



CLIENT'S PREFERENCE IN CAPILLARY BLOOD SUGAR TESTING: FINGERTIP OR PALM?

Jonh Nichole Avelino¹, Sharmaine Go², Chenny Aton³, Nissie Degulacion⁴, Aileen Herais⁵, Krystel Pesical⁷,
Kaulene Louise Pigano⁶, Tonette Villanueva⁸
University of San Jose-Recoletos
sharmindago@gmail.com

ABSTRACT

Capillary blood glucose testing has always been performed at the fingertip but every time this procedure is performed, pain can be felt and the site is traumatized. However, recent studies suggested that palm could be an alternative testing site. This study aims to determine the client's preference in capillary blood sugar testing in terms of pain among clients with Diabetes Mellitus. We utilized the quasi-experimental design with a qualitative element to triangulate the data. The Subjects were purposively selected from Cebu City. OneTouch lancet was used to induce pain and ethical considerations were strictly observed. Paired t-test was employed in analyzing the data. Results revealed: Group A had a higher mean score of pain level in the fingertip (3.13) than in palm (2.33); similarly, in Group B the fingertip (2.57) scored higher than the palm (2.20). The relationship between Group A and B produced a p-value of 0.776 which implies that there is no significant difference. 70% of the subjects verbalized that they prefer the fingertip than the palm as the site for capillary blood sugar testing. In conclusion, there is no significant difference in capillary blood sugar testing on two different sites in terms of pain and the fingertip is the preferred site in capillary blood sugar testing. This study guides health care professionals in improving the management of

1. INTRODUCTION

Pain can be objective but most often subjective, can be physical or emotional. In the case of a Diabetic person, Diabetes management can be a pain, literally. However, recent studies suggested that palm could be an alternative testing site. This study aims to determine a significant difference with regards to pain on the two test sites—fingertip and palm and the client's site preference in Capillary Blood sugar testing.

2. METHODOLOGY

2.1 Research Design

This study utilized a quasi-experimental design.

2.2 Research Locale

The subjects were gathered from two communities in Cebu city, Philippines,

2.3 Research Subjects/Sampling

The sampling technique used in this study was purposive sampling with 13 women and 7 men diagnosed with Diabetes Mellitus. The 20 subjects were selected from an established inclusion criteria: (1) diagnosed with Diabetes Mellitus type 1 or DM type 2. (2) Routinely takes Capillary blood sugar, once a day (OD). (3) Residing in Cebu City, and (4) without pain medications but if the patient is able to take pain medications within the process of data gathering.

2.4 Research Instrument

Triangulation of data was used in this study with three data gathering methods. In the quantitative method of data gathering, a standardized Numeric Pain Rating Scale was utilized to measure the pain, objectively. The qualitative data was gathered with the use of a pain assessment Survey questionnaire to support the quantitative data. The third tool was the observational assessment tool, an evidence-based method, wherein the researchers filled out from their observation of the subjects during the capillary blood sugar testing.

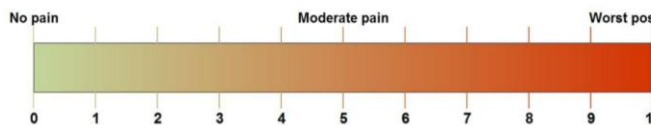


Fig. 1. Numeric Pain Rating Scale

3. RESULTS AND DISCUSSIONS

Table 1. Paired T-test values(quantitative data)

Subjects	p-value	Remarks
Group A	0.138	No significant difference
Group B	0.255	No significant difference
Group A and B	0.776	No significant difference

Significant value >0.05

Table 2. Qualitative data and evidence-based data

Verbatim	Observation
Subject 1: Mas sakit ang tudlo, sa palad kay mura ug wala” (I felt pain on the finger but I didn’t feel pain in the	Mild pain is only felt, withdrawal to stimuli upon finger puncture

palm)	
Subject 2: “Mas nasakitan ko sa palad kay mas duo tang sakit” (I felt a greater amount of pain on the palm)	Moderate signs of pain. Rocking of hand and frowning noted immediately after puncture of the fingertip

4. CONCLUSION

The mean score of pain in the fingertip is equivalent to 2.67 while in the palm, is 2.45. This indicates that the fingertip was more painful than the palm during Capillary blood sugar taking. However, the relationship between Group A and B after a paired t-test produced a p-value of 0.776 which implies that there is no significant difference. 70% of the subjects verbalized that they prefer the fingertip than the palm as the site for capillary blood sugar testing.

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