



**THE CONSUMERS' AWARENESS, PERCEPTION AND
ATTITUDE TOWARDS COSMETIC PRODUCTS AND
SKIN CONDITION ASSESSMENTS AMONG THE
POPULATION OF KUANTAN, PAHANG**

BY

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ABSTRACT

The increased usage of cosmetic products has caused a growing concern and yet little is known about cosmetics from consumers' perspective. This study aimed to explore consumers' perspectives towards cosmetic products, to develop a valid and reliable tool for assessing consumers' awareness, perceptions and attitudes towards cosmetic products, to assess consumers' awareness, perceptions and attitudes towards cosmetic products, to investigate consumers' skin condition, to identify any possible differences between; awareness, perceptions, attitudes and skin conditions with respect to their demographic background, and to identify any associations between consumers' awareness, perceptions, and attitudes with skin conditions. Cross-sectional study design was used and carried out among the residence in Kuantan. To begin, an interview guide was developed and in-depth face-to-face interviews were conducted. The conversations were recorded in audio and transcribed verbatim. Next, a questionnaire was developed and piloted among 66 consumers. Reliability, internal consistency and other statistical analyses were analyzed. For the final stage, a total number of 551 consumers were recruited conveniently. They were subjected to fill up the questionnaire and do the skin condition assessments; collagen intensity, elasticity, melanin, hydration and trans epidermal water loss. Statistical analyses were carried out to the data where it is appropriate. The results from the interview session show that, awareness related to the cosmetic products in Malaysia among the consumers was not satisfying. Although, at the time of the study, they were using conventional cosmetic products, consumers showed a positive perception and attitude towards natural and halal cosmetic products. However, price and accessibility of those products may influence their purchase intention. For the pilot study, it was found that the questionnaire can be used as a valid and reliable tool for assessing consumers' awareness, perceptions and attitudes towards cosmetic products in Malaysia in future studies. In the final stage, consumers in this study were found to have adequate level of awareness, held positive perceptions and practiced positive attitudes towards the cosmetic product. Subsequently, consumers in this study were found to have; high collagen intensity, more elastic skin and low TEWL value. However, moisture content and melanin content were found to be low. Cosmetic consumers' demographic background such as gender and age was found to have significant differences towards their awareness, perception, attitude and skin conditions. Lastly, consumers with adequate awareness were associated with low melanin content and consumers with positive perception were associated with; low melanin content and insufficiently moisture skin. To conclude, consumers should be wise in terms of using the cosmetic products in their daily life.

خلاصة البحث

إن الاستخدام المتزايد لمستحضرات التجميل سبب بالمقابل اهتماما متزايدا بمضار هذه المستحضرات ولا تزال معلوماتنا قليلة حول المستحضرات التجميلية من وجهة نظر المستهلك. تهدف هذه الدراسة لاستكشاف وجهات نظر مستخدمي المستحضرات التجميلية، و تطوير ادوات صحيحة وموثوقة لتقييم وعي المستخدمين وتصورهم ومواقفهم تجاه مستحضرات التجميل، لتقييم وعي المستخدمين وتصورهم ومواقفهم تجاه مستحضرات التجميل، للتحقيق في حالة جلد المستخدمين، لتحديد أي اختلافات محتملة بين؛ الوعي والتصورات والمواقف وحالة الجلد مع احترام خلفياتهم الديموغرافية، و لتحديد أي علاقة بين الوعي والتصورات والمواقف مع حالة الجلد. تم استخدام دراسة تصميم القطاعات المتقاطعة على سكان كوانتان. في البدء تم تطوير دليل للمقابلات و تم القيام بمقابلات وجهها لوجه حتى بلوغ درجة الاشباع. وقد تم تسجيل المقابلات وكتابتها حرفيا. ثم تم تطوير استبيان اختباره على 66 مستخدم. تم تحليل موثوقية الاختبار و التحليل الاحصائية الأخرى. وفي المرحلة الأخيرة تم توظيف مجموع 551 مشاركا عن طريق اخذ العينات المريح وطلب منهم ان يملؤوا الاستبيان و تم تقييم حالة الجلد من خلال خمس معلمات وهي: كثافة الكولاجين والمرونة و الميلانين والرطوبة وفقدان الماء عبر البشرة. تم اجراء الدراسات الاحصائية على البيانات حال لزومها. من خلال المقابلات تبين ان المخاذير من استخدام المستحضرات التجميلية بين المستخدمين في ماليزيا غير كافية. وعلى الرغم من أن المستخدمين كانوا يستخدمون مستحضرات تجميل تقليدية في وقت الدراسة الا انهم ابدوا تصورا ايجابيا تجاه المستحضرات النباتية والحلال ولكن سعرها وصعوبة الحصول عليها قد تعدل نية الشراء لديهم. ومن خلال نتائج الدراسة المبدئية تبين أنه يمكن استخدام الاستبيان المطور والمترجم كأداة موثوقة لتحديد المخاذير والتصورات والمواقف تجاه مستحضرات التجميل في ماليزيا في الدراسات المستقبلية. أظهرت المرحلة الاخيرة من الدراسة أن الحاضرين في هذه الدراسة قد طوروا مستوى مقبول من المخاذير والتوصيف والمواقف تجاه مستحضرات التجميل. وكذلك وجد أن المستخدمين في هذه الدراسة لديهم كثافة الكولاجين عالية ومرونة الجلد كانت أكثر و قيمة قليلة لل TEWL بينما وجد أن الرطوبة و الميلانين كانت منخفضة. وقد وجد أن الخلفية الديموغرافية للمشاركين من جهة الجنس والعمر تلعب دورا هاما في وعي و توصيف وموقف وحالة جلد المشارك من المستحضرات التجميلية. وأخيرا وجد مستوى منخفض من الميلانين بين المشاركين الذين لديهم فهم كافي وتوصيف ايجابي. والى جانب ذلك وجد مستوى غير كافي من الرطوبة بين المشاركين ذوي التوصيف الايجابي. وفي الختام يجب أن يكون لدى المستخدمين شيء من الحكمة في اختيار مستحضرات التجميل التي يستخدمونها يوميا.

APPROVAL PAGE

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CHAPTER ONE

INTRODUCTION

1.1 COSMETIC PRODUCT

Cosmetic product can be defined as “any form of substances or preparation applied to the outer layer of human body or with the teeth and the mucous membrane of the oral cavity with the intention to clean, to perfume, to alter the appearance and/or correcting body odors and/or protecting them in good condition” (Di Giovanni, Arcoraci, Gambardella, & Sautebin, 2006). In Malaysia, the presence of cosmetic products in the market is regulated by the National Pharmaceutical Control Bureau (NPCB). Based on a guideline produced by NPCB in the year of 2007, cosmetic products in this country can be categorized as color cosmetic, skincare, toiletries, hair care products, perfumes and fragrances (“Guideline for Control of Cosmetic Products in Malaysia,” 2009). For the past five years, the cosmetic products become excessively popular among the Malaysian and the demands increase annually especially among the younger people and people who lives in urban area (Teng & Wan Jusoh, 2013). By referring to a report produced by Euronomitor International (“Beauty and personal care in Malaysia,” 2014) , one of the reasons that causes people to use cosmetic products were due to the needs of increasing their confidence level, which indirectly help their career to be successful.

1.1.1 Issues about cosmetic products

The existence of cosmetic products was tracked since thousands of years ago. One of the examples of the use of cosmetic products was detected among the ancient Egyptians. They used a mixture of henna and indigo to color their hair and they also perfumed their hair by using marjoram, a type of herbs, which nowadays known as oregano (Narayanaswamy & Ismail, 2015). In addition, clay, mud and arsenic were colored into different types of color such as red and yellow, and it is used to paint the Neanderthal men's face (Kumar, 2005). From the examples, it is clear that the cosmetic products in the old days were derived from natural ingredients. Unfortunately, starting from 19th century, chemical substances were used to replace natural ingredients in order to get a bigger production. Besides, the cosmetic industry was growing tremendously in the 20th century as innovations and technologies were used in manufacturing the cosmetic products (Kumar, 2005).

1.1.2 Natural ingredients in cosmetic products

Various kinds of cosmetic products are available in the Malaysia market. This product range is available from a variety of branded cosmetics products and to the cosmetics products which were locally produced. However, most of the cosmetic products contain hazardous substances such as parabens, colorants and stabilizers. Besides, antimony (Sb) , arsenic (As), cadmium (Cd), chromium (Cr), cobalt (Co), mercury (Hg), nickel (Ni) and lead (Pb) are examples for toxicology properties which may present in cosmetic product ingredients (Bocca, Pino, Alimonti, & Forte, 2014).

In line with the problem, people nowadays are more aware in order to protect themselves from hazardous chemical substances. They become more concerned about the cosmetic formulations and it turn into a vital criterion for consumer to choose

cosmetic products. Hence, cosmetic products made from natural ingredients become more popular (Bono, Mun, & Rajin, 2006).

Natural ingredients can be defined as any substances or mixture made from natural ingredients of botanical, animal or mineral origin. For an easier explanation, the word natural gives a positive characteristic, whereas artificial means negative characteristic (Apaolaza, Hartmann, López, Barrutia, & Echebarria, 2014). As an example, in Lip Ice Sheer Color by Mentholatum their main ingredients are made from natural ingredients such as bees wax, shea butter, macadamia ternifolia seed oil, jojoba seed oil and aloe extract. The benefits of natural ingredients in cosmetic products were listed as follow (Chen, 2009; Mukherjee, Maity, Nema, & Sarkar, 2011) :

- Natural ingredients produce fewer side effects compared to chemical-based cosmetics.
- Natural ingredients are less harm to the earth and create environmentally-friendly products.
- Natural ingredient products can be absorbed quickly by the skin layer.
- Natural ingredient products are usually hypo-allergenic in nature.

1.1.3 Halal cosmetic products

Aziz et al. (2014), states that halal is defined as lawful or permissible according to the Quran. The word halal is followed by the word toyyiban which means good and safe. As a Muslim, they are required to seek for halal and toyyiban as it is part of demand in Islam. Therefore, their goods and actions in their daily life must in line with the concept of halal and toyyiban. There are many verses in Quran which emphasize on

halal and toyyiban concept and one of examples lies in the Surah Al-Baqarah, verse 2:168.

Halal cosmetic products are not only produced by raw materials authorized by Syariah law, however, the processing method for the cosmetic product shall be consistent with the Syara requirements. By following halal and toyyiban procedure, the final cosmetic product will be clean, pure, nutritious, hygienic and healthy (Husain, Ghani, Mohammad, & Mehad, 2012).

Markets for halal cosmetic products in Malaysia are very encouraging at the present time. According to the Population and Housing Census of Malaysia (Census 2010) (*Population Distribution and Basic Demographic Characteristic Report*, 2010), Islam religion is the most widely religion professed by the Malaysian people with a percentage of 61.3%. The statistics shows that the range of halal cosmetic products as another criterion in purchasing cosmetic products can be implemented for the benefits of Muslim consumers in this country. During 7th Malaysia International Halal Showcase (MIHAS), Prime Minister of Malaysia launched two new standards for the development of international standards for halal pharmaceutical industry; MS 2200: 2008 and MS 2400: 2010. These two standards reflect a great implementation of halal standards starting from collecting or using raw materials to the logistic procedure. This reflects the concept of halal and thoyibban which is in line with the Islamic teaching (*Annual Report (Innovative Partnership)*, 2010).

1.2 QUALITATIVE METHOD

Any data or information analysis in a way of descriptive in nature and not readily quantifiable is categorized as qualitative method (Sekaran, 2003). There were several types of research design used in qualitative method such as; grounded theory,

phenomenology and ethnographies. In terms of collecting the qualitative data the methods can be as follow; interview, observation and document analysis (Creswell, 2013). The objective of this study was to obtain consumers experienced in using the cosmetic products so, phenomenology research design were used. Data collection for this study were performed via the interview method, as it is a well-known method used in the research study (DiCicco-Bloom & Crabtree, 2006).

From the interview, more information about consumers' perspective towards cosmetic products were obtained and used as supporting points to construct a questionnaire. Generally, the questions for the interview session must be generic, non-directive and introspective in nature. Besides, the formats are open-ended question and it is in semi-structured form. By using this kind of questions, respondent will be more relaxed and tend to give reliable answers throughout the interview session (Leong & Tan, 2013). Any excessive background noise and the location for the recorder can be a menacing factor for the quality of recorded interviews, if it is not consider seriously. The interview session will be ended when it reach the saturation point, the point where no new categories or theme were emerged (DiCicco-Bloom & Crabtree, 2006).

1.3 SURVEY

Survey refers to a systemic method for collecting data from the target population and it tends usually to be quantitative in nature. This method can be done through mail, fax, telephone or in-person and or this study questionnaire was used to collect data. Questionnaires can be defined as a set of pre-formulated written questions where the respondent records the answers in it (Sekaran, 2003). The results become