



Development of Practical Package for Pidih Cosmetic in Traditional Bridal Learning

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Abstract. The development of Practical Package for Pidih Cosmetics conducted to support Traditional Bridal Learning to found the right formula which collaboration with the production house of Ayu Nora Imas Koes. The aim to knowing (1) The concept of innovation for developing Pidih cosmetics through practical packaging (2) The process of developing Pidih through practical packaging (3) Feasibility of developing Pidih cosmetics through practical packaging. The development process with the experimental method uses three treatment formulas based on the reference formula. Conducted at the Makeup and Beauty Laboratory of UNY with 3 months of research time with product testing on experts from practitioners in the field of Traditional Bridal Makeup then tested by panellists with one product selected from expert testing. The expert test concluded that the selected product was a formulation II product with percentage details, in the aspect of product composition formula I is 75%, formula II is 88.1%, formula III is 88.1% and the aspect of innovation package, formula I is 92.1%, formula II is 96% and formula III is 95.8%. Furthermore, product testing by users can be interpreted if the percentage of product composition aspects reaches 95.2% in the very feasible category and 97% in the aspect of innovation package in the very feasible category with ten panellists.

Keywords: Practical Package · Cosmetic · Traditional Bridal Make-up

1 Introduction

In the island of Java, there are, among others, Solo Putri bridal makeup, Solo Basahan, Yogya Putri, Yogya Don't Groat, Yogya Paes Ageng, Demak, Semarang, and others. Among the various types of bridal makeup, the ones most favoured by people on the island of Java are the Solo and Yogya styles. The similarity of the bridal makeup style is to have makeup on the forehead or often called paes. The form of paes consists of penunggul, penitis, clamp, and godheg [1]. According to the Big Indonesian Dictionary, paes means to beautify the face (bride, and so on) by using cosmetic ingredients in certain ways [2].

One of the problems found in Indonesian bridal makeup lectures is the forehead makeup technique (Paes), including (a) the application of pidih cosmetics for forehead makeup takes a long time; (b) there is often uneven smearing; (c) lack of maximum

adhesion to the existing curd cosmetic ingredients; (d) the stinging condition sometimes becomes a hard texture when it is applied on the forehead. It can be identified that the forehead makeup technique (Paes) still has some shortcomings in terms of time efficiency and durability of pidih cosmetics when applied, which is influenced by the ingredients and packaging of pidih cosmetics.

Recent technological developments have also made it easier to produce new discoveries in the field of makeup services, both tools and cosmetics that are increasingly of higher quality [3]. Maintaining the quality of the results of the makeup, of course, it is necessary to try to use the latest high-quality breakthrough cosmetics. In the learning materials in lectures, they should be in line with the development of technology and learning, so they must always innovate to keep up with developments time to improve the quality of the results of the make-up. While one of the problems in learning traditional bridal makeup is the application of pidih cosmetics in making paes [4].

This is what underlies the development of pidih cosmetic innovations so that it is easier to apply and can save time in making paes on Indonesian bridal makeup by making innovations consisting of (a) formulation of pidih cosmetic product compositions that have the appropriate texture for easy application; (b) pidih product packaging with practical innovations such as so that in its application it does not require tools such as swallows. It is necessary to conduct a study in research and development in order to create new product innovations and measure the feasibility of products in certain groups, in this case the study was conducted on students of Make-up and Beauty FT UNY in order to compare the application of pidih cosmetics which were previously in the form of a cepuk bottle and required Swallow aids. as well as with product innovations that will be carried out with pidih cosmetics in the form of sticks.

This development activity will be carried out in collaboration with the pidih production house, namely Ayu Nora Imas Koes which is located in Sleman Yogyakarta. This is done in order to determine the right composition in the mixture for making pidih cosmetics as well as the safety of pidih production for users in accordance with existing production standards. The choice of production site cooperation was done because at Ayu Nora Imas Koes pidih production is one of the pidih production sites that already has a production permit, so that production is carried out according to existing standards and the area is quite easy to reach. This development innovation is expected to be an innovation in make-up and beauty technology, especially in traditional bridal makeup which has a level of difficulty in the application of paes with pidih cosmetics, which is expected to be a foothold in the development of other beauty products to make it easier to apply and can provide time efficiency in its use.

2 Method

The type of research carried out is experimental research which aims to make pidih cosmetic formulations to suit packaging designs that are practical in their use, so that some treatments are needed in making pidih formulas in order to find formulas that have the right stickiness, colour and texture qualities in the use of appropriate packaging. in accordance. Experimental research is the most scientifically reliable research (the most valid), because it is carried out with tight control on confounding variables outside the experiment [5].

Experimental research has a variety of designs. Its use is adjusted to the research aspect and the subject matter [6]. In this case, the research was carried out by design using three treatments from the cosmetic formula for pidih products to choose one product through the results of a validation test by an expert, then the selected product was then assessed by the user. The experimental research design is in accordance with Fig. 1.

The research sample is part of the number and characteristics possessed by the population. Determination of the sample is done by using a purposive sampling technique which is a sampling technique in which the researcher relies on his own judgment [7]. When selecting members of the population who have taken the Indonesian Bridal Makeup course, in this case, the research sample is Diploma III and IV students of the Make-up and Beauty study program who have taken the subject Indonesian bridal makeup course. Determination of the sample size is done by using the Federer formula.

$$(n - 1) \times (t - 1) \geq 15 \tag{1}$$

Where:

n = sample size for each group.

t = Number of groups.



Fig. 1. Research design

Table 1. Instrument Grille [8]

Variable	Indicator	Sub Indicator
Aspect of Composition Formulas of Pidih	Composition quality	Smooth of texture, Easy to stick, Durable
	Color match	Texture suitability, Colour density, Composition suitability the right mix of colour
Aspect of Innovation packages	Quality of packages	Good design, interesting factor, good package Shape selection accuracy, Maintainability
	Usefulness	Application time efficiency Have added value in product application skills
	Usability	Usability Product practicality Conformity of the shape to the texture of product

Table 2. Product Rating Scale [9]

Achievement Level	Qualification	Information
81% - 100%	Very Decent	No revision needed
61% - 80%	Decent	No revision needed
41% - 60%	Decent Enough	Revision
21% - 40%	Less Decent	Can not be used
0% - 20%	Very Less Decent	Failed/unusable

The formula is then applied in the implementation of the research, in order to obtain the results,

$$(n - 1) \times (t - 1) \geq 15 \quad (n - 1) \times (3 - 1) \geq 15$$

$$(n - 1) \geq 15 : 2$$

$$(n - 1) \geq 7.5$$

$$n \geq 7.5 + 1$$

$$n \geq 8.5$$

The results of these calculations are known that the research sample must be more than 8.5, so that in the process of this research using a sample of 9 people/panellists. The product feasibility assessment is in accordance with the results of the instrument including in accordance with Table 1.

The feasibility test assessment uses a Likert scale with a range of 1 - 5, which is very inappropriate to very feasible according to Table 2.

3 Result and Discussion

3.1 Practical Package Development

The application of pidih usually uses an applicator tool called a swallow, which used to be how to apply pidih using betel leaf stalks or bamboo blades. Welat is made of bamboo or wood that is mashed in such a way that it can facilitate the smoothing of pidih without dirtying the hands of the make-up. Welat was developed again with brass which was used in ancient make-up, then welat developed into stainless steel until now [10].

This cosmetic packaging development innovation will provide benefits in addition to facilitating the application of pidih cosmetics [11], it also has aesthetic value for pidih cosmetics. This is in accordance with the trend of the development of beauty in consumer behaviour in the purchase of cosmetic products which is increasing [12]. So that its development must pay attention to aspects of packaging quality [13]. The packaging innovation can be seen in Fig. 2.



Fig. 2. Pidih Cosmetics Packaging and Packaging Innovation Plan.

3.2 Pidih Formula

The product reference formula is based on pidih cosmetic formulas that are already on the market. In this case, the formula making process is in collaboration with the pidih production house, Koes Imas, Yogyakarta. Next, do a trial on the treatment which is then from the reference formula was given three treatments. These formulas are presented in Table 3.

The initial product formulation was carried out by demonstration by resource persons with carry out manufacturing procedures, including through stages:

- a. Necessary equipment such as stove, Scales, Scissor, Knife, Pan, Spoon, Wooden Spatulas, Mold Pouring Container Small plates, Stick Mold, and Packaging Stick (lipstick container)
- b. Materials used Bees Wax, Parafin Wax Petrolinium Jelly Alumunium Bambu Charcoal Aeron Oxide Organik, Organic Dyes (Yellow and Green), Pidih Deodorizer (Sendana), Perfume Deodorizer (Tarpetin), and Alcohol Aqua water Coconut oil.
- c. Stages of Making Pidih is as follows:

1) Prepare the pan that has been cleaned in advance Weigh the materials used



- 2) Melt 1000 gr Vaseline Aluminum, 75 g Organic Aeron Oxide, 100 ml Cooking Oil in medium heat



- 3) Add 50 g of Bees Wax, and 50 g of Paraffin Wax



- 4) Then mix the fragrance The Vaseline and Paraffin will separate Pidih (Sendana), Fragrance Perfume (Tarpetin), Alcohol, Water Aqua in a small amount.



- 5) After the dough has cooled a bit, we pour the pidih mixture into it and stir it, if you pour it while the dough is still hot, what happens is that the dough will cause a fire or during the printing process. The Vaseline and Paraffin will be separated.



- 6) Put the dough into the pouring container, then pour it into the stick mold.



- 7) Put the stick mold into the refrigerator, and let it sit for a few minutes until it hardens.





Fig. 3. Product Results when Application.

- 8) After the dough feels like it has hardened, remove the mold from the refrigerator.



The formulation of the development product then there are differences in the results. application of pidih cosmetics on the skin. The results of these differences can be seen during the process production of pidih cosmetics according to Fig. 3.

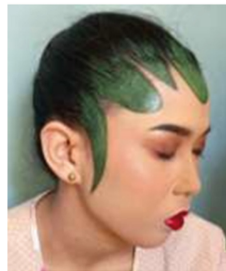
3.3 Expert Test Results

Expert test conducted by three practitioners in the field of traditional bridal makeup with the selected formula II. The product is feasible to use and has the composition density that suits the use of packaging and strong adhesion to the skin. The process of product testing by experts can be seen in Fig. 4.

Product formulation that has been carried out by inviting resource persons to provide guidance regarding the formulation of existing pidih products so that they become products reference in development in accordance with the treatment that has been prepared.

Table 3. Comparison of Reference Formulas and Treatment Formulas

Ingredient	Reference Product	Composition		
		Formula I	Formula II	Formula III
Vaseline Aluminium	1000 gr	1000 gr	1200 gr	1200 gr
Bees Wax	50 gr	120 gr	120 gr	120 gr
Paraffin Wax	50 gr	120 gr	120 gr	120 gr
Cendana Fragrance	10 drops	10 drops		10 drops
Turpentine Fragrance	10 drops	-	-	-
Coconut oil	100 ml	30 ml	30 ml	30 ml
Green colouring	25 gr	80 gr	80 gr	80 gr
Yellow colouring	25 gr	80 gr	80 gr	80 gr
Black colouring		40 gr	80 gr	120 gr
Bamboo Charcoal	25 gr			
Aeron oxide	75 gr	-	-	-



Formula I



Formula II



Formula III

Fig. 4. The Process of Applying Pidih Cosmetics in Expert Tests.

	Aspects of Formula Composition	Aspects of Packaging Innovation
Formula I	75%	92.1%
Formula II	88.1%	96%
Formula III	88.1%	95.8%

Fig. 5. The result of product formulation

Table 4. Results of Expert Test Qualitative Analysis

Expert	Formula I	Formula II	Formula III
Expert 1	Not worth using	Used with repair	Worth using with repair
Expert 2	Worth using with repair	Worth using with repair	Worth using with repair
Expert 3	Used with repair	Proper to use	Worth using with repair



Fig. 6. Product Trials by Users.

The results of the quantitative analysis there are several notes on formula I which has the lowest average percentage, reaching 75%, so that formula I is not the selected product. Furthermore, in formulas II and III, there is a similarity in the percentage of aspects of the composition of the formula, which is 88.1%. and the packaging innovation aspect of formulation III with a percentage of 95.8% and formulation II with a percentage of 96%. These results are in line with the results of the qualitative analysis, with details of the feasibility aspects of the product from the conclusions regarding the feasibility of the product.

Table 4 can be concluded if the product development of formula II is considered feasible to use without improvement. This creates added value in the process of selecting

the selected product from the formulation that has been carried out. This is also supported by the results of expert tests that formula II shows better application results than formula III.

3.4 User Test Results

Product trials were carried out by D III and DIV students of the Cosmetology and Beauty Study Program, Faculty of Engineering, UNY, face-to-face, and were able to apply the product on the client's face from the results of the product validation test selected by the expert. Activities in product trials by users can be seen in Figs. 5 and 6.

4 Conclusion

This development research is based on problems in the application of pidih cosmetics which have several problems in their application, including the product is difficult to apply because it has a cepuk-shaped packaging so that it requires a tool in its application, in addition to the characteristics of pidih cosmetics which are less durable and less water proof. The product development process was carried out by bringing in the source persons of the cosmetic production house Pidih Imas Koes Jogja.

The expert test concluded that the selected product is a formulation II product with percentage details, (1) formula I, which is 75% in the aspect of formula composition and 92.1% in the aspect of packaging innovation; (2) formulation II, namely 88.1% in the aspect of formula composition and 96% in the aspect of packaging innovation; (3) formulation III is 88.1% in the aspect of formula composition and 95.8% in the aspect of packaging innovation. Obtaining the average percentage score is then analysed qualitatively where formulation II states that the product is suitable for use without any repairs.

The product test by the user can be interpreted if the percentage acquisition of the formula composition aspect reaches 95.2% in the very feasible category and 97% in the packaging innovation aspect in the very feasible category. So it can be concluded that the results of product testing by users with product formula II are acceptable and feasible to use.

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