

Health Outcomes for Iraqi Women in Undergoing Colposcopic Examination (A Cross-Sectional Study)

Dr. Seenaa Ali Hussein¹, Dr. Lina Muhssen Atyia² and Dr. Nabras Nasar Hassan³

¹M.B.Ch.B., D.G.O. (Obstetrics and Gynecology), Iraqi Ministry of Health, Babylon Health Directorate, Mahawil General Hospital, Babylon, Iraq

²M.B.Ch.B., D.G.O. (Obstetrics and Gynecology), Gynecological Specialist, Iraqi Ministry of Health, Al-Diwaniyah Health Directorate, Al-Diwaniyah Child and Maternity Hospital, Department of Obstetrics and Gynecology, Al-Diwaniyah, Iraq

³M.B.Ch.B., D.G.O. (Obstetrics and Gynecology), Iraqi Ministry of Health, Al-Diwaniyah Health Directorate, Al-Dewaniya Gynecological and Children Teaching Hospital, Al-Diwaniyah, Iraq

Abstract: Background: The cervical screening program offered by the National Healthcare Service must include colposcopy. **Aim:** This paper aims to improve health outcomes for Iraqi women in undergoing colposcopic examination (a cross-sectional study). **Patients and methods:** This paper was assessed health outcomes for Iraqi women in undergoing colposcopic examination (a cross-sectional study) into patients with 88 cases with ages between (26 and 47) years. To follow up of methodology, this study was collected data with, analysed, and designed by the SPSS program. This study was acquired from Baghdad-Iraq from 7th July 2021 to 15th February 2022. **Results and discussion:** Precancerous lesions, known as cervical intraepithelial neoplasia as well as squamous intraepithelial lesions, frequently transform into invasive cervical carcinoma in 15-20 years after the initial diagnosis. As has been observed, prior testing and knowledge of a patient's medical history frequently influence colposcopic perceptions. A comprehensive evaluation found that the positive predictive value in HSIL in the diagnosis of CIN2+ is 78.64% globally. According to Ouitrakul et al., a colposcopically guided biopsy was 86.8% sensitive in detecting HSIL or more within the uterine cervix. **Conclusion:** Our study also revealed that HPV+ patients had a greater risk of underdiagnosis, which was consistent with another study. Although our study's colposcopy diagnostic accuracy and colposcopy and histopathology consistency were equivalent to those of earlier research, there is still potential for improvement. The quantity of biopsies, the kind of transformation zone, and the cytology results in all seem to be indicators of misdiagnosis; as a result, they should be taken into consideration more carefully in clinical consultations and via additional study.

Keywords: colposcopic examination; HPV; ASC-H; and HSIL.

INTRODUCTION

The cervical screening program offered by the National Healthcare Service must include colposcopy. A doctor or certified colposcopies does a thorough examination regarding the cervix in an outpatient environment. Cervical Intraepithelial Neoplasia can be diagnosed and treated in colposcopy clinics. Following a referral made by the NHSCSP for further study of any probable cell abnormalities identified during regular cervical screening or once a woman exhibits symptoms that call for additional examination, she is invited for a colposcopy. [Basen-Engquist, K. *et al.*, 2003-Luesley, D. *et al.*, 2004]

Each year, 134,000 new referrals for colposcopy appointments - which total over 400,000 are scheduled. Colposcopy is, consequently, a technique that is rather widespread and has a therapeutic success rate of more than 90% [Soutter, W. P. *et al.*, 2006-Kyrgiou, M. *et al.*, 2006]. There are normally not many issues. Only a little amount of research has looked at the long-term effects of colposcopy inquiry, aside from studies looking at CIN recurrence, cervical stenosis prevalence, the influence on subsequent

pregnancies, or recurrence. [Bruinsma, F. *et al.*, 2007-Greimel, E. R. *et al.*, 2000]

Invasive cancer's long-term psychological and physical effects are well-explained. Regardless of their age, cancer site, or stage of disease, cancer patients' psychological well-being scores continue to be lower than that of individuals who have other chronic illnesses as well as healthy subjects. It has been suggested that providing psychological interventions to patients undergoing cancer treatment is an essential part of cancer management. Studies looking at the quality of life for cancer survivors also indicate that the dread of the diagnostic procedure may be just as stressful as the results of cancer therapy. [Posner, T. *et al.*, 1998; Jensen, P. T. *et al.*, 2003]

According to longitudinal research examining the effects indicating hysterectomy in the management for early-stage cervical cancer, almost all of women (>90%) report symptoms that are linked to a worse quality of life, and there has been evidence of a long-lasting detrimental effect on sexual interest. By using its Sexual Function-Vaginal Changes Questionnaire (SVQ), a validated self-assessment tool, Jensen et al. discovered that

radical hysterectomy was linked to a long-term decline in patients' sexual desire [Posner, T, 1993-Ziegert, C. *et al.*, 2003]. This paper aims to improve health outcomes for Iraqi women in undergoing colposcopic examination (a cross-sectional study).

PATIENTS AND METHODS

This paper was assessed health outcomes for Iraqi women in undergoing colposcopic examination (a cross-sectional study) into patients with 88 cases with ages between (26 and 47) years. To follow up of methodology, this study was collected data with, analysed, and designed by the SPSS program. This study was acquired from Baghdad-Iraq from 7th July 2021 to 15th February 2022.

This study was presented into the distribution of health outcomes for colposcopy patients by age between (26-47) years. Furthermore, this paper was analysed health outcomes of cytology results for colposcopy patients where these outcomes were including ASC-H, ASC-US, HSIL, LSIL, and NILM, which it can be determined in Table 2. This study was extended into the distribution of colposcopy health outcomes with HPV Types

which get on HPV16/18, Negative, and HR-HPV positive, that can be seen in Table 3. To further the results, our outcomes were defined transformation zone types of demographic characteristics for colposcopy patients, which include TZ 1, TZ 2, and TZ 3, that can be defined in Figure 1.

In addition, this data was determined by HSIL diagnoses related to colposcopy patients' accordance, overdiagnosis, and underdiagnosis. These outcomes can be shown in Table 4. This paper had progressed was determined of HPV types of diagnoses related to colposcopy patients into accordance with overdiagnosis and underdiagnosis, which can be determined in Table 5. This study was indicated of logistic analysis for risk factors into colposcopy patients where these parameters were got with age, cytology outcomes that have ASC-H, ASC-US, and HSIL, as well as HPV Types which are Negative and HR-HPV positive, also get on Transformation zone type that includes TZ 2 and TZ 3 where these risk factors were shown in Table 6.

RESULTS

Table 1: Distribution of Health outcomes for colposcopy patients by age

N	V	88
	Mi	0
M		36.5000
SEM		.68018
Me		36.5000
Mo		26.00 ^a
SD		6.38065
Var		40.713
Sk		.000
SES		.257
Ra		21.00
Min		26.00
Max		47.00
S		3212.00

Table 2: Health outcomes of Cytology results for colposcopy patients

		Freq, 88	Per (%)	VP (%)	CP (%)
V	ASC-H	30	34.1	34.1	34.1
	ASC-US	33	37.5	37.5	71.6
	HSIL	7	8.0	8.0	79.5
	LSIL	8	9.1	9.1	88.6
	NILM	10	11.4	11.4	100.0
	T	88	100.0	100.0	

Table 3: Distribution of colposcopy health outcomes with HPV Types

Variables		Freq, 88	Per (%)	VP (%)	CP (%)
V	HPV16/18	27	30.7	30.7	30.7
	Negative	28	31.8	31.8	62.5
	HR-HPV positive	33	37.5	37.5	100.0
T		88	100.0	100.0	

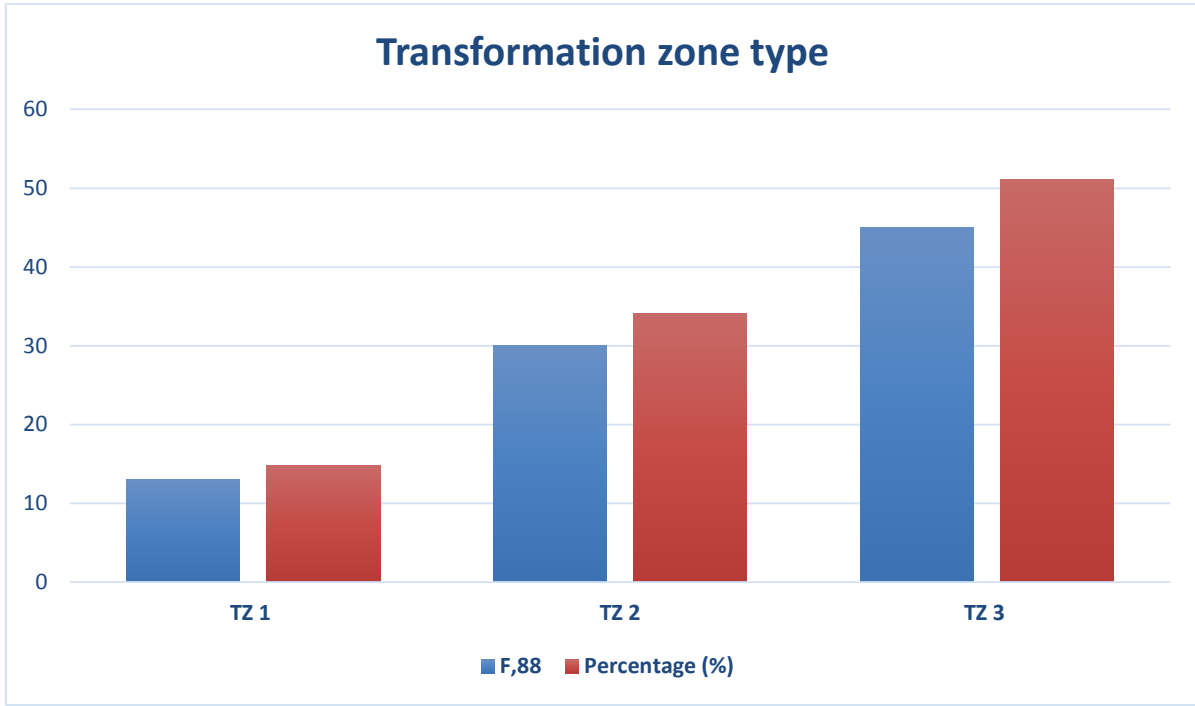


Figure 1: Transformation zone types of demographic characteristics for colposcopy patients

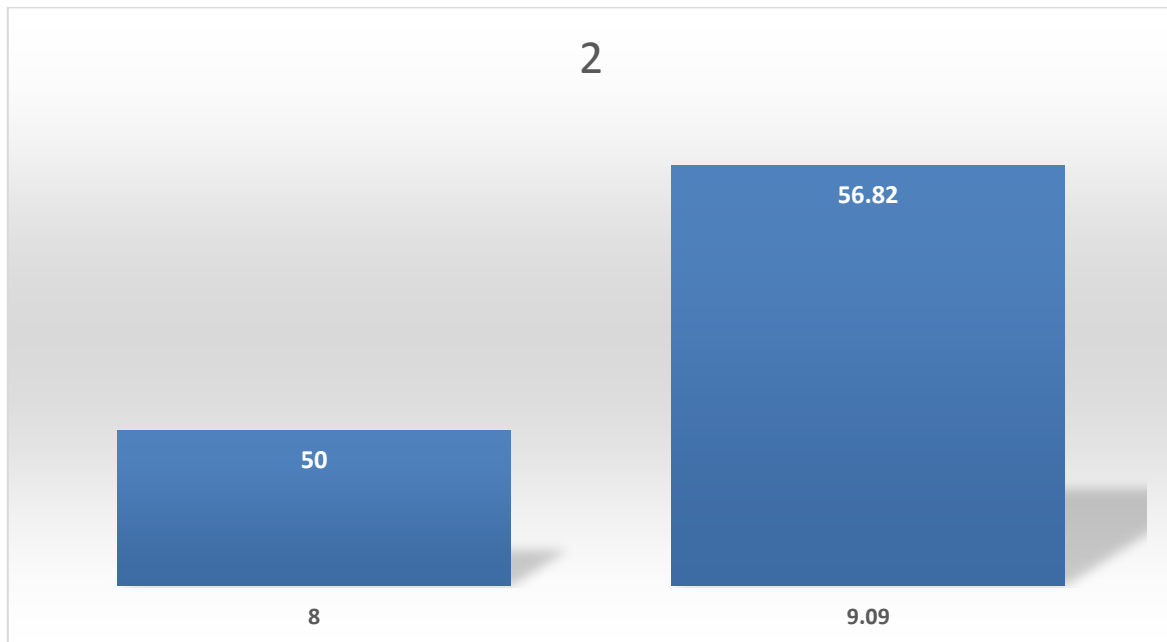


Figure 2: Detecting of a number of biopsies for colposcopy patients

Table 4: Determinations of HSIL diagnoses related to colposcopy patients

		Freq, 88	Per (%)	VP (%)	CP (%)
V	Accordance	41	46.6	46.6	46.6
	Overdiagnosis	26	29.5	29.5	76.1
	Underdiagnosis	21	23.9	23.9	100.0
T		88	100.0	100.0	

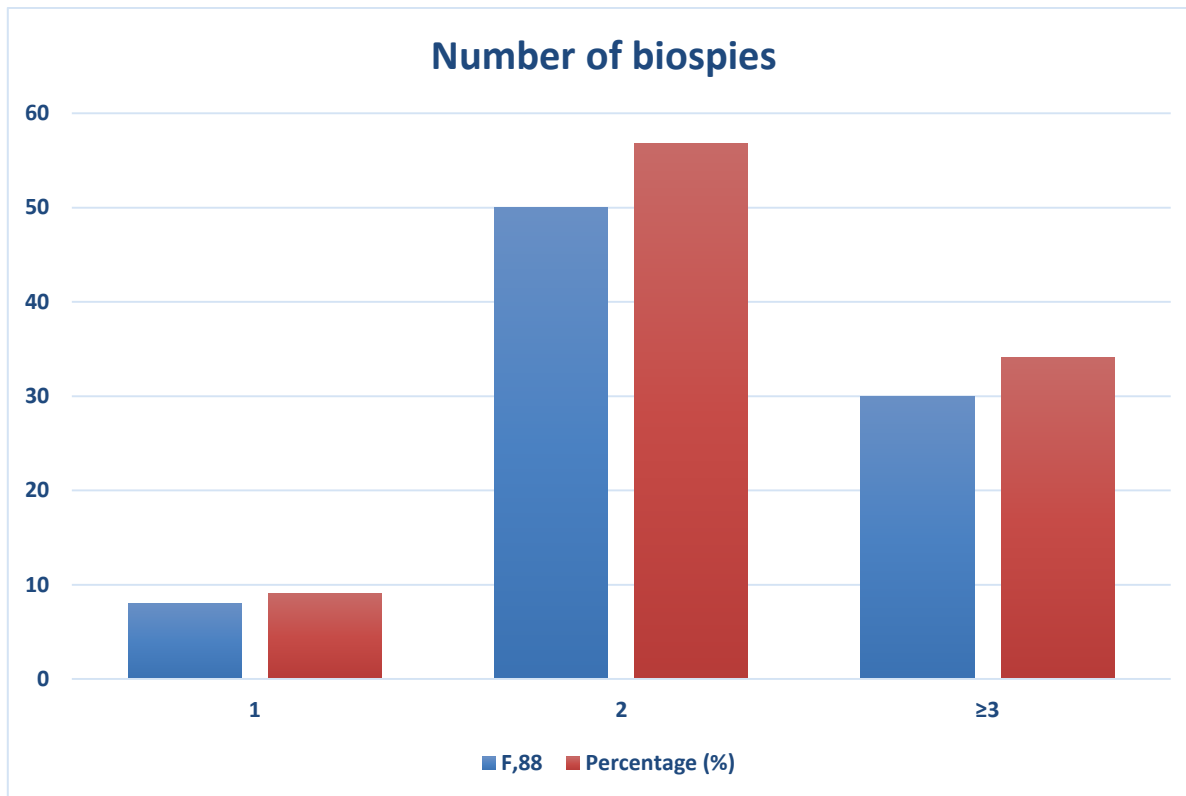


Figure 3: Determinations of the Number of biopsies related to colposcopy patients

Table 5: Determinations of HPV types of diagnoses related to colposcopy patients

		Freq, 88	Per (%)	VP (%)	CP (%)
V	Accordance	54	61.4	61.4	61.4
	Overdiagnosis	20	22.7	22.7	84.1
	Underdiagnosis	14	15.9	15.9	100.0
T		88	100.0	100.0	

Table 6: Indications of logistic analysis for risk factors into colposcopy patients

Risk factor	Frequency, 88	Percentage (%)	95% CI
Age	20	22.73%	1.4 (0.56-4.62)
Cytology outcomes			
ASC-H	7	7.95%	5.33 (1.24-7.29)
ASC-US	5	5.68%	3.11 (1.38-4.25)
HSIL	12	13.64%	3.88 (2.34-8.56)
HPV Types			
Negative	10	11.36%	5.71 (3.55-7.47)
HR-HPV positive	13	14.77%	3.57 (2.66-8.77)
Transformation zone type			
TZ 2	17	19.32%	5.48 (3.45-8.87)
TZ 3	4	4.55%	3.854 (2.448-6.61)

DISCUSSION

Precancerous lesions, known as cervical intraepithelial neoplasia as well as squamous intraepithelial lesions, frequently transform into invasive cervical carcinoma in 15 years after the initial diagnosis. Contrary to many illnesses, there is a chance for an early diagnosis, which significantly improves results. However, neither cervical biopsy analysis nor screening procedures differ between nations or even between hospitals. Colposcopic examination in this study had a sensitivity of 26% and a specificity of 71% for finding HSIL+ in patients, which were comparable to other studies done in various countries. [Sankaranarayanan, R. *et al.*, 2005; Fan, A. *et al.*, 2008]

In this study, the agreement among colposcopic diagnosis and ultimate pathology matched with 73.27% of cases, which was similarly like other American studies [Massad, L. S. *et al.*, 2003]. Using the colposcopic nomenclature from the 2011. Discovered that the agreement of colposcopic impression and histological diagnosis was 46.9%, having a sensitivity in colposcopic examination at identifying HSIL+ of 54.7%. Importantly, even though the Li *et al.* study was carried out in western China, there are variances that might not be fully attributable to variations in sample sizes.

As has been observed, prior testing and knowledge of a patient's medical history frequently influence colposcopic perceptions. A comprehensive evaluation found that the positive predictive value in HSIL in the diagnosis of CIN2+ is 78.64% globally. According to Ouitrakul [Staf, A. *et al.*, 1991] colposcopically guided biopsy was 86.8% sensitive in detecting HSIL or more within the uterine cervix. This demonstrates that although cytological HSIL findings in the identification of CIN2+ lesions are respectable, their diagnostic value cannot be high enough to allow for cytology to be the exclusive method of diagnosis for cervical lesions.

A greater rate of overdiagnosis was noted in both HPV-positive and HPV-negative individuals, with the difference in HPV-negative patients being highly significant. 22.8% of women who tested positive for HPV and had high-grade lesions were found by Zaal *et al.*, which suggests that false-negative HPV findings may be to blame. Our study also revealed that HPV+ patients had a greater risk of underdiagnosis, which was consistent with another research. Under multivariate logistic

regression, the correlation between HPV subtypes and the success rate of HSIL+ detection by colposcopy, however, was no longer significant. This shows that the impact of HPV may be reduced when considered in conjunction with other factors.

CONCLUSION

Our study also revealed that HPV+ patients had a greater risk of underdiagnosis, which was consistent with another study. Although our study's colposcopy diagnostic accuracy and colposcopy and histopathology consistency were equivalent to those of earlier research, there is still potential for improvement. The quantity of biopsies, the kind of transformation zone, and the cytology results in all seem to be indicators of misdiagnosis; as a result, they should be taken into consideration more carefully in clinical consultations and via additional study.

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