

Transdisciplinary research proposal

1. Title
Gel nasal packing
2. Proposer
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3. Who do you think could join you [from other schools --eg chemical engineer, computer expert etc] in your research
School of chemistry
4. Problems statement
Current widely used products available to control nasal bleeding are base on sponge and balloon types. This product is not comfortable for the patient throughout their use and especially during removal of the product.
Recently a German company has come up with antibiotic gel which needs to be mixed before use and harden in the nose. Apart from being very expensive, the problem with this product it takes a long time to disintegrate and most of the time it need to be removed manually thus case discomfort to patients.
5. Objective
To develop a gel like substance and able to change into semi-solid form remain in that form for 24 hours before slowly disintegrate. It should be easy to apply and no need to be removed.
6. Brief methodology/design
I suggest that we use virgin coconut oil as a base as it is unique in Asia region, has anti septic properties and easy to get.

Some chemical processes to change the oil to gel form. It should be able to handle body temperature i.e. not melt down easily.
7. The outcome of the projects [ie the usefulness of the products]
The product would have huge marketing potential especially in sinonasal surgery and maybe in vascular surgery or neuro surgery as well.