

Make It Mine: How Aesthetic Customization of Durable Medical Equipment Impacts Patient Autonomy

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INTRODUCTION

Durable Medical Equipment (DME) is understood as an umbrella term referring to most essential, daily-use medical devices/equipment that is not disposable. The use of DME has a significant impact on the identity and self-image of consumers, and most readily available equipment designed for adults is aesthetically bland, sterile, or otherwise unappealing to both younger populations and older. The design of the equipment influences not only functionality and usability, but the consumers' sense of agency and control.

RESEARCH QUESTIONS

- What is the impact of aesthetically customizing DME on consumer compliance?
- What is the effect of customizing DME on consumer's feelings of autonomy and perceived power in and surrounding medical environments?

METHODS

We conducted a comprehensive review of existing literature started market research to understand current trends and perspectives on durable medical equipment (DME). Utilizing insights from these analyses, we developed a survey to gather opinions on how DME empowers individuals. The survey was distributed across various platforms.

Our research is still in progress at this point in time. Continuing on, we will collect more responses on our survey and conduct interviews with selected individuals that opted in to participating in an interview.



Example of how equipment customization exhibits agency and ownership. From *Dia-BADASS Insulin Protection Sleeve*, by Vial Safe 2024, Etsy (<https://www.etsy.com/listing/1524496071/vial-safe-insulin-bottle-protector>)

RESULTS

Many participants speak about the ways that customizing their equipment allows them to feel more comfortable using it as well as feeling and showcasing their autonomy. While some participants do prefer to downplay their assistive devices, many choose to employ more decorative and eye-catching approaches that may lessen the extent to which they feel stuck with an intrusive device. These personalized design choices may also help to mitigate a sense of stigma caused by popular perceptions of medical equipment (Dos Santos et al., 2020).

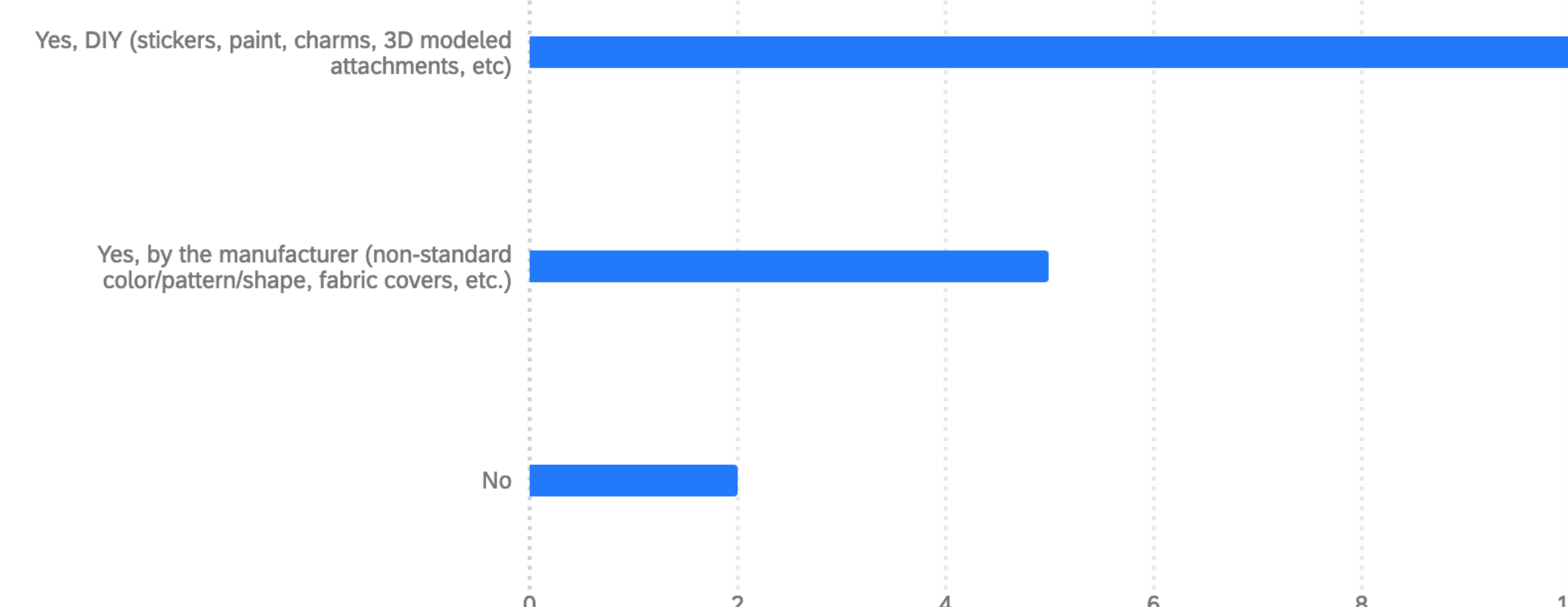


The only portable oxygen tank bag in the Medline consumer catalog. From *Medline M6 Oxygen Cylinder Shoulder Bag*, 2024, Medline at Home (<https://athome.medline-m6-oxegen-cylinder-shoulder-bag-6ct-hcsm6bag6>)

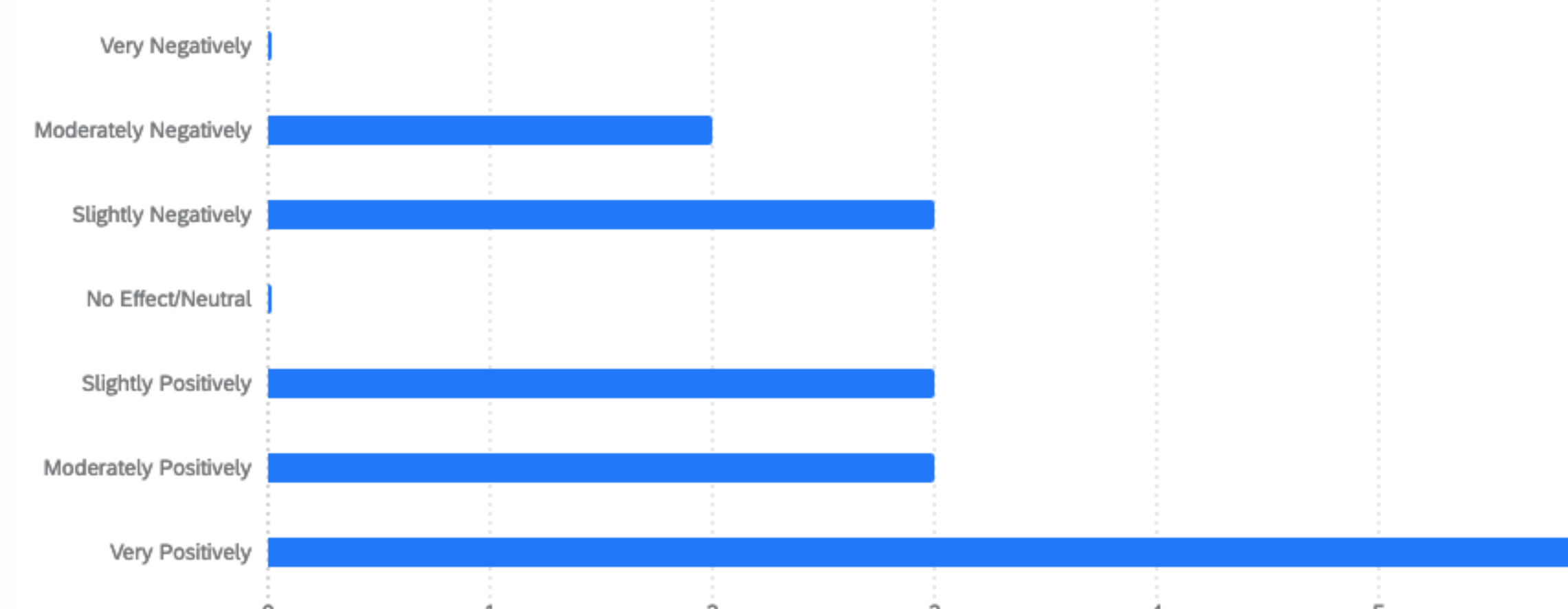


An example of a user customization. From *Made to Order Oxygen Tank Sleeve*, by StylinWithOxygen, 2024, Etsy (<https://www.etsy.com/listing/772976984/made-to-order-oxygen-tank-sleeve>)

“Is your DME Customized for aesthetics?”



“Please rate how your use of DME Affects your Autonomy”



Many of our respondents customize their DME, which implies that they prefer their DME to look different from the status quo/standard aesthetic available to them. While some participants rate their DME use as negatively impacting their autonomy, a majority of the participants cite positive effects on their autonomy from DME use.



Our market study of DME showed that aesthetic variation occurred primarily in two categories: pediatric products and traditionally feminine products. For example, one rollator line offered a series of utilitarian models plus the “fashion-forward posh pink zebra” model, which includes a built-in cosmetic mirror to “touch up your look.”

From *Deluxe Posh Pink Zebra Rollator*, 2024, Medline at Home (<https://athome.medline.com/en>)

DISCUSSION

There are a lot of insurance constraints when designing DME that lead to the whole system being alienating, as available equipment does not allow for many consumers to make choices about their DME. Right now, the only groups that are offered medical equipment that they enjoy the aesthetics of are traditionally feminine consumers and young children, whom the industry seems to recognize benefit from a softened image to improve the patient experience. Patient-centric communication design is important (Meloncon and Frost, 2015), and these devices also act as communication agents. Currently, clients get very little choice in what they communicate.

CONCLUSIONS & RECOMMENDATIONS

The current status of DME on the market does not appeal to the majority of its users, despite consumer interest in improving this. To change the status quo of medical equipment, we first need to consider how populations other than children and traditionally feminine women prefer their equipment to look. While some companies have begun to tread this path, aesthetically diverse DME is often prohibitively expensive or otherwise damages the function. Customizations need to be accessible to everyone, not just those wealthy enough to buy them without insurance. By making aesthetically diverse DME more readily available its users can face increased visibility, decreased stigma, more pride in their identity, and the ability to both feel and showcase their autonomy.

REFERENCES

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