
<td>Neuritis (peripheral)</td>
<td>Inflammation of nerves</td>
<td>1, 55, 110, 111, 112</td>
<td>113&amp;114</td>
<td>Plus cupping on the affected areas</td>
</tr>
<tr>
<td>Sciatic pain (right &amp; left)</td>
<td>Neural pain from the buttock down to legs</td>
<td>1, 55, 11, 12, 26,27</td>
<td>51,52</td>
<td>Plus at places of pain on the right/left leg muscles, its beginning and end points</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>Vague Pain</td>
<td>1, 55, 7, 8</td>
<td>DC on 137, 138, 139, 140</td>
<td>Plus DC* on the back opposite to the pain</td>
</tr>
<tr>
<td>Gastric ulcers</td>
<td>Epigastric pain</td>
<td>1, 55, 7, 8, 50</td>
<td>41, 42, 137 to 140</td>
<td>In one session, three to five CPs are used</td>
</tr>
<tr>
<td>Gastritis</td>
<td>Upper abdominal pain, nausea, vomiting</td>
<td>1, 55, and 121</td>
<td>-----</td>
<td>Bloating and anorexia due to inflammation of stomach lining</td>
</tr>
<tr>
<td>Liver and gall bladder disease</td>
<td>Pain in right upper quadrant of the abdomen</td>
<td>1, 55, 6, 48, 41</td>
<td>42, 46, 51, 122, 123, 124, &amp;124</td>
<td>Plus 5 cups on the right, outer leg. Nausea and vomiting other symptoms</td>
</tr>
<tr>
<td>Irritable bowel syndrome</td>
<td>Cramps, diarrhea &amp; constipation</td>
<td>1, 55, 6, 48, 7</td>
<td>8, 14, 15, 16, 17, 18, 45, 46</td>
<td>Plus DC on 137. Each CP has a specific anatomical area on skin surface.</td>
</tr>
</tbody>
</table>

#Main symptoms in addition to diagnostic tests must guide a practitioner to reach a diagnosis which is a crucial step for the selection of final CPs.

CPs matching these numbers may have their origin in different traditional systems including Chinese meridian system and Prophetic medicine and other systems but need scientific studies for evidence based data to support or refute them.
3.4 Cautionary Note and Cupping Points

Evidently cupping therapy is absolutely or relatively contraindicated in certain conditions. The question arises “is there any special cupping points considered in these conditions? The straightforward answer is big no. These conditions include but possibly not limited to pregnant or menstruating women, puerperium, bone fractures, metastatic cancers, patients with multiple organ failure (kidney, heart and liver failure), hemophilia/bleeding disorders, infectious diseases, high fever and convulsions, medical and surgical emergencies, patients with pacemaker and severe cardiovascular disease, patients using anticoagulants, very obese or thin person or emaciated patient, very recent wet cupping and blood donation and severe anemia.

Cupping points and cupping should never be selected and applied respectively directly on veins, nerves, arteries, open sores/wounds, places of deep vein thrombosis, inflamed skin, skin lesions such as eczema or psoriasis, eyes, lymph nodes, body orifices such as anus, nose, eye or oral cavity and varicose veins [3,40]. Cupping therapy is not without local and systemic adverse events [3,14] which are attributed to a variety of factors including incompetent practitioners, untrained traditional healers and quacks [3,9] and selection of wrong cupping points. Overall cupping points if not selected precisely and in collaboration with patient may contribute to the development of adverse events of cupping (Hijamah) therapy, delayed therapeutic response, ethical problems and additional cost burden.
4. DISCUSSION

Cupping (Al-Hijamah) therapy is an integral part of traditional complementary and alternative medicine practice since ancient times. Since then there have been continuous technical developments in several aspects of cupping therapy including identification of cupping points [3,24] and currently this traditional modality is used in various diseases including low back pain with good outcome [3,30,40-42]. In a recent study, Hijamah is reported to be cardioprotective as it restored sympathovagal imbalances by stimulating the peripheral nervous system [43]. However, more rigorous better quality studies are required to provide level I and II evidence [3,30,39]. Recently Huang and colleagues (2017) summarized seven cupping (wet cupping, moving cupping, balance-cupping, cupping with retention) studies that reported level I and level II evidence of cupping in chronic conditions including low back pain and acute lumber sprain [44]. Although precise mechanism of action and effects underpinning cupping therapy and cupping points is not precisely known, several hypothesis and theories have been put forward to explain how precise application of cupping points helps cupping therapy in producing good outcome in various illnesses [3,6,45-51].

Cupping points possibly part of meridian acupoints system and other traditional system are powerful tools to standardize and modernize the cupping therapy (Al-Hijamah). There are twelve main meridians which are invisible channels and present throughout the body with Qi or energy flow. Each limb is traversed by six channels, three Yin channels on the inside, and three Yang channels on the outside. Like in Traditional Chinese medicine (TCM), cupping points are also described in prophetic medicine (Tibb Nabawi), modern medicine and traditional healers cupping methods [24] and intrinsically cupping points are overlapping each other. For example, Prophetic medicine recommended nine cupping points (also called Sunnah points of Hijamah Fig. 1 and for other points see sources [24, 28]) including Kahel and Akhdayin whereas Traditional Chinese Medicine recommended numerous similar cupping points with special names-number [24]. The surprising idea is that when a cup is placed on a specific cupping point concerning a disease; does it not cover acupoints or extra-meridian points positioned in close proximity? If yes, does the therapeutic outcome need to be attributed to exclusively cupping point or combined cupping and acupoints? This amazing hypothesis-cum-idea needs scientific answers by conducting relevant research studies. The Kahel region includes skin overlying 7th cervical vertebral spine and surrounding area (upper, lower, right and left lateral) and interscapular region. The Kahel region used most commonly in diseases but not all for therapeutic and preventive purposes (especially cupping during Sunnah days, i.e., 17th, 19th and 21st of the Islamic, lunar month which coincide with Monday, Tuesday or Thursday), and very important area (but similarly other points on the back) linked with safe and suitable skin points on the back, flat area suitable for applying cups easily, and away from critical structures such as nerves, veins, and arteries. This area and Sunnah days for cupping were also recommended by Prophet Mohammad (PBUH) for cupping (Al-Hijamah) therapy [24, 28]. This Kahel area together with other cupping points on the back and dorsum of legs is also used for promotion of health in sports medicine, and for enhancing athletes’ performance [32]. It is better to use the largest cup on Kahel area/point because of multiple reasons such as large area. The Akhdayin sites closer to jugular veins are important because cupping therapy may clear biochemical substances (and toxic materials) found in high concentration in jugular veins (and interstitial spaces) during episodes of cluster and migraine headaches [26]. When practitioners apply cups on Akhdayin sites (#43 &44), they must take extreme precaution not to injure jugular veins or else never use these critical points. However cupping on areas behind ears (#22&23 and #GB20&21) is without any risk as these points are away from jugular veins, and these cupping perspectives need research evidence in future.

The selection of cupping points and their numbers differs from disease to disease, and further determined by other factors such as nature and severity of disease, relative contraindications, and cupping mechanisms in terms of distal painful sites [3,6,7,24,26]. The avenue of selecting cupping points in various diseases is controversial and confusing because thousands of cupping points are described according to anatomical sites, numbers and meridian-derived acupoints terminology. For example, Kahel area (in Arabic, and surrounding areas along with interscapular region) is referred to as the Feishu (BL-13) and Dazhui (Du 14/GV-14 and 13 in TCM used in pain conditions) acupoint groups and used in the treatment of hypertension [52] and other conditions with pain...
like trigeminal neuralgia. Another example includes of Akhdayin (in Arabic) which is known as GB20 and GB12 (GV14 acupoint group in Chinese medicine [52]. However, it is heuristic to select those cupping points with a precise location on the skin surface which are used most frequently and at the same time most beneficial and safe to the patients with specific diseases but with no adverse events and complications. Another invaluable point is that authors of cupping therapy studies need to mention what and why certain cupping points are used in individual diseases.

5. CONCLUSION

Cupping therapy (Al-Hijamah) is a traditional complementary and alternative medicine practiced since ancient times, and evidently continuing progress has been made in its several aspects including a precise selection of cupping points in specific diseases yet this area is grey and puzzling. Presumably, the precise selection of cupping points is a powerful tool in standardization and modernization of cupping therapy techniques and, hence, this study is calling for further global research for defining and classifying cupping (Hijamah) therapy points’ and their accurate applications in individual diseases.

DISCLAIMER

The views, thoughts, and opinions expressed in this manuscript belong solely to the authors, and not necessarily to the authors’ employer, organization, or committee.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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