

Satisfaction level of wrist drop patients to cock up splints at Mulago Hospital Orthopedic workshop. Cross-sectional study.

Ernest Bisanga Obonyo*, Ambrose Asiimwe
Orthopaedic Technology Training School
Uganda Institute of Allied Health and Management Science –Mulago

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Abstract

Background:

Patient satisfaction can be subjective, depending on individual patients and caregivers, considering various factors. The aim of the study is to assess the Satisfaction level of wrist drop patients to cock up splints at the MNRH Orthopedic workshop.

Methodology:

A cross-sectional study using quantitative data collection methods to collect data from 45 Respondents who were wrist drop patients between 10 and 18 years.

Results:

The satisfaction rate of wrist drop patients with the use of cock up splints is low at 46.7%. Majority 46.7% were dissatisfied, 13.3% Neutral, 24.4% Satisfied, and 15.6% very satisfied. Regarding appearance, the majority of the patients, 36(80%), were satisfied with cock up splints, and 9(20%) were not satisfied with the appearance. 15(33.3%) were satisfied with durability while 35(67.7%) were not satisfied with durability. The majority of respondents, 18(40%), had a very negative perception, 13% somewhat positive, Neutral 9%, Somewhat positive 22%, and very positive 16%. The majority of the respondents 27(60%) were aged 10 to 13 years, 9(20%) were 13 to 16 years while 9(20%) were 16 to 18 years.

Conclusion:

Wrist drop patients are generally not satisfied with the use of cock up splints, citing various reasons like discomfort, appearance, and a negative perception despite their positive impacts on their health.

Recommendation:

Health care providers should monitor compliance with cock up splint usage and provide timely support to address any issues that may arise to improve the effectiveness of cock-up splints in the management of wrist drop, hence increasing the satisfaction levels.

Keywords: Satisfaction level of wrist drop patients, Mulago Hospital Orthopedic workshop, and cock-up splints.

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Corresponding author: Ernest Bisanga Obonyo

Uganda Institute of Allied Health and Management Science –Mulago

Background of the study

Patient satisfaction can be subjective depending on individual patients and caregivers, considering various factors ranging from their expectations to the amount of relief or improvement noticed after the use of cock-up splints. Other factors, like attitude towards services in particular health centers, can influence the level of patient satisfaction, including the cost of the services received. Patients have been found with a positive perception towards cock up splints and satisfied with the biomechanical efficacy of these splints, the functional performance of the splint in daily life, and the ease of splint maintenance. The study concluded that the splints were effective in the treatment of wrist drop (Kimbrough et al, 2013).

Discomfort when wearing the splints has been highlighted as a common reason for patients to avoid them due to reasons like difficulty aligning correctly, resulting in uncomfortable positioning, problems associated with the design of the splints, such as improper weight distribution, were also found to be a major cause of discomfort and dissatisfaction with the cock-up splints (Bsteh et al, 2013). Patients with wrist drop prescribed with cock up splints had a high level of dissatisfaction with the splints, reporting that the cock-up splints were uncomfortable, cumbersome, and unattractive, adding that the splints made it difficult to participate in sports and other social activities (Juan et al, 2014). Such negative perception and dissatisfaction associated with cock up splints could potentially lower

treatment and adherence, and lead to poor treatment outcomes. The aim of the study is to assess the Satisfaction level of wrist drop patients to cock up splints at Mulago Hospital Orthopedic workshop.

Methodology

Study Design

A Cross-sectional design with quantitative data collection methods. Quantitative study design was selected because of its flexibility in collecting data for the study in the shortest time possible. Therefore, it was appropriate for the researchers' limited time frame.

Study Setting

The study was conducted at the Orthopedic workshop in MNRH, Kampala district. The hospital serves a big population of the entire country of Uganda. The study setting was selected because it is one of the biggest orthopedic referral health facilities in Uganda, with a total of 40 orthopedic health workers.

Study Population

The study included all male and female patients with wrist drop who were present at the Mulago orthopedic workshop, and this population was used because of the increasing cases of wrist drop at the orthopedic workshop. Only those who were willing to get involved in the study were included.

Sample Size Determination.

The sample size will be computed using Slovin's formula.

Expressed as $n = \frac{1+N e^2}{1+e^2}$

Where n = minimum sample size desired

N = Study population

e = level of significance, which is 0.05

$n = \frac{45(1+45 \times 0.05 \times 0.05)}{1+45 \times 0.05 \times 0.05}$

n=45

The sample size of the study was 45 respondents.

Sampling Technique

A non-probability convenience sampling technique was used to select respondents who were available at the time of data collection at the orthopedic workshop, MNRH.

The respondents were sampled on a first come first serve basis.

Sampling Procedure

A simple random sampling technique was employed, where every wrist drop among patients aged 10 to 18 years had an equal opportunity of being selected for the study.

Data Collection Method

Data was collected using self-administered questionnaires.

Data Collection Tools

The tools that were used include: pencils, pens, erasers, notebooks, and self-administered questionnaires.

Data Collection Procedure

A research assistant was trained on data collection, specifically reading questions to the respondents. The principal researcher and the research assistant explained the purpose of the study to the respondents who filled out a consent form before they were given the questionnaires. The researcher assured the respondents about privacy and confidentiality by informing them not to include their names on the questionnaire. After finishing the questionnaires, the researcher collected them, cross-checked for completeness and correctness, before he left the study area.

Study Variables

Independent Variables

The independent variable for the study was the presumed cause of the dependent variable, and it was the use of cock-up splint among patients aged 10 to 18 years.

Dependent Variables

The dependent variables were the presumed effects of the independent variable; the impact of cock up splints on wrist drop patients due to cock up splints use.

Quality Control

Reliability and Validity of Research Instruments.

The researcher pretested the questionnaires among patients with wrist drop at CoRSU hospital before the actual data was collected because the facility had similar settings and could handle cases like the Mulago orthopedic workshop. Data was analyzed and adjusted accordingly, and questionnaires were checked for data accuracy, consistency, adequacy, quality, completeness, and any identified mistakes were corrected.

Data Analysis and Presentation

Data from filled questionnaires were sorted, recorded, categorized, coded, and summarized. The results were edited for errors. The data was analysed manually for accuracy, consistency, and completeness by the principal researcher. Quantitative data were presented in tables, graphs, and pie charts, and this helped to illustrate the statistical significance of the data.

Ethical Considerations

An introductory letter seeking permission to carry out research was delivered to the MNRH Research and Ethics Committee. The purpose of the study was explained to the respondents, and consent was obtained before giving out questionnaires and interview schedules. Each respondent was assured of privacy and confidentiality since no names were written on the interview schedule and questionnaire.

Sensitive issues were explored before a good relationship was established with the respondents.

Study Limitations

Scarcity of funds to enable the researcher to complete the research in time. Time was also thought to be another limiting factor.

Results

Table 1: Social demographic factors of respondents.

Variable	Category	Frequency(N)	Percentage(%)
AGE	10 to 13 years	27	60
	13 to 16 years	9	20
	16 to 18 years	9	20
GENDER	Male	27	60
	Female	18	40
OCCUPATION	Civil servant	6	13.3
	Business person	12	26.7
	Unemployed	27	60
RELIGION	Catholic	13	28.9
	Moslem	14	31.1
	Protestant	18	40
CADRE	Primary	6	13.3
	Secondary	12	26.7
	Tertiary	9	20
	None	18	40

As seen in Table 1, 27(60%) were males, while 18(40%) were females out of the 45 respondents. The majority of the respondents 27(60%) were aged 10 to 13 years, 9(20%) were 13 to 16 years while 9(20%) were 16 to 18 years. Majority of the respondents 27(60%) were unemployed, 6(13.3%)

were civil servants and 12(26.7%) were doing business. Most of the patients, 18(40%), were protestants. The majority of the patients 18(40%) were illiterate and not educated, 6(13.3%) attended primary, 12(26.7%) attended secondary while 9(20%) attended tertiary institution.

Perception and satisfaction levels of patients to cock up splints in wrist drop management.
Figure 1: Shows the patient satisfaction levels with the effectiveness of cock up splints.

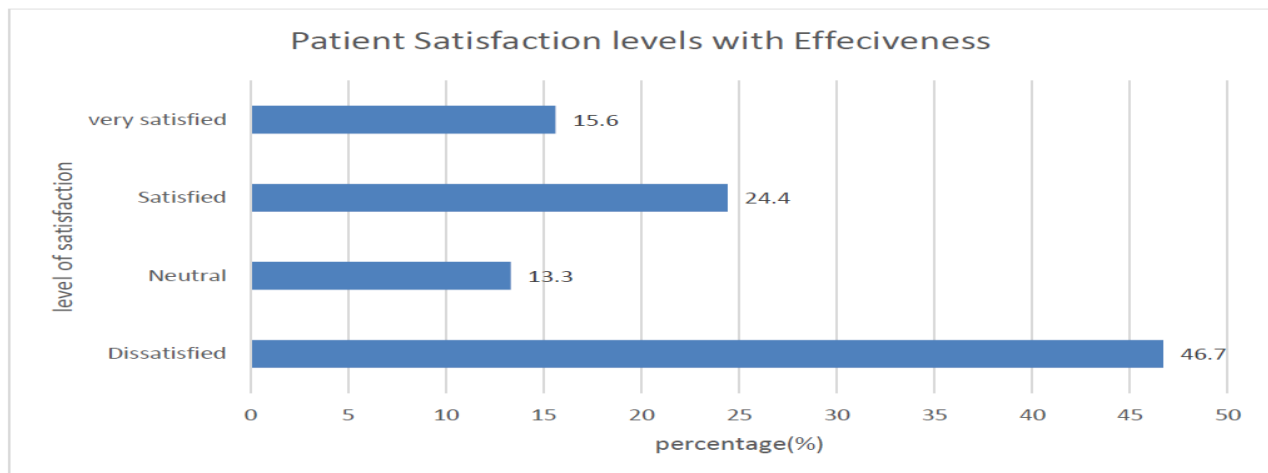
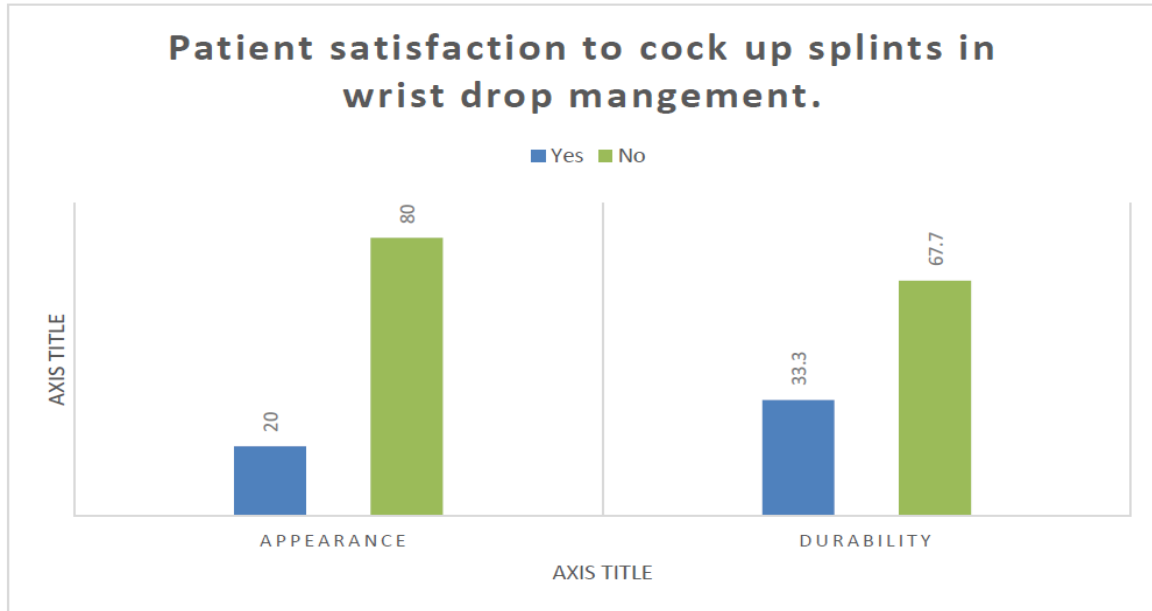


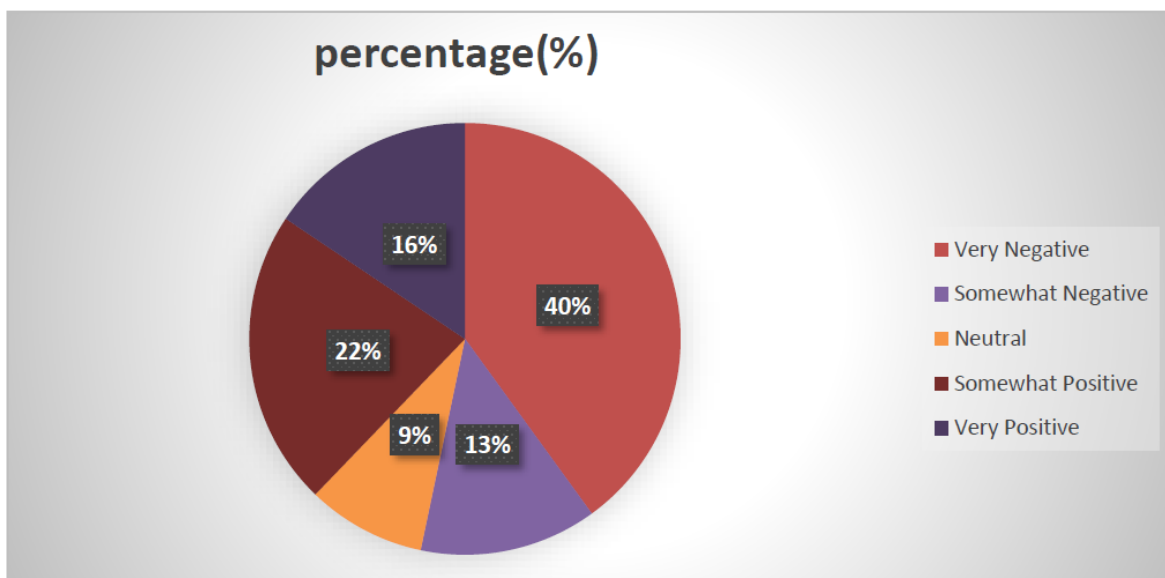
Figure 1 shows the level of patient satisfaction to cock up splints in wrist drop management, and Majority 46.7% were dissatisfied, 13.3% Neutral, 24.4% Satisfied, and 15.6% very satisfied.

Figure 2: Shows patients' satisfaction to cock up splints during wrist drop management.



In Figure 2, regarding appearance, the majority of the patients, 36(80%), were satisfied with cock up splints, and 9(20%) were not satisfied with the appearance. 15(33.3%) were satisfied with durability while 35(67.7%) were not satisfied with durability.

Figure 3: Shows overall patient perception levels to cock up splints.



In Figure 3, the majority of respondents 18, (40%) had a very negative perception, 13% somewhat positive, Neutral 9%, Somewhat positive, 22% and Very positive 16%.

Discussion

Findings suggest that there is a significant dissatisfaction level with the effectiveness of cock-up splints among patients, with the majority (46.7%) being dissatisfied, which is a concern, and only (15.6%) being very satisfied. This could be due to various factors such as discomfort, inconvenience, and lack of mobility, among others.

The majority of the patients (80%) were not satisfied with cock up splints, indicating that there were significant issues with cock up splints. This finding highlights the need for improvement in the design of cock up splints to make them more comfortable and visually appealing to patients.

The majority of the patients had a very negative perception (40%) of cock-up splints; this could be due to previous experience with cock up splints, lack of information about cock up splints, or the cost of cock up splints.

Conclusion

Wrist drop patients are generally not satisfied with the use of cock up splints, citing various reasons like discomfort, appearance, and a negative perception despite their positive impacts on their health.

Recommendation

To Health care providers: Health care providers should monitor compliance with cock up splint and provide timely support to address any issues that may arise. This will improve the effectiveness of cock-up splints in the management of wrist drop, hence increasing the satisfaction levels, thus increasing adherence levels.

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List of Abbreviations

MNRH: Mulago National Referral Hospital

Source of funding

No source of funding.

Conflict of interest

No conflict of Interest.

Author Biography

Ernest Bisanga Obonyo is a diploma student at the Orthopaedic Technology Training School. Uganda Institute of Allied Health and Management Science –Mulago.

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