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COMPARATIVE EFFICACY OF AGNUS CASTUS AND LYCOPODIUM CLAVATUM IN THE HOMOEOPATHIC MANAGEMENT OF OLIGOSPERMIA

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ABSTRACT

Background: Oligozoospermia is a semen abnormality encountered during the assessment of Male Infertility. Agnus Castus and Lycopodium Clavatum appear in Homoeopathic prescribing literature, but prescribing frequency is distinct from evidence of treatment benefit.

Methods: A structured search and source-verification exercise considered scholarly reports on Homoeopathic interventions, Oligozoospermia, Semen outcomes and Male Infertility. Publicly verifiable original reports and clinical guidelines were critically examined. Extracted fields covered intervention assignment, participant number, comparator, semen analysis and reproductive outcomes. PRISMA 2020 reporting concepts informed the evidence audit; a complete database-export-based PRISMA enumeration could not be established.

Results: Five clinically relevant or contextual reports were inspected in detail: a 2024 mixed-sex observational survey with 15 male records, a 2025 non-peer-reviewed single-arm study involving 10 men, a 2002 uncontrolled pilot involving 45 men, a 2022 seven-couple case series and a 2022 single-patient case report.

Conclusion: The retrieved publications do not establish comparative clinical efficacy or superiority of either preparation for Oligozoospermia. Controlled, prospectively registered research with standardized semen analyses and reproductive outcomes is required.

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1. Introduction

Investigation of Infertility is an opportunity to address clinical and psychosocial issues in both partners. Conditions affecting men may be identified through assessment for male factor infertility and may include reversible conditions as well as Structural, Endocrine, Genetic and Functional abnormalities for which further specialist evaluation is required. Reduced sperm concentration (Oligozoospermia) must be considered in the context of the specimen as well as biological and laboratory variations and accompanying abnormalities of sperm motility and morphology and volume of the ejaculate. The presence of a semen analysis in the patient's record may be an important clinical sign; however, it is an insufficient indicator of the probability of conception. The World Health Organization (WHO) has recommended various standard procedures for semen analysis. Additional recent European and American guidelines encourage comprehensive, individualized assessment of the Infertile man.

In everyday clinical practice, a single value may represent the combined effects of illness, fever, medication, exposure to environmental toxins, collection incomplete during the first urge, abstinence interval, and variation in the laboratory. Real change following an intervention must be documented using established primary outcome measures and appropriate control of regression to the mean. An improvement must occur on an outcome that is meaningful to the patient and might include conception or a live birth. In the absence of a measured improvement on the desired outcome, interventions aimed at specific semen variables may not be deemed effective [1-3].

In some cases of sexual and reproductive complaints, *Agnus Castus* and *Lycopodium Clavatum* may be prescribed using the principles of Homoeopathy. *Agnus Castus* and *Lycopodium Clavatum*, in the context of Homoeopathy, should not be confused with pharmacological studies of plant extracts, in part because of differences in the method of preparation and potency, as well as the route of administration and the vehicle. The prescription may be based on the assessment of the person's overall health (i.e. constitutional type) rather than the diagnosis of Oligozoospermia alone. Therefore, within observational studies, a person may take several remedies of different potencies, as well as undergo additional treatments, which makes identifying the impact of a particular remedy difficult [6-8].

This review seeks to compare the effects of *Agnus Castus* and *Lycopodium Clavatum* and other treatments, if any, on sperm and reproductive parameters among men diagnosed with Oligozoospermia. It seeks data by treatment arm to answer the question, "Does *Agnus Castus* produce better or worse objective sperm and reproductive parameters than *Lycopodium Clavatum*, placebo, or standard care?" A description of the remedies selected, case report, or a combined change in multiple prescriptions is not sufficient to evaluate the relative treatment effect. Therefore, this review separates exposure description from case report and controlled before-and-after studies. It reports case studies to the extent the data support case studies, while avoiding giving the impression that data support greater precision than they actually do.

The review Aims to clarify the sorts of evidence required to undertake a valid statistical synthesis. The PRISMA 2020 statement outlines how to transparently report the identification, eligibility and inclusion of studies. The Cochrane Handbook explains the difference between a meaningful and a mechanical meta-analysis. In the case of the comparison of the selected remedies, both the PRISMA 2020 statement and the Cochrane Handbook require justification for a direct comparative forest plot in the same way. This is the requirement for compatible study-level effects and their associated uncertainty.

The review addressed three questions: First, is there an identifiable controlled study, directly randomizing or otherwise assigning eligible men to *Agnus Castus* or *Lycopodium Clavatum*? Second, do studies of the two remedies, using a shared comparator, provide analyzable means, standard deviations, event counts, or adjusted estimates? Third, how should studies of Individualized Homoeopathy be interpreted, in the event that participants receive several different remedies without remedy stratified outcome data?

2 Methods

2.1 Eligibility Criteria and PICO

The participants were adult males with Oligozoospermia, Oligoasthenozoospermia or male-factor Infertility with low sperm concentration. The interventions were Homoeopathic *Agnus Castus* and *Lycopodium Clavatum*, used individually or as distinct treatment components. The eligible comparators included an alternative remedy, placebo, no additional treatment, or clinically described usual care. The main outcomes were Sperm Concentration (million/mL) and Total Sperm Count, as well as Progression and Normal Morphology of Sperm, and Live Births or Pregnancies. Other outcomes included adverse effects, treatment duration, potency and co-interventions.

Randomized Controlled Trials (RCTs) and non-RCT comparative studies were included in the effect-estimation tier. Other types of studies, i.e., Single Arm Cohort Studies, Case Reports, Clinical Observations and Case Series, were included as contextual evidence and evaluated separately. It was not assumed that male-specific outcomes were provided in mixed-sex studies, solely because the names of the remedies were listed in a table. Clinical efficacy of Homoeopathy was assessed primarily on the basis of studies of the remedy in its diluted and triturated form. Other studies that were excluded from assessment of clinical efficacy of Homoeopathy were, for example, clinically related Advertisements, *Materia Medica* descriptions, studies of Botanical extracts, in vitro and in vivo studies, etc.

2.2 Identification and Verification Strategy

Concept searches combined the remedy terms (Agnus castus/ Vitex agnus-castus/ Lycopodium clavatum/ Lycopodium) with Oligospermia/ Oligozoospermia, Male Infertility, Semen, Sperm Count, Sperm Motility, Homoeopathy/Homeopathy, Trial, Clinical study. Concepts were researched via publicly accessible scholarly-web and PubMed. Designs, Interventions, Results and Bibliographic details of the studies were researched in Publisher, PubMed, WHO, and in Urological practice guidelines. Reference trails of relevant studies were also considered.

This was not a completed reproducible, multi-database systematic search: independent export logs, de-duplication records, and database-specific hit totals, and registration of the search protocol, were not available. It is therefore not accurate to state that Embase, CENTRAL, Web of Science, and Scopus, had been exhaustively searched, or to provide made-up numbers for them. The following is an assessment of what was found during focused verification, and is not a substitute for a full search-accounting file in accordance with PRISMA 2020. The absence of a directly comparable trial is a result of this verification process; this does not mean that such a trial does not exist.

2.3 Data extraction and analysis plan

From each source, the following information was extracted: year and status of publication; the clinical setting; the details of recruitment and design; the number of men in the sample; the presence of low sperm count; the use of Agnus Castus or Lycopodium; the dose, if any, and other treatment, if any; the comparator, if any; the time of semen analysis; the type of end points; missing data, if any; adverse events, if any; and pregnancy, if any. The unit of analysis was the study or comparison group, if any, and not the individual prescription.

For a continuous endpoint on the same scale, an unadjusted between-group mean difference is typically calculated as the mean difference in the intervention group minus the mean difference in the comparator group, with an appropriate standard error. An analysis of change scores assumes the correlation between baseline and follow-up scores and adequate follow-up and baseline data. Relative risks would be considered for binary reproductive endpoints. When several clinically compatible studies are available, a Random-Effects Synthesis, Heterogeneity Diagnostics, and Sensitivity Analyses would be performed in accordance with the Cochrane recommendations [5]. No calculated estimate would be assumed from percentages of remedies prescribed or a cohort-wide p-value.

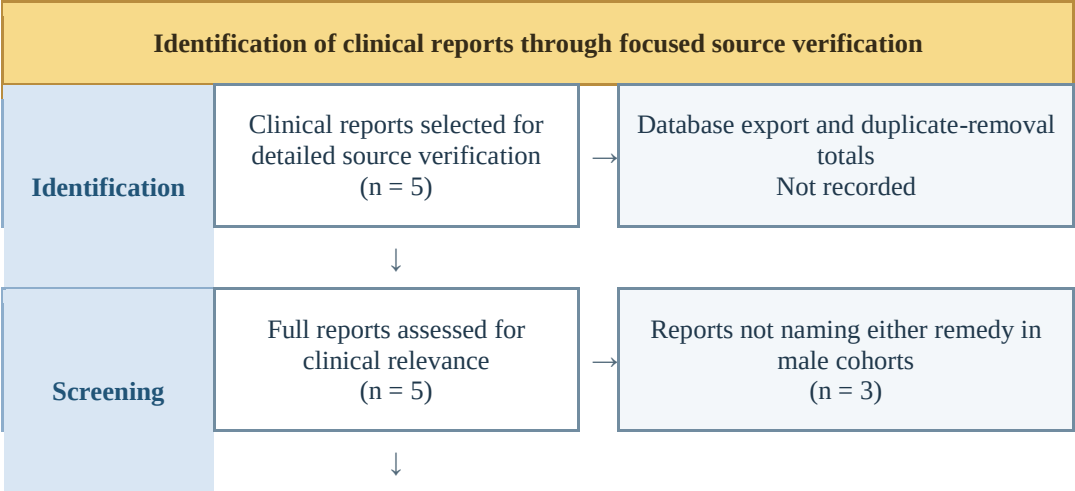
Risk of bias was assessed in relation to allocation, confounding, completeness of follow-up, fidelity to intervention, outcome measurement and selective reporting. For randomized comparisons, assessing risk of bias was based on the revised version (RoB 2). For comparisons of effects of interventions from non-randomized studies, the ROBINS-I tool was utilized. The GRADE approach was used to assess the overall body of evidence. Because no directly analyzable comparisons were made, the effect size or confidence intervals for any particular comparison could not be determined [5,14].

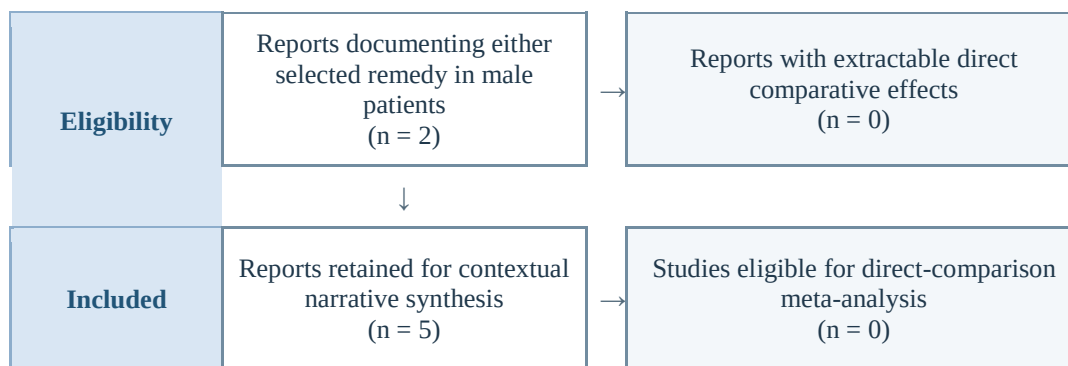
3. Analysis

3.1 Source Selection and Evidence Audit

Five reports containing primary human observations or appropriately contextualized findings have been advanced for detailed critical assessment [6-10]. Of these, a 2024 observational report noted the use of both medicines in a male cohort, but provided no comparative follow-up endpoints; a 2025 report provided single-arm observations with multiple Individualized prescriptions and was published as a preprint; older pilot and more recent reports lacked a randomized head-to-head comparison. Thus, the comparative quantitative data set was comprised of zero studies. These counts pertain to the five explicitly cited candidate reports assessed here. They do not reflect the total number of records retrieved from the database across the globe.

Figure 1. PRISMA-style flow of the five verified candidate reports and their disposition





Note. Counts represent five traceable reports reviewed in detail, not an exhaustive multi-database PRISMA 2020 search. The three contextual reports without a named remedy remained in the narrative evidence map; no report yielded a controlled Agnus Castus–Lycopodium Clavatum treatment contrast. Database search and de-duplication totals were unavailable and are therefore not assigned numerical values.

3.2 Characteristics of the Published Reports

Table 1. Characteristics and inferential value of reports identified for detailed assessment

Source	Design and population	Relevant remedy exposure	Outcome comparability	Efficacy tier
Khan et al., 2024 [6]	Observational survey; 15 males plus 15 females	Lycopodium in 6 males; Agnus castus in 1	No remedy-specific before/after effect	Prescribing description
Pocha et al., 2025 [7]	Single-arm, open-label; 10 men; preprint	Lycopodium in 3 participants; multiple remedies overall	Full-cohort P values; no separate comparator	Uncontrolled observation
Gerhard and Wallis, 2002 [8]	Prospective single-arm pilot; 45 subfertile men	Individualized remedies; names not sufficient for this comparison	Uncontrolled aggregate change	Contextual observation
RajachandraSekar et al., 2022 [9]	Selected case series; seven couples with conception	Individualized homoeopathy, not an Agnus/Lycopodium comparison	No randomized comparator	Selected cases
Ramanan and Sathyanandhan, 2022 [10]	One male with combined semen abnormalities	Natrium muriaticum, not either target remedy	Single-person observations	Off-comparison case

Publications vary in terms of population, recruitment, the nature of the intervention, and the way outcomes are reported. This type of variation goes beyond the ordinary statistical heterogeneity. The absence of an effect in the population or set of the treatment groups being compared means that the synthesis should be, at best, descriptive and methodological. The reports are not interchangeable. In particular, the 2022 selected-case series focus on the documentation of pregnancies within couples, while the 2024 survey focuses on prescription practices and the 2025 pre-print focuses on measurement of cohorts of individuals after the consumption of multiple medications.

3.3 Observations of Agnus Castus

Khan and colleagues (2024) reported the use of Agnus Castus 200 by a 31-year-old man who presented with a diagnosis of Oligozoospermia with fatigue. The case report did not include the participant's baseline and post-intervention measurements of progression of his sperm concentration and motility and/or morphology. Nor did the report include a pregnancy outcome, or a control group who received an alternative treatment. Given this, the reported case of Agnus Castus does demonstrate a case of clinical use, but the case does not yield any meaningful clinical effect.

This is crucial, as the complete observational sample could lead one to believe that a comparison is numerically viable, taking the six Lycopodium prescriptions as one group, and the single Agnus prescription as the other. Statistically and clinically, this would be incorrect. The patients were not randomly assigned; their diagnoses and other reasons for prescription were different; the authors did

not report prespecified change endpoints by remedy; some patients received other prescriptions as well; and a group size of one is not sufficient for estimating outcome variation. An odds ratio or difference in means based on the frequency of prescriptions, would be an indicator of allocation rather than of treatment effect.

3.4 Observations for Lycopodium Clavatum

In the 2024 observational study, the authors noted that six out of the fifteen males were prescribed Lycopodium. Some of the records noted Oligozoospermia; others noted Erectile Dysfunction; and some noted concurrent prescriptions. The 6/15 ratio is 40.0%; Agnus Castus was reported for 1/15 (6.7%). The other 8 (53.3%) records were associated with other medicine categories. These are prescriptions ratios for a mixed infertility cohort and are not response ratios or effectiveness estimates [6].

The 2025 report by Pocha and colleagues was a nonrandomized, open-label single-arm study of ten men, using Individualized Homoeopathy. The study reported the use of Lycopodium in three of the ten subjects. The report described variations in semen parameters over approximately three months and calculated post hoc P values for the aggregate multi-remedy cohort. Two of ten female partners were reported to have conceived during the follow-up. These observations are clinically relevant, but isolating the effect of Lycopodium is not possible as seven of the participants received other prescriptions, and there was no control, placebo, or Agnus Castus group. The study was posted as a preprint and, as indicated, was not a peer-reviewed independent study.

The preprint described an aggregate analysis of sperm count and active motility, with p values of 0.0013 and 0.0027, respectively. The preprint also described analyses of sluggish motility and a non-motile measure with p values of 0.0119 and 0.0006, respectively. These values describe the results of the tests performed on the ten participants in the study, and do not represent inter-remedy effects, do not make the three participants who received Lycopodium individually analyzable, and do not account for confounders or other remedies. Their meaning relies on the techniques and analyses employed by the authors. So, these values cannot be independently interpreted or reanalyzed.

Table 2. Extractable numerical observations and their correct interpretation

Report	Measure	Reported number	What it represents
Khan 2024 [6]	Male sample	n = 15	Cross-sectional observed records
Khan 2024 [6]	Lycopodium prescriptions	6/15 (40.0%)	Prescription frequency, not treatment response
Khan 2024 [6]	Agnus castus prescriptions	1/15 (6.7%)	Prescription frequency, not treatment response
Pocha 2025 [7]	Male study sample	n = 10	Single-arm participants
Pocha 2025 [7]	Lycopodium exposure	3/10 (30.0%)	Receipt of remedy within a mixed-remedy cohort
Pocha 2025 [7]	Conceptions reported	2/10 (20.0%)	Uncontrolled cohort-level report; no causal attribution
Pocha 2025 [7]	Sperm-count test	P = 0.0013	Aggregate before/after result, not Agnus vs Lycopodium
Pocha 2025 [7]	Active-motility test	P = 0.0027	Aggregate before/after result, not Agnus vs Lycopodium
Gerhard 2002 [8]	Men treated	n = 45	Individualized, uncontrolled pilot

3.5 Contextual Individualized-Homoeopathy reports

An older prospective pilot by Gerhard and Wallis studied 45 subfertile men who received Individualized Homoeopathic treatment for an average of 10.3 months. The authors reported within-person improvements in certain semen variables, especially in men with Oligoasthenozoospermia, and called for a controlled study. These observations are historically important, but cannot be employed as a modern, controlled estimate of the named medicines. Without a parallel comparator, regression to the mean, concurrent behavioral change, laboratory variability and selection bias are all factors that remain unaccounted for.

A more recent publication reported seven couples who conceived after Homoeopathic treatment (9). Case studies that include only couples who conceived do not answer the question about the probability of treating-related conception. Hence, the number of cases who did not conceive (or for whom treatment was unrelated to conception) is also unknown. Again, the Agnus versus Lycopodium question remains.

In 2022, a case report stated Natrium Muriaticum improved Oligo-astheno-terato-zoospermia and resulted in a pregnancy. While it makes a strong case for the interest case-level temporal measurements warrant in clinical practice, its intervention is outside the comparison, there is no control, and its outcomes cannot be included in an Agnus/Lycopodium efficacy forest plot.

3.6 Direct comparison and Forest-plot Feasibility

No eligible two-arm allocation existed in which both target drugs were allocated and separately reported sperm outcomes. No common comparators could be extracted to allow an indirect comparison. Therefore, a numerical, pooled mean difference, standard error, 95% confidence interval, Cochran Q, tau-squared, and I² would be mathematically unrepresentable for the primary comparison. Treating P values from an uncontrolled cohort as if they were effects of treatment would be inappropriate. Therefore, a pooled forest plot has not been provided [5].

Figure 2. Forest-plot feasibility for Agnus Castus versus Lycopodium Clavatum

Prespecified analysis	Study-level estimates	95% confidence intervals	Meta-analysis
Sperm concentration, million/mL	0 extractable	Not estimable	Not performed
Progressive motility, percentage points	0 extractable	Not estimable	Not performed
Clinical pregnancy or live birth	0 extractable	Not estimable	Not performed

A conventional forest plot would require each row to identify the same contrast and provide a valid study-specific effect with uncertainty. Figure 2 is a transparent feasibility panel, not a forest plot containing invented effect estimates. Statistical null or non-significant results are not being inferred from missing effect data: the correct description is that the treatment difference is unknown.

3.7 Bias Assessment and certainty of Evidence

Table 3. Design limitations influencing causal interpretation

Evidence type	Key threat	Consequence for efficacy assessment
2024 observational survey [6]	No allocation, response endpoints or remedy-specific outcome estimates	Cannot estimate comparative benefit or harm
2025 single-arm preprint [7]	No control; several medicines; small sample; non-peer-reviewed status	Apparent changes cannot be attributed to Lycopodium
2002 pilot [8]	Uncontrolled longitudinal design; multiple individualized remedies	Temporal improvement cannot establish causation
2022 case series [9]	Selected on favorable clinical outcome	No conception-rate denominator for a comparative claim
2022 case report [10]	One case; different preparation; no control	Not relevant to the named medicine comparison

Risk-of-bias instruments need a definable treatment effect and study design. RoB 2 cannot meaningfully assign domain judgments to a non-existent randomized Agnus-versus-Lycopodium comparison. The observational papers warrant strong concern about confounding, selection, absence of blinded measurement, missing outcome stratification and selective outcome reporting. GRADE would not convert an empty comparative evidence base into an effect estimate. Rather, the certainty of any claim that one treatment is superior is assessable because the effect itself has not been estimated. A lack of established benefit should not be incorrectly restated as proof of equivalence or proof of ineffectiveness.

4. Discussion

4.1 Principal Interpretation

The most relevant finding is the discrepancy between prescribing documentation and comparative therapeutic evidence. The data from 2024 showed that Agnus Castus was prescribed more than Lycopodium among male records, although the reason for the prescription is likely to be attributable to the preferences of the prescribing practitioner, as well as the symptoms of the patient. Lycopodium was prescribed more than Agnus Castus by a greater count, but that says nothing about sperm count improvement, the extent of that improvement or whether pregnancy occurred. Inferring anything about effectiveness from 6 prescriptions vs. 1 prescription is to confuse process information with effectiveness [6].

The 2025 study, in comparison, seems more informative, as it reported the follow-up of participants and Statistical tests of cohort comparisons. A low p-value, however, is not an estimate of efficacy. In the absence of a control group, the null hypothesis is generally that the average measurement changed over time. The intervention was not shown to be responsible for the change and a

fortiori, one of the seven selected preparations was not shown to be responsible for the change [7]. The outcome data, in particular the numerator of the three participants, is of great importance, as the outcome data were not stratified based on the preparations. Making assumptions to create an effect size would not be justifiable based on the information provided [7].

4.2 Biological and Measurement considerations

Considerable biological measurement variation exists for any trial of an intervention for Oligozoospermia. Variations in semen parameters may be attributable to the duration and completeness of the collection, Fever, Illness, Medication, Environmental Exposure, Smoking, Body Weight, Oxidative Stress, Urinary Tract Infections, Varicocele, Endocrine Disorders, Genetic disorders, and several other factors. There may be differences in measurements between analytical laboratories. The WHO protocols help standardize measurements, but do not fully address true within-person variation. Oligozoospermia is often an exception, and after the first measurement, a second measurement is done to confirm, especially if the first measurement prompts a clinical visit. In the interim, some of the biological variation may resolve itself.

For control and experimental groups to be comparable at baseline, study groups should be randomized, standardized abstinence windows should be established, the follow-up period should be adequate, and repeated samples should be planned in advance. Use of one laboratory, blinded analysts, and standardized protocols to address measurement bias helps to reduce measurement variation. The direction of true variation should be stated when results are reported. An increase in semen volume does not necessarily improve sperm concentration or fertilizing ability [1-3].

The difference between remedy classification and botanical pharmacology is significant. Preparations made according to Homoeopathic Pharmacopoeia (e.g. 30C, 200C) are not equivalent to a measured dose of a botanical extract. Studies of Vitex Agnus-Castus in the general population do not translate to clinical studies of Homoeopathic Agnus Castus for male-factor infertility. Likewise, studies of plant constituents of Lycopodium would not support any inference to a Homoeopathic preparation. In eligibility decisions, the actual formulation and indication must be considered and similar names are not relevant.

4.3 Clinical relevance of Outcomes

When outcomes are ranked in order of importance, the highest priority should be given to the occurrence of a live birth or pregnancy, confirmed clinically. Less important outcomes may include: semen analysis showing increased concentration and progressive motility and/or normal morphology. It should be clear that these outcomes are not interchangeable. An increase in the number of sperm in a semen sample may be clinically relevant, particularly if part of an oocyte preparation, but may not lead to a change in the probability of the couple experiencing a live birth. A pregnancy in an uncontrolled study may be the result of numerous factors, including the reproductive health of the female partner, unrecorded co-interventions, and happenstance. Thus, desired reproductive outcomes of a partner may require special follow-up, complete denominators, and sufficient number of subjects to ensure confidence limits are informative [2, 3].

The 2025 study reports ten couples' experience with two conceptions. A 20% treatment effect is lacking without a control rate, and clarity about partner factors. This number cannot distinguish intervention effects from background conception. The case series of seven couples is even more limited for incidence estimation because it describes couples who conceived. These publications may motivate formal research, but, as they stand, are not a basis to recommend any of the named products over another [7,9].

Safety reporting is another gap. A Homoeopathic product may contain little starting material, but patients may still suffer clinical harm because the assessment of reversible factors for Infertility has been delayed or other causes for Infertility have been ignored. The product may be of poor quality, and have negative interactions with other ingredients in mixed preparations. The opportunity cost of the treatment is also relevant. Guidelines state that the first priority for the management of male-infertility is to ensure that the patient receives an adequate diagnostic and therapeutic work up [2,3]. Other interventions should be discussed, and if relevant, integrated within the framework of evidence-based medicine.

There is a broad diversity across indications when reviewing Homoeopathy, including variation in types of prescriptions, methods of trials and definitions of outcomes. Conclusions at this broader level cannot be extrapolated to Oligozoospermia or to Agnus Castus versus Lycopodium for that matter, though they indicate the importance of distinguishing randomization quality from bias due to attrition, masking and selectively reported outcomes from the supposed direction of a result [13]. A claim related to a Homeopathic remedy is narrower than a claim related to an Individualized Homeopathic treatment system, and has to be assessed by equivalent evidence.

There are positive aspects to the current evidence map. Each numerical estimate in its main tables is linked to a definable source and is described at the correct level. It does not confuse patients receiving a medicine with patients responding to it. The review also does not label a preprint as peer-reviewed or use a case of Natrium Muriaticum to support Lycopodium. Distinguishing the aforementioned is relevant for clinical evidence synthesis, especially for small studies with incomplete outcome reporting, which can otherwise appear quantitative.

4.4 Implications for the next Clinical Trial

The most valuable next study would be to randomize men who have undergone a standardized diagnostic assessment into clearly defined treatment groups, including at least the two trial preparations and an appropriate comparator when justifiable, from a scientific and ethical standpoint. Before Individualization is permitted, the protocol should describe whether treatment is remedy-specific or Individualized based on symptoms. If an Individualized approach is permitted, and treatment is remedy-specific, it should

not be compared as a single remedy contrast without a proper definition. Measures to ensure allocation concealment, blinding where possible and placebo, and analysis of semen should be employed where feasible.

Recruitment, adherence and missing data should be assessed during the initial feasibility phase. Acceptable follow-up duration and variation in the primary outcome should also be assessed during the initial phase. Finally, the initial phase should determine the extent to which the primary outcome is measured. Based on what is learned during this phase, a power calculation should be performed to determine the required sample size to reveal a clinically meaningful difference. This calculation should replace the use of uncontrolled p-values to extrapolate sample sizes. The trial should collect repeated semen samples using WHO methods and capture clinically relevant etiologies and environmental factors. The trial should report adverse events and pregnancy outcomes and use intention-to-treat analysis to preserve the randomized treatment allocation. Sharing a de-identified extraction dataset and statistical code would allow independent effect-size estimation.

For evidence synthesis, the presence of two or more papers is not the only threshold for the forest plot. Papers should compare the same contrast, and have comparable participants. Estimates should be interpretable and ideally not incompatible. A single-arm mixed-remedy cohort and an observational prescription survey are two different quantities and so cannot be combined in a forest plot. A transparent depiction of non-estimability is scientifically preferable. If future randomized studies become available, we can report the same study-level mean differences, standard errors and heterogeneity without revising the question.

5. Limitations of this Review

There were five limitations with the critical review of traceable documents. A truly systematic search across multiple platforms would require independently reproducible, exhaustive efforts. Complete exports were not provided from PubMed, Embase, Scopus, Web of Science, CENTRAL, trial registers and/or supplemental databases, and the screening process was not dual. Therefore, an exhaustive PRISMA 2020 flow would also not be justified. Claims that all accessible evidence was captured would also not be justified. The five-report flow is an audit of source verification.

Full participant-level data were not available, and primary sources often omitted means, standard deviations, baseline and follow-up, treatment assignment processes, and adverse event results. There were also numerous differences in methodology and clinical aspects that prohibited data synthesis. The 2025 record was a preprint during the assessment and as such, the findings should not be regarded as the same standard as peer-reviewed literature. The 2002 study was retained to contextualize observations, and falls within the preferred 2020-2025 window of literature.

Reporting and publication bias are still possible. Case reports describe atypical positive outcomes. Because case series describe successful conceptions, they provide no information about the outcome for the couples that were treated. It is possible that there are unpublished or negative studies that are not available. Because of the reasons listed above, the review cannot rank the medications. It also cannot provide a clinically meaningful effect size or state that the medications are equivalent. The findings of the review describe the best estimate of the currently observable evidence, a gap that would be addressed by complete systematic review of registered data and access to primary sources.

6. Conclusion

The clinical evidence considered in this review does not provide a analyzable direct comparison of *Agnus Castus* and *Lycopodium Clavatum* in the Homoeopathic treatment of Oligozoospermia. The available data mainly concern prescription ratios and uncontrolled, mixed remedy follow-up, not between arm comparisons of effectiveness. The review cannot infer the superiority of one medication over the other. No pooled Forest-plot analysis or defensible comparison specific CIs could be calculated. Future studies should be designed to accomplish improvement in semen endpoints, standardization, allocation and clinical relevance in the field of fertility.

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