



@dokterhafid | UNUSA

# Embedding **Research** into Lectures: **a psychiatrist's perspective**

---

Hafid Algristian, dr., Sp.KJ., M.H. | @dokterhafid

Dosen Fakultas Kedokteran UNUSA, Psikiater RS Islam Surabaya Jemursari

# Points of Discussion



@dokterhafid | UNUSA

- ▶ Psychiatry challenges in lectures
- ▶ Sharing experience: research on psychiatry
- ▶ Embedding research into lectures
- ▶ Take home messages

**Studi Stephanie Knaak, dkk (2017):**

Stigma terkait kesehatan mental menjadi hambatan besar bagi ODGJ untuk mendapat akses & perawatan berkualitas

**Penelitian di Kebumen (2019):**

Stigmatisasi memiliki pengaruh besar terhadap proses pengobatan ODGJ. Semakin sedikit stigma, semakin besar peluang kesembuhan ODGJ

Sumber: Dihimpun Tim Riset tirtoid



Dukungan keluarga terhadap ODGJ dapat membantu melawan stigma



@dokterhafid | UNUSA

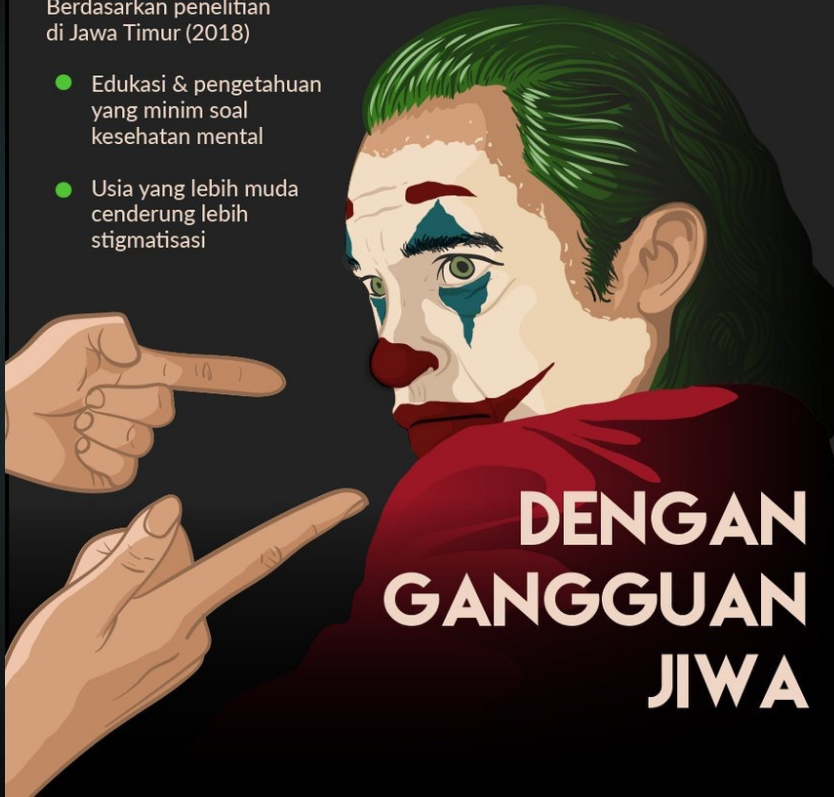


## STIGMATISASI ORANG

**Apa yang membuat stigmatisasi?**

Berdasarkan penelitian di Jawa Timur (2018)

- Edukasi & pengetahuan yang minim soal kesehatan mental
- Usia yang lebih muda cenderung lebih stigmatisasi



**DENGAN GANGGUAN JIWA**

# Psychiatry & Mental health Challenges

- ▶ Stigma by family, relatives, neighbors, friends, society, and even by **doctors** and health workers.

# Psychiatry Challenges in Lectures

- ▶ Some of the challenges of Psychiatry Lectures for Bachelor of Medicine and Health students:
  - ▶ 1. **Scarcity of teaching staff:** The number of psychiatrists in Indonesia is 1,120 for 260 million people, only a few of whom are willing to teach.
  - ▶ 2. **Psychiatry is considered abstract** because it relies on clinical symptoms which are sometimes subjective – research on **biomarkers** as the objective measurement is a hot topic.

# Scarcity of Teaching Staff



@dokterhafid | UNUSA

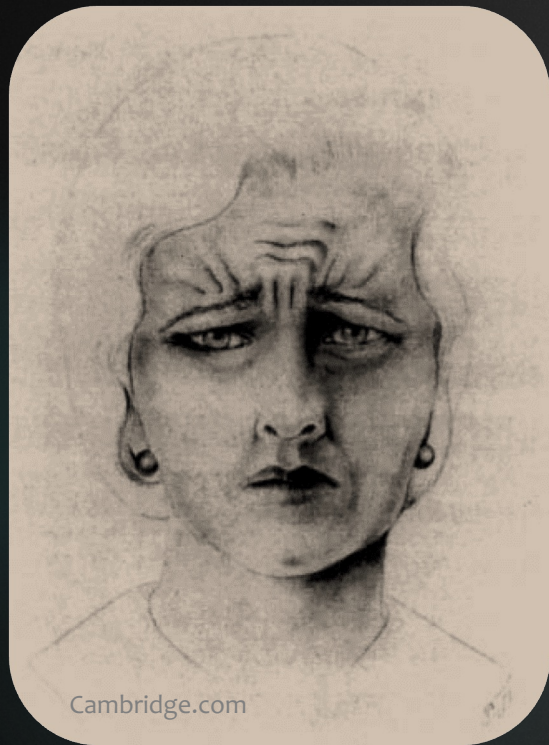


- ▶ This scarcity can be overcome by **cooperation and collaboration** between universities or between institutions (educational hospitals or networks):
  - ▶ 1. Guest lecturers
  - ▶ 2. Collaborative research
- ▶ Universities must have a **specialty**, including psychiatry.
  - ▶ However, this specialty must be held by the teaching staff of the main university

# Research of **Biomarkers** on Psychiatry



@dokterhafid | UNUSA



Cambridge.com

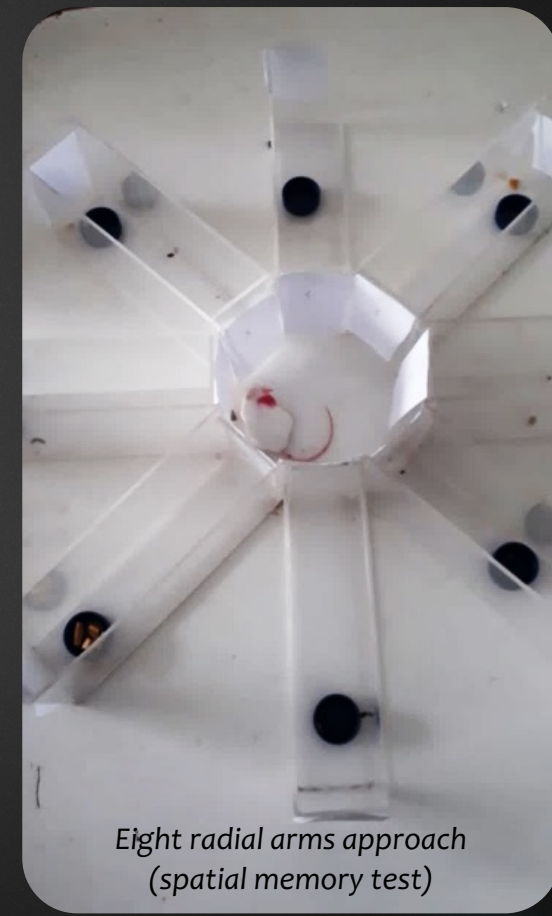
Shorter, E. (2009). Darwin's contribution to psychiatry. *British Journal of Psychiatry*, 195(6), 473–474. <https://doi.org/10.1192/bjp.bp.109.072116>

- ▶ Research on **definitive markers** of psychiatric disorders is a hot topic.
  - ▶ **The objective is to achieve the proper diagnosis and treatment**, as the professionalism and ethics of medical doctors are taught in the curriculums.
  - ▶ These biomarkers research could lead to a new invention that has the potential **to be patented**.
  - ▶ Helps explain that mental disorders are not merely subjective complaints, but **objective** ones.

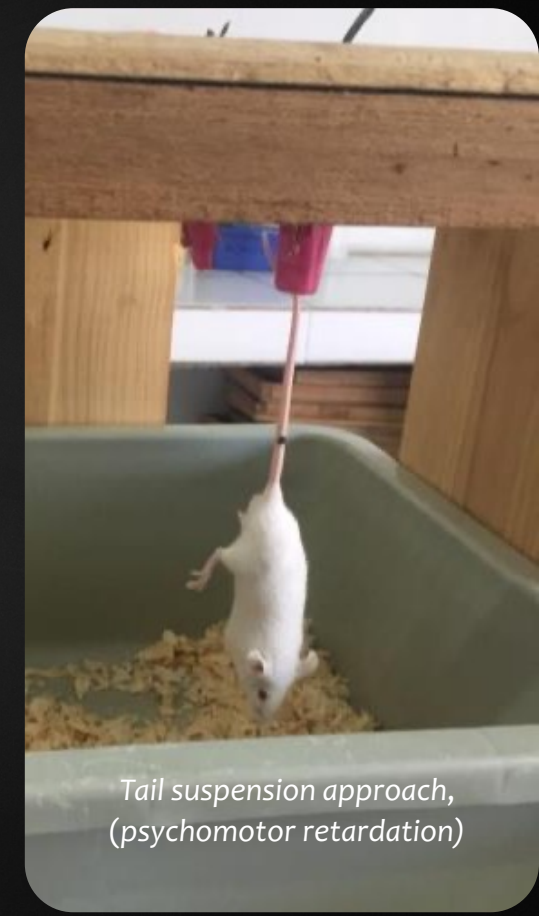
# Sharing experience

Symptoms of depression in the research **model**

- ▶ **Translating “depression” into the research model** (Algristian, et al 2022):
  - ▶ **Affective** depression (human subjects) – subjective feelings, moods, affect.
  - ▶ **Cognitive** depression (mice subject) – spatial memory.
  - ▶ **Psychomotor** retardation (mice subjects) – immobile time.
- ▶ **Collaborative** research:
  - ▶ Lecturers and medical students
  - ▶ UNUSA, UNAIR, Univ. of Florida



Eight radial arms approach  
(spatial memory test)



Tail suspension approach,  
(psychomotor retardation)

# Sharing experience

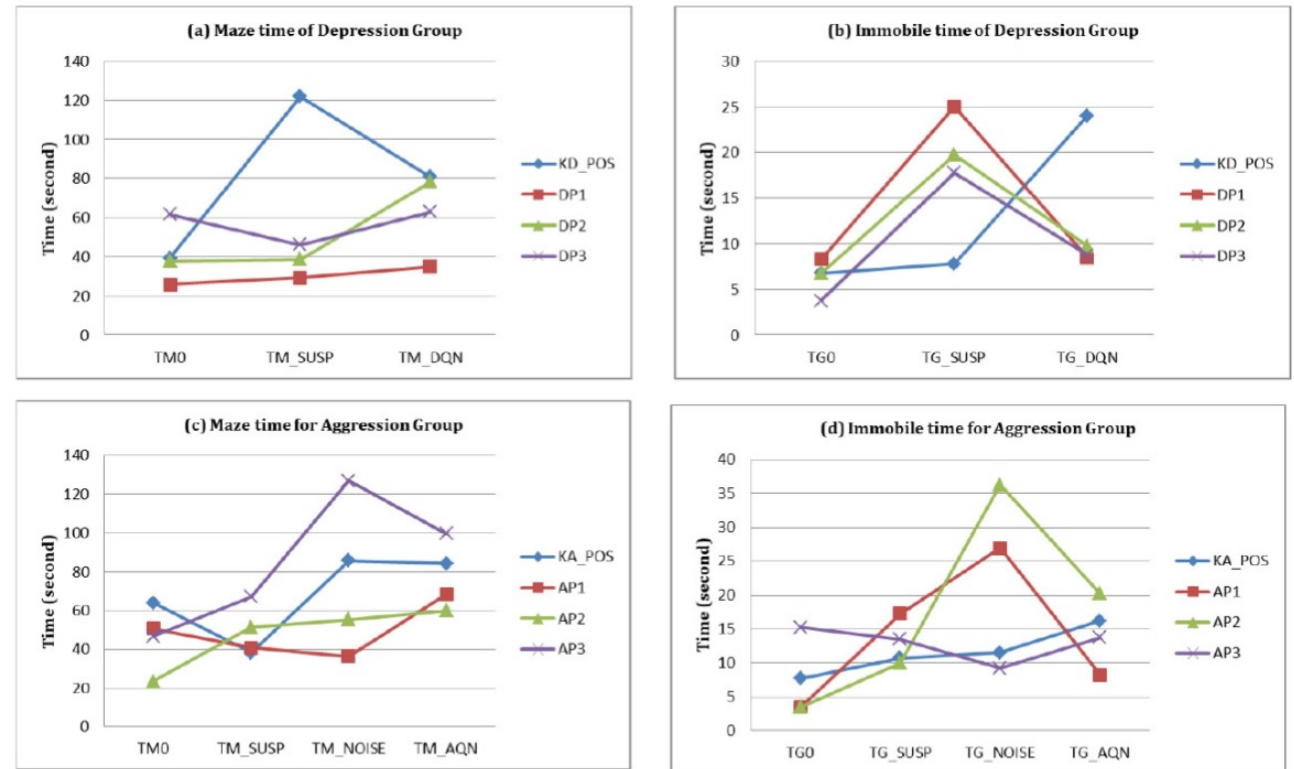
Symptoms of depression in the research **model**



@dokterhafid | UNUSA



Algristian, H., Bintarti, T.W., Solihah, I., Ferdiantoro, A., Napstyawati, F., Handajani, R. 2022. **Quran recitation as noise-induced aggression and resilience in animal model of depression**. Bali Medical Journal 11(2): 994-1002. DOI: 10.15562/bmj.v11i2.3432



**Figure 5.** Average mean of maze time and immobile time of depression and aggression group. Immobile time was significantly decreased after the Quran recitation approach (b), but maze time was still slightly increased (a). There were no consistent changes in the aggression group (c and d).

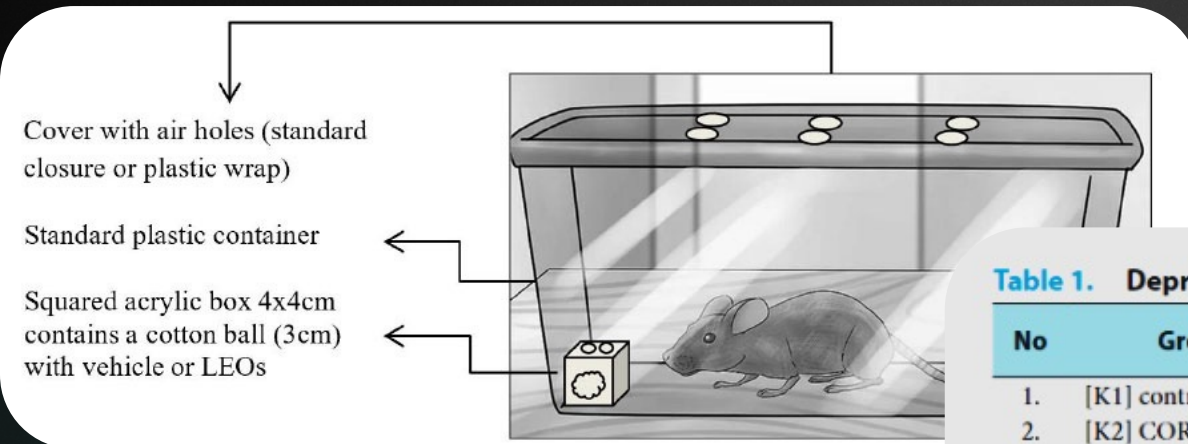


# Sharing experience

## Symptoms of depression in the research model



@dokterhafid | UNUSA



**Table 1. Depression model and mean difference between groups.**

No	Group	n	Mean ± SD		
			Cortisol level (ml)*	Immobility (s)**	Residual volume (ml)***
1.	[K1] control	6	12.219 ± 1.034	158.278 ± 32.355	27.743 ± 8.079
2.	[K2] CORT only	6	15.270 ± 0.907*	140.833 ± 25.972	28.474 ± 4.589
3.	[K3] LEO only	6	13.075 ± 1.688*	158.222 ± 19.343	26.917 ± 3.542
4.	[K4] CORT + LEO	6	11.187 ± 1.364	130.444 ± 15.701	31.117 ± 6.628

\* Post hoc test was significantly different compared to [K4] ( $p < 0.05$ ; with ANOVA test  $p < 0.05$ ).

\*\* Immobility (silent time) was counted in second during tail suspension test (ANOVA test  $p > 0.05$ ).

\*\*\* Residual volume was counted in milliliter during sucrose preference test (ANOVA test  $p > 0.05$ ).

**Table 2. Effect of Aromatherapy on Glia Cells.**

No	Group	n	Mean ± SD (Normal Cell)	p post hoc* (compared with [K4])	Mean ± SD (Abnormal Cells)	p Mann-whitney** (compared with [K4])
1.	[K1] control	6	6.67 ± 2.16	0.138	0.00 ± 0.000	0.138
2.	[K2] CORT only	6	8.33 ± 1.862	0.282	1.33 ± 1.633	0.282
3.	[K3] LEO only	6	9.33 ± 0.816	1,000	0.33 ± 0.516	1,000
4.	[K4] CORT + LEO	6	9.50 ± 2.429	-	0.33 ± 0.516	-

\* Post hoc Tukey test was not significantly different ( $p > 0.05$ ; with ANOVA test  $p > 0.05$ )

\*\* Mann-Whitney test was not significantly different ( $p > 0.05$ ; with Kruskal-Wallis test  $p > 0.05$ )

Algristan, H., Bintarti, T.W., Baroroh, R.N.M., Leila, Q., Ulfa, R., Krismawati, A., Nurdiana, M., Sudjarwo, G.W., Nurhidayat, A.W., Satriotomo, I., Handajani, R. 2022. **Protective effect of lavender essential oils on depression and multi-organ stress.** Bali Medical Journal 11(3): 1357-1363. DOI: 10.15562/bmj.v11i3.3655

# Embedding Research into Lectures



@dokterhafid | UNUSA

## ▶ Start from...

- ▶ **Research objective**
- ▶ **Learning objective (curriculums)**

## Research Roadmap: Complementary Approach to Depression & Aggression

- 2015: "Sexual Harrassment & Frontotemporal Dementia" <http://bit.ly/ftd2015>
- 2016: "Impact of Psychological Factors to Employee Engagement" <http://repository.unair.ac.id/65606/>
- Published paper:**
  - 2017: "Psychotherapy to Breast Cancer" (Research award, 2nd National Congress on Religion, Spirituality, and Psychiatry) <http://bit.ly/LABCJkt>
- Journal article:**
  - 2017: "Psikodinamika Fraudster" <https://bit.ly/3T9xWKf>
  - 2017: "Students Vulnerability and Literacy Analysis Terrorism Ideology Prevention" [10.1088/1742-6596/1028/1/012089](https://doi.org/10.1088/1742-6596/1028/1/012089)
- Book chapter:**
  - 2017: "Aspek Kesehatan Mental pada Ekstrimis Agama", Pusat Studi Peradaban dan Masyarakat Islam (PPMPI UNUSA)

- 2018: "Spirituality Dilemma" <https://bit.ly/3K7nmPX>
- 2018: "A Psychotherapy Experience with A Gay Muslim" (*International Muslim Mental Health, Malaysia, 2018*)
- 2020: "Predicting Fraud" <https://bit.ly/3PDDTw4>
- 2021: "Engagement to Religious Organization: <https://bit.ly/3QXHRAJ>
- 2018: "De-Radicalization seems an Utopia?" [10.4081/jphia.2019.1211](https://doi.org/10.4081/jphia.2019.1211)

- 2017: "Psikoterapi pada *Breast Cancer*" <https://bit.ly/3wiWh6H>
- 2019: "Expressive Writing" [10.3889/oamjms.2019.402](https://doi.org/10.3889/oamjms.2019.402)

- 2020: "BDNF Mencit Model Depresi" [10.30651/jqm.v5i2.6354](https://doi.org/10.30651/jqm.v5i2.6354)

Biological, Clinical, and Psychological Model of Depression & Aggression

Therapeutic Approach for Depression & Aggression

- Project Aromatherapy
- Project Genetic polymorphism on Psychiatric Illness

Social-psychological Model of Depression & Aggression

- 2019: "Smoking and Education" <https://bit.ly/3wk0G9u>
- 2020: "Perception about Smoking" <https://bit.ly/3caldX2>
- 2021: "Schizophrenia Prognosis" <https://bit.ly/3AB0m8I>
- 2021: "Schizophrenia & Religion" <https://bit.ly/3RgApkD>
- 2021: "Muslim and Tobacco" [10.18332/tid/140951](https://doi.org/10.18332/tid/140951)
- 2022: "Coping & COVID-19" [10.3390/bs12070206](https://doi.org/10.3390/bs12070206)
- 2022: "Fear of COVID Scale" [10.51200/bejv1i2.2755](https://doi.org/10.51200/bejv1i2.2755)

# Embedding Research into Lectures

- ▶ Competence in Curriculums:
  - ▶ **Standard** competence as a medical doctor
  - ▶ **Local** wisdom & uniqueness (specialty)
  - ▶ **Advanced** competence (research)
- ▶ Teaching **standards**: 1. **Books** and teaching modules; 2. Learning **Design**; 3. **Assessment** of Learning Processes and Outcomes (cognitive, affective & attitude, skill & psychomotor).



# Take Home **Messages**



@dokterhafid | QRBC #3

- ▶ Embedding research into lectures can provide benefits to hone the **uniqueness** of higher education institutions
- ▶ The **involvement of lecturers and students** in embedding research into lectures can accelerate the achievement of this uniqueness
- ▶ Embedding research into lectures supports the **professionalism and ethics** of medical graduates for the future

# Referensi



@dokterhafid | QRBC #3

1. Shorter, E. (2009). Darwin's contribution to psychiatry. *British Journal of Psychiatry*, 195(6), 473–474. <https://doi.org/10.1192/bjp.bp.109.072116>
2. Greden, J. F., Genero, N., & Price, H. L. (2006). Agitation-increased electromyogram activity in the corrugator muscle region: a possible explanation of the “Omega sign”? *American Journal of Psychiatry*, 142(3), 348–351. <https://doi.org/10.1176/ajp.142.3.348>
3. Algristian, H., Wahyuni Bintarti, T., Solihah, I., Ferdiantoro, A., Napstyawati, F., & Handajani, R. (2022). Quran recitation as noise-induced aggression and resilience in animal model of depression. *Bali Medical Journal*, 11(2), 994–1002. <https://doi.org/10.15562/BMJ.V11I2.3432>
4. Muhammad, A. R., Palupi, Y. D., Astri, M., & Algristian, H. (2022). The effect of Quran recitation on t-cell lymphocyte activity in mice model of breast cancer. *Bali Medical Journal*, 11(3). <https://doi.org/https://doi.org/10.15562/bmj.v11i3.3473>
5. Algristian, H., Bintarti, T. W., Baroroh, R. N. M., Leila, Q., Ulfa, R., Krismawati, A., Nurdiana, M., Sudjarwo, G. W., Nurhidayat, A. W., Satriotomo, I., & Handajani, R. (2022). Protective effect of lavender essential oils on depression and multi-organ stress. *Bali Medical Journal*, 11(3), 1357–1363. <https://doi.org/10.15562/BMJ.V11I3.3655>



@dokterhafid | UNUSA

# Embedding **Research** into Lectures: **a psychiatrist's perspective**

---

Hafid Algristian, dr., Sp.KJ., M.H. | @dokterhafid

Dosen Fakultas Kedokteran UNUSA, Psikiater RS Islam Surabaya Jemursari