

## ABSTRACT

Packaging is a container that serves and protect the main of the product in it. In addition, the packaging also serves as a visual communication that gives the difference between a product with other products, so that the design of the packaging has an important role in product development. At XHA-Sericin Coated products, the production of Bioceramics package not currently exist. So the purpose of this activity is to design the product packaging of XHA-Sericin Coated which can fulfill the function as packaging and also provides an important role of information that is required in a product packaging.

This study begins with the research of consumer needs through interviews. The Interviews conducted to obtain a list of requirements from 9 respondents which were works as an Orthopedics doctors in Yogyakarta. Then the level of interest and the rate of competitors were obtained from questionnaires that has been distributed to the respondents as well as consumers assessment of the final packaging concept. Then there is a few thing that should be contained in products were obtained through the internet such as: Ergonomics, Safe Healthy Environment, Regulation, Trends and Intellectual Property Rights. From the research that has been conducted, there were 26 list of consumer needs that consider in the product. Then the list of consumer needs need to be process through Kano and translated into Quality Function Deployment (QFD) to get the category types of needs and product specifications. The results will served as an input to generate 10 concept produtcs through Combination Table. The 10 existing concepts were filtered and selected based on the criteria of needs through Screening and Scoring. After that, the assessment of final concept is given by consumers. The result of the concept was preferred and the rated score was 8, which means the concept is good. Then the prototype  $\alpha$  were created using Robo 3D printing machine so the shape of the packaging products can be seen.

The result shows that the packaging design of XHA-Sericin Coated were conducted: The primary packaging shaped is vial, made fom plastic, height 6 cm x 1.9 cm of diameter base; cap of packaging type is turn twist cap, height dimension: 3.3 cm x 1.9 cm diameter, grip patterned webs (transverse), company logo on the top of the lid packaging, using a seal as a safety; The label has a dimension of a length of 6.5 cm x 1.5 cm of wide, there is a company logo and brand, expiration date; use sterile plastic; Secondary packaging has a long dimension of 8.1 cm wide x 4.5 cm high x 3 cm, there is the company logo on the packaging, recycle logo, using a hologram and barcode, using hydroxyapatite as image information products, the dose on the front of the packaging, ingredients in section in packaging, light green as the product layout.

**Keywords:** Concept Design, Packaging, Medic, Industrial Design, Prototype

## INTISARI

Kemasan adalah wadah yang berfungsi untuk melindungi produk utama yang ada di dalamnya. Selain itu kemasan berfungsi sebagai media komunikasi visual yang memberikan perbedaan antara suatu produk dengan produk lainnya, sehingga desain kemasan memiliki peran penting dalam perkembangan produk. Pada produk *XHA-Sericin Coated*, produksi kemasan *Bioceramics* saat ini belum ada. Sehingga tujuan kegiatan ini adalah mendesain kemasan produk *XHA-Sericin Coated* yang dapat memenuhi fungsi sebagai kemasan dan juga memberikan informasi penting yang dibutuhkan dalam suatu kemasan produk.

Penelitian ini diawali dengan riset kebutuhan konsumen melalui wawancara. Wawancara dilakukan untuk mendapatkan daftar kebutuhan kepada 9 orang responden yang merupakan dokter Ortopedi di daerah Yogyakarta. Kemudian tingkat kepentingan dan pesaing di dapatkan dari kuesioner yang dibagikan kepada responden serta penilaian konsumen terhadap konsep akhir dari kemasan. Adapun kebutuhan lain yang sebaiknya terkandung dalam produk, seperti: ergonomi, SHE, regulasi, tren produk dan HKI didapatkan melalui internet. Dari penelitian yang dilakukan, terdapat 26 daftar kebutuhan konsumen yang menjadi pertimbangan dalam produk. Kemudian pengolahan daftar kebutuhan dilakukan melalui Kano dan diterjemahkan kedalam bahasa teknis *Quality Function Deployment* (QFD) untuk mendapatkan kategori jenis kebutuhan serta spesifikasi produk. Hasil yang diperoleh tersebut dijadikan masukan untuk menghasilkan 10 konsep melalui *Combination Table*. Sepuluh konsep yang ada kemudian disaring dan diseleksi berdasarkan kriteria kebutuhan melalui *Screening* dan *Scoring*. Konsep akhir diberikan penilaian oleh konsumen. Hasilnya konsep tersebut disukai dan diberi nilai 8 (baik). Kemudian *prototype α* dibuat menggunakan mesin Robo 3D *printing* sehingga dapat dilihat bentuk akhir dari produk kemasan tersebut.

Hasil desain konsep kemasan adalah: kemasan primer berbentuk vial, berbahan kaca, tinggi 6 cm x diameter dasar 1,9 cm; tutup kemasan bertipe *turn twist cap*, berdimensi tinggi: 3,3 cm x diameter 1,9 cm, grip bermotif jaring (garis melintang), logo perusahaan pada bagian atas tutup kemasan, menggunakan segel/*seal* sebagai pengaman; Label memiliki dimensi ukuran panjang 6,5 cm x lebar 1,5 cm, terdapat logo perusahaan dan *brand*, tanggal kadaluarsa; menggunakan plastik steril; kemasan sekunder memiliki dimensi panjang 8,1 cm x lebar 4,5 cm x tinggi 3 cm, terdapat logo perusahaan pada kemasan, logo *recycle*, menggunakan hologram dan *barcode*, menggunakan gambar Hidroksiapatit sebagai informasi produk, dosis pada bagian depan kemasan, *ingredients* pada bagian dalam kemasan, berwarna hijau muda sebagai layout produk.

**Kata kunci:** desain konsep, kemasan, medis, desain industri, *prototype*