

# **THE EFFECTS OF INTRODUCING SCREENING FOR DEPRESSION USING THE PHQ-9 TOOL ON MENTAL HEALTH SERVICES AT KANYAMA LEVEL ONE HOSPITAL IN LUSAKA DISTRICT, ZAMBIA.**



**PRESENTER: DR. THERESA MUZYAMBA**

**KANYAMA LEVEL ONE HOSPITAL**

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# AUTHORSHIP

- ▶ Dr Theresa muzyamba
- ▶ Dr Wilson Mbewe
- ▶ Mrs. Jane Botha
- ▶ Dr Mah Asombang
- ▶ Dr Emmanuel Mungomba
- ▶ Dr Nalukui Wanga
- ▶ Miss Amanda Moonga
- ▶ Mr. Franklyn Munsanje
- ▶ Mrs. Oriet Muchelemani
- ▶ Mr. Cheepa, Lawrence
- ▶ Mr Mills
- ▶ Kanyama Level 1 hospital
- ▶ Kanyama Level 1 Hospital
- ▶ Kanyama Level 1 Hospital
- ▶ Centre for infectious disease Zambia
- ▶ Kanyama Level 1 Hospital
- ▶ Kanyama Level 1 Hospital
- ▶ Morehouse School of Medicine
- ▶ Kanyama Level 1 Hospital
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# BACKGROUND

- ▶ Depression is a psychological burden.
- ▶ The use of routine screening tools for mental health conditions in primary health care settings like the PHQ-9
- ▶ The PHQ-9 is based on the DSM-IV and it consists of 9 questions that seek to investigate the nature of a patients' daily activities

# OBJECTIVES

## *GENERAL OBJECTIVE*

- ▶ To assess the effects of introducing the PHQ-9 screening tool at Kanyama level one Hospital.

## *SPECIFIC OBJECTIVES*

- ▶ To determine the number of patients with depression using PHQ-9 tool
- ▶ To determine the severity of depression among patients screened with the PHQ-9 tool.
- ▶ To determine the relationships between respondent background characteristics and Depression



# METHODOLOGY

- ▶ The study was a cross sectional study conducted in the Out-patients department at Kanyama Level one Hospital among patients seeking standard routine care between July 2022 and September 2022.
- ▶ A simple random sampling technique was used to select the 384 respondents who met the inclusion criteria.
- ▶ The PHQ-9 was administered by the study assistants after consent and data from the questionnaires was entered into version 13 of excel and was then cleaned, coded and extrapolated onto version 26 of SPSS. Data was then analyzed using descriptive statistics and inferential statistics.

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #: \_\_\_\_\_ DATE: \_\_\_\_\_

Over the last 2 weeks, how often have you been bothered by any of the following problems?  
(use "\*" to indicate your answer)

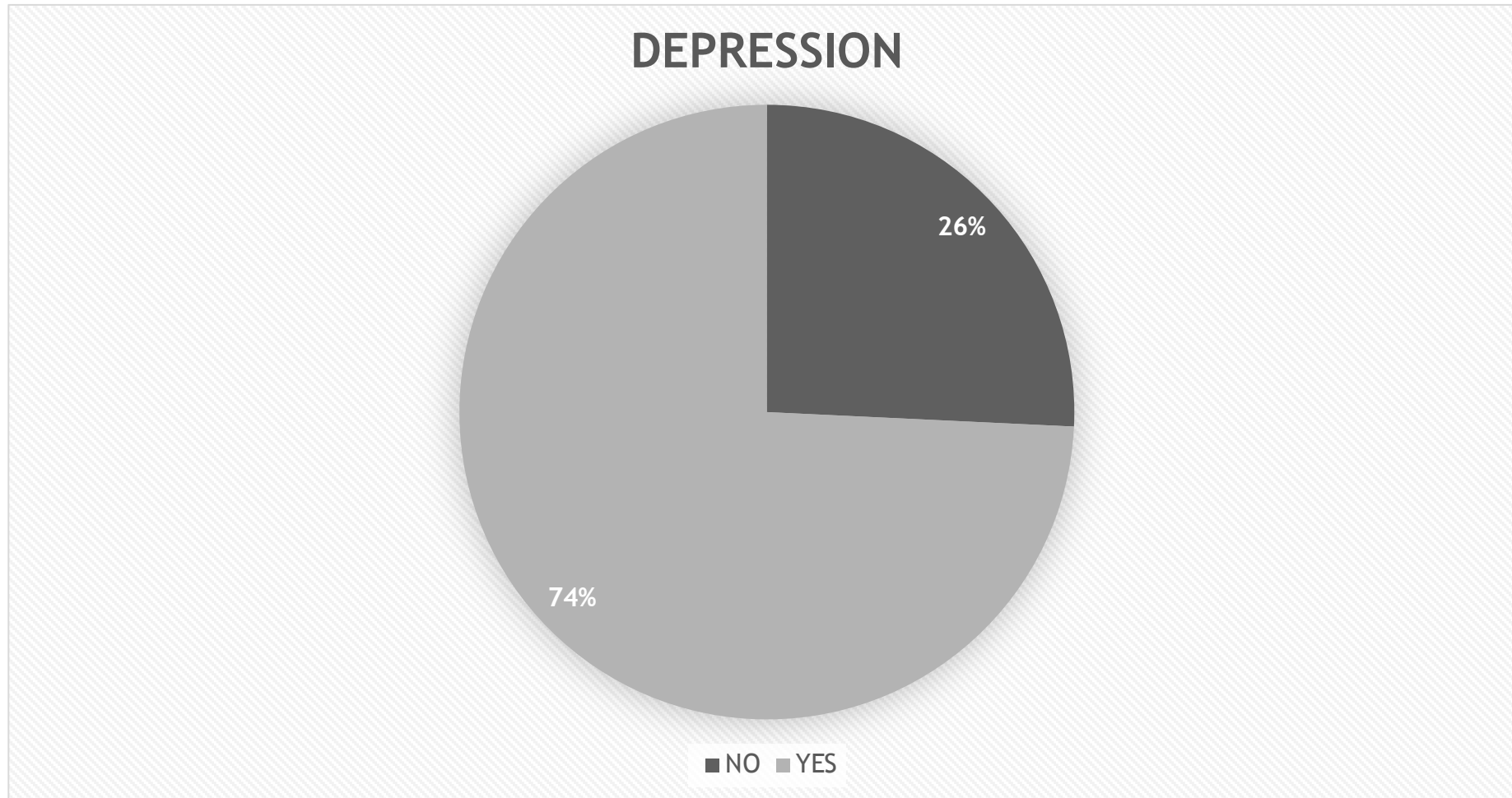
	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

add columns  +  +

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card). TOTAL:

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

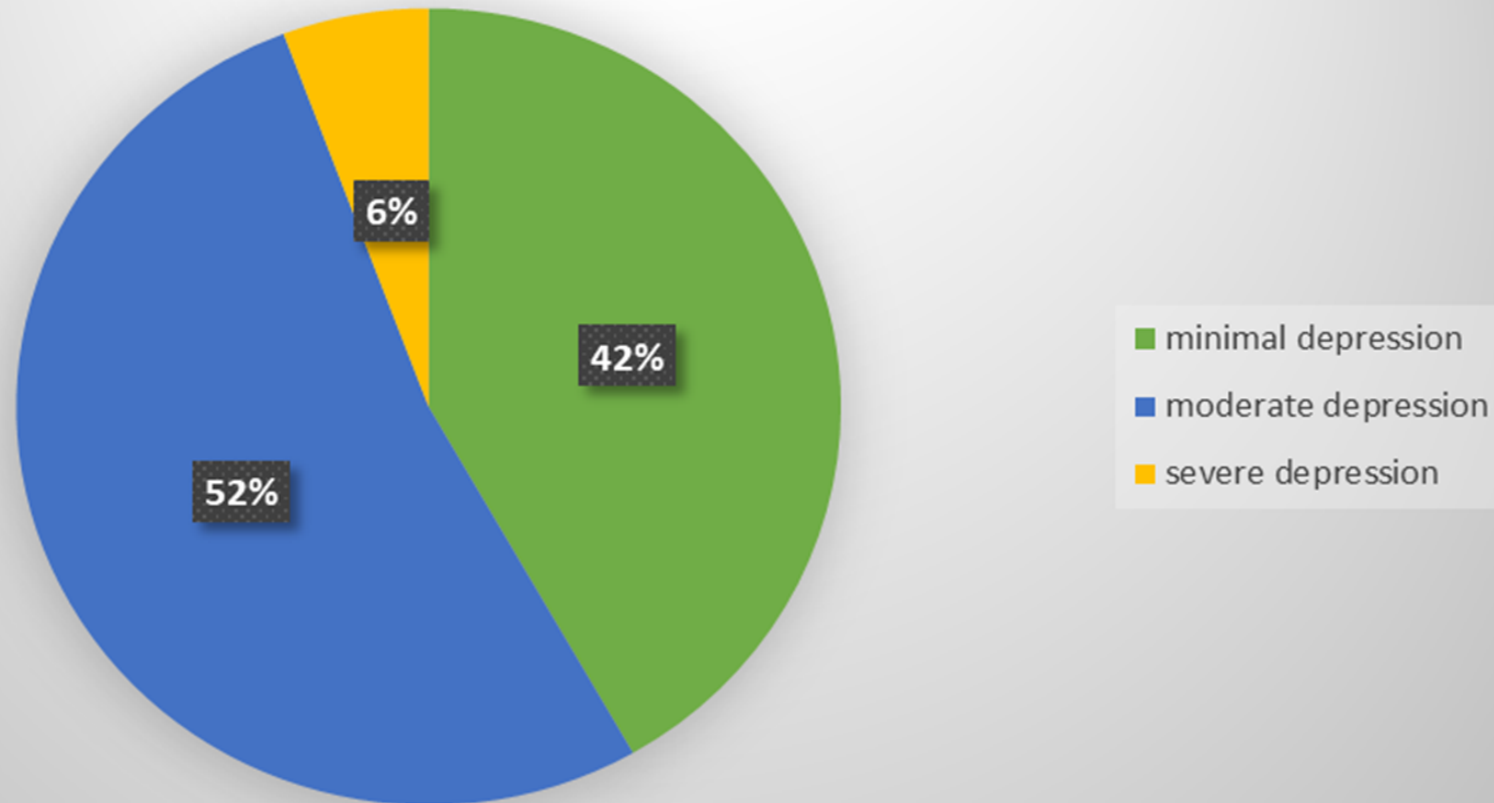
# INCIDENCE OF DEPRESSION





# SEVERITY OF DEPRESSION

level of depression



# GENDER AND DEPRESSION

		Depressed		Total
		Yes	No	
<b>Gender</b>				
FEMALE	Count	176	82	258
	% within Gender	68.2%	31.8%	100.0%
MALE	Count	121	21	142
	% within Gender	85.2%	14.8%	100.0%
Total	Count	297	103	400
	% within Gender	74.3%	25.8%	100.0%

$\chi^2 = 13.835; P = .000; CV = .186$

# AGE GROUP AND DEPRESSION

Age_group					
Age_group	14 - 19	Count	47	16	63
		% within Age_group	74.6%	25.4%	100.0%
	20 - 25	Count	137	44	181
		% within Age_group	75.7%	24.3%	100.0%
	26 - 31	Count	71	16	87
		% within Age_group	81.6%	18.4%	100.0%
	32 - 37	Count	25	11	36
		% within Age_group	69.4%	30.6%	100.0%
	38+	Count	17	16	33
		% within Age_group	51.5%	48.5%	100.0%
	Total	Count	297	103	400
		% within Age_group	74.3%	25.8%	100.0%
<b><math>X^2 = 12.021</math>; <math>P = .017</math>; <math>CV = 173</math></b>					

# MARITAL STATUS AND DEPRESSION

<b>Marital Status</b>					
Marital Status	DIVORCED	Count	13	1	14
		% within Marital Status	92.9%	7.1%	100.0%
	MARRIED	Count	109	56	165
		% within Marital Status	66.1%	33.9%	100.0%
	SEPARATE D	Count	1	0	1
		% within Marital Status	100.0%	0.0%	100.0%
	SINGLE	Count	169	45	214
		% within Marital Status	79.0%	21.0%	100.0%
	WIDOWED	Count	2	1	3
		% within Marital Status	66.7%	33.3%	100.0%
	WIDOWER	Count	3	0	3
		% within Marital Status	100.0%	0.0%	100.0%
Total		Count	297	103	400
		% within Marital Status	74.3%	25.8%	100.0%
<b><math>X^2 = 12.296</math> <math>P = .031</math>; <math>CV = .175</math></b>					

# LEVEL OF EDUCATION AND DEPRESSION

Level of Education						
Level of Education	NOT EDUCATED	Count	3	3	6	
		% within Level of Education	50.0%	50.0%	100.0%	
	PRIMARY	Count	48	34	82	
		% within Level of Education	58.5%	41.5%	100.0%	
	SECONDARY	Count	187	57	244	
		% within Level of Education	76.6%	23.4%	100.0%	
	TERTIARY	Count	50	8	58	
		% within Level of Education	86.2%	13.8%	100.0%	
	TETIARY	Count	9	1	10	
		% within Level of Education	90.0%	10.0%	100.0%	
	Total	Count	297	103	400	
		% within Level of Education	74.3%	25.8%	100.0%	
	<b><math>\chi^2 = 18.798</math>; <math>P = .001</math>; <math>CV = .217</math>.</b>					

# DISCUSSION

- ▶ Zambia has a young population and as such, randomly sampled study populations tends to have young people as the majority (ZDHS,2018.)
- ▶ Among those who reported depression, a considerable portion were referred to Mental Health services and subsequently received treatment. This could speak to an effective response system available to provide mental health service at the facility
- ▶ Psychological and social factors contribute to the gender disparity in depression (Nolen-Hoeksema, Larson and Grayson, 1999; Parker and Brotchie, 2010; Labaka et al., 2018).



# DISCUSSION

- ▶ Respondents in the 20-25 years age group were more likely to be depressed than those in other age groups, this could be due to individuals in this age range often experience significant life transitions and stressors (Hendrick, Altshuler and Suri, 1998).
- ▶ The experience of separation or loss of a spouse through death or divorce can be emotionally challenging and may lead to increased feelings of loneliness, grief, and social isolation (Weiss, 1969; Sanders, 1988; Dugan and Kivett, 1994)
- ▶ Some studies suggest that the strongest manifestation of depression occurs within the first 6 months (Vable et al., 2015), first year (Parkes, 1998), or beyond 2 years (Zisook & Shuchter, 1993) after the loss.

# DISCUSSION

- ▶ The demands of higher education, such as heavy workloads, competitive environments, and high expectations for achievement, can contribute to elevated levels of stress, which in turn may increase the risk of developing depression(Chusid, 2020).

# CONCLUSION

- ▶ The use of PHQ-9 screening tool in the OPD has helped identify the magnitude of depression and the need for heightened mental health awareness activities in the community.
- ▶ Patients with undiagnosed depression are less likely to adhere to their treatment plan for physical illness resulting in poor clinical outcomes and increased cost of care.

# RECOMMENDATIONS

- ▶ Future research on the PHQ-9 should ideally be based on semistructured diagnostic interviews, considering estimating probabilities of depression across the full spectrum of PHQ-9 screening scores (rather than dichotomizing scores at a cut-off), and should combine screening scores with individual characteristics to generate individualized probabilities of major depression.
- ▶ Further research could be done to collect further consultations where the PHQ-9 is incorporated into daily routine care for patients in health facilities.