

Going Pregnant? The Best Things You Can Do To Help Your Skin Stay in Pristine Condition

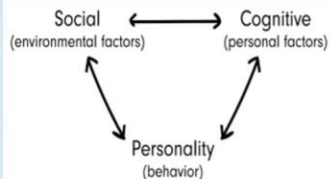
Background

The public problem that has been seen is skin issues among women during pregnancy. The most common issues that have been identified during pregnancy are dark spots, stretch marks, acne, melasma or brown patches in faces and Linea nigra or dark line seen in the body (Avşar *et al.* 2021). Skin issues have become an essential concern for women as they cannot maintain a Pristine condition of their skin. In this regard, an intervention is essential for healthcare companies in which a direct strategy can be taken into consideration to mitigate the public health issue. Based on the skin issues identified by the women during pregnancy, the main intervention that can be considered is AI-powered skin analysis which is a highly advanced and innovative strategy taken into consideration by the management. With the assistance of the advanced AI-powered skin analysis technique, the issues in pregnant women's skin can be analysed and a proper solution for the issue can be developed by the technology (Ridoloe *et al.* 2019). With the assistance of this process, the potential skin issue can be mitigated among pregnant women.

In the past years, public health interventions regarding dermatology evaluation of skin and the safety of using skin care products were taken into consideration (Alzamora *et al.* 2020). The past public intervention has helped to improve the knowledge of pregnant women regarding skin issues and what skincare products such as skin-lightening agents, moisturisers, self-tanning agents and so on can be used by them. However, the lack of using AI-based analysis could not highly affect the issues faced by pregnant women in the past years. Nonetheless, the current intervention regarding AI-powered skin analysis techniques has directly helped companies to evaluate the issues faced by pregnant women and develop an instant solution so they can maintain pristine skin conditions.

Behaviour Change Theory: Social cognitive theory

The social cognitive theory has been considered to be used in the context of using digital technology intervention to promote skin care for pregnant women. The social cognitive theory has been recognised as one of the commonly used behavioural change theories that emphasize the impact of observational learning, self-regulation, reciprocal interaction, and social factors on the behaviour of an individual (Hashemian *et al.* 2021).



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Health promotion values and principles

As per the description of WHO or the World Health Organisation, health promotion has been described as the process of allowing people to take control over their own health and improve it (Who, 2023). In order to maintain health promotion activities accurately, few necessary values and principles need to be taken in consideration by the healthcare companies. The first principle of health promotion is participative approach. In respect to this principle, the value of prioritising patients' needs is also considered in health promotion. The participative approach focuses on healthcare employees taking part in the health program and interacting with the patients to understand the current issues they are facing. In addition to that, in this process, the healthcare employees also focus on providing direct advice to the patients regarding their current lifestyle, diet and medication to avoid health issues and improve their health (Sanchez *et al.* 2023). The second principle considered in health promotion is holistic in which separate influence on health is evaluated by the healthcare employees. In simple words, this approach helps to identify that the health advice provided to the patients does not create any side effects or additional health issues in the future (Parker and Fleming, 2020).



The holistic approach in health promotion helps to promote the health of the patients for a long period of time. Therefore, the potential risks can be mitigated in an efficient way and the issues of the patients can be mitigated in an efficient way. The third principle is equitability in which fairness of the outcome has been taken into consideration which can help the patients to receive an expected outcome from the health promotion (Mian *et al.* 2020). In modern times, digital technology intervention such as AI-powered skin analysis has helped in determining the issues of the patients and developing solutions within a short time. Therefore, healthcare employees are capable of providing a better and more efficient service to the patients.

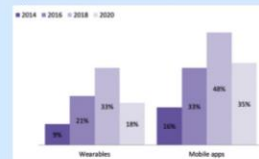


Application of social cognitive theory in the context of digital technology intervention to deal with skin related issues of pregnant women

The theory indicates that observational learning plays a positive role in shaping the behaviour of individuals (Hashemian *et al.* 2021). In this regard, a digital technology intervention like using the AI-powered skin analysis tool for pregnant women needs to be developed by incorporating elements of observational learning. This particular digital technology intervention can include elements such as the option of sharing success stories for providing individuals with the chance of observational learning. For example, allowing them to observe the actions as well as consequences of using the AI-powered skin analysis tool during pregnancy (Juyal *et al.* 2021).

Conclusion

In terms of reciprocal determinism, the theory indicates that interactions between behavioural, environmental, and personal elements are important in shaping human behaviour (Beauchamp *et al.* 2019). In this regard, it is understood that digital intervention, the AI-powered skin analysis tool for pregnant women, needs to create an environment, which can support behavioural change. For instance, while promoting this tool it is important to use an online platform for the users of the tool in order to effectively interact with them and allow them to share their experience, which can help others to know about the tool. On the other hand, the theory indicates the importance of individuals' beliefs regarding self-efficacy in performing a behaviour (Beauchamp *et al.* 2019). Considering this aspect, it is notable that the AI-powered tool needs to emphasise the self-efficacy of users, through providing them effective step-by-step guidance, along with personalised suggestions regarding skin care. The tool needs to include features like setting goals, tracking the progress or improvements in clients' skin and empowering users to emphasise skin care in their daily routine. On the other hand, digital technology also needs to facilitate self-regulation of individuals by offering them the control to set their own goals and monitor progress along with providing them reminders related to checkups and using personalized feedback. Thus, influencing the behaviour intention of users is extremely crucial while promoting the AI-powered skincare tool.



Expected outcome

Social cognitive theory has been taken into consideration in the current study. In respect to the social cognitive theory, three expected outcomes can be taken in consideration. The expected outcomes are increasing demand for digital health interventions, reduction in manual health interventions and demand for AI technologies in healthcare interventions (Di Marco *et al.* 2019). In respect to these factors, the patients can be able to focus on improving their skin care facility and improve their overall health in the future. Based on the efficiency of digital health interventions and complexity of manual health intervention, the potential demand of digital health intervention has expanded compared to manual health intervention (Alipour *et al.* 2020). The below graph has shown that compared to 2014, the use of digital health tools and digital health intervention in recent years have developed by a huge rate.

Conclusion

It can be concluded that skin issues identified during pregnancy are dark spots, stretch marks, acne, melasma or brown patches in faces and Linea nigra or dark line seen in the body. The massive skin problems have become an essential concern for women as they cannot maintain a Pristine condition of their skin. In regards to AI-powered skin analysis techniques, the issues in pregnant women's skin are analysed and an effective solution for the issue can be developed by the technology. In the previous years, dermatology evaluation of skin and the safety of using skin care products were taken into consideration. However, due to the negligence of advanced AI-powered technologies, the potential efficiency of the health intervention has been mitigated. The main principle of health promotion is participative approach which directly concentrates on healthcare employees to take part in the health program and interact with the patients to understand the current issues they are facing. On the other hand, a holistic approach in health promotion is capable of evaluating the health of the patients for a long period of time by mitigating side-effects of health advice provided by them. Final principle is equitability in which fairness of the outcome has been taken into consideration which can help the patients to receive an expected outcome from the health promotion.

References

- Alipour, S., Eskandari, A., Johar, F.M. and Furuya, S., (2020). Phyllodes tumor of the breast during pregnancy and lactation; a systematic review. *Archives of Iranian medicine*, 23(7), pp.488-497.
- Alzamora, M.C., Paredes, T., Caceres, D., Webb, C.M., Valdez, L.M. and La Rosa, M., (2020). Severe COVID-19 during pregnancy and possible vertical transmission. *American journal of perinatology*, 37(08), pp.861-865.
- Avşar, T.S., McLeod, H. and Jackson, L., (2021). Health outcomes of smoking during pregnancy and the postpartum period: an umbrella review. *BMC pregnancy and childbirth*, 21, pp.1-9.
- Beauchamp, M.R., Crawford, K.L. and Jackson, B., (2019). Social cognitive theory and physical activity: Mechanisms of behavior change, critique, and legacy. *Psychology of Sport and Exercise*, 42, pp.110-117.
- Businessinsider, (2023). *A new survey finds consumer adoption of digital health tools dropped in 2020* [Online]. Available at: <https://www.businessinsider.com/consumer-adoption-of-digital-health-tools-down-in-2020-2020-3?IR=T> [Accessed on 3 November 2023]
- Di Marco, N., Kaufman, J. and Rodda, C.P., (2019). Shedding light on vitamin D status and its complexities during pregnancy, infancy and childhood: An Australian perspective. *International journal of environmental research and public health*, 16(4), p.538.
- Hashemian, M., Abdolkarimi, M., Asadollahi, Z. and Nasirzadeh, M., (2021). Effect of "social cognitive theory"-based intervention on promoting physical activity in female high-school students of rafsanjan city, iran. *Journal of Education and Community Health*, 8(2), pp.111-119.
- Juyal, S., Sharma, S., and Shukla, A. S. (2021). Smart skin health monitoring using AI-enabled cloud-based IoT. *Materials Today: Proceedings*, 46, 10539-10545.
- Mian, M., Dunlap, R. and Simpson, E., (2020). Dupilumab for the treatment of severe atopic dermatitis in a pregnant patient: a case report. *JAAD case reports*, 6(10), pp.1051-1052.
- Parker, E., and Fleming, M. L. (2020). *Health promotion: Principles and practice in the Australian context*. Routledge.
- Ridolo, E., Incorvaia, C., Martignago, I., Caminati, M., Canonica, G.W. and Senna, G., (2019). Sex in respiratory and skin allergies. *Clinical Reviews in Allergy & Immunology*, 56, pp.322-332.
- Sanchez, O.D.R., Tanaka Zambrano, E., Dantas-Silva, A., Bonás, M.K., Grieger, I., Machado, H.C. and Surita, F.G., (2023). Domestic violence: A cross-sectional study among pregnant and postpartum women. *Journal of Advanced Nursing*, 79(4), pp.1525-1539.
- Sciencedirect, (2023). *A Updates on the dermatopathology of pregnancy-associated skin conditions* [Online]. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0046817723001168> [Accessed on 3 November 2023]
- Who, (2023). *Health promotion* [Online]. Available at: https://www.who.int/health-topics/health-promotion#tab=tab_1 [Accessed on 3 November 2023]
- Zinsser, L. A., Stoll, K., Wieber, F., Pehlke-Milde, J., and Gross, M. M. (2020). Changing behaviour in pregnant women: A scoping review. *Midwifery*, 85, 102680.